

The 'disappearance' of Trypillia culture

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ABSTRACT – *The Trypillia-Cucuteni cultural complex over a period of almost 2000 years was an outstanding phenomenon east of the Carpathians, but it fell into decay. The Late period of Trypillia culture dates back to 3200–2700 BC and is represented by a few local types or so-called 'post-Trypillia cultures', all located in regions with different natural conditions and resources, from forest to steppe zones. Local features displayed different trends of change in the economy and material culture and also in social structures. The most conservative were groups with the highest development of social organisation and economy based on a division of labour, with proto-cities, as 'points of rest'. On the borders of Trypillia culture, intercultural relations took on a special significance and led to changes in material culture and economy that materialised as a process of 'disappearance'. It seems that these changes had a common point of departure – changes in the environment since 3200 BC.*

IZVLEČEK – *Kulturni kompleks Trypillia-Cucuteni je predstavljal izjemen fenomen vzhodno od Karpatov v časovnem razponu več kot 2000 let, vendar je razpadel. Pozno obdobje kulture Trypillia datira v čas 3200–2700 pr.n.št. in je predstavljeno v obliki lokalnih tipov t.i. 'kultur po-Trypillia', ki so locirane na področjih z različnimi naravnimi pogoji in viri, od gozda do stepe. Lokalne posebnosti kažejo različne trende sprememb v gospodarstvu in v materialni kulturi, pa tudi v družbenih strukturah. Najbolj konservativne so bile skupine z najviše razvito družbeno organizacijo in gospodarstvom, ki je temeljilo na delitvi dela, s proto-mesti kot 'točkami počitka'. Na mejah kulture Trypillia so medkulturne povezave dobile poseben pomen in so privedle do sprememb v materialni kulturi in gospodarstvu, ki se je materializiral kot proces 'izginotja'. Zdi se, da so imele te spremembe skupno izvorno točko – in sicer spremembe v okolju okoli leta 3200 pr.n.št.*

KEY WORDS – *Trypillia-Cucuteni; intercultural relations; east of the Carpathians*

What came before

Before the beginning of the changes in the second half of 4th millennium BC Trypillia culture consisted of several local types with different structures (Figs. 1 and 2). It was a period in which large settlements flourished. Researchers are now aware of the existence of almost 200 Trypillian settlements with an area of over 10ha, and with the help of a magnetic survey and aerial photographs, the development of almost forty of them have been ascertained (*Videiko 2007.251–276*). They are known not only in the interfluvium of the Southern Bug and the Dnieper, but also between the Bug and the Dnister; even in Moldova a few dozen such settlements were even found in Moldova (Fig. 4). As a special phenomenon, large

settlements existed from the second half of the 5th millennium until the first half of the 3rd millennium BC, *i.e.* for more than one and a half thousand years. Thus we are dealing not with some accidental episode, but a phenomenon in the history of this part of Europe, which deserves thorough research.

The largest of them is situated between the villages of Talyanky and Lehedzine; its area is almost 400ha. A magnetic survey showed the housing development on the basis of the same plan and more than two thousand dwellings. Excavations also confirmed the simultaneous existence of the settlement, which was about 3.5km across and was settled at one time

(Krutz 2008. 42–49). Another large settlement existed c. 4000–3900 BC near the village of Nebelivka on a square of up to 300ha (Chapman et al. 2010).

Strictly speaking, according to the example of these mega-sites – proto-cities – we can observe the initial stages of the process of urbanisation with all its contradictions, and positive and negative consequences. Solving the economic and social problems which they faced, Trypillian society created quite a complex hierarchical organisation, now designated as chiefdom. This very sophisticated organisation made it possible to solve problems in one way or another – from the distribution of land between separate families and clans, to assuring the protection of tribal territories and trade at a great distance.

The division of labour led to the flourishing of handicrafts, which is especially noticeable in pottery. The realistic ‘portrait’ statuettes give rise to reflections on the development of art. A ramified and large-scale system of exchange of raw materials and of metal and flint products was created (the annual requirement of one super-settlement for flint inserts for sickles constituted a few tons, and deliveries came from the Volhynia region, hundreds of kilometres away).

A huge settlement with a few thousand residents could muster a few hundred or even a thousand warriors for its defence. Such a powerful (for that time, and well-armed – including ‘the most advanced’ copper weapons) military contingent was quite sufficient to discourage neighbours who did not have such a ‘mobilised resource’ from raising territorial and property claims. On the other hand, the concentration of the population in proto-cities led to the appearance of previously unknown (or almost unknown) problems with ecology, exhaustion of natural resources, deterioration in the quality of life. In principle, by their example we can observe practically the first display of the permanent ecological crisis caused by humans.



Fig. 1. Trypillia and Cucuteni cultures before ‘disappearing’. ○ large sites (proto-cities).

Sooner or later, all civilisations are relegated to oblivion and become part of history forever. It happens in different ways, but usually this process in ancient times is described as an invasion of cruel barbarians whose hordes burn and reduce to dust and ashes flourishing oases and towns. It is understood that there are such views concerning the epoch when the civilisation of ‘Old Europe’ disappeared. Bellicose nomads from the Pontic steppes have been identified as the aggressors by some scientists. However, these terrors, as it turned out, have almost nothing to do with what really happened. Thanks to research conducted by representatives of different sciences – from paleo-geographers to archaeologists – an overall picture of events on the continent more than forty-five centuries ago is now available.

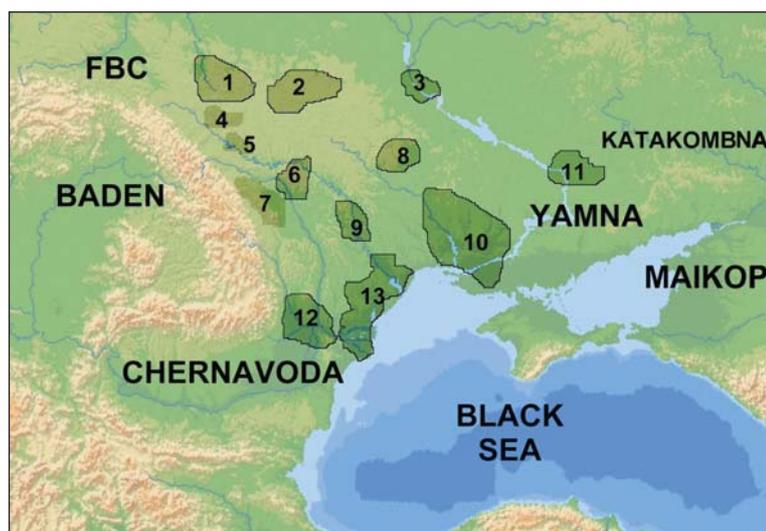


Fig. 2. Trypillia in the process of ‘disappearing’. Local groups and ‘post-Trypillia’ cultures. 1 Khoriv and Lozy. 2 Troyaniv and Goro-dsk. 3 Sofiivka. 4 Kasperivtsi. 5 Zhvanets. 6 Gordineshti. 7 Erbi-ceni. 8 Kosenivka. 9 Vykhvatincy. 10 Serezliivska. 11 Zhyvotyliiv-ska. 12 Foltesti. 13 Usatove.

Three modes of development

If one looks closer at the diversity of variants of the Trypillian culture after 3400–3200 BC, one can see that different groups of the population overcame a crisis in a different way (Figs. 2 and 3). So, we can speak of a few 'anti-crisis programmes' implemented in ancient times by the Trypillians, who were striving desperately to survive. Not all these programmes appear to have been 100% successful (a success rate one cannot expect even now), but perhaps thanks to them, the Trypillian world survived for another 500–600 years.

In the interfluvies of the Southern Bug and Dnieper, proto-cities existed for another half millennium or perhaps even more – the latest of them is dated to about 2750 BC: Olkhovets, an area of almost 180ha (Fig. 6). Other large settlements with painted pottery existed at Kosenivka (near 120ha), Apolyanka (90–100ha), Sharyn (30ha), and other places. All of them parts of the local Kosenivka group, which appeared at the end of the Trypillia CI stage c. 3500–3200 BC and existed during stage CII. In the area between the Dnister and the Carpathians communities survived which continued the previous way of life. Their security was based on small fortified settlements located in out-of-the-way places.

Perhaps complexity and the power of the social organisation worked here; reserves of food created by powerful chiefs for 'the black day' appear to have been very useful; they allowed people not only to survive, but also to resist the raids of their hungry neighbours. Groups of warriors (well-fed and organised and also numerous) managed to defend the harvest in the fields. In any case, the residents of the proto-cities in the Cherkassy region continued to make painted pottery and perform a rite of abandoning settlements, which was accompanied with an immense sacrificial fire until the end of their existence.

Near the borders of this group there were other groups which used some Trypillia culture pottery and also made figurines. They are known from the graves under burial mounds, and were divided into a few local groups: Serezliivka, Zhyvotylyvska (Fig. 2). They occupied the river valleys of Southern Bur and Dniro in the Steppe zone (*Dergachov 2004. 109–111*).

Nomads appeared in the Steppe zone in those hard times, not without the help of the Trypillians. In the Usatove culture which was spread in the steppes mainly between the Dnister and the Danube their presence is rather noticeable. A considerable quanti-

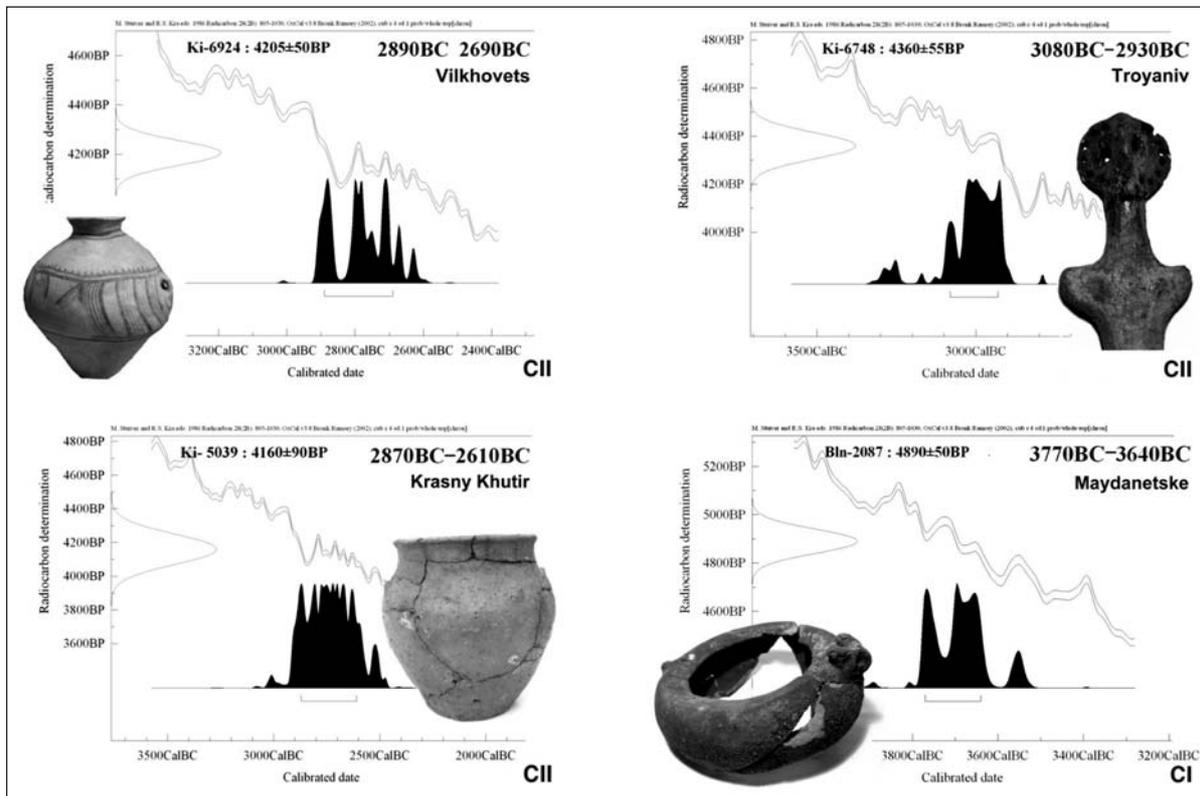


Fig. 3. Chronology of Trypillia culture – stages CI and CII.

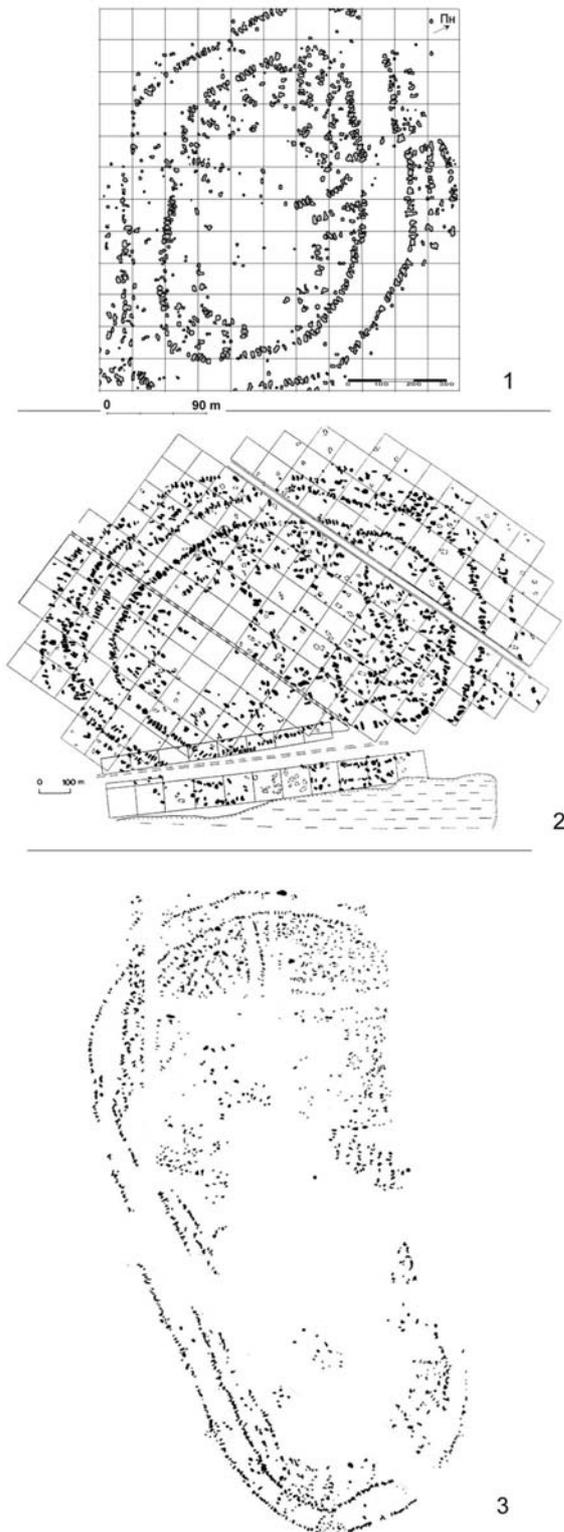


Fig. 4. Large Trypillia culture settlements. 1 Glybochok (BII, near 132ha). 2 Maydanetske (CI, near 200ha). 3 Talianky (CI, near 400ha). 1–3 after V. Dudkin.

ty of painted pottery has been found here; statuettes of rather peculiar appearance were used in rites (Fig. 8). Another important component of the Usatove community (judging by the same pottery) was

the population of the Cernavodă culture, which had come from the West, from the Danube; probably descendants of a tribe ruled by the chief buried with a horse-head sceptre in the Suvorove burial mound took part in the process of carrying out the steppe ‘anti-crisis programme’ (and creating a new culture).

The important thing is that the bearers of the Usatove culture were probably the first to create and use nomadic cattle-breeding as a special type of economic management in the steppes. Their burial mounds – with characteristic burial sites – are scattered along watersheds of Dnister valley, from maritime estuaries to Tiraspol, indicating the routes of ancient nomads (Fig. 2). Only a few settlements are known, all of them are situated near estuaries, in the South. Bearers of the Usatove culture probably spent winter here, closer to the warm sea. This system of economic management continued here until the 18th century.

It has also been established that residents of Usatove settlements continued to grow cereals: einkorn, hull-less barley, oats, peas, bitter vetch (for forage), and millet, a traditional plant of nomads (*Patokova, Petrenko, Burdo and Polishchuk 1989.118–122*). The latter prevails to a great extent among impressions on pottery and on anthropomorphic statuettes. However, grain cultivation could not have been the main element in Usatove economic management, because the plots suitable for sowing were confined to a floodplain and a few in number.

Numerous bones of domestic animals found in these settlements during excavations and studied by paleozoologists became one of the reasons favour supporting conclusions regarding bearers of the nomadic Usatove culture. It has been established that the main ‘breadwinner’ of Usatove culture must have been herds. Their composition was as follows: sheep comprised almost 70%, cattle and horses comprised the same amount (13–17%) (*Patokova, Petrenko, Burdo and Polishchuk 1989.120, mavl. 4; Videiko, Burdo 2004.89–91*). Both in terms of quality and quantity, this range of domestic animals was ideally adjusted to farming on the steppe. In winter, when pastures are covered with snow, the first horses were sent there. Tall animals walked trampling snow and pastured, ‘trimmed’ the tops of plant stems. They were followed by cows which ‘removed’ the next layer of forage and also trampled snow. Sheep were the last to be sent to pasture, eating the remaining grass revealed from the snow cover by the bigger animals (*Masanov 2000.116–130*).

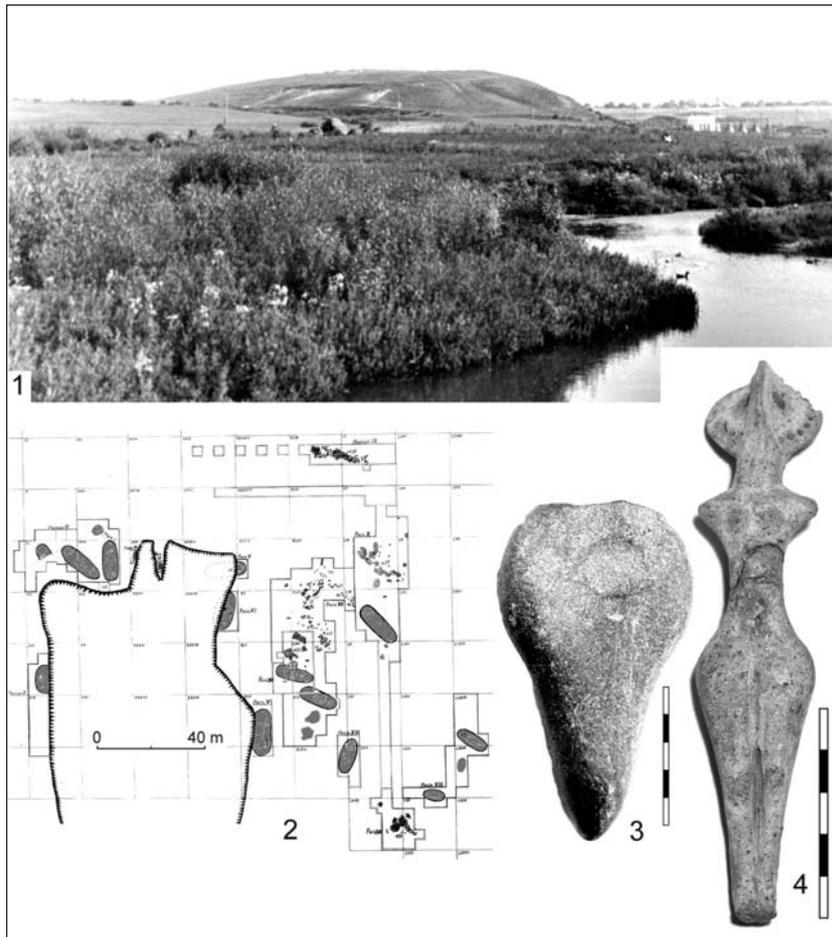


Fig. 5. Troyaniv, Late Trypillia, stage CII. 1 view at place of location. 2 plan of explored part of the settlement (1–2 after M. Shmaglij). 3 hammer-axe, stone. 4 clay figurine.

This feeding regime (bio-technology, as it were) on the snow-covered winter steppe was effective for many millennia. In Kazakhstan in the 19th and the beginning of the 20th century, ethnographers found a correlation between the number of animals per herd similar to the Usatove numbers. There is one caveat: even according to the most perfect model of such economic management, the steppes could feed nomads much less than grain growers. Grain growing in the steppe was impossible at that time for ecological (and technological) reasons. First, it was cold and dry; second, it was impossible to plough virgin land without iron tools (it would happen only a few thousand years later).

Moreover, they had to compete for possession of these pastures, just as they had for possession of fields. This is why it is not difficult to distinguish the graves of military leaders among Usatove burial places; they are distinguished by their monumentality and the presence of bronze weapons. And among 'ordinary' bearers of the Usatove culture, there are

quite a lot of military burials with traces of injuries received while protecting a herd (Videiko 2001.52–54).

A third way was taken by the Trypillians who went north, closer to the forests, where a lack of grain could be compensated for by hunting and fishing, gathering edible plants and mushrooms. This is how Trypillians appeared in the Volhynia and Zhytomyr regions at the beginning of the 3rd millennium BC – the Troyaniv, Gorodsk, Lozy, and Sofiyivka local groups (Dergachov 2004.109–110).

Judging by the appearance of pottery and weapons, these tribal groups already included not only Trypillians, but also some other, new western neighbours (Videiko 2000.32–55). For the new community, painted pottery was almost as exotic as for the bearers of the Usatove culture in the South. At most, the surfaces of vessels were covered

with red paint. However, during excavations, fragments of simple, roughly made pots predominated (Fig. 5).

Thus these descendants of Trypillians knew how to grow grain and breed cattle, but virtually none of them established permanent settlements (which now comprised two to three dozen buildings) with large ground dwellings any longer. They also seem to have completely forgotten the rite of burning settlements. At the same time, they chose places for settlements which were as high as possible, on capes and hills, with slopes as steep as possible. They chose narrow capes; if necessary, it could easily be blocked by a ditch or a rampart. This population continued to use deposits of Volhynia flint and even used it to make great plates toothed sickles (Budziszewski 1995.148–189). However, arrows heads definitely predominate among the flint finds.

In the area of Kyiv, a few necropolises with cremations of the late Trypillian culture have been found

(Fig. 7). They were dubbed 'cemeteries of the Sofiyivka type' after the name of the first find near the village of Sofiyivka (Videiko 1995.15–134). All in all, five are now known; however, there could be (and were) many more. Excavations have shown quite a number of warriors were buried there; including those who died in a battle (burnt arrows have been found among the ashes). A large (a few hundred specimens) collection of arrows was collected by Fr. Yanovskyi near the village of Vyshenky some time ago. We can even try to reconstruct a few sets of weapons of horse archers, which were obviously made by the different fighters for themselves. And again, there are many burnt points of arrows heads in the collection. This very fact allows us to assume the presence of a large burial ground of the Sofiyivka type in the area of the village.

Judging by these flint points, the same Trypillians might also have been of the warriors were killed in battle. In addition, quite an impressive collection of flint combat axes-hammers has been found at burial sites. Some have prototypes among the weapons of their neighbours in Central Europe, or were even made of raw materials which had been brought from beyond the Carpathians (Petrugne 1995.190–199). Such axes-hammers are also among the weapons of some of the last southern and eastern Dnieper Trypillians. On the butt of some axes there are splits due to blows, while some axes are broken. Thus these axes appear to have been used in battles more than once (Klochko 2001.50–67).

The armoury also included carved copper daggers. One was placed on the funeral pyre of the deceased together with a grindstone. An analysis of metal products from the Sofiyivka burial ground has shown that, just as before, deposits of copper explored more

than a millennium ago within the limits of Volhynia and Dnistro region had been used. We can only guess why the last 'Trypillian wars' on the bank of the Dnieper were waged almost forty-seven centuries ago.

The visible and invisible changes

Everything is simple at first sight: if painted vessels, statuettes, wattle, and daub dwellings disappeared, it seems that the people who created them, *i.e.* Trypillians, must also have disappeared. However, in discussing the disappearance of the culture, the decay and twilight of this civilization, we must understand that its bearers did not disappear from this earth.

Thus, really beautiful and refined Trypillian painted pottery disappeared forever. But perhaps the society

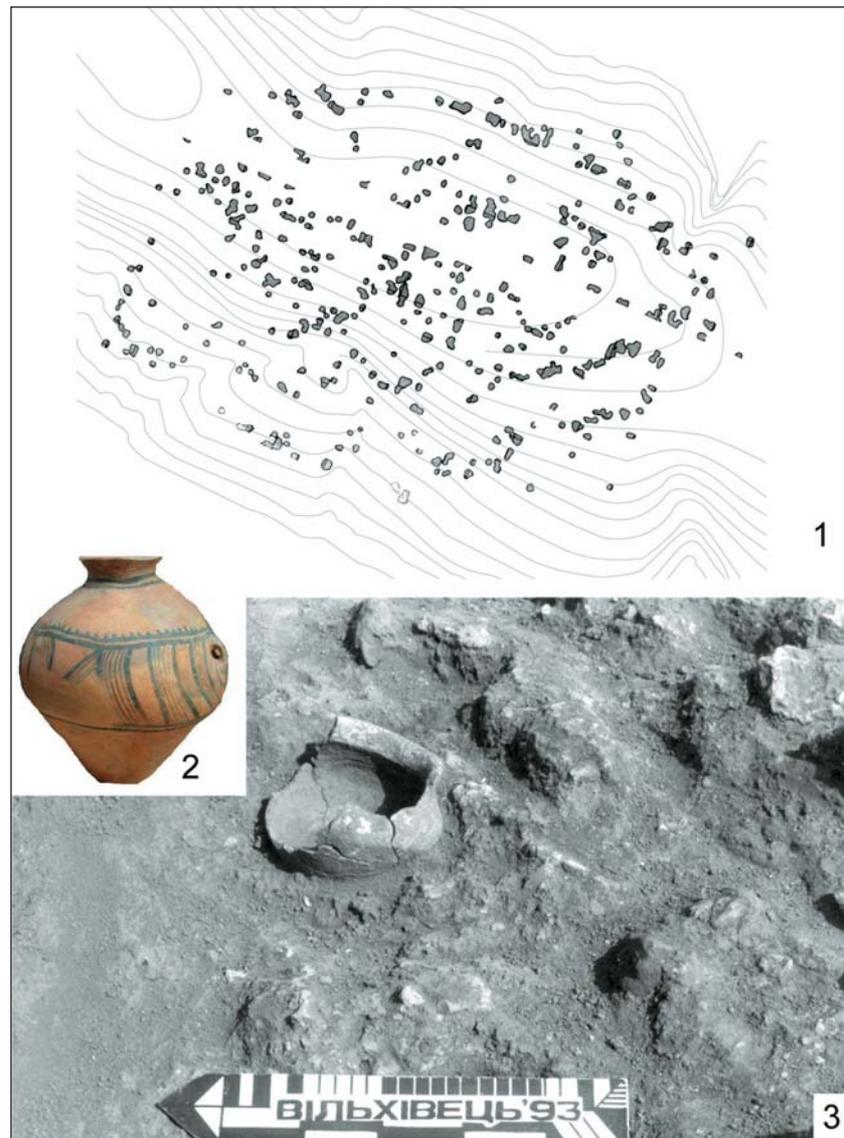


Fig. 6. Vilkhovets, Late Trypillia, stage CII. 1 plan (after V. Dudkin). 2 painted vessel. 3 remains of burnt house with pottery inside.

could no longer afford such luxury, or continue to feed craftsmen who made beautiful pots. Because when you are hungry, you become indifferent to jugs and ornaments on bowls. Moreover, it is not very difficult for anyone to make a pot for preparing food if needs be; it can then be used to make a meal of cereals without employing a potter. In the same way, not only beautiful vessels, but many other things which seemed unnecessary disappeared.

And what of statuettes? Why make them, spend time on them, when for some reason the old gods had stopped defending the people who performed rites in their honour. And it was no longer necessary to give away expensive instruments, food and sacrifice buildings – as this rite had proved to be quite ineffective, too. New gods and new rites in honour of them, new sacrifices were necessary. And the time free from performing rites that were once so vital could be used more effectively for foraging, building fortifications, training in archery, or improving weapons.

It is also worth noting that, according to archeologists's calculations, at the late stage of Trypillia the number of people in the tribes of this community reached 120 000. However, what catastrophe befell this civilization is explained by the comparison of this figure with the index of the number of the population for the previous period: more than 400 000 (*Krutz 1993.33*). We can see that the number of Trypillians suffered a three- to fourfold decline. Moreover, even in the period of the decay, the population of bearers of different variants of this culture evidently exceeded all the other local populations of the land combined.

Conclusions

Judging by the findings of the excavations of ancient settlements of the middle to the second half of the 3rd millennium BC, practically the same thing happened as at the very beginning of Trypillian history there: scarce representatives of tribes and clans who had been very powerful formed new communities which are represented by the archaeological cultures of the Early Bronze Age. It may be said with confidence that in the ensuing millennia in this area, such breakdowns, reformations of clannish and intertribal coalitions occurred more than once. Their traces can be found in the new archaeological cultures.

We may conclude that:

- The process of the 'disappearance' of Trypillia culture continued approx. 500 years after 3200 BC.

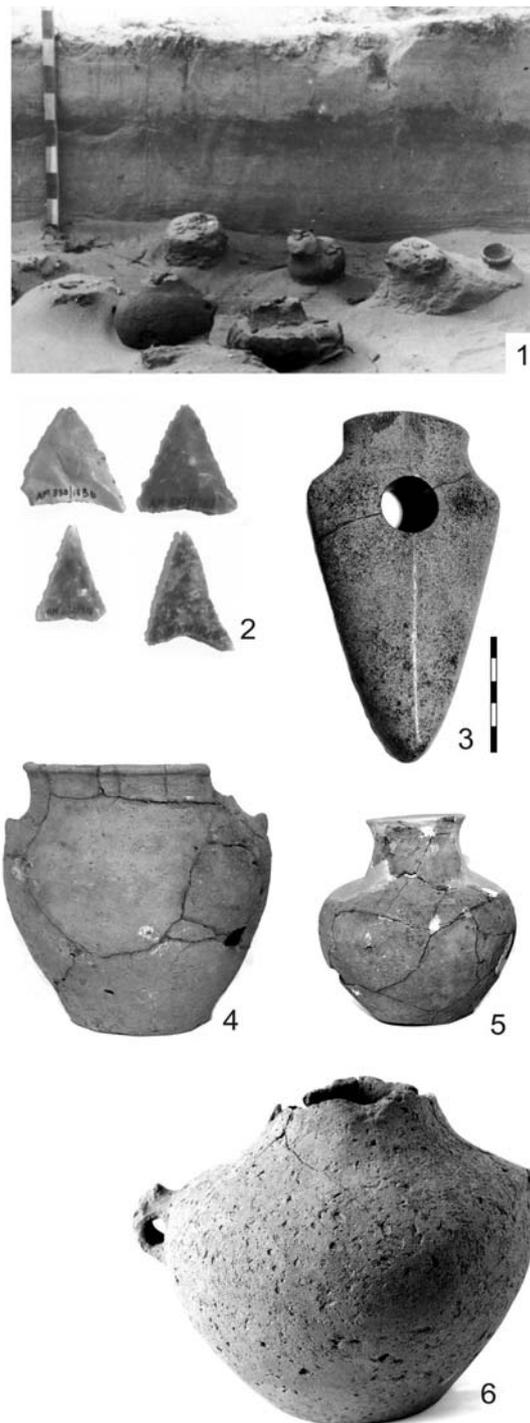


Fig. 7. Sofivka-type cemeteries, Late Trypillia, stage CII. 1 burials at Chernin cemetery (after V. Kaniyets). Sofivka cemetery: 2 arrowheads, 3 hammer-axe, 4–6 pottery.

- It led to the creation of several cultural complexes in the Trypillia-Cucuteni region and on its borders.
- Populations survived in various natural conditions and created different few modes of adaptation.
- Old traditions for a long time survived in groups which had a strong social organization and developed crafts.

- Border groups were in contact with and influenced the closest cultural groups/cultures which led to the rapid disappearance of Trypillian features.
- They used only a few elements of the 'old culture' (painted pottery, figurines), mainly imported from surviving Trypillian enclaves.
- Trypillian heritage was also used by different groups outside the area of the Trypillia-Cucuteni complex.

In the Early Bronze Age, the Usatove culture mentioned above, the cultural groups along the banks of the Dnieper, in the Azov Sea region, in the east of Ukraine are among them. And almost everywhere, if not the material traces of the Trypillian world in the form of painted vessels brought from some last islands of this civilization, then at least the imitation of its achievements can be found – a rough likeness of painted pottery. These have even been finds at burial sites under mounds of statuettes made by local sorcerers who performed rites which were probably somewhat similar to the Trypillian ones.

A great deal of information from different fields of knowledge and skills was preserved by the heirs, but even more information was lost. And information about the creators of the ancient civilization was later completely erased from the memory of generations who returned to their distant heirs long millennia later.

At the times of 'Trypillia culture disappearance' various social structures coexisted: from complex chiefdoms and simple chiefdoms to separate tribes. This situation contradicts the picture of a common evolution displayed for Southern-Central Europe by Gronenborn (Gronenborn 2009.101–102, Figs. 3–4).

Did the Trypillian proto-cities have any hope of surviving and their chiefs climbing to the summit of power like the rulers of Crete, and to continue dominating the Pontus steppes as the legendary Minos ruled in the Mediterranean? Probably, yes, they did; however, this chance was missed, and all further attempts were directed not to achieving elusive power, but solely to survival.

For millennia, these lands appeared to be far from the frontiers of the civilized communities of the Old World. Also, it took entire millennia to approach the level attained in the distant 5th millennium BC.

At the same time the Trypillian experiment clearly showed that this area, which is now called Ukraine,

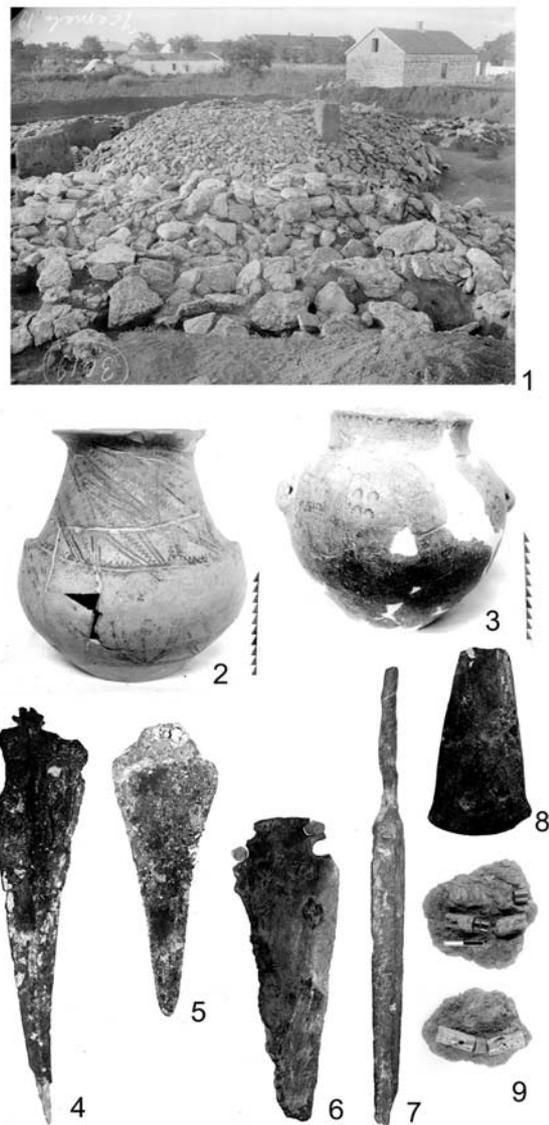


Fig. 8. Usatovo culture (type), Late Trypillia, stage CII. 1 burial mounds at Usatovo with stone constructions. 2 painted vessel. 3 pot with stamp decoration. 4–9 copper objects (after O. Lagodovska, report on excavations at the Usatovo cemetery).

can provide its residents with practically unlimited possibilities. It is a paradise for grain growers and cattle-breeders; there are plenty of mineral resources here. Here, with enough knowledge, skills and most importantly, will and desire, a flourishing civilization can be built which will arouse the surprise and envy of neighbours near and far. However, the sweet fruit of civilization may be in the same way lost by the heirs of its creators if they cannot face the challenges of history and nature, not once and not twice. What was created in these lands by the heirs of the Trypillians and their neighbours in the Bronze Age is one more clear proof that history has plenty of opportunities and factors which can determine its further development.

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