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Different Reactions to Environmental Changes in
the Late Bronze Age of the Lower Don Area
(Southern Russia)

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Staying Home or Staying with your Cattle? Different Reactions to Environmental Changes in the Late Bronze Age of the Lower Don Area (Southern Russia)

Steppe; Southern Russia; Bronze Age; cultural landscape; economy; environmental changes; nomadism.

The many surveys and excavations on both settlements and burial grounds, performed—especially since the 1950s—by our Russian colleagues in the steppe area to the northeast of the Sea of Azov (Rostov province [oblast’], southern Russia), provide us with a wealth of information on the cultural landscape, settlement patterns, economy and the developments therein through time. This high density, especially of settlement data, is rare in the steppe zone, where archaeology in many regions is still mainly focused on burial mounds. Therefore, the Rostov area is a good starting point to try to understand the developments around the transition from the Bronze to the Iron Age, leading to the development of the Scythian or early nomadic culture. Both last terms, not being neutral labels, have their minuses. Terming any archaeological culture in this way directly connects material culture to either a specific ethnicity (Scythians) we only know from Greek descriptions, or to a special way of living (nomadism). Both should first have to be identified archaeologically. Our presentation will try to explore the way-of-life of different groups of people inhabiting the steppe around the Don Delta and the northeastern Sea of Azov. We will mainly focus on the food economy and questions regarding sedentism versus nomadism, and our temporal focus will be on the developments during the Late (ca. 2200–1400 cal BC) and Final Bronze Age (ca. 1400–800 cal BC). The used chronology is based on ca. 40 ¹⁴C-datings, performed on contexts dating from the Middle to Final Bronze Age, undertaken within a Ph.D. research project by the first author, financed by the Excellence Cluster Topoi.

The starting point of our presentation is the Middle Bronze Age Catacomb-grave culture (ca. 3000–2200/2100 cal BC). Settlements from this period are extremely rare in the Rostov area, amounting to about five for the entire Rostov province and only two in our more restricted research area within the northeastern Azov steppe. Therefore, information on the economy is rather limited. However, when considering the entire steppe area to the north of the Black Sea, we can see a clear dominance of cattle in all bone assemblages,¹ whereas evidence for the use of domesticated crops is negligible to non-existent (at least east of the Dnepr). In sharp contrast to the data on the settlements, burials of the Catacomb-grave culture are well represented within the research area. They amount to about 30–40% of the thousands of excavated burials from Bronze Age mounds in the region. Looking at the distribution of Catacomb-grave burials within the research area, clear regional differences can be discerned. On the relatively ‘wet’ terraces and plateaus surrounding the Don Delta, the coast and the major rivers, Catacomb-grave

1 Antipina 1997.

burials mostly make up the majority of known burials (around the Don Delta 40–55% of all known kurgan burials). However in the ‘dry’ areas around the small steppe river valleys, they form only a minority of the known burials (ca. 25% for the medium-sized river valleys, and a maximum of 10% in the smaller river valleys of the dry steppe). The discrepancy between the small amount of known settlement sites and the large amount of known burials probably is due to the low archaeological visibility of Middle Bronze Age settlement sites in the steppe area. They mainly consist of artifact scatters, with small dug-out features like pits or houses, and therefore are normally only found during excavation of settlement sites dating to other periods (the image for the forest-steppe region seems to be very different).

The transitional phase to the Late Bronze Age (the Babino or Mnogovalikovaya culture, dating ca. 2200–1900 cal BC) sees a rise in the number of known settlements, reaching its peak during the Late Bronze Age Srubnaya (or pit-grave) culture (ca. 1900–1400 cal BC). From this period, hundreds of settlement sites are known throughout the steppe zone of the Rostov province. Although the number of settlement sites vastly outnumber the known settlements from earlier parts of the Bronze Age, the number of graves roughly equals the number from the Catacomb-grave culture. However, when looking at the distribution of graves throughout the research area, we see major differences between the different landscape zones. Whereas in the ‘wet’ areas, the graves from the Early and Middle Bronze Age outnumber those of the Late Bronze Age, which account for about 20–30% of the known Kurgan graves in the Don Delta region, in the dry steppe areas, Late Bronze Age graves form the vast majority of burials, accounting for 60–70% of known Kurgan graves, with Early and Middle Bronze Age together rarely accounting for more than 10–15% of known graves. This points to a regular colonization of the dry steppe lands during the Late Bronze Age, going hand in hand with a new and highly visible settlement record. Within a few centuries, even the smallest and driest river valleys of the steppe were densely settled. At the same time, it seems we can define central settlements that—in contrast to the many hamlets consisting of loose groupings of about 1–5 house plans—contain dozens of houses, often built in several layers on top of each other, and showing traces of metallurgy being performed at the site.

Although relatively few bone assemblages are known from the Early and Middle Bronze Age in the region, the economy doesn’t seem to change during the transition to the Late Bronze Age. Cattle was the major food source during the Bronze Age, augmented with sheep/goat and horse, pig playing no role of importance in the steppe area (as opposed to the forest-steppe zone). Domestic crops, hunting and, quite surprisingly in the Don Delta region, fishing played no role in the subsistence economy of the region.² Interestingly, both the bone assemblages and the ceramics point to a rather stable, possibly year-round use of these settlement sites. In the bone assemblages of both the coastal site of Levinsadovka, excavated by the German Archaeological Institute (DAI) together with the Don Archaeological Society (DAO), and of the dry steppe site of Khavaly, where we had the opportunity to participate in an excavation by the DAO under direction of P.A. Larenok, all age categories of young animals are represented, indicating year-round occupation. The ceramics of 15 sites from different parts of the research region were studied, paying special attention to the mineral temper used during the production of the ceramics. Interestingly, the types of minerals and their coarseness change with the geological subsoil. Even when the sites are situated at 5km from each other on both sides of a geological border, their ceramics show a completely different temper, which can be used as an argument against large-scale nomadism. This would point to an extremely dense exploitation of the steppe, which was mainly used as pastureland for cattle. As

2 Cf. Antipina and Morales 2005; Lebedeva 2005.

the economy shows no major changes, the colonization of the dry steppe area might be connected to an improvement of the quality of steppe grasslands around 1900–1500 cal BC, for which there are arguments in the palynological record and paleosoils.³ Both palynological records and charcoal from the sites indicate the existence of woodlands on wet locations as river valleys. Although this colonization seems to be triggered by environmental changes, it goes hand in hand with a range of cultural changes, e.g. in house building traditions and settlement lay-out.

Around 1400 BC, this settlement system breaks down. As opposed to the low number of known settlements from the Middle Bronze Age, the low number of settlements known from the Final Bronze Age cannot be explained as the result of a problem in the detection of these settlement sites. Similar to the Late Bronze Age settlements, the Final Bronze Age settlements consist of dugout houses, with stone wall foundations, large amounts of found material, etc., making them easy to be detected archaeologically. Also, in contrast to the Middle Bronze Age, the number of graves known from the Final Bronze Age declines as drastically as the number of settlements known. Settlements seem to retract to the wettest area within the research region: the Don Delta and its immediate surroundings, where the Kobyakovo culture is formed (1400/1300–1000 cal BC). This culture not only shows major transformations in ceramic style and burial traditions, but its bearers also incorporated many new food sources into their menu: especially large numbers of fish, but also grains (*Panicum miliaceum* were identified in our excavation at the Kobyakovo-culture settlement of Safyanovo) and maybe, most intriguingly, large numbers of dog bones. Also pig and sheep/goat appear in much higher proportions in the bone assemblages than before. In the steppe, settlement traces and burials became rare, but the inhabitants seemed to stick to the previous domination of cattle in the subsistence economy. To provide enough food for their cattle, however, they seem to have started a more mobile life-style. It seems that these two very different societies are the result of different answers to the questions they had to answer as the vegetation of the steppe became poorer: do we stick to our homes and, therefore, shall we change our economic base, or do we stick to our cattle-based economy, even if this means following the cattle on their quest for food and therefore becoming nomadic?

These two strands of trying to deal with a changing environment might have been triggered by climatic developments that caused a deterioration of the quality of the steppe vegetation. Paleosoil studies point to a continuing cooling of the steppe, which somewhere around the transition from the Bronze to the Iron Age is joined by an increasing aridity in the Don River basin.⁴ Interestingly, in the northern part of the research region at the settlement of Yagodinka, large oaks and pine trees were still available for house construction at the beginning of the Final Bronze Age, indicating that the northern steppe zone wasn't that arid yet. We had expected that the intensive use of the steppe during the Late Bronze Age might also have caused an overexploitation, leading to changes in the vegetation cover, the erosion of the fertile chernozem soils and with that a decrease of the quality of the steppe pastureland. However, the first drillings within the research area did not show any colluvium dating from the Late or Final Bronze Age, not even near settlement sites. Finally, the two new types of societies that developed during the Final Bronze Age: sedentary groups near the Don Delta and the coast, living from a broad spectrum of food resources, opposed to more mobile groups in the steppe, living mainly from cattle breeding, seem to dominate the region from this period onwards. During the so-called Scythian Iron Age with its associations of nomadism, horsemanship and gold, the Lower Don Valley is generally regarded as a border zone between the nomadic Scythians and Sauromatians and the more sedentary Meotians. The settlements of the

3 Gerasimenko 1997.

4 Medvedev 1999, 15–16.

sedentary populations mainly dating to the 5th–3rd centuries BC (of which a settlement was excavated by the DAI and the DAO at Novo-Zolotovka) and the 1st–3rd centuries AD, show bone assemblages containing large numbers of fish, sheep/goat outnumbering cattle etc. The settlements in the dry steppe are more problematic. Not much more is known than the burial grounds. Even in the 13th–14th centuries, the economy of the city of Azov fits in the tradition of the Kobyakovo-settlements, whereas written sources tell us about the cattle- and horse-based economy of the nomads whose graves are well known archaeologically. Only the rich and wet pastures of the Don Delta were able to maintain a relatively settled cattle-based economy, as indicated by the cattle-dominated bone assemblages from the Iron Age settlement of Elizavetovka. In conclusion, it is the Final Bronze Age during which period two different forms of societies appeared in the northeastern Azov sea region as a reaction to environmental changes that seem to have been caused by climate changes, but might have been accelerated by human overexploitation of the steppe. It laid the basis for an interaction between settled and nomadic societies, soon to be joined by Mediterranean population groups (in this case Greek settlers, reaching the region in the late 7th century BC). It is this confrontation between three different population groups that dominated the history of the region from then onwards, until its incorporation in the Russian empire around 1700 AD.

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