Neolithic and Bronze Age cultural communities of the steppe zone of the USSR

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Natural environment
The culture-historical development of Neolithic and Bronze Age communities under Eurasian steppe conditions is indissolubly linked with the establishment and development of early forms of productive economy, and displays a number of distinguishing features, which are the product of both natural and historical factors.

Within the USSR, the steppe extends from the mouth of the Danube to the upper reaches of the Ob and the Altai mountains (Milkov 1977). To the north, the steppes naturally grade in to the forest zone to form a belt of transitional forest-steppe landscape. To the south, the steppe is bounded by the coast of the Black Sea, the foothills of the Caucasus and beginning in the Lower Volga region the semi-deserts and, further south, deserts of Soviet Central Asia.

The European part of the steppe is characterized by a temperate continental climate, fairly fertile chernozems and dark chestnut-coloured soils which, in the not too distant past, were covered with a rich diversity of herbage predominantly grasses; see above, p. 781. Broad-leaved woodland occupied the river valleys, steadily increasing northwards towards the forest zone.

The Trans-Volga steppes have a continental climate, and the thin chernozems, dark chestnut and chestnut-coloured soils have a high salt content, which determined the spread of xerophyte wormwood-grass and shrub vegetation.

Despite the relatively favourable conditions that were produced by the onset of the post-glacial climatic optimum, the steppe zone did not become a habitat suitable for the domestication of cereals (Vavilov 1966). Suitable forms of sheep and goat for stock-breeding were also originally lacking.

Although populations of aurochs, wild boar and horse were widespread (Tsalkin 1970; Shnirelman 1980), sedentism was a precondition for their initial domestication. Thus, throughout the Mesolithic and during part of the Neolithic, the steppe zone was very sparsely populated. Because of the natural environment, the development of a productive economy and its diffusion into the steppe zone were directly dependent on the influence of communities further to the south which had entered the era of the productive economy.

The diffusion of agriculture
During the 6th and the first half of the 5th millennia BC, the Kelteminar (Masson 1966; A.V. Vinogradov 1981) and Seroglazovka (Melentev 1976) cultures came into existence under the influence of advanced centres in the Trans-Caspian area and around the Aral Sea. The Crimean (Formozov 1962; Kolosov 1983), Bug-Dniester and Sursko-Dnieper (Danilenko 1969; Markevich 1974) cultures take shape at the same time or a little later. These cultures, which have, in part, different impetuses and occur at different times, combine elements of a traditional appropriating economy, with new features of emergent agriculture and pastoralism; all of them, however, are found in regions on the edge of the steppe zone, rather than in it.

Unfortunately, little work has been done on the problem of the diffusion of progressive forms of economy in the steppe proper; this can

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be explained with reference to the specific character of the process here. It is clear that southern influences on the steppe came from the Carpatho-Danube region as well as from the eastern Caspian region and the Caucasus.

The initial impetus undoubtedly came mainly from the eastern Caspian region, where a pastoralist complex based on breeding sheep and goats which were also suited to the steppe zone emerged quite early on. The tradition of making round-bottomed pottery out of clay to which cockle-shell had been added as a filler, which subsequently became widespread in the cultures of eastern Europe and western Siberia, also emerged in this area.

It should be emphasized that the eastern Caspian, Caucasian, and Carpatho-Danubian influences were directed not so much towards the interior of the steppe zone although they were very significant there as towards the forest-steppe zone.

Evidently the cultural impetuses which came simultaneously from various centres and their interaction with each other and with local traditions, on the one hand, and, on the other hand, the diversity of the soils, flora, and fauna of the forest-steppe belt created a very favourable cultural background for the perception, independent selection, and consolidation of the forms of productive economy most suited to local conditions. These forms of economy were then conveyed both to parts of the steppe zone and, later, northwards to the forest zone.

Only in this way can we explain why the majority of cultures and sites of the Neolithic and Eneolithic occupied, or gravitated towards the forest-steppe regions.

The Middle Volga and southern Urals was a focus of culturogenesis that also emerged in the forest-steppe during the Neolithic–Eneolithic period to play a significant part in the development of the eastern European and western Siberian communities.

Only from the Eneolithic period (4th and first half of the 3rd millennia BC) onwards is it possible to speak with certainty about the early forms of productive economy and the general cultural progress of the communities of the steppe zone. This process is connected with two important cultural communities, the development of which was based on an early horse-breeding economy.

The Mariupol and Sredni Stog cultural communities

The first of these communities dates to the first half of the 4th millennium BC, and is represented by the Samara culture (Figure 1.9: left bank of the Middle Volga), the Lower Don culture (Figure 1.10: Middle and Lower Don regions), the Azov–Donieter culture (Figure 1.11: northern Azov region), and, it seems, the Caspian culture (Figure 1.8: northern Caspian region).

The second dates to the second half of the 4th and first half of the 3rd millennium BC, and includes the Khvalynsk culture (Figure 1.12: Middle and, apparently, Lower Volga region), the Sredni Stog culture (Figure 1.13: from the lower and Middle Dnieper to the lower reaches of the Don), and the Repin culture (Figure 1.6: Middle Don) (Vasiliev 1981; Vasiliev & Sinyuk 1985). The Suverov group (Dergachev 1986) in the northwestern Black Sea region, and sites of Novodanilovka (Telegin 1985) and post-Mariupol (Kovaleva 1980) types on the left bank on the Dnieper (discussed below also belong to this period.

Each of these groups and cultures has distinctive features but, significantly, they form a kind of unified substratum within the chronological stages identified. This has given scholars grounds for uniting them into two major culture-historical communities. The first (Early Neolithic) is known as the Mariupol community and the second as the Khvalynsk Sredni Stog.

In addition to those already mentioned, the development of the Dnieper-Donets culture (stages II–III: Figure 1.14) in the forest-steppe region of the Middle Dnieper also dates to the Eneolithic (Telegin 1968). But, evidently, because of its peripheral position, it retained many archaic features and is, to some extent, not typical of the general picture as observed in the eastern and southern regions.

Finally, the appearance of Eneolithic cultures in the Trans-Ural region and western Kazakhstan the Surtandy (Figure 1.15: Matyushin 1982) and Botai (Zaibert 1985) cultures also dates to this time, although the development of productive forms of economy proceeded more slowly here and its diffusion dates mainly to the Bronze Age.

The Mariupol culture-historical community is characterized by numerous, fairly short-lived settlements, most of which are located in the forest-steppe zone. Colleagues or trenches, often with stone or stone tools and weapons (stone adzes, chisels, anvil) are also common. The main distinguishing feature is a high percentage of horse
The sredni Stog cultural communities dates to the 8th millennium BC, and is associated with the Samara culture (Figure 1.9; Middle Volga), the Lower Don region, Middle and Lower Don Dnieper culture (Figure 1.8; region), and, it seems, the Kurgan culture (Vasiliev 1981; Vasiliev 1981). The Suverov group (Dergachyov 1981; northwestern Black Sea of Novodanilovka (Telegin 1980) types in the Dnieper (discussed) for this period.

Regional and cultural characteristics, and, significantly, they form a stratum within the chronology. This has given scholars several major communities. The first (Early Neolithic) as the Mariupol complex as the Khvalynsk Sredni Stog, Dnieper-Donets culture (1.14) in the forest-steppe zone. The Dnieper also dates to the 8th millennium BC. But, evidently, they were not in a shalier position, it retained its role and, to some extent, a regional picture as observed in the Orenburg region.

The Neolithic–Eneolithic cultural communities of Eneolithic cultures in the region and western Kazakhstan (Figure 1.15; Matyushin 1985) cultures also flows through the development of economy and proceeds more diffusion dates mainly to the period of Neolithic–Eneolithic cultural communities of the Steppe Zone of the USSR.

settlements, most of which occur towards the forest-steppe zone. Collective burials in large pits or trenches, often with several burial horizons, are distinctive. The skeletons lie on their backs and are sprinkled with ochre. Some pottery is pointed-based, although flat-bottomed pottery with cockle-shell and vegetable filler in the fabric and a distinct collared lip and all-over combed impressed decoration predominates.

There is a specific assemblage of ornaments (plaques made from wild-boar tusk, beads, cockle-shell pins) and depictions of horses, bulls and other animals on bone plates, as well as tools and weapons (large flint knife-blades, stone adzes, chisels, and maces). One of the main distinguishing features is the extremely high percentage of horse bones (80% or more) found at settlements. Horses are also often found as sacrifices in burials.

The whole economic and cultural assemblage continues organically in the cultures of the Khvalynsk Sredni Stog community, reflecting the genetic link with previous cultures. The widespread opening-up of regions of the steppe proper occurred in this period. Collective burial is replaced by individual burial in large clan cemeteries. Burial grounds containing only a limited number of burials also occur and, most importantly, the first kurgan (barrow) burials appear.

The earliest of these kurgans, as determined by Tripolye imports, are dated to the very beginning of the second half of the 8th millennium BC. The bodies were laid on their backs, but often in a contracted position, with the legs...
bent upward at the knee. A northern or northeastern head orientation predominates.
There is a marked increase in the number and variety of weapons: large flint knife-blades, spearheads and javelins, and various types of stone mace.

The appearance of zoomorphic sceptres and of horse-riding is associated with the Khvalynsk Figure 1.12) and Suvorov cultures (Danilenko & Shmagly 1972). The pottery assemblage undergoes considerable change as round-bottomed vessels begin to predominate. Along with combed and impressed decoration, pricked and then corded decoration begin to appear. The traditional cockle-shell ornaments, beads, pendants made from deer’s milk-teeth, and stone bracelets, are supplemented by metal ornaments.

The emergence of a steppe economy
The principal significance of the cultures discussed above is that they demonstrate the transfer of the cultural epicentre from the forest-steppe to the steppe zone. The horse-breeding economy, later supplemented by sheep-breeding, apparently leads, in the second half of the Eneolithic, to the emergence of semi-mobile population groups with which the kurgan assemblages and sites of Novodanilovka type are associated. The increase in population density was accompanied by an increase in the area available for stock-breeding, because of the complete opening up of the steppe in the European part of the USSR, particularly in the Trans-Volga region.

Throughout the Eneolithic, steppe cultures were greatly influenced by the agricultural communities of the Caucasus, Trans-Caspian region, and Carpatho-Danubian region. In the late phase, however, the steppe tribes themselves start to play an ever-increasing role in the development of these agriculturalists. Material similar to the Mariupol material, from the Tumek Kichidzhik burial ground in the southern Aral Sea region is significant in this respect (A.V. Vinogradov. Itina & Yablonsky 1986).

Events on the western periphery were significant. Pastoralist tribes, having penetrated the area inhabited by the agriculturalist communities of the Carpatho-Danubian region, provoked considerable changes in the development of the Cucuteni-Tripolye and Alden II Bolgrad cultures. Similar processes also took place in the foothills of the Caucasus (Masson 1982).

This process of cultural genesis intensifies, particularly in the final stages of the Eneolithic when it is accompanied by the emergence of numerous and diverse cultural groups at sites such as Usatovo, the lower layer of Mikhaillovka, Konstantinovka, and a whole number of diverse sites from the forest-steppe zone.

The subsequent cultural and economic development of the communities of the steppe zone encompasses the period of transition from the Eneolithic to the Bronze Age (the second half of the 3rd millennium BC to the 10th century BC).

In this period the eastern European steppe was completely opened up and the Asian steppe was in the process of being opened up as a result of the final establishment of semi-mobile and semi-nomadic pastoralism, based mainly on sheep-breeding, and partly caused by the onset of a dryer climate in the middle of the 3rd millennium BC.

In eastern Europe, this is the period of the Pit Grave (or Yamnaya) and Catacomb cultural communities, identified by the remarkable Russian archaeologist V.A. Gorodtsov at the beginning of the century.

The Pit Grave (Yamnaya) culture
The Pit Grave culture (Merpert 1974) is of local origin. Its source can be traced to the Eneolithic cultures of Khvalynsk and Sredni Stog. It underwent two main stages of development. In the early stage (27th–25th centuries BC) it occupied the region from the Volga to the right bank of the Dnieper. In the late stage (25th–18th centuries BC) it extended from the area around Orenburg, to the south of the Urals, across the whole steppe and (in part) forest-steppe zone westwards to the Eastern Carpathians, also penetrating deep into southeast Europe as far as the Middle Danube region (Figure 2.1).

Thanks to its prolonged existence and large territorial extent, the Pit Grave culture includes a large number of zonal and local variants with their distinguishing features. The settlements of this culture are few and far between (Mikhaillovka, Skelya Kamenolomnya, Aleksandriya, etc). They seem to be cultural centres and, in a number of cases, have man-made defensive structures.

Kurgan cemeteries containing simple sub-rectangular pit-chambers (the tomb takes its name) are characteristic, with secondary inhumations in round the edges. The roofs were covered with layers of beams and slabs. In some regions anti-Hittites are found used in this remains of dismantled fortifications. The vehicles were found placed on the roofs.

The bodies were placed in chambers or burials placed on the knees. The skeletons were sprinkled with white clays and blackened early stage, the orientation of the head: the north and northeast; the south and southwest. The inventory is sparse. The weapons and ornaments are of various types: flat-bottomed of the vessels they are decorated with corded ware). The shape
cultures. Similar processes on the foothills of the Caucasus... 

cultural genesis intensifies, in the final stages of the Eneolithic anied by the emergence of some cultural groups at sites in the lower layer of Miknovka, and a whole number in the forest-steppe zone.

Cultural and economic developments of the steppe zone during the period of transition from the Bronze Age (the second half of BC to the 18th century BC) made the steppe zone one of the most important centers of early metallurgy and manufacturing. The eastern European steppe was opened up, and the Asian steppe was closed, to an extent caused by the establishment of semi-nomadic pastoralism, based on sedentary agriculture, and partly caused by the climate in the middle of the

This is the period of the Pit Grave (Ukraine) culture and Catacomb culture, identified by the remarkable Russian A. Gorodtsov at the beginning of the 20th century.

**Figure 2. Cultural communities of the end of the Eneolithic/Bronze Age**

- 1. Pit Grave (Yamnaya)
- 2. Afanasievo
- 3. Catacomb
- 4. North Caucasian
- 5. Andronovo
- 6. Srubnaya
- 7. Mnogovalikovaya
- 8. Sabatinovka
- 9. Tazabagayab

**Natural zones**
- I. forest
- II. forest-steppe
- III. steppe
- IV. semi-deserts
- V. deserts
- VI. mountains

**The Pit Grave (Ukraine) culture**

The material from the Pit Grave culture (Figure 2.3) is equally impressive (Popova 1955; Shaposhnikova 1969). It is named after the distinctive sub-kurgan burials consisting of a vertical shaft with a lateral catacomb niche and a cist decorated with cord impressions (corded ware). The shapes and ornamental composition vary. Stone axe-hammers, flint knife-daggers, and arrowheads are found. The metal artefacts are sparse: knife-daggers, flat axe-adzes, and tetrahedral awls. Ornaments include: copper, silver and gold spiral-shaped rings, bone beads, and pendants.

Faunal remains from settlements and burial grounds indicate that the animals bred were mainly sheep, cattle, horses. The ratio varies from one region to another. Agriculture was also practised. Hunting played a secondary role.

**The Catacomb culture**

The material from the Catacomb culture (Figure 2.3) is equally impressive (Popova 1955; Shaposhnikova 1969). It is named after the distinctive sub-kurgan burials consisting of a vertical shaft with a lateral catacomb niche and a cist decorated with cord impressions (corded ware). The shapes and ornamental composition vary. Stone axe-hammers, flint knife-daggers, and arrowheads are found. The metal artefacts are sparse: knife-daggers, flat axe-adzes, and tetrahedral awls. Ornaments include: copper, silver and gold spiral-shaped rings, bone beads, and pendants.

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subject of long debate. It is now believed that it arose on the basis of the Pit Grave community under strong North Caucasian influence.

The culture consists of several subdivisions which are constantly being defined more precisely. The central link in this community is the Donets group, located in the basin of the Seversk Donets river. At its height, this culture spread across the whole steppe from the Volga and north Caucasus to the river Prut in Moldavia. As they settled in new places, the Catacomb tribes partly displaced and partly assimilated the Pit Grave populations which preceded them. This was accompanied by the emergence in the peripheral regions of an area of distinctive mixed Pit Grave-Catacomb assemblages.

As before, the settlements are few in number. Fortified settlements occur (Perun, Leventovka), as do temporary, short-lived sites or stopping-places.

The kurgans contain central burials. Secondary burials are let in concentrically around the southern side of the mound. The Catacombs themselves are vaulted and sub-rectangular or oval in plan. Their form and size vary. Bodies are predominantly in a contracted position on their side, and occur in various orientations. The skeletons are sprinkled with ochre, but less often and more sparsely than in the Pit Grave culture.

An assemblage is quite often found in the burials. The pottery, which is always flat-bottomed, is made from paste with an admixture of fired clay. The jar-shaped vessels, pots and cups are decorated around the rim, on the shoulders, or all over. Corded decoration predominates. Ornately decorated incense burners on legs are characteristic.

The stone artefacts include a large number of axe-hammers, often with elegant relief decoration, maces, and flint arrow-heads. There are many more metal artefacts than in the Pit Grave culture, either originating in the North Caucasus cultural region or made locally from arsenical bronze. Casting moulds found in the burials provide evidence for local bronze casting. Massive lop-headed axes, flat adzes, daggers of distinctive type, chisels and awls are widely represented. There are many bone and metal ornaments: rings, pendants, beads, distinctive hammer-shaped pins etc. The majority of them are, like the metal tools, of North Caucasian origin.

The nature of the culture and its faunal remains suggest that semi-mobile pastoralism was practised. In the steppe zone, sheep-breeding predominated, while in the forest-steppe cattle were also important.

**The development of pastoralism in the steppe zone**

The cultures considered above demonstrate developmental continuity in the early pastoralist economy. They are associated with the establishment of the semi-mobile, semi-nomadic, predominantly sheep-breeding economy most suited to the steppe zone (which remained fairly sparsely populated). The steppe is identifiable as an independent cultural region with clearly expressed cultural and economic indices peculiar to itself.

Throughout the development of both the Pit Grave and Catacomb communities, an active adoption of cultural elements from the Caucasus, the Carpatho-Danubian region, and central Europe, can be traced as well as from the forest-steppe, particularly the Middle Volga and southern Urals region. In addition, the tribes of these cultures themselves played a direct role in the fate of a large number of communities in both near-by and distant regions.

The appearance of the first pastoralist cultures on the Asiatic steppes also dates to the end of the Eneolithic and start of the Bronze Age. The most striking of these was the Afanasievo culture (Figure 2.2: History of Siberia 1968: Khloystina 1975), which existed on the steppe of the Minusinsk basin, in the Gorny Altai region and between the rivers Yenisei and Ob.

It is characterized by small, short-lived settlements and, primarily, by kurgan burial grounds. The small mounds are surrounded by stone revetments. Pits of simple form, sometimes with a wooden frame-built lining, were covered with planks or stone slabs. Bodies were laid in an extended or contracted position on their backs with the head oriented northwards.

Oviform pottery with a pointed base, similar to early Pit Grave pottery, is characteristic of the Afanasievo culture. Flat-bottomed vessels appear towards the end of the culture. The culture dates to the second half of the 3rd millennium BC, and, at the start of the 2nd millennium BC, is replaced by the Okunevo culture which is characterized by kurgans with a stone revetment, of rectangular shape, in a stone cist. On the steppes appear to have been populated.

**Middle and Late Bronze Age**

The last culture-historical period considered is the Middle Bronze Age (3rd centuries BC) and Late Bronze Age (2nd centuries BC). This is the period of the eastern European and Aryan migrations, and the beginning of the stable pastoralist-agriculturalist exchange of combinations.

This stage is represented by separate communities, the main one: (Figure 2.5) and Srubnaya roots. Both these cultural traditions differ in the end of the Eastern Bronze Age in the northern Ural. Together, they contribute significantly to the formation of ethnic identity. Some recent, many scholars believe them to be related to the single Srubnaya cultural community.

The Andronovo cultural area is characterized by small, seminomadic settlements with a high degree of mobility and a limited amount of material culture. The Andronovo culture is characterized by kurgans with a stone revetment, of rectangular shape, in a stone cist.
culture and its faunal semi-mobile pastoralism in the steppes. The steppe zone, sheep- and goat-herding, while in the forest-steppe and central regions, the steppe is nomadic, but in the southeastern regions, it is semi-nomadic.

Pastoralism in the steppe

The development of both the Pit-Grave and Andronovo cultures, with their own elements from the Caucaus-Danubian region, was characterized by the transition to stable sedentism and a complex pastoralist-agriculturalist economy within a wide range of combinations. This was represented by several cultural communities, the main ones being Andronovo (Figure 2.5) and Srubnaya (Figure 2.6). The roots of both these communities are back to the cultures of the end of the Eneolithic and start of the Bronze Age in the Middle Volga and southern Ural regions. This circumstance, together with constant and prolonged interaction, made them remarkably similar in terms of all major parameters to such an extent that, until recently, many scholars were inclined to join them together in a single Srubnaya-Andronovo cultural community. The Andronovo cultural community is the largest of those considered in this paper. Whereas at first it mainly occupied the area between the rivers Ural and Irtysh, at the end of the Bronze Age it extended as far as the Yenisei, and from the taiga-forest zone of western Siberia to the desert oases of Soviet Central Asia and the Tien Shan. The territory of the Srubnaya community is slightly smaller. Initially the community occupied the forest-steppe of the Middle Volga and Upper Don regions, and then extended across the whole forest-steppe and steppe from the Middle and Lower Dnieper region to the Ural river although individual sites are known as far east as Soviet Central Asia.

Thanks to the length of time that they existed and the extent of their territory, each of these communities is represented by thousands of settlements and burial complexes, the study of which has given rise to an abundant literature and, as a result, a large number of sometimes mutually exclusive opinions on chronological attribution, provenances, and the typology and interpretation of sites.

However, all specialists agree that both cultural communities involve two basic chronological horizons, the early one corresponding with the middle, and the later one with the end, of the Bronze Age.

In the early period, the cultures of both communities have fortified settlements, later replaced by large, long-lived, open settlements. Large houses of rectangular plan either on the surface, sunken-floored or semi-sunken-floored with frame-built walls are characteristic. Houses with stone foundations occur on the steppe. Settlements with houses have been discovered in the copper-ore regions of the Donbass, the western Ural region and Kazakhstan, and include sites where metal was worked.

Kurgans, sometimes ringed with stones or with a surrounding ditch are characteristic of the cultures of the Srubnaya community. They contain large simple pits, pits with frame-built internal constructions (hence the name of the culture: Srubnaya from Russian strub, framework) or stone cists. In the later stages, small rectangular or oval pits occur. Cemeteries with simple burial in the ground are also known.

The burial complexes of the cultures of the Andronovo community are similar to the Srubnaya ones, but catacomb kurgans are also known. The mound is more often surrounded by a ring of stones, and flat cemeteries usually have low sub-rectangular or circular stone revetments.

Inhumation was practised by both commu-

* Unfortunately, there is no single work that covers either of these communities thoroughly, although there are a large number of works which make broad regional generalizations. For the Srubnaya community of cultures the work of Krivosheva-Garova (1955) has remained topical and should be mentioned, along with a collection of recent papers on The Srubnaya culture-historical community (1985) which is one of the most complete new works. For the cultures of the Andronovo community, the following should be mentioned, from an extensive literature: Chernkoff 1960, Salnikov 1967, Maksimenko 1978, Kosar 1981, and Zdanovich 1986.

† Wooden poles form a single, ridged, tent-like 'mortuary house': the dwellings are thought to have been constructed similarly [Translator's note].
nities, with a certain amount of cremation occurring at a later stage. The bodies were placed in a contracted position on the left side with the hands to the face. In the cultures of the Srubnaya community, the predominant orientation is eastwards, whereas in the Andronovo it is westwards.

Animal sacrifices are common. In the early stages, whole skeletons (most often of horses) are found, while in the later stages only individual bones occur. The inventory consists of vessels, tools, weapons, and ornaments and varies according to the sex and age of those buried. For the early periods, warrior burials stand out because of their wealth. Andronovo warrior burials, in Sintashta-type cemeteries (Gening 1977) which contain the remains of chariots, sacrificed horses and a large number of weapons, are especially noteworthy.

Despite the mass of indices, variations in which form the basis for the distinction between the two communities, the pottery, tools, weapons, and ornaments are generally similar. The general developmental trend of Srubnaya and Andronovo pottery consists in a gradual transition from squat angular vessels to more extended, harmonious proportions.

Combed impressed geometrical decoration (triangles, rhomboids, squares, etc.) is common, either all over or in horizontal bands. In later phases, jugs and jar-shaped pots decorated with applied bands occur. The stone artefacts are axe-hammers, battle-axes and flint arrowheads.

There are a large number of metal artefacts, connected with the widespread development of metal-working (Chernykh 1970; 1976), although towards the end of the culture their number diminishes. There are top-headed axes, spearheads, sickles, knives and daggers. The numerous bone and antler bridle cheek-pieces – sub-rectangular or disc-shaped with knobbles in the early stages, pivoted at a later stage – are of particular interest.

There are numerous and diverse ornaments, usually found in children’s or women’s burials. The settlement and cemetery material indicate that the main type of economy in the cultures of both these communities was mixed agriculture and pastoralism. Sheep and goat, cattle, horses, and pigs were bred. The importance of agriculture in relation to pastoralism, and the make-up of the domestic herd, depended on specific environmental conditions and differed both within and between zones. Agriculture and the herding of cattle, sheep, goats, and pigs predominated in the forest-steppe regions. In the steppes, the semi-desert and mountainous regions, sheep pastoralism prevailed.

At the end of the Bronze Age the Srubnaya and Andronovo cultures break up into a large number of cultural formations of so-called Srubnaya-Andronovo appearance, characterized by pottery with banded decoration (Valikovskaya culture: Chernykh 1983).

In addition to those mentioned, two more communities belong to this period: the Mnozovalkovskaya (‘multi-banded’) Pottery culture (Figure 4.7) and the Sabatinovskaya culture (Figure 4.8: Berezanskaya 1986). The former occupied the steppe and forest-steppe regions from the Prut to the Dnieper and the Donets, although some sites occur further east. It dates to the Middle Bronze Age (17th–15th centuries BC).

The Sabatinovka culture occupied the steppe zone from the mouth of the Danube to the Dnieper, the northern coastal region of the Sea of Azov and the eastern Crimea. It dates to the Late Bronze Age (14th–12th centuries BC).

The Mnozovalkovskaya Pottery culture is characterized by settlements with large semi-sunken-floored or surface pisé dwellings. Small kurgans contain one or more burials in simple pits, sometimes with frame constructions or stone cists. The ritual was inhumation or, occasionally, cremation. The bodies were placed in a more or less contracted position on their sides, mainly in a northeastern or eastern orientation. The burials are distinguished by the sparseness of the inventory.

The pottery is specific: truncated biconical forms decorated with incised lines or applied bands (from which the culture takes its name), often in the form of hatched triangles or fir-tree/ herring-bone pattern. In the late stages, jar-like vessels occur.

Bone clasps with a central, or central and side, opening are a distinctive burial artefact. The metal artefacts are relatively scarce and are represented by types characteristic of the Late Catacomb and Early Srubnaya cultures. The Borodino hoard is associated with this culture.

In its general features the Sabatinovka culture is similar to the Late Srubnaya, and was for a long time considered to be part of it. Houses either have stone foundation floors. The kurgan inhumation strongly contracted, lying on inventories. The pottery mair and jars with banded decor strong links with the Nova steppe Carpatho-Dniester reg.

The assemblage of distinctive (Chernykh 1976) objects of eastern Transyl economy of the Sabatinovka on various combinations o livestock husbandry, incl semi-mobile pastoralism.

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either have stone foundations or are sunken-floored. The kurgan inhumations are usually strongly contracted, lying on one side, and lack inventories. The pottery mainly consists of jugs and jars with banded decoration, and shows strong links with the Nova culture of the forest-steppe Carpatho-Dniester region.

The assemblage of metal artifacts is distinctive (Chernykh 1976). There are many objects of eastern Transylvanian type. The economy of the Sabatinovka culture was based on various combinations of agriculture and livestock husbandry, including, apparently, semi-mobile pastoralism.

Thus the development of the Middle and Late Bronze Ages demonstrates the final opening-up of the entire Eurasian steppe from the Danube to the Altai. This process is linked with considerable population growth, which made it possible to open up the whole territory and led to the transition to sedentism and the establishment of more intensive forms of farming economy.

This transition was made possible by the rapid development of bronze-casting and the widespread introduction of metal artefacts into all branches of production. Throughout their development, the steppe tribes interacted with each other and the communities of Central Asia, the Caucasus, the Carpatho-Danubian region and the forest-steppe zone, especially with the tribes of the Middle Volga and southern Urals region, where large foci and centres of metalurgy and metal-working operated.

In the next stage, these cultural communities were to experience major transformations associated with the transition to the Iron Age which, in the Eurasian steppe, took place between the 12th and 8th centuries BC.

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The Scythian Black

Regional perspective
Several cultural features of northern Black Sea region
Antique world. The region that it was the scene of direct
period, not only between different stages or levels
development, but between different economic and culti-
pastoralists on the one hand
plough agriculturalists (b and immigrant Greek) on the other.
The interaction of these economies through time
distinctive culture-histoiy paper presents a new syn-
zation for this system.
The region comprises the arid zone of the great Eu-
interfaces with more humid
North, west and southeast
riversine systems cross-cut the
ary of the steppe corridor a
the southern boundary the
obviously favoured the
nomad-agricultural inte-
by the existence of seve:
- the Kuban region
- the Dniepr
- which were able to suppo-
tory ethnic-social groups.
The climate of the ste
uniform during the 1st c.
development of nomads
steppe took place against a
general fall in temperature
1st centuries BC (Gumilev
attendant onset of dryer c
been one of the principal f

Translated by Sarah Wright & Tin

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STEPPE AND THE CAUCASUS
(CULTURAL TRADITIONS)

The articles included in this book reconstruct Bronze and Iron age nomadic and agricultural modes of life from the western Eurasian steppe based on an interdisciplinary program including archaeology, natural science and ethnography. The work has three parts - description of Bronze age, Scythian and Sarmatian complexes from the expedition of the State Historical Museum (led by N.I.Shishlina); associated paleoecological studies (paleosol studies, palyonological studies) and 45 new radiocarbon dates; and ethnographic studies of pastoral adaptations on the steppe of Kalmykia. Thus volume reflects the new ecological perspective on ancient pastoral and agricultural societies as conducted by Russian scholars.

Moscow
1997