CHAPTER 3

THE CAUCASUS – DONOR AND RECIPIENT OF MATERIALS, TECHNOLOGIES, AND PEOPLES TO AND FROM THE ANCIENT NEAR EAST

Investigators of long-distance exchange frequently have observed that the objects exchanged were not in the first instance necessities, but luxuries and prestige items. The desire to obtain them led to the intensification of production and the acquisition of large surpluses. . . . Undoubtedly, exchange exerted great influence on the society of the mountain peoples, and stimulated the extraction and initial working of metals, tasks that demanded an organization of production and inevitably led to a more complex social structure.

(Avilova, Antonova, and Teneishvili 1999: 61, 64)

The Copper Age of the Caucasus – or, more precisely, the immediately pre-Maikop and pre-Kura-Araxes horizons of the northern and southern Caucasus, respectively – appears remarkably impoverished relative to the spectacular Chalcolithic developments considered in the previous chapter. Nothing comparable to the Cucuteni-Tripol’ye complexes exists in the Caucasus during the sixth through the first half of the fourth millennium BC; even more striking is the underdevelopment of the northern Caucasus before the emergence of the famous Maikop culture, which most specialists (Munchaev 1994: 169–170) now date as beginning at least towards the second half of the fourth millennium, if not somewhat earlier (Trifonov 1996, 2001; Lyonnet 2000, n.d.c.; Chernykh and Orlovskaya 2004a; cf. later discussion).

Such underdevelopment in Chalcolithic times, of course, contrasts sharply with what occurs during the Early Bronze Age when the Caucasus becomes
one of the main suppliers of arsenical copper/bronzes to the peoples of the steppes, particularly to the Pit and Catacomb Grave cultural communities. As Chernykh (1992: 159–162) has argued, the northern Caucasus from Maikop times through the Middle Bronze period may have functioned as the critical intermediary for receiving metals that originated in Transcaucasia and for producing and shipping bronze artifacts to the steppes. Clearly a major shift in interregional relations occurred initially sometime during probably the second quarter to middle of the fourth millennium BC, a shift that brought the Caucasus onto the main stage of developments encompassing both the steppes to the north and the mixed agricultural/herding and settled agricultural regions of the Ancient Near East to the south.

Specialists differ in their assessments of which regions contributed to the formation of the Maikop culture, some emphasizing its steppe (Nechitailo 1991) or Central European (Rezepkin 1991; 2000: 31) components, the latter via links with the tradition of megalithic constructions, and others (Andreeva 1977; Trifonov 1987) its links with northern Mesopotamia. In a recent reappraisal and comparison of the so-called royal tomb at Arslantepe with the Novosvobodnaya-phase Maikop burials, Trifonov (2004) even argues for an eastern Anatolian Chalcolithic origin for the Novosvobodnaya megalithic tombs, such as documented at Korucutepe. Thus, if Trifonov is correct and if the calibrated radiocarbon dates securely place Maikop chronologically prior to the emergence of the Pit-Grave (Yamnaya) horizon, then, somewhat counter-intuitively, the origins of raising large barrows or kurgans above the broad, flat expanse of the steppes may not have been indigenous to the steppes, but may have derived from eastern Anatolia or the northern periphery of the greater Ancient Near East. It is also well established that Mesopotamian elements, such as Halafian pottery, have occasionally been found on Chalcolithic sites, such as at Kyul-tepe I in Nakhichevan (Fig. 3.7), in the southern Caucasus, finds that push back some form of contact between the Caucasus and northern Mesopotamia at least into the fifth millennium BC.

The redating of the well-established Caucasian Early Bronze horizons, both the Maikop and Kura-Araxes formations, which are based now not only on typological considerations, but also on calibrated radiocarbon determinations (for Maikop see Rassamakin 1999: 163–164; Chernykh et al. 2000: 74–75; and Trifonov 2001: 76–77; for Transcaucasia cf. Kavtaradze 1983, 1999 and the partial uncalibrated list of Kushnareva 1997: 52; also Chernykh and Orlovskaya 2004a), suggest that Maikop began to emerge towards possibly the second quarter of the fourth millennium and the Kura-Araxes cultural formation slightly later, towards the middle to third quarter of the fourth millennium, or, perhaps not coincidentally, at roughly the same time that the so-called Uruk colonies have been documented in Anatolia on the middle to upper reaches of the Euphrates (cf. Rothman 2001).
The calibrated high dating for the beginnings of the Maikop culture also demonstrates that this culture/cultural community predates the formation of the Yamnaya (or Pit Grave) cultural community and possibly suggests that it was somehow formative in the development of Early Bronze kurgan-building cultures on the steppes (Chernykh and Orlovskaya 2004a: 97; cf. also the internal stratigraphy and C14 dates of Maikop, Pit Grave and Catacomb Grave burials in the recently excavated Ipatovo kurgan, about 120 km. northeast of Stavropol; Belinskij et al. 2000). Although relatively uncommon, earlier Chalcolithic kurgans on the steppes and in the southern Caucasus (cf. below) have occasionally been excavated, and some of these, particularly north in the Lower Don and, to a lesser extent, northeast in the Lower Volga regions, show clear evidence for contact with the Maikop-Novosvobodnaya cultural community (Rassamakin 2002: 56–60; Figs. 3.2 and 3.3). If the Novosvobodnaya component or phase of the Maikop cultural community is historically/genetically antecedent at all to the later megalithic dolmen constructions found near the Black Sea coast south of Novorossiisk, then it would suggest a chronological extension in some transformed variant of the Maikop/Novosvobodnaya community at least into

Figure 3.1. Caucasus and adjacent regions, showing approximate locations of selected archaeological sites.
Figure 3.2. “Steppe Maikop-type” burials (adapted from Rassamakin 2002: 58, fig. 4.5).
the early third millennium BC. The Black Sea coast dolmens continue to be built much later, at least into the second half of the second millennium BC (Markovin and Munchaev 2003: 101–102).

This chapter begins by briefly considering the physical and environmental characteristics of the Caucasus and reviewing earlier Chalcolithic developments in the southern and northern Caucasus. It then presents in greater detail features of the Maikop and related Novosvobodnaya cultures of the northern Caucasus and the intriguing Kura-Araxes or Early Transcaucasian cultural community of the southern Caucasus and focuses on the metal-rich, syncretic Early Bronze Age site of Velikent, which is located on the Caspian littoral plain, the only natural corridor linking the Eurasian steppes to areas south of the Great Caucasus range.

It presents evidence for movements of peoples into and out of the Caucasus, discussing the well-known spread of Kura-Araxes related settlements to the southwest ultimately to Syria-Palestine and south into west-central Iran, and
the likely movement of peoples with oxen-driven carts from the steppes into the southern Caucasus beginning on a substantial scale possibly towards the middle of the third millennium BC. The material remains found in the monumental kurgans in Transcaucasia during the late Early and Middle Bronze periods are briefly described, and the settlement pattern of this time is contrasted with what has been documented for the immediately preceding and succeeding periods. The exchange, particularly of metals, and contacts with the Early and Middle Bronze Age cultures of the Eurasian steppes are discussed, and the refractory epistemological problem of detecting the movements of peoples on the basis of archaeological evidence is considered.

The chapter concludes with a summary characterization of the reemergence of settlements in Transcaucasia in the second half of the second millennium BC and the massive production of dominantly tin-bronzes for internal consumption that characterizes Caucasian metallurgy at least into the first millennium BC. Our analysis of the Caucasus materials extends somewhat beyond the lower chronological boundary of our study and violates, in a sense, its basic principle of presenting the materials historically or in correct temporal order. Such an extension is necessary to complete our review of the extremely rich and highly specific late prehistoric record of the Caucasus.

THE CAUCASUS – PHYSICAL AND ENVIRONMENTAL FEATURES AND A CONSIDERATION OF EARLIER CHALCOLITHIC DEVELOPMENTS

The Caucasus Mountains form a sharp geographic boundary between the Eurasian steppes to the north and the highland plateaus of Anatolia and Iran to the south (Fig. 3.4). The physical border created by the Caucasus is much sharper than that which divides the steppes and deserts of Central Asia from northern Afghanistan and northeastern Iran on the eastern side of the Caspian Sea. There the Kopet Dagh and Hindu Kush ranges also separate highland areas to the south from the flat Kyzyl Kum and Kara Kum deserts with their systems of internal drainage to the north, but the borders formed by these mountains are more easily traversed by following upstream rivers, such as the Tedjen then Kashaf Rud or the Murghab into, respectively, northeastern Iran or northwestern Afghanistan. Alternatively, one can move west-southwest onto the extensive Misrian plain, which extends along the southeastern shore of the Caspian (or today’s southwestern Turkmenistan), or cross the Kopet Dagh via the Darreh Gaz plain and continue south into the upper Atrek valley, the river of which flows west towards the northern Gorgan plain of northeastern Iran. All these areas were densely occupied during late prehistoric times (cf. Chap. 5, pp. XX – and Figs. 5.0, 5.1, and 5.2).

The Central Asian deserts, in other words, effectively extend the range of transition between the steppes and the highlands and find no real parallel on
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Figure 3.4. The Caucasus and adjacent regions: physical features (adapted from Kohlmeyer and Saherwala 1984: 9, abb. 2).

the western side of the Caspian, though in this latter area the dry Nogai and Kalmyk steppes also merge with each other and extend north around the Caspian. Paradoxically, the Central Asian deserts functioned as a more effective cultural barrier until later in the second half of the third millennium, when the pastoralists and agriculturalists of Central Asia were able to traverse the extensive arid expanses by developing more mobile economies, presumably with the help of horses and Bactrian camels (cf. Frontispiece and discussion at the beginning of Chapter 5).

Therefore, from a strictly geographical perspective, it is not surprising that contacts between the western Eurasian steppes and the ancient Near East developed earlier on the western side of the Caspian because the steppes and the Caucasus mountains, particularly in the northwest along the Kuban basin, were directly contiguous with one another, not separated by waterless deserts. Here the only problem more mobile pastoralists confronted was how to get around or over the mountains. One can visualize this important physical distinction between steppe and sown on either side of the Caspian as like a wedge opening west to east in which the northwest Caucasus mountains practically touch the Crimean and east Ukrainian steppes, whereas the oasis irrigation agricultural settlements of southern Central Asia are physically removed from the vast steppes of southern Russia and northern Kazakhstan by the formidable Kyzyl Kum and Kara Kum deserts.
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In other words, the transitional zone separating the steppes from the piedmont and into the high Caucasus with their unbroken wall of perennially snow-capped peaks is much narrower. As soon as one travels north of Makhachkala, the capital of Daghestan, the steppes simply open up to the north and west. The small mountains that surround Pyatigorsk form a restricted enclave famous for their salubrious mineral waters, but the massive peaks of the Caucasus looming immediately to their south dwarf them. The flat plains north of the Caucasus, such as those forming Krasnodar and Stavropol' provinces, are today intensively cultivated and constitute some of Russia’s richest and most productive agricultural land. Their use during Bronze Age times was totally different, when more extensive and more mobile economies exploited them. Farther west the heavily wooded slopes of the northwestern Caucasus descend almost directly into the Black Sea, creating strikingly beautiful landscapes and today a potentially lucrative tourist area extending from Novorossiisk in the north through Abkhazia into western Georgia in the south.

The Caucasus contain extremely diverse environments, particularly marked by altitudinal differences, ranging from the perennial glaciers to countless steep and well-protected mountain valleys, to open volcanic highland plateaus, to broader plains, and even to subtropical depressions such as the Colchidean plain of western Georgia. Such environmental diversity explains, to a certain extent, the incredible ethnic and linguistic diversity for which the Caucasus is renowned; this human cultural diversity, however, is foremost the product of a long history of movements into the Caucasus of peoples who then zealously defended the separate valleys and environmental zones that they had entered and occupied.

The Caucasus region, in general, consists of the isthmus between the Black and Caspian Seas that is cut by the Great Caucasus range. The mountains extend roughly 1200 km. northwest to southeast, encompassing a total area of about 440,000 sq. km. The region can be subdivided into five basic zones (for more detail, cf. Motzenbäcker 1996: 13–20):

1. the pre- or Cis-Caucasian northern plain bounded by the Kuma and Manych Rivers;
2. the Great Caucasus Mountains themselves, the highest peaks of which extend in the central part of the range between the Elbrus (5633 m. above sea level) and the Kazbek (5047 m.) mountains and include an additional four peaks over 5000 m. and none under 4000 m.;
3. the southern or Transcaucasian river basins consisting principally of the Rioni River and its tributaries that flow through the Colchidean depression into the Black Sea, and the basin of the Kura River that originates in northeastern Anatolia and flows through central Georgia (Shida Kartli), being joined in its lowermost course before debouching into the Caspian
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by the Araxes River, which originates even farther west in Anatolia near the headwaters of the Upper Euphrates; in its middle course the Araxes has demarcated the political border with Iran and Turkey since the early nineteenth century;

4. the so-called Smaller Caucasus ranges, which also contain peaks exceeding 4000 m. in height, such as Mt. Aragats in western Armenia; the Smaller Caucasus consist of several ranges, some of which run perpendicular to each other (e.g., the Trialeti and Djavakheti ranges in southern Georgia);

5. the volcanic, obsidian-rich Armenian highland or plateau that extends imperceptibly into eastern Anatolia or today’s eastern Turkey to the south.

Relatively broad valleys and plains are found in central and eastern Georgia (Kakheti), and the broad Ararat plain (ranging between about 800 and 1200 m. above sea level) of southern Armenia and the Nakhichevan province of Azerbaijan extends along the middle course of the Araxes River and represents a particularly productive subregion that today is as intensively cultivated as it was in the prehistoric past.

Forests, consisting of an oak and juniper canopy, may have largely covered southern Georgia, including the Tsalka plateau, from Neolithic through Middle Bronze times, ca. 1500 BC (Connor et al. 2004). This thick forest cover may affect our interpretation of later prehistoric sites. Thus, the Tsalka plateau today consists of open grassy terrain, and the large kurgans dotting it, which are occasionally connected with one another via impressive stone causeways (cf. Fig. 3.27), are strikingly visible. Such might not have been the case when they were built. Similarly, geomorphological factors, which are still imperfectly understood, must also be considered in evaluating the distribution of later prehistoric sites. Much of the Central Caucasus has experienced considerable alluviation that has buried sites, particularly small one-period sites, sometimes beneath more than two meters of alluvial sediments and small river pebbles. This phenomenon obviously also affects our understanding of Bronze Age settlement patterns.

The only unimpeded route from the steppes to the south is to circumvent the Great Caucasus on their eastern side by following the Caspian littoral plain from the Nogai steppes, and Herodotus says that it was by this route that the Cimmerians and Scythians moved into the Ancient Near East beginning in the first half of the first millennium BC, thereby setting a pattern for numerous mounted nomadic incursions that continued into the first half of the second millennium AD. In other words, this so-called Caspian corridor forms the only natural unbroken route linking the south Russian steppes to the north with Transcaucasia and the eastern Anatolian and northwest Iranian plateaus to the south (Fig. 3.5).
Figure 3.5. General Map of the Caucasus, showing the Caspian corridor and the Bronze Age site of Velikent (adapted from Kohl, Gadzhiev, and Magomedov 2002: 114, fig. 7.1).

The corridor consists actually of a series of plains or bays successively interrupted by rivers and streams flowing down from the mountains and by the mountains themselves extending eastwards to “pinch” the plain at several critical points, the narrowest being at the town of Derbent (or literally “closed door”), where the Sasanian ruler Khosrow I in the early sixth century AD erected a fortress and a long fortification wall, which stretches about 45 km. along the ridge of mountains directly west of the town, attempting unsuccessfully to stop the periodic nomadic invasions off the steppes to the north (Fig. 3.6). This wall was only one of a series of long parallel walls constructed by the Sasanians to defend their realm against nomadic incursions from the north; remnant lines of the southernmost walls are found north of Baku in eastern Azerbaijan at Beshmarak and then along the Ghilghilchay River, extending into the high mountains (Aliev et al. n.d.).
There are also several passes through the Great Caucasus, the most famous being the Darial (“door of the Alans”) or Cross Pass (2388 m. high and, significantly, open year-round) that connects the Upper Aragvi valley with the Upper Terek River that originates to the north off Mt. Kazbek along what is known today as the Georgian Military Highway running between Vladikavkaz (formerly Ordjonikidze) and Tbilisi. Most of these passes are only seasonally accessible from late spring to early fall, and all are narrow and easily defended by mountain tribes, such as historically the Khevsurs and Svans of mountainous Georgia.

Finally, it must be mentioned that both the Great and Small Caucasus ranges contain numerous mineral deposits. Chernykh (1992: 60) refers to more than 400 deposits and ore bodies of copper, arsenic, antimony, and gold, though characteristically most of the copper deposits are composed of sulphidic minerals with weakly developed oxidized zones; many of these presumably would have been exploited only from the Late Bronze period onwards when people were able to extract and smelt them. Their modern exploitation has destroyed many of the traces of ancient mining activities, though ancient slag heaps and mines have been discovered, particularly in the Zangezur region of southeastern Armenia (Gevorkyan 1980) and in the western and central Great Caucasus (Tschartolani 2001; Maisuradze and Gobedschischwili 2001). Much archaeometallurgical research still needs to be done, particularly in the metal-rich eastern Caucasus Mountains of northern Azerbaijan, Dagestan, and Chechnya.

The best documented food-producing Late Neolithic to Early Chalcolithic horizon in the Caucasus is known as the Shulaveri-Shomu complex and dates principally to the sixth millennium BC (Kiguradze 1986: 112; Kavtaradze 1999: 70–71; Narimanov 1987), exhibiting clear relations with the Umm Dabaghiyeh-Tell Sotto and Hassuna cultures of northern Mesopotamia. The internal development of the Shulaveri-Shomu complex has been traced over
several centuries for the sites found along the Khramis tributary of the Kura River in Kvemo Kartli south of Tbilisi by Kiguradze (1986) and in the neighboring region of western Azerbaijan by Narimanov (1987; cf. also Chataigner 1995). This cultural horizon clearly predates considerably our period of interest and will not be reviewed in detail here.

Some features, however, are interesting for they shed light on later Chalcolithic and Early Bronze developments in Transcaucasia. The sites group together in clusters of tells or tepes of the Ancient Near Eastern type composed of successive building levels formed by the decomposition of their distinctive interconnected circular mud-brick architecture forming cultural deposits that sometimes exceed 10 m. in depth (Kushnareva 1997: 21). They are located in a well-watered district of south-central Transcaucasia but are totally isolated or set off from any other known contemporary food-producing cultures, except possibly for some Late Neolithic/Early Chalcolithic settlements on the Ararat plain of southern Armenia (ibid., 33; cf. also now the ongoing Armenian-French excavations at Aratashen [Lombard 2003; Badalyan et al. 2004]). For example, the earliest food-producing remains found on the contiguous high Djavakheti plateau to the west or on the Shirak plain of Armenia to the southwest relate to the much later Kura-Araxes cultural community that begins roughly in the middle of the fourth millennium BC.

There is a clear disjunction between the Shulaveri-Shomu remains and those of the Kura-Araxes culture; the later dwellings of the latter in these mountainous areas are typically made of stone, not mud-brick, and, correspondingly, do not form classic Near Eastern-like tells. It can be argued, in other words, that the Shulaveri-Shomu horizon represents something intrusive in Transcaucasia, presumably from southeastern Anatolia and northern Mesopotamia, consisting of small colonies of early food-producers who lived in this area for several centuries before returning (?) to their southern homelands and/or possibly assimilating with the local highlanders and disappearing from the archaeological record.

Later Chalcolithic horizons in Transcaucasia, which now occupy different areas, such as the Ararat plain (Tekhut, Aratashen), central Georgia (Sioni), Nakhichevan (Kyul Tepe I), the Mughan steppe (Alikemek tepesi) and the Karabakh steppe (Chalagan-depe, Leila-depe), also exhibit parallels with cultures documented farther south; a few Halafian ceramics were recovered from Kyul Tepe I (Abibullaev 1982: 292, table XII; Fig. 3.7), and ceramic parallels with northern Mesopotamia have been observed for the remains from Tekhut and from Leila-depe, where the excavator I.G. Narimanov (1985: 271–272), who had also dug at the site of Yarim Tepe III in northern Iraq, believed that Leila-depe, located on the Karabakh steppe, had been founded by Ubaid “tribes” that had moved into the area from the south. His interpretation was based on very specific ceramic parallels with late Ubaid ceramics from Yarim Tepe III (Aliev and Narimanov 2001: 48–53). Later examination
of these materials by B. Lyonnet (n.d.c.; personal communication) suggests that the parallels are better made with Early and Middle Uruk ceramics, making these sites contemporary with the earliest materials from Berikldeebi in Shida Kartli (Central Georgia) and early Maikop remains from the northwestern Caucasus.

Leila-depe also revealed evidence in the form of slag fragments, metal drops, a possible ingot, and a relatively high concentration of copper artifacts for local metalworking (Aliev and Narimanov 2001: 70–73, table XXXVIII; Kiguradze 2001: 50–51). With the exception of Leila-depe, however, metal artifacts are remarkably scarce during the so-called Chalcolithic period of Transcaucasia, a relative paucity that leads Akhundov (2004: 425, 432) to question the standard terminology and even the validity of the concept of a Copper Age for the southern Caucasus. This picture changes radically during the subsequent Kura-Araxes Early Bronze period.

The painted pottery from Alikemek tepesi shows clear parallels with Dalma-related wares from northwestern Iran (Masson and Merpert 1982: 120–121), and this site in southeastern Azerbaijan is also interesting for its rich collection of bone tools, including horse bones, which constituted 7.5% of the identified faunal assemblage. The claim (ibid., 135) that the horse bones, coming apparently from both small and large types of horses, demonstrates that horses were domesticated here is questionable, though their recovery must indicate minimally that the distribution of wild horses extended at least as far south as the border with northwestern Iran and probably into northern Iran as well (cf. Mashkour 2003: 133). There is no artifactual evidence at all that the horses were ridden.

Most of these Chalcolithic Transcaucasian sites also reveal a basic disjunction with the Kura-Araxes remains. Typically, there is a recognizable break in the stratigraphic sequence, as at Kyul Tepe I, between the Chalcolithic and Kura-Araxes levels, or there is a shift/abandonment of settlements from one period to the other, as on the sites near Agdam on the Karabakh steppe. Kushnareva’s recent review of the Kura-Araxes culture emphasizes the continuities between
these Late Chalcolithic Transcaucasian cultures and the early stages of the Kura-
Araxes culture. She believes the latter dispersed initially from the “flatlands of
the southern Caucasus” but admits that the problem of locating the “home-
land” of the Kura-Araxes cultural community remains unresolved (1997: 49).

Currently available (i.e., published) evidence does not allow one to deter-
mine the origin/homeland (assuming there was only one) of the Kura-Araxes
culture. Ceramics from the site of Ovchular-tepesi in Nakhichevan exhibit fea-
tures that may be considered “transitional” typologically between the Late
Chalcolithic and Kura-Araxes forms, but their stratigraphic relationship is
unclear, and the site needs to be reexamined and published. Farther north
in Shida Kartli, the site of Berkikleebi has been meticulously excavated by L.
I. Glonti and A. I. Dzhavakhishvili (1987) and does contain a sequence that
extends from pre- to post-Kura Araxes, or what are termed Bedeni and even
later Bronze Age remains; its deposit, however, is shallow and badly pitted.
It alone cannot solve the problem of the seemingly sudden and quite massive
emergence of Kura-Araxes settlements throughout Transcaucasia, the north-
eastern Caucasus, and parts of eastern Anatolia beginning towards the middle
of the fourth millennium BC (cf. discussion that follows).

The claim for a broadly uniform Sioni horizon immediately preceding the
beginnings of the Kura-Araxes culture and directly ancestral to the culture as a
whole (cf. Kiguradze 2000) covers only part of the broad area over which the
subsequent Kura-Araxes settlements are distributed. Lyonnet (n.d.c.) emends
this interpretation somewhat and, based principally on a detailed analysis of
ceramic parallels, relates the emergence of this Late Chalcolithic Sioni horizon
from Transcaucasia and the initially pre-Maikop fortified Meshoko settlements
found in the northern Caucasus with an intrusion of northern Mesopotamian
cultural elements or peoples (?), predating the subsequent well-known southern
Mesopotamian Uruk expansion. In other words,

Le phénomène que l’on observe dans les régions du Caucase... est très
proche de celui qui se manifeste sur d’autres sites d’Anatolie orien-
tale, comme Haçinebi au cours des phases A et B1. Il est clair qu’il
précède l’intrusion urukéenne sud-mésopotamienne de plusieurs centaines
d’années... Il est néanmoins clair que le phénomène entrevu ici ne
représente qu’un maillon supplémentaire de celui déjà connu en Anatolie
orientale.

She believes that this pre-Uruk northern Mesopotamian intrusion into the
Caucasus may have been related ultimately to advances in metallurgy

qui se serait développée dès la fin du 5ème millénaire dans le Caucase, très
probablement sous l’influence principale du foyer des Balkans-Carpathes.

This latter opinion may be correct, but it is hard to confirm given the minimal
occurrence of copper artifacts in both the northern and southern Caucasus
prior to the emergence of the Maikop “cultural-historical community” and the minimal evidence in general for the participation of Caucasian Chalcolithic cultures in the Carpatho-Balkan Metallurgical Province (CBMP) to the north. The more important original stimulus for metallurgy in the Caucasus may have come ultimately from earlier Chalcolithic developments in Iran that also influenced the metallurgical practices of Ubaid peoples in both northern and southern Mesopotamia (Pigott 1999; Avilova 2005: 27–28).

Other evidence for the initial emergence of food-producing economies and subsequent developments during Chalcolithic times can be traced independently for western Georgia and for the mountains of Dagestan in the northeastern Caucasus (Kushnareva 1997: 10–21). The latter are particularly interesting for here reexcavations at the site of Chokh (Amirkhanov 1987) defined a sequence extending from the Mesolithic to the Neolithic, which probably represents an essentially independent evolutionary trajectory culminating in food-production. Excavations of later Chalcolithic sites, such as the settlement of Ginchi (Gadzhiev 1991: 61–78), continued this process of development and adaptation (including the beginnings of terraced agriculture?) to mountainous terrain. Ginchi’s bone- and stone-working and ceramic traditions clearly constituted one of the formative components to the distinctive hybrid Early Bronze Kura-Araxes-related culture at Velikent that was established on the Caspian plain by the middle of the fourth millennium BC, though it is also possible that the Chalcolithic Ginchi settlement essentially overlapped chronologically with the initial settlement at Velikent on the Caspian plain which began around the middle of the fourth millennium.

Chalcolithic remains in the Northwest and North-Central Caucasus are not well documented despite some recent investigations, particularly at the site of Svobodnoe (Nekhaev 1990). The excavator of the Svobodnoe settlement, A. A. Nekhaev (1992: 83), emphasizes its connection with the steppes to the northwest, even suggesting that it may have formed as a result of a movement of peoples from the steppes into the northwestern Caucasus. Rassamakin (1999: 108), however, explains the similarities differently, observing that materials from this site, such as its characteristic serpentine bracelets, can be paralleled with materials found on the steppes to the northwest and argues that the northwestern Caucasus in the late fifth millennium was involved also in the prestige exchange network linked with the newly defined Skelya culture.

Possibly, but, if so, the connection was rather tenuous, and they were only marginally, if at all, caught up in the Carpatho-Balkan Metallurgical Province, which, as we have seen, stretched from the Balkans to the Volga. A single copper artifact, presumably of Balkans origin (Rassamakin 1999:108), is reported from Svobodnoe, and only one small copper fragment was found in the Nal’chik cemetery, despite the excavation of more than 100 burials (Masson and Merpert 1982: 130). Most of the graves lack funerary goods altogether, and those (e.g.,
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Graves 86 and 41) with a more substantial burial inventory, including the stone bracelets, contain principally objects most reasonably interpreted as local in origin, such as perforated pendants made from the teeth of wild animals. The social differentiation evident in this Chalcolithic cemetery is certainly far less than that described for the Balkan cultures of “Old Europe” reviewed in the previous chapter.

What is most striking and contrastive with what immediately follows in Maikop times is the extreme paucity, indeed almost complete absence of metal artifacts in Caucasian Chalcolithic contexts. Such absence could partly be a product of the lack of sufficient research on this period in the northern Caucasus, but the negative evidence from the Nal’chik cemetery and from other sites, such as the Agubekov settlement (ibid., 129) suggests that metalworking and the exchange of metal goods did not develop gradually in the northern Caucasus, although it may have been stimulated ultimately by contacts with the steppes and distant familiarity with the metals of Balkan-Carpathian origin, as Nekhaev, Rassamakin, and Lyonnet suggest. This picture is radically transformed when local metallurgical activities suddenly and spectacularly burst on the scene with the advent of the Maikop culture in the second quarter to the middle of the fourth millennium BC.

THE MAIKOP CULTURE OF THE NORTHERN CAUCASUS – A REVIEW OF ITS KURGANS, SETTLEMENTS, AND METALS; ACCOUNTING FOR ITS ORIGINS AND WEALTH AND A CONSIDERATION OF ITS SUBSISTENCE ECONOMY

In 1897, N. I. Veselovsky excavated the very large, nearly 11 m. high Oshad kurgan or barrow in the town of Maikop in the Kuban region near the foothills of the northwestern Caucasus (today’s capital of the Adygei Republic). The kurgan contained a spectacularly rich burial assemblage, including bronze weapons and cauldrons; scores of figured gold appliques, which had been sewn on the clothes of the principal male burial; six silver rods (some over 1 m. long) with gold and silver terminals depicting bulls (Fig. 3.8); silver, gold, stone, and ceramic vessels; and numerous gold, turquoise, and carnelian beads. This discovery stimulated the excavation of other large kurgans located in the same general region, some of which seemed “royal-like” in their dimensions and, when not robbed in antiquity, in their materials; this research has continued to the present day, and spectacular discoveries are still being unearthed, such as hoards from the Klady kurgan necropolis near the village of Novosvobodnaya that have been excavated from 1979 on (Rezepkin 2000), containing distinct but clearly Maikop-related bronze, gold, silver, polished stone, ceramic, turquoise, and carnelian artifacts.

The Maikop materials were brought to the attention of Western scholars initially through the writings of A. M. Tallgren, M. I. Rostovtseff, and, later,
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Figure 3.8. Maikop kurgan: gold and silver bulls (adapted from Markovin and Munchaev 2003: 54, fig. 10).

V. G. Childe. The “absolute” dating of the “first early” or “large Kuban kurgans” was debated for years, with some scholars (Degen-Kovalevskii 1939) relating them to the Scythians or immediately pre-Scythians and dating them as late as the early first millennium BC, whereas most (Iessen 1950) dated them back to the middle or second half of the third millennium BC. The demonstration of convincing parallels to still earlier northern Mesopotamian/Syrian remains (Andreeva 1977), the new excavation of related Maikop settlements (e.g., Korenevskii 1993, 2001), and the application of a consistent sequence of more than forty calibrated radiocarbon determinations (Trifonov 1996, 2001; Chernykh et al. 2000; Chernykh and Orlovskaya 2004a) have all combined to place them on a much firmer chronological footing and date their earliest appearance much farther back towards the second quarter to the middle of the fourth millennium BC, practically to the transitional period between late Ubaid and early Uruk times (cf. also Lyonnet 2000). The spectacular early discoveries, particularly of Veselovskii, have never been published completely, but the Maikop culture itself has been defined and described in two long treatments in Russian by R. M. Munchaev (1975; 1994; for a recent summary treatment cf. Markovin and Munchaev 2003). A convenient short English
description with a focus on the Maikop metals is provided by E. N. Chernykh (1992: 67–83) (unfortunately, I was unable to consult the recently published catalogue of some of the Maikop materials in the Hermitage Museum: Shliman, Peterburg, Troya by Yu. Piotrovskii [1998]).

Munchaev (1994: 178, 174) estimates that roughly 150 Maikop burial complexes (or 250, according to Korenevskii 2004: 13) have been excavated, whereas there are only about 30 known Maikop settlements (or even fewer, cf. Korenevskii 2001; 2004: 12; Lyonnet, personal communication), only a handful of which have been substantially excavated. The mortuary assemblage to settlement ratio for Maikop remains is heavily weighted towards the former, and this situation is almost the opposite of what is known for the slightly later but overlapping Early Bronze Kura-Araxes “cultural community” of Transcaucasia to the south. Hundreds of Kura-Araxes settlements have been found, scores of which have been excavated, whereas very few Kura-Araxes cemeteries have been located and investigated. As Chernykh (1992: 73) is at pains to observe, it is primarily this difference in the nature of the archaeological evidence that explains the apparent greater wealth of the Maikop metals relative to that of the Kura-Araxes culture.

Both areas were working – and probably producing – metals on a large-scale, though we have more evidence from the Maikop culture just because more “royal” kurgans and hoards have been uncovered. Indeed, the recent discovery of the grave of the “Signore di Arslantepe” (Frangipane 1998, 2000; Frangipane et al. 2001), with its wealth of bronze weapons, bronze, silver, and gold ornaments and local Mesopotamian-related and “Transcaucasian” (Kura-Araxes) vessels, underscores the degree to which our knowledge of Kura-Araxes metallurgy and social differentiation is partial and distorted. This important discovery also suggests that significant interaction, possibly involving migration and armed confrontation, occurred between Transcaucasia and eastern Anatolia already at the end of the fourth millennium (Arslantepe VII), becoming more significant at the beginning of the third millennium BC (Arslantepe VIB 1), a pattern that may have continued for several centuries with the subsequent spread of the Kura-Araxes peoples far to the south.

Munchaev (1994) divides the Maikop culture into three successive phases – labelled Maikop, transitional, and Novosvobodnaya – on the basis of changes in the features of the construction of the kurgans and their accompanying ceramic and metal artifacts. He accepts completely the ceramic parallels first noted by Andreeva between the early Maikop ceramic vessels and those found farther south in Syria and northern Mesopotamia (Amuq F and Gawra XII–IX); a detailed comparison of their specific attributes reveals a “similarity that is simply striking” (ibid., 169), and it has now been claimed that some of the spherical Maikop vessels may have been turned on a slow wheel, a technological development that may also reflect direct borrowing from the south, though this also could be either a local innovation or even reflect diffusion from the
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north, for the slow potter's wheel may also have been used in late Tripol'ye CI specialized ceramic workshops, such as at Varvarovka VIII (Ellis 1984: 162; Anthony 1996).

The depiction of a deer and a “tree of life” on a cylinder seal from an early Maikop burial at Krasnogvardeiskoe (Nekhaev 1986) can be paralleled to depictions on earlier stamp seals and on late fourth-/early third-millennium seals from northern Mesopotamia (Tepe Gawra) and eastern Anatolia (Degirmen tepe), whereas a toggle-pin with a triangular-shaped head from the Late Uruk-related Arslantepe is identical to a pin found in an early Maikop burial at the Ust'dzhegutin cemetery (for references, cf. Munchaev 1994: 169). Surprisingly, microlithic chipped stone tools were found in the great Maikop kurgan, and Munchaev (ibid., 189) relates their late presence there to the long-rooted Mesopotamian tradition of depositing such archaic artifacts beneath the floors of public buildings or temples (e.g., in the earlier Yarim Tepe 2 and at Uruk itself); in other words, the fact that such a symbolic Mesopotamian practice is attested in the richest known “royal” or chiefly Maikop burial must have significance not only for the earlier dating of the Maikop culture, but also for determining its cultural affiliation and formation (Fig. 3.9).

Other scholars have focused on the northern steppe component of the Maikop culture. Most fundamentally, kurgan or raised earth burials are not characteristic of northern Mesopotamia, but at least eight Chalcolithic and presumably pre-Maikop kurgans have been excavated in central Ciscaucasia (work of S. N. Korenevskii, cited in Munchaev 1994: 178–179) and in the Kuban area (Nekhaev 1990). Early kurgans with Maikop or Maikop-related materials also appear on the Middle and Lower Don on sites of the so-called Konstantinovka culture, some materials of which show clear parallels with Maikop remains, such as characteristic asymmetric flint arrowheads (Rassamakin 1999: 117–122; compare Fig. 3.3 and Fig. 3.9 above). Although not common, pre–Kura–Araxes Chalcolithic kurgans or raised burial mounds have also now been documented in northwestern Azerbaijan and central Georgia (Akhundov n.d., Makharadze n.d.).

The Maikop settlements, with their relatively thin cultural deposits, light-framed, clay-plastered wattle-and-daub houses, some of which were supported with wooden posts, and many of which contain numerous pits, hardly recall characteristic Mesopotamian building traditions and techniques. Similarly, the subsistence economy of the Maikop culture, as understood from the excavations of a few of the settlements, seems to have focused more on animal husbandry, cattle and possibly pig raising (cf. next), than agriculture. Such subsistence practices too bespeak more of a northern steppe connection (ultimately, to the breakup of the Tripol’ye settlements?) than a southern-related Near Eastern heritage. The Maikop culture clearly has multiple origins or is syncretic in character, with local roots that extend naturally north onto the steppes and with surprisingly close and novel connections with northern Mesopotamia.
Some pre-Maikop or “Maikop-related” settlements, such as Meshoko and Yasenova Polyana (Munchaev 1994: 174), were perched on the top of steep ravines and fortified with stone walls, whereas others, such as the Galyugai series of settlements along the Middle Terek or those now being investigated by B. Lyonnet and A. Rezepkin along the eroded southern shore of the large Krasnodar reservoir, were open and easily accessible. Rock shelters, containing Maikop materials, also have been excavated. The apparently earlier fortified settlements (cf. Korenevskii 2001: 24–25) may have been occupied permanently and over a longer period of time than the other types of settlements, which possibly were occupied seasonally (Korenevskii 1995: 80–81). Korenevskii’s work has shown that Maikop settlements appear to have extended at least as far east as along the Middle Terek in the Kursk region of Stavropol’ province. The cultural deposits of the Meshoko “Maikop-related” fortified settlements in the piedmont rarely attain 1.5 m. and never exceed 2 m. in depth, and the open settlements along river valleys in the north Caucasian plain have much thinner deposits (roughly up to 40 cm.) and, in some cases, are totally buried, a fact that long impeded their recognition and excavation. According to Korenevskii (2004: 13), the Galyugai 1 settlement extended over an area of about 2 ha.

In this respect, the Maikop settlements sharply contrast with those of the Kura-Araxes culture sites south of the Great Caucasus range, particularly those with mud-brick architecture, the deposits of which can exceed seven meters in depth (e.g., at Dzhravot on the Ararat plain or at Garakepetepe in southeastern Azerbaijan). Maikop houses are typically light-framed surface structures, plastered with clay and reinforced with reeds (wattle-and-daub); the small villages or encampments now being revealed in the Krasnodar area contain up to twenty or so circular wattle-and-daub structures, some of which exceed 6 m. in diameter, and strangely reveal evidence of being partially burned or deliberately set on fire (Lyonnet, personal communication).

Direct evidence for agriculture in the form of palaeobotanical remains retrieved through flotation or seed impressions on vessels currently are generally not yet available or, when attempted, yield minimal results, though grinding stones, occasional flint sickle blades (Korenevskii 1995: 62), and what may be bronze hoes (ibid., 170) seem to attest indirectly to the practice of some form of extensive field preparation and cultivation and collection of plant remains, though it is also possible that such “hoes” really functioned as adzes to work wood. Consistent with the lack of direct evidence for agriculture elsewhere on the Bronze Age Eurasian steppes, the Maikop settlements have yielded very little macrobotanical remains, only about 10 grains of wheat, for example, being recovered via flotation from the recent excavations near the Krasnodar (B. Lyonnet, personal communication). Relative again to the Kura-Araxes settlements in Transcaucasia, agriculture apparently played a far less significant role in the subsistence economy of the Maikop culture, and in this respect
Figure 3.9. Maikop culture: stone points and tools, including microliths from Maikop kurgan (1–2) and asymmetric points (adapted from Markovin and Munchaev 2003: 70, fig. 21).

the “Maikop phenomenon” prefigured later developments on the Bronze Age Eurasian steppes.

Animal husbandry, probably involving at least some form of transhumance, was the more dominant activity. Interestingly, the most thoroughly investigated earlier “Maikop-related” settlements in the foothills, which are located along tributaries of the Kuban River, such as Meshoko and Yasenova Polyana, reveal a surprisingly high concentration of pig remains (40% at the former site; 22.2% at the latter [Cernych, Antipina, and Lebedeva 1998: 245, table 2]). Maikop settlements farther east along the Middle Terek, such as Galyugai I, contain far fewer pig bones (3.3% at Galyugai I) and have a much greater concentration
of sheep and goats (44.6% at Galyugai I compared to 15.2 and 12.3%, respectively, at Meshoko and Yasenova Polyana) (ibid.). Cattle (steers and cows) were always the principal animals raised by the Maikop herders, constituting 44.5, 65.5, and 49.6% of the assemblages from these three sites (Meshoko, Yasenova Polyana, and Galyugai I). Cattle were the principal animals raised by the late Tripol’ye peoples, who also kept a considerable number of pigs. The adoption of such practices by the Maikop herders may not be totally coincidental. The importance of cattle in the Maikop subsistence economy is reflected also in their art, such as the silver and gold long-horned bulls that capped the “royal” staffs in the original great Maikop kurgan (Fig. 3.8).

It is commonly accepted that keeping pigs implies sedentism, but this assumption may rely too much on the characteristics of contemporary pigs that have been bred for centuries to produce maximum meat/animal, making them less mobile. Hittite texts refer to the neighboring Kashka peoples to their northeast as “pig-raising nomads” (Matthews, personal communication). Mobile, quite wild-appearing, and apparently very tasty “Kakheti” pigs were moved seasonally between high and lowland areas in central and eastern Georgia in the recent past; during Soviet times, pig herders, who also farmed, drove these animals into the high wooded Georgian forests (in the Aragvi valley, Svaneti, and eastern Georgian mountain valleys) during the summer and let the animals forage freely in the forests, driving them to more protected lowland areas during the late fall (Kikodze, personal communication).

The extremely low percentage of horse bones found on Maikop settlements suggests minimally that horses were not a basic component of their diet, and the only “evidence” for horse-riding consists of the problematic interpretation of distinctive handled circular bronze objects as cheekpieces (or *psalia* in Russian), an interpretation very much open to question (Trifonov 1987; cf. below); such “cheekpieces” have never been found directly associated with horse remains (Fig. 3.10). In any event, the Maikop culture is very distinctive, not only in terms of its metals, to which we turn next, but also in terms of what current evidence reveals about its basic subsistence economy, where a range of gathering and herding practices are suggested, indicating some distinctive form of transhumance, not directly comparable with later, ethnographically documented practices of steppe nomads.

The wealth of the metals – arsenical copper/bronzes and silver and gold artifacts – found in the Maikop “royal” kurgans is truly extraordinary, leading Chernykh (1992: 142–144) to reflect on the “problem of gold” at this time. Indeed, if we trace the occurrence of gold in the area of our concern, we see a conspicuous shift from north to south that continues through Middle Bronze times: the early Chalcolithic florescence of gold consumption in the Balkans, particularly in the Varna cemetery; the abundance of gold (and silver) objects in the Maikop kurgans of the northwestern Caucasus during the Early Bronze period; and the spectacular discoveries of precious gold and, to a lesser
Figure 3.10. Maikop culture: bronze hooks or forks (kryuki) and so-called cheekpieces (psalia) or, possibly, Mesopotamian cult symbols (adapted from Markovin and Munchaev 2003: 68, fig. 20).

extent, silver objects in the monumental early kurgans of Transcaucasia and the famous hoards of Anatolia during the Late Early and Middle Bronze periods. Although accidents of discovery undoubtedly play a part here, the trend is unmistakable and must reflect underlying historical processes. For example, Avilova, Antonova, and Teneishvili (1999: 57–58) calculate that approximately 7,400 gold and 1000 silver artifacts have been found in Maikop-related kurgans in the northwestern Caucasus. These practically disappear in this area towards the middle of the third millennium, while at the same time the number of gold and silver artifacts in Anatolia and Transcaucasia (and, not incidentally, in Mesopotamia, such as at the Royal Cemetery at Ur) sharply rises (calculated at around 32,000 objects, ibid.). This shift reflects not only changes in the
production and supply of precious metals, but also the movements of peoples with their leaders or chiefs south – across or around the Great Caucasus range.

The Maikop arsenical copper/bronzes include not only ceremonial prestige weapons, which were potentially also useable, such as ribbed tanged daggers and shaft-hole axes, and ornaments, but also functional tools, such as the already mentioned “hoes”, chisels, and awls (Figs. 3.11 and 3.12), and bowls and large distinctive cauldrons (Fig. 3.13); characteristic objects of uncertain significance include the so-called twisted circular cheekpieces (or psalia, Fig. 3.10) (Munchaev 1994: 211, for a different interpretation cf. Trifonov 1987) and the large, pitch-fork-like shafted hooks (or kryuki, Fig. 3.10).

Chernykh’s work has shown that the Maikop bronzes could be divided into two groups – copper-arsenic alloys and copper-arsenic-nickel alloys – and he has postulated that the sources for the former were appropriate ore deposits in Transcaucasia, and for the latter deposits located farther south, possibly in Anatolia and/or Iran, which were also utilized by Mesopotamians. Chernykh

Figure 3.11. Maikop culture: bronze shaft-hole axes and adzes (adapted from Markovin and Munchaev 2003: 76, fig. 25).
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Figure 3.12. Maikop culture: bronze chisels and knives/daggers (adapted from Markovin and Munchaev 2003: 74, fig. 24).

(1992: 159–160) refers to the “North Caucasian Bridge,” which brought metals, presumably as ingots or in semiworked form, across the Caucasus, and explains the wealth of the Maikop chiefs as associated with their unique role as intermediaries in this south-north metals trade, supplying vast areas of the steppes to the north and east with Caucasian-derived bronzes.

More recent work by B. A. Galibin (cited in Munchaev 1994: 199) has proposed that an appropriate nickel-bearing copper source exists locally in the northern Caucasus at Belorechensk and could have been utilized by the Maikop
miners. This question must, however, still remain open, reflecting the lack of systematic archaeometallurgical research in the northern Caucasus, a situation that also adversely affects our understanding of Early and Middle Bronze metal production in Dagestan to the east. In short, Chernykh’s interpretation of the Maikop culture’s principal role as intermediaries participating in an extensive metals trade linking the Kura-Araxes culture of Transcaucasia with the steppe cultures farther north remains somewhat speculative, or at least in need of further documentation through future systematic archaeometallurgical research throughout the northern Caucasus.

What happened to the “Maikop phenomenon”? Why did it disappear, or why was it seemingly supplanted by cultures, such as Novotitorovskaya and later regional variants of the Katakombnaya “cultural-historical community,” that are also known to us largely from their mortuary remains? Here the focus is on the virtual post-Maikop disappearance of archaeological evidence for the differential accumulation of substantial wealth – particularly in the form of precious metals, that is, gold and silver artifacts – on the western Eurasian steppes throughout the rest of the Bronze Age. That is, the Bronze Age cultures that subsequently develop on the western Eurasian steppes contain little evidence for social differentiation and appear much more egalitarian, if not actually impoverished, relative to Maikop.

The “Maikop phenomenon” stands out for its uniqueness or singularity, particularly in terms of the precious metals buried with its presumed leaders or chiefs. From this perspective, it is not surprising that initially some scholars attempted to date the Maikop materials to immediately pre-Scythian times. In terms of the concentration of wealth, the Maikop “royal” kurgans resemble the much later “royal” kurgans that appear on the steppes only with the advent of real nomadic societies interacting regularly with sedentary states to their south at the beginning of the Iron Age. How does one account for Maikop’s singularity? If true Eurasian nomadism finally emerged only when relations with settled state societies were firmly established – as has been convincingly argued by A. M. Khazanov (1994: 94–95) and, more recently, by L. N. Koryakova and A. V. Epimakhov (n.d.: 160) – then does Maikop’s singularity or precocity in terms of its accumulation of wealth suggest, albeit indirectly, that it had established relations by the middle of the fourth millennium BC with a settled state(s) to south? These much later Iron Age nomadic societies and ultimately the first steppe empires (and first appearance of truly “royal” kurgans) came into being in part because they were caught up in larger systems of interregional interaction and exchange, including regular relations with sedentary states to their south (from China to Rome, including the states of southern Central Asia, such as the Parthian and Kushan states).

If this thesis/relationship is essentially correct, then with what settled complex state society was the Maikop culture regularly interacting? Although convincing archaeological documentation for such relations is still largely lacking, the calibrated radiocarbon dates show that Maikop’s demise roughly
Figure 3.13. Maikop culture: bronze vessels (adapted from Munchaev 1994: 210, table 56).

coincides with the collapse of the “Uruk expansion,” the complex, multifaceted, and relatively long-lived phenomenon that represented some form of southern Mesopotamian presence and/or interest in the Anatolian highlands, particularly along the Upper Euphrates drainage. The end of this southern presence, the “Uruk contraction,” if you will, corresponds roughly with the initial dispersal of Kura-Araxes or Early Transcaucasian peoples to the south and southwest, a similarly complex and protracted development that will be discussed in the following section.
As far as is known, state societies do not reappear in the eastern Anatolian highlands or in Transcaucasia until the advent of the Iron Age kingdom of Urartu at the end of the ninth century BC. Southern Mesopotamia (including Southwest Iran) subsequently directed their primary political and economic interests first to the east, culminating in the rise of secondary states in eastern Iran, Central Asia, and western South Asia in the second half of the third and first centuries of the second millennia BC, and then to the west, particularly to the eastern Mediterranean basin during the second millennium BC (cf. Chapter 5). The western Eurasian steppes developed largely on their own during the remainder of the Bronze Age, moving and exchanging materials and ideas over vast distances and constantly developing their mobile herding economies, activities that gradually led to the development of mounted nomadism, social differentiation, and states on the steppes during the first millennium BC. From this macrohistorical perspective, the “Maikop phenomenon” seems remarkably precocious and singular.

The differences between the overlapping Maikop and Kura-Araxes cultures in nearly all their material remains (from settlement patterns and domestic architecture to their subsistence economies and metal assemblages) are also striking. There is very little evidence for direct contact between these two “cultural communities,” though some contact is now suggested possibly in the Krasnodar settlements currently being investigated (Lyonnet, personal communication) and possibly also at the Lugovoe settlement in Ingusheti (cf. Krupnov 1954). These two Early Bronze “cultural-historical communities” are totally distinct phenomena, though part of the same overarching, interconnected system that Chernykh has defined as central to his Circumpointic Metallurgical Province (or CMP).

It is only during this Early Bronze period when such a pronounced cultural divide so sharply separates the material remains of the northern and southern Caucasus. Later, the Great Caucasus Range appears to have been more porous, with greater evidence for connections on either side of the mountains (e.g., the close similarity between the Colchidean Late Bronze culture of western Georgia and the Koban culture first documented in northern Ossetia and then south of the Caucasus in the Tli cemetery, cf. Tekhov 1980, 1988; Lordkipanidse 1991). This later pattern of close interaction and cultural assimilation across the Great Caucasus seemingly had not yet been established during the Early Bronze period, and one can only speculate as to the nature of the relations – possibly hostile and/or competitive? – between the bearers of the distinct Maikop and Kura-Araxes “cultural-historical communities.”

Clay models of disk wheels have been found at the Late (or Post-) Tripol’ye site of Velyka Slobidka on the Dniester, and two early pre–Pit-Grave kurgan burials with the actual remains of wooden wheels have been found respectively in the Lower Don (Koldyri, burial 7, kurgan 14) and Kuban (Starokorsun, burial 18, kurgan 2) areas. Rassamakin (2002: 53) believes that their appearance in these latter areas was due to “the migration or re-settlement of groups from
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the agricultural population” farther west. The latter discovery, which consisted of the remains of a wagon with wooden wheels (approximately 60 cm. in diameter), has been attributed to the “early Novosvodnaya” phase of the Maikop culture (Munchaev 1994: 180, table 44, no. 3), and the partial remains of a similar wheeled cart were found in a kurgan at Tsagan-nur in Kalmykia to the northeast that also apparently contained Maikop-related materials (ibid., 187).

Such vehicles are among the earliest known examples of wheeled transport found on the Eurasian steppes. They may be roughly contemporaneous with or perhaps a few hundred years later than the now earliest well-documented carts from moors in northwestern Germany and Denmark (Hayen 1989; 1991: ptc. 7; and Häusler 1981; 1994). On current evidence, the diffusion of the technology of wheeled transport may have just as plausibly spread north to south from northwestern Europe with its forests of useable hard woods to the more open steppes to the southeast and then farther south into Mesopotamia as the reverse (cf. Bakker et al. 1999). The important point is not where this revolutionary technology first originated but rather how quickly it diffused across western Asia, Eurasia, and Europe during the Early Bronze period, underscoring the interconnections among disparate cultures throughout this vast area.

Later during Late Early and Middle Bronze times or beginning in the first half of the third millennium BC such wheeled vehicles are well documented in eastern Ukraine (Pustovalov 1994: 99–101; 1998), the northern Caucasus (Gei 1991, 2000), and in Transcaucasia (cf. Miron and Orthmann 1995: 69–94) and provide direct evidence for a more mobile economy and the movements of peoples throughout this area.

Maikop-related peoples may also have moved south into northwestern Iran. Six of eleven surveyed kurgans, collectively referred to as Sé Girdan, which were excavated in 1968 and 1970, were laid out in a straight row running northwest to southeast and situated roughly west-southwest of the southwestern corner of Lake Urmia in northwestern Iran. O. W. Muscarella, who originally had excavated the kurgans, dated them initially to the Iron Age III period (seventh to sixth centuries BC), but recently he has accepted the criticisms of other scholars (Deshayes 1973; Trifonov 2000) and radically revised his interpretation, now dating them to the second half of the fourth millennium on parallels with Maikop remains from the northwestern Caucasus. Muscarella (2003: 126–130) provisionally accepts the interpretation that Maikop-related peoples from the northwestern Caucasus entered northwestern Iran during the second half of the fourth millennium BC, essentially prior to the expansion of Early Transcaucasian or Kura-Araxes peoples into northwestern Iran towards the end of the fourth millennium.

This interpretation is plausible but in need of additional archaeological confirmation from intermediate areas between the northern Caucasus and northwestern Iran. The parallels cited include aspects of the kurgans’ constructions, such as the off-center location of the principal tomb, pebble floors and outer
encircling stone revetments, and close similarities in arsenical copper/bronze artifacts, characteristic of the Caucasian Early Bronze Age, such as socketed axes with bent butts and blades with curved bases. It would be worthwhile to excavate one of the remaining kurgans to test this new, dramatically changed date through radiocarbon determinations from the skeletal remains.

The emergence of peoples burying their dead in raised kurgans in the Kuban basin of the northwestern Caucasus by the middle of the fourth and continuing into the third millennium is well established, but their subsequent spread farther east to the northeastern Caucasus and the western littoral Caspian plain is less well documented. Unfortunately, many kurgans on this coastal corridor have been leveled during the past fifty years with intensive modern settlement and agricultural exploitation. The Caspian littoral plain once was dotted with kurgans dating to various periods, but very few have been excavated. Maikop-related materials have been found in a handful of kurgans in Daghestan, such as at the Large Miatli kurgan along the Sulak River and at Torpakh-kala along the coastal plain south of Velikent.

This evidence is hardly conclusive but has been cautiously interpreted as documenting a northwest to southeast movement of Maikop peoples during the final stages of this culture’s existence (cf. Magomedov 1991:34–35). If possible, one should locate partially destroyed kurgans through the study of earlier aerial photos and systematically excavate several of them. These movements still require more extensive archaeological documentation, but the hypothesis of prolonged north-to-south movements beginning possibly as early as the late fourth millennium BC is theoretically testable through selected excavations of the remaining kurgans. In any event, it is likely that such postulated movements did not represent sudden events, such as armed invasions, so much as protracted processes, consisting of cattle herders moving south with their families on oxen-driven wagons in search of better pastures for their animals.


Very recognizable, black- and red-burnished, hand-made ceramics now attributed to the “Kura-Araxes” or, in the Western literature, “Early Transcaucasian” culture were first discovered in the Gyandzha region of Azerbaijan.
The initial recognition of their significance and the fact that such ceramics were found often in the lowest levels of many later Bronze Age sites, some of which had cyclopean stone fortifications, is due principally to the work of B. A. Kuftin in the 1930s. He coined the term “Kura-Araxes” to describe these materials because at that time all the sites with these materials that were known to him were found in the greater catchment areas of the Kura and Araxes basins. We now know their distribution extended far beyond Transcaucasia itself, spreading at some point southeast along the eastern slopes of the Zagros at least as far as west central Iran (e.g., at the Godin IV settlement, see Weiss and Young 1975) and southwest across Anatolia and northwestern Syria as far as northern Palestine/Israel during the Early Bronze III period, where the pottery is known as Khirbet Kerak ware (Amiran 1968).

Kuftin also mistakenly attributed the Kura-Araxes culture to the Chalcolithic period, a conclusion that had to be revised thanks to the analytical work conducted initially by I. R. Selimkhanov in the 1950s on their metals, work that showed that they were not pure copper but contained significant amounts of arsenic, possibly from deliberately alloying arsenic with copper to produce arsenical copper/bronzes. Calibration of radiocarbon dates from Kura-Araxes sites (Kavtaradze 1983; 1999: 73–74; a partial list appears also in Kushnareva 1997: 52; n.b., these last mistakenly listed as “B.C.” when actually “B.P.” and uncalibrated) pushes back the beginnings of the culture towards the middle of the fourth millennium, or slightly later than the sudden appearance of the Maikop culture (cf. Appendix).

The internal periodization of the Kura-Araxes “phenomenon” within Transcaucasia has been worked out most thoroughly by Kushnareva (1997: 53–54), who divides it into four sub-periods (E. B. I–IV), extending from ca. 3500–2300 BC. Although most Transcaucasian specialists would agree with her general periodization and relative chronological positioning of excavated sites, it still must be emphasized that much guesswork is involved and that the internal sequence requires additional refinement and corroboration. The vast majority of excavated materials have not been adequately published, and the best excavated and published sites, such as Khvatskhelebi (Djavakhishvili and Glonti 1962) in Shida Kartli, Georgia, are small villages with relatively thin cultural deposits (e.g., 1.7 m. of deposit for the Early Bronze levels B and C at Khvatskhelebi). It is doubtful that they would have been occupied for the entire 1000-year-plus period attributed to the culture.

Kura-Araxes sites are found throughout all areas of Transcaucasia, except for the subtropical Colchidean basin of western Georgia, and are located in markedly different environments at different altitudes. Not surprisingly, sites found high in the Great and Lesser Caucasian ranges or on highland plateaus are characterized typically by stone architecture and have relatively thin cultural deposits (sometimes barely exceeding 1 m.). Sites farther south on the fertile Ararat plain of southern Armenia and Nakhichevan, or in the eastern
piedmont between the Guru and Kandalan Rivers in southeastern Azerbaijan (at Garakaptepe, cf. Ismailov 1983), or even farther south in northwestern Iran (e.g., Geoy Tepe, Yanik Tepe, and Tappeh Gijlar), or in eastern Anatolia (e.g., Pulur [10 m.] and Karaz [9 m.]) are often multiperiod tells formed by the decomposition of mud-brick architecture with very thick cultural deposits, at times exceeding 10 meters (at Tappeh Gijlar, for example, which is located west of Lake Urmia in northwestern Iran, the unmixed Kura-Araxes levels [period B] are nearly 11 m. thick [Belgiorno, Biscione, and Pecorella 1984: 241; see Fig. 3.14]).

It is very difficult to correlate precisely such differently formed settlements. Thus, Kushnareva (1997: 49) suggests that the initial dispersal of the Kura-Araxes culture is to be found in “the flatlands of the southern Caucasus” (i.e., on the Ararat plain and farther east in the interfluve between the Guru and Kandalan Rivers of southeastern Azerbaijan) and sees a movement from these plains into the highlands, associated ultimately with a productive agricultural economy and consequent population increase (ibid., 55, 74). Possibly, but the reverse process could also be argued on the basis of the archaeological evidence (earliest sites located possibly in Shida Kartli [cf. Sagona 1984] or even in higher areas) and is more consistent with the historical pattern of mountain valleys becoming overcrowded and sending their surplus population down onto the plains; for example, the Ossetians are known to have moved down from both sides of the Greater Caucasus and into the broader valleys of central Georgia during relatively recent historical times. Current evidence does not allow us to resolve this problem.

It is useful to recall that modern political borders rarely define prehistoric culture areas, and regions immediately adjacent to southern Transcaucasia (i.e., to the south and west of the Middle Araxes River or northeastern Anatolia and farther to the north and east into southeastern Daghestan) should also be seen as part of the formative area for this culture. To add further ambiguity to the situation, whereas some areas exhibit a break in material culture remains, others, such as Sos Höyük near Erzurum (Sagona 2000), show continuity from earlier so-called Chalcolithic into later Early and Middle Bronze times. Though never densely occupied with Early Bronze remains, the Erzurum region in northeastern Anatolia most likely lies within the original formative region of the Kura-Araxes “cultural-historical community,” and, consequently as such, did not experience the later dispersal or intrusion of Kura-Araxes peoples into this area. Calibrated C14 dates suggest that the initial occupation of Sos Höyük, its period Va, occurred ca. 3500 BC or approximately at the same time that many other Kura-Araxes-related sites in distant regions, such as the Caspian coastal plain of southeastern Daghestan, were first occupied. The terminology here may be confusing: the Late Chalcolithic and initial Early Bronze designations refer to the same period and macrohistorical pattern of development.
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The Kura-Araxes culture seems to have emerged in different places – north-eastern Anatolia, the broad area of Transcaucasia drained by the Upper and Middle reaches of the Kura and Araxes Rivers, and the Caspian coastal corridor and adjacent mountainous regions of northeastern Azerbaijan and southeastern Daghestan (cf. below) – exhibiting different regional features at approximately the same time, towards the middle of the fourth millennium BC. The characteristic red-and-black burnished wares, one of the hallmark features of Kura-Araxes material remains, may actually have originated at sites, such as Sos Höyük, in today's northeasteasternmost Anatolia (Palumbi 2003, n.d.; Kiguradze and Sagona 2003) and subsequently spread east into Transcaucasia as conventionally defined. There seems to have been fairly rapid intra- and intercultural communication among these different contiguous regions, leading relatively quickly to the emergence of a recognizable Kura-Araxes koine or broadly defined “cultural-historical community.”

Even within this broadly defined area, some thicker multiperiod tells that contain earlier pre-Kura-Araxes Chalcolithic levels show a gap or period of abandonment between the latest Chalcolithic and earliest Kura-Araxes occupations (e.g., at Kyul’tepe I in Nakhichevan), and other multiperiod tells with thick Kura-Araxes deposits (e.g., Dzhravot and Mokhra-Blur on the Ararat plain or Garakepektepe in Azerbaijan) are inadequately published, and work on them has only preliminarily, if at all, plumbed the earliest Kura-Araxes levels. That is, we know little about the beginnings of these latter settlements.

Problems of interpretation are farther exacerbated by the distinct regional variants of this “cultural-historical community.” This pronounced regional diversity (summarized by Kushnareva 1997: 54–73; cf. also Sagona 1984) may, of course, also be explained in part chronologically and suggests that this “culture” (or, perhaps better, “phenomenon” or “bloc of cultures”) was quite heterogeneous, never representing a single unity or polity. The postulated movement over time of surplus populations from the restricted mountain valleys onto the
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plains is consistent with the original local formations of this culture – quite literally, northeastern Anatolia and in the high Caucasus mountains – and such movements in search of more arable land may constitute one of the mechanisms driving the peoples out of Transcaucasia and south into Iran, farther west in Anatolia, and into the upper Euphrates and beyond.

Some Kura-Araxes sites are located near steep ravines or in fairly inaccessible settings (e.g., Garni), and some (e.g., Shengavit, Mokhra-Blur) appear to have been fortified (Kushnareva 1997), though it must be emphasized that the dating of such fortifications to the Kura-Araxes occupation has not been established in all the claimed cases. Many sites, including those most carefully excavated, such as Kvatskhelebi in central Georgia and Karnut in northwestern Armenia, were not fortified but represent simple open villages with separate or clustered one-room houses with central hearths, often set at the southern foot or along the lower slope of a local large hill (e.g., the sites of Satkhe and Amagleba in southern Georgia [Isaac et al. 1994]). Certainly the Kura-Araxes settlements and their accompanying materials exhibit far less emphasis on militarism and defense, reflective of politically insecure and unstable times, than that characteristic for the later Transcaucasian Late Early and Middle Bronze and, particularly, Late Bronze/Early Iron periods (from the second half of the third through the beginnings of the first millennium BC).

Our understanding of the Kura-Araxes “phenomenon” is incomplete, and surprises, like the already mentioned burial of the “Signore di Arslantepe” with his rich array of weapons (Frangipane 1997, 1998, 2000), still await us. It is also possible that much larger Kura-Araxes settlements lie buried beneath more massive Late Bronze and Early Iron deposits (e.g., possibly at Metsamor, cf. Kohl 1992). The recently discovered site of Agarak in Armenia is reported to extend over 200 ha. and to have a substantial Early Bronze occupation. It also, however, is clearly a multiperiod site that was occupied intermittently into historic times; until the site is more thoroughly excavated and adequately published, it is impossible to evaluate the extent or nature of the Early Bronze settlement at the site.

Based on the currently available published evidence, however, most Kura-Araxes settlements in Transcaucasia are small (rarely exceeding 5 ha. in size) and show very little evidence of internal social differentiation. The dwellings in the largest sites, such as Arich (12 ha.) on the southern edge of the Shirak plain in northwestern Armenia, or Amiranis-Gora (approximately 4 ha.) near Akhaltsikhe in southern Georgia, a site which shows evidence of deliberate terracing, are quite dispersed, not densely packed together. At most, they can be considered large villages – not towns or cities – and do not constitute evidence for a sharply differentiated three-tiered settlement hierarchy (contra Kushnareva 1997: 74, 78). Thus, for example, the Early Bronze occupation at the site of Arich, which is located on a naturally fortified promontory drained by a stream flowing down from the northwestern slope of Mt. Aragats, is surrounded by
Late Bronze/Early Iron dwellings and burials and even later (Classical?) fortifications that cover the approximately 12-ha. area of the site. It is very difficult to estimate the extent and density of its Kura-Araxes occupation; it is misleading, therefore, to refer to the Early Bronze settlement at Arich as qualitatively different or larger than other Kura-Araxes villages or, at best, small towns.

Although the mortuary evidence is fragmentary and unexpected discoveries, like the rich burial at Arslantepe, may occur and alter our understanding, the currently available record does not suggest that the Kura-Araxes societies in Transcausasia were torn apart by internal social divisions. In this sense, the Kura-Araxes materials contrast strongly with those of the Maikop culture to the north, or with what appears in Transcausasia during the immediately succeeding late Early Bronze period or the time of the monumental “chieflly”/“royal” kurgans. Individual flat-grave burials have been excavated both within settlements and in cemeteries outside the settlements, as well as small kurgans or barrows associated with or in immediate proximity to Kura-Araxes settlements (e.g., at Satkhe in Djavakheti, cf. Kohl, Carson, Edens, and Pearce 1993). None of these Transcaucasian burials has yielded evidence for an accumulation of wealth comparable with that seen in the burial at Arslantepe or in those of the northern Caucasus. The metal assemblages of the Maikop cultural community in the northern Caucasus and the Kura-Araxes cultural community in Transcausasia and eastern Anatolia also differ (Compare the Kura-Araxes metals from Transcausasia in Fig. 3.15a and the metals from Arslantepe VIA and VIB in Fig. 3.15b, on the one hand, with the Maikop metals illustrated above, on the other).

The available evidence does unequivocally show that all areas of Transcausasia (again excepting the distinct region of western Georgia bordering the Black Sea) were occupied during the initial Early Bronze period in the second half of the fourth millennium. Kura-Araxes settlements, now numbering in the hundreds (Kushnareva 1997: 44), are found throughout the region, even at very high altitudes, suggesting possibly seasonal occupations and some form of transhumance, and their association with terraced agriculture in some mountainous areas seems well established. These “peoples of the hills” – to use Burney and Lang’s (1971) apt phrase – knew how to adapt to different altitudinal zones, settling in high mountain valleys, on broad volcanic uplands, or on lower-lying fertile plains. Given their occupation of these different altitudinal zones, it is not surprising that the materials used in the construction of their houses varies from stone and wattle-and-daub with wooden post structures in the intermontane valleys and higher plateaus to circular and subrectangular mud-brick structures sometimes with stone foundations in the lower plains. We know that they herded sheep and goats and, to a lesser extent, cattle, and it is hypothesized that some flocks may have been driven to higher pastures during the summer by transhumant pastoralists as occurs today on the passes into and on the plateaus of Djavakheti from the Adzhari and Imereti regions.
Figure 3.15. (a) Kura-Araxes metal tools, weapons, ornaments, and metal-working artifacts from Transcaucasia (after Kushnareva and Markovin 1994: 40, table 12); and (b) metal objects from Arslantepe; 1–5 from period VIA public area; 6–19 from period VIB “royal tomb” (after Frangipane 2000: 471, fig. 17).
Figure 3.15 (continued).
Kushnareva (1997: 182–196) provides a very complete summary of what currently is known of agricultural and herding practices, listing the domesticated species of plants and animals that have been documented on Kura-Araxes and Kura-Araxes related settlements. They cultivated soft (common) wheat and barley, including specific club or dwarf forms (such as *Triticum vulgare antiquorum*, *Hordeum sphaerococcum*), and grew grapes probably to make wine. Wild fruit trees are abundant in the Caucasus, and it is surmised that their fruits were collected during this period, though fruit pits are not well documented in the archaeological record. Apparently, apricot pits were recovered at the site of Garni in Armenia (ibid., 186).

What is uncertain is how intensive their agricultural practices were. Again, it is misleading to speak of a single adaptation given the different ecological zones that were occupied. It is very difficult to date the beginnings of terraced agriculture in mountainous areas, such as Djavakheti in southern Georgia or Daghestan to the northeast, though most scholars are inclined to date their initial construction back to this period when there is substantial evidence for permanent settlement. Conclusive evidence in the form of artifacts recovered from excavated artificial terraces at the site of Verkhniy Gunib in Daghestan have shown that they were constructed at least during the subsequent Middle Bronze period, and it is reasonable to place their beginnings even earlier (Aglarov 1986: 57–58; Kushnareva 1997: 187–189). The terraces that they constructed on steep hill slopes could have been built by related families or small
corporate kin groups and extended over some period of time. They do not necessarily suggest any form of centralized authority involved in their construction and maintenance, though they probably do indicate new forms of land ownership and attachments to the land and, correspondingly, transformed agrarian relations (Aglarov 1986: Fig. 3.16).

Similarly, no state hierarchies were needed for the probable construction of the small irrigation systems with dykes and canals in lower-lying, flatter regions, such as the Ararat plain where such dykes have been documented, for example, at Mokhra-Blur. In most areas such modifications of the natural landscape were not required, and it is in these areas where it is difficult to assess how intensive the agricultural practices were. The incredible profusion of small Kura-Araxes settlements throughout Transcaucasia and northeastern Anatolia may reflect both population increases over time and the periodic settlement of new areas suggestive of a form of extensive shifting cultivation, an interpretation consistent with the apparent sudden abandonment of several Kura-Araxes settlements. Kura-Araxes houses, such as those uncovered at Karnut on the Shirak plain of northwestern Armenia, often contain large complete artifacts, such as storage jars and the characteristic, distinctly modeled andirons or figured portable hearth supports. It appears almost as if the people had planned to return to the settlements that they had mysteriously and suddenly left.

Metal sickles have been recovered from several Kura-Araxes settlements (Kushnareva and Chubinishvili 1970: 118, fig. 42, nos. 27–31), though the sheer quantity of characteristic toothed flint sickle inserts suggest that basic agricultural activities continued to rely on chipped stone tools. There is some direct evidence for the use of wooden and antler light plows, such as the one recovered from Kvatskelebi (Djavakhishvili and Glonti 1962: pl. XXXIII, no. 11), and the use of traction animals are at least suggested by depictions on clay plaques and models (Kushnareva 1997: 184). Models of solid-wheeled clay carts, presumably pulled by oxen, are attested at the site of Arich (Fig. 3.17).

Cattle, sheep, goats, and pigs are all documented on Kura-Araxes settlements, though quantitative counts of faunal assemblages, assessing their relative importance, are fragmentary or largely unavailable. The raising of sheep and
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goats seems to have been more significant than cattle or pig-herding, a dominance also suggested by the recovery of numerous figurines of rams and their depictions on andirons (Kushnareva 1997: 193; Fig. 3.17). Cattle may have assumed an increasing importance as they were harnessed to carts and used to plow fields, though more evidence is available for such uses at the end of the Early Bronze period with the appearance of the large “royal” kurgans and the direct recovery of oxen-driven wheeled vehicles. Given the location of Kura-Araxes settlements and later ethnographically and historically attested practices, it is assumed that some form of herding took place that brought the flocks of sheep and goats and even, to some extent, the herds of cattle to higher mountain pastures during the summer. The winter quarters for the animals may have been directly associated with the settlements (ibid., 194).

Whether it was the search for more arable land to support their burgeoning populations and/or their displacement with the arrival of new groups from the north with four-wheeled, oxen-driven wagons, the Kura-Araxes peoples moved over some extended period beginning towards the end of the fourth millennium far to the southwest across the Anatolian plateau to the Amuq plain and beyond to today’s northern Israel, and to the southeast into northwestern Iran, along the Zagros mountains, and onto the Iranian plateau as least as far as Kermanshah. This spread of “Early Transcaucasian” settlements has long fascinated archaeologists (see, for example, the map in Roaf 1990: 80), many of them speculating on the ethnic/linguistic identity of these migrants and interpreting them as ancestral to Hurrians, Hittites, or other later historically attested peoples (e.g., Woolley 1953: 31–37). A. Sagona (1984) has published the most complete list of Kura-Araxes sites and sees the movement of these colonists first out of central Georgia (Kvemo and Shida Kartli) to the south followed by the development of distinctive regional traditions (Armenian, Upper Euphrates, Khirbet Kerak), and then a subsequent spread to the northeast (Dagestan) and southeast into western Iran. Others have placed the beginnings of the Kura-Araxes cultures along the Middle Araxes valley on the Ararat plain and in Nakhichevan, with its subsequent spread first to the north and then south.

As reviewed above, the “homeland” of this culture is elusive or difficult to pinpoint precisely, a fact that may suggest that there is no single well-demarcated area of origin, but multiple interacting areas including northeastern Anatolia as far as the Erzurum area, the catchment area drained by the Upper Middle Kura and Araxes Rivers in Transcaucasia, and the Caspian corridor and adjacent mountainous regions of northeastern Azerbaijan and southeastern Daghestan. Though broadly (and somewhat imprecisely) defined, these regions constitute the original core area where the Kura-Araxes “cultural-historical community” emerged. Kura-Araxes materials found in other areas are intrusive in the local sequences. Indeed, many, but not all, sites in the Malatya area along the Upper Euphrates drainage of eastern Anatolia (Norsuntepe, Arslantepe) and western
Iran (Yanik Tepe, Godin Tepe) exhibit a relatively sharp break in material remains, including new forms of architecture and domestic dwellings, and such changes support the interpretation of a subsequent spread or dispersal from this broadly defined core area in the north to the south. The archaeological record seems to document a movement of peoples north to south across a very extensive part of the Ancient Near East during the first half to the middle of the third millennium BC. Although migrations are notoriously difficult to document on archaeological evidence, these materials constitute one of the best examples of prehistoric movements of peoples available for the Early Bronze period. This dispersal needs to be restudied intensively. Here only a few general observations can be made.

Firstly, calibrated radiocarbon dates are beginning to yield a consistent picture for the timing of this dispersal. The relevant VIB period at the extensively excavated site of Arslantepe near Malatya dates ca. 2900–2700 BC, a date which is supported essentially by evidence from neighboring sites such as Norsuntepe (Di Nocera 2000: 75–76). It is also apparently consistent with sites in the Ezerum region farther east (Sagona 2000: 333). Related Khirbet-Kerak materials from northern Israel have been dated roughly from 2700 to 2450 BC (de Miroshedji 2000: 258), suggesting an initial dispersal into the Upper Euphrates basin at the very beginning of the third millennium (and after the collapse of the Uruk expansion), followed by a subsequent movement to the southwest in the second quarter of the third millennium. The chronological gap between the appearance of Khirbet Kerak (or Red-Black Burnished [R. J. Braidwood and L. S. Braidwood 1960]) ware on the Amuq plain and its appearance in the southern Levant may have been somewhat overestimated. New relevant radiocarbon dates from the southern Levant suggest that Khirbet Kerak ware may first have appeared ca. 2800–2700 BC, or almost simultaneous with its appearance farther north (Philip and Millard 2000: 284). The overall pattern seems reasonably clear: an initial spread across eastern Anatolia to the Upper Euphrates basin at the very end of the fourth and beginning of the third millennium, followed by a relatively rapid diffusion (during the course of a century or so?) farther southwest and ultimately to the eastern Mediterranean coast.

Sites in the Urmia basin with relevant materials (e.g., Geoy Tepe and Yanik Tepe) seem to have been occupied already in the last centuries of the fourth millennium (Voigt and Dyson 1992, vol. II: 137). “Early Transcaucasian” materials appear to be intrusive in this region; that is, they represent a break with earlier Chalcolithic remains on these sites, but this movement appears to predate the spread into the Upper Euphrates area. One can only speculate that the lack of an Uruk presence in northwestern Iran may have facilitated this earlier movement to the east. Their spread farther south into central-western Iran occurred later, though precisely how much later is still unclear. Carbon dates are unavailable for the beginning of the relevant Godin IV period, though the excavators (Weiss and Young 1975: 2) believed that there was only a short break
in the sequence between this period and the underlying Godin V period that can be dated to the last centuries of the fourth millennium and “significant percentages” of recognizable Kura-Araxes wares first appear in the final Godin V levels (Badler 2002: 83, 107, fig. 17). The assumption is that the Godin IV period with its very distinctive Early Transcaucasian-related ceramic assemblage began in the early third millennium BC. Here too one wonders whether there is some causal relationship: the collapse of the “Uruk outpost” at Godin V (Algaze 1993: 60), accompanied by the protracted arrivals of Transcaucasian settlers from the north.

Second, these “peoples of the hills” seem to have consciously avoided certain regions, including large settled areas on the northern Mesopotamian plain. Less than a handful of Kura-Araxes sherds, for example, have been found at Tell Brak (J. Oates, personal communication), although apparently the ongoing excavations may have revealed more substantial evidence for Kura-Araxes related remains in previously uninvestigated areas. Movements across the Anatolian plateau and into northern Mesopotamia and regions farther west were undoubtedly very complex and involved more than just these dispersals from Transcaucasia. Other groups may have crossed the Caucasus from the northwest and then intermingled with both the local peoples and the Transcauscians with whom they came into contact. A chain reaction was set in motion, with incoming groups successively displacing one another.

There also remained relatively empty places that the Transcauscians could easily settle. They possibly destroyed or overran some settlements, whereas others they avoided or left alone, presumably because the polities that occupied them were more powerful. Although our knowledge of the distribution of the sites containing Kura-Araxes materials is obviously dependent on the nature and extent of the surveys conducted throughout these different regions, which manifestly are not commensurate with one another, it also seems clear that not all contiguous zones were equally affected by these dispersals. The spread was not continuous and there are clear gaps in the distribution of sites containing these materials, such as the dense concentration of Early Transcaucasian sites in the Malatya region of eastern Anatolia (Fig. 3.18) or the gap in known sites with Early Transcaucasian/Khirbet Kerak ceramics in Syria and Lebanon between the Amuq plain and northern Israel, a break possibly to be explained by coastal rather than overland contacts and movements of peoples (Philip and Millard 2000: 287–288, 292, fig. 1; also cf. De Miroschedji 2000: 278, fig. 7). Despite the uneven coverage, these gaps to some extent must reflect the historical reality that the newcomers from the north occupied only certain selected regions.

It is obvious also that for the most part these dispersals do not represent armed military invasions and that the movements involved considerable assimilation with preexisting local traditions, exacerbating the archaeologists’ task of
recognizing them. Populations expanded and intermingled with one another. In these processes, social structures obviously must have changed. It is an archaeological truism today to note that pottery styles do not equate with peoples, and the temptation to do so must be resisted. Nevertheless, the very frequency of distinctive, seemingly intrusive ceramics and other items of material culture, such as the highly specific figured andirons (Figs. 3.19 and 3.20), suggest that this phenomenon, however short-lived, must have been reasonably substantial. At Beth Shean, for example, the Khirbet Kerak pottery constitutes more than 60% of the total ceramic assemblage in levels 11–9 before dropping off to 38% in level 8 and essentially disappearing in level 7 (as summarized in De Miroschedji 2000: 259). At the type site of Khirbet-Kerak (Beth Yerah), these wares constituted 20–30% of the sherds found on the site. The site itself is 20–25 ha. in size (Albright 1926), or considerably larger than any known Kura-Araxes site in Transcaucasia. Site size too, as we have seen with the gigantic Tripol'ye settlements, cannot simplistically be equated with social complexity. The data, however, is suggestive that the “peoples of the hills” transformed themselves as they spread across large areas of the Ancient Near East.
Figure 3.19 Figured hearth supports from Transcaucasia, eastern Anatolia, and Syria-Palestine (adapted from De Mioschedji 2000: 276, fig. 5).
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Figure 3.20 (a) Figured andiron or hearth support from the Early/Middle Bronze Age site of Marki Alonia in Cyprus (adapted from Frankel and Webb 2000: 763, fig. 3); (b) Anthropomorphic andiron from Zveli, southern Georgia, with obsidian eye insets (courtesy Akhaltsikhe museum).

It is unclear what was driving these dispersals. Possibly, the peoples involved were in search of new sources of metal in Jordan or, more convincingly, in Cyprus (cf. the recently excavated, Kura-Araxes-like hearth stands and evidence for migrants from southwestern Anatolia at the Early Bronze Age site of Marki Alonia [Frankel 2000; Frankel and Webb 2000; Webb and Frankel 1999], Fig. 3.20a). It should be noted, however, that anthropomorphic-figured hearth stands for what are interpreted as altars in sanctuaries have been found also on much earlier and seemingly unrelated Cucuteni-Tripol’ye sites (Lazarovisi and Lazarovisi 2003: 422, 484, figs. 143–144); nevertheless, because anthropomorphic representations are always, to some extent, going to
resemble one another (insofar as they are remotely naturalistic), the question of the specificity of the parallel must always be addressed before suggesting a meaningful historical connection. The resemblance in this latter case may be fortuitous.

The settlers from Transcaucasia may have been skilled metallurgists, but why leave a metalliferous region like the Caucasus for unknown sources? Moreover, Khirbet Kerak materials are not found in the metal-bearing Wadi Feinan area south of the Dead Sea (De Miroschedi’s 2000: 264). Perhaps they were simply in search of more and better arable land with natural population increases, replicating on a much larger scale the movements from the highlands to the plains that we thought may have characterized the initial spread of Kura-Araxes settlements within Transcaucasia? Possibly, but why did they move and not others? Another factor may also have been at work: people were not only moving south out of the Caucasus, but also may have been moving into Transcaucasia from the north – at least at some point beginning towards the middle of the third millennium (see the new calibrated dates for the “early kurgan cultures” of Transcaucasia, Kavtaradze 1999: 81).

It is hard to distinguish cause from effect here: did peoples move into the rich Alazani and Kura valleys because others had moved out, or were the Kura-Araxes peoples moving south because of the incursions of peoples from farther north? Before examining the materials from the late Early and Middle Bronze kurgan cultures of Transcaucasia, let us briefly review evidence for occupation of the Caspian littoral plain during the second half of the fourth and third millennia BC.


Soviet archaeologists have long recognized the presence of Kura-Araxes traits on Early Bronze Age sites in the northeastern Caucasus, referring to the Daghestan “variant” of this culture (for a classic exposition, see Munchaev 1975: 172–191). It is also clear that this “variant” had very specific features, many of which can be traced back directly to so-called Chalcolithic remains from mountainous Daghestan, particularly as documented at the site of Ginchi (Gadzhiev 1991: 34–78), and these Chalcolithic settlements in turn had their own ancestral roots in local Neolithic and Mesolithic developments, as documented at the site of Chokh (ibid., 110–126; Amirkhanov 1987). The Daghestan “variant” of the Kura-Araxes cultural tradition, thus, contains specific distinctive features related to these local roots that distinguish it from the more “classic” Kura-Araxes settlements in Transcaucasia to the south. Moreover, the Early
Bronze materials from Dagestan exhibit parallels with Maikop remains to the northwest and with materials also found farther north on the western Eurasian steppes, particularly in terms of metals and polished stone weapons, such as shaft-hole axe/hammers (battle axes) and perforated mace heads. The architecture on Early Bronze coastal plain sites varies from circular mud-brick freestanding architecture (e.g., at Serker-tepe in northeastern Azerbaijan) to deeply dug oval and circular pit-houses and even sunken, multi-roomed structures (e.g., at Velikent in southeastern Dagestan).

It may even be somewhat misleading to refer to the highly syncretic Early Bronze remains from the northeastern Caucasus as a “variant” of the Kura-Araxes culture – whatever that means. These remains seem sufficiently distinctive to warrant renaming them after the most extensively excavated Early and Middle Bronze Age site in the northeastern Caucasus, namely, that of Velikent on the Caspian plain of southeastern Dagestan. The temptation to define a new culture, however, must be resisted because there already exist too many archaeological cultures distributed across southern Russia (cf. the discussion in Chapter 1); to continue this proliferation only compounds the problem. Here reference will be to the Velikent “component” of the Kura-Araxes cultural-historical community, a less than satisfactory term that acknowledges the basic similarities in ceramics and portable hearth supports within the Kura-Araxes tradition, but also emphasizes the regionally distinctive and steppe-like features of the material remains most thoroughly documented at Velikent. Scores of Velikent component sites are known from both the coastal plain south of Izberbash, Dagestan roughly to Divichi, northeastern Azerbaijan and in the immediately adjacent piedmont and mountainous regions to the west (Fig. 3.21).

As described earlier, the Caspian littoral plain forms the only unimpeded corridor around the Great Caucasus Mountains, linking the steppes to the north with Transcaucasia and the Anatolian and Iranian plateaus to the south. Peoples moving into Transcaucasia from the north would almost certainly have traveled down this corridor, encountering the settlements existing there. Preliminary survey reconnaissances to the south of Velikent and in northeastern Azerbaijan, as well as limited excavations on sites to the north at least as far as the contemporary town of Izberbash, have shown that sites with materials similar to those from Velikent were relatively densely distributed on this section of the coastal plain during Early Bronze times (Gadzhiev 1991: 128; Gadzhiev et al. 2000: 47–56; Khalilov et al. 1991). Early Bronze sites in mountainous Dagestan, such as Mekegi, Galgalati, and Chirkei, as well as in Chechnya to the northwest, such as Serzhen’-Yurt, contain materials closely related to those from Velikent (Gadzhiev 1991: 140–163), though obviously architectural traditions differ between the two zones with fairly simple one-roomed standing stone structures being characteristic in the mountains and mud-brick and pit-houses being typical on the coastal plain.

In other words, this Velikent “component” of the Kura-Araxes culture has a reasonably widespread distribution throughout the northeastern Caucasus.
There is practically no earlier evidence for Chalcolithic sites on the littoral plain, as there is in the mountains, suggesting that the coastal plain was first settled during the middle of the fourth millennium BC, or slightly later than early Maikop sites to the northwest and roughly contemporaneous with the initial appearance of Kura-Araxes sites to the south. The essentially simultaneous emergence of the different components of the Kura-Araxes cultural-historical community seems to coincide roughly with the so-called Uruk expansion up the Euphrates and onto the eastern Anatolian plateau.
The Early Bronze Age site of Velikent was occupied from the mid-fourth to the early second millennium BC (or ca. 3600–1900 BC as based on a series of calibrated radiocarbon determinations). Its cultural remains, which consist of separate burial and settlement areas set on the top of five natural clay terraces, extend intermittently over approximately 28 ha. (Fig. 3.22). Excavations at the
type site of Velikent have been the most extensive and have yielded the most materials, particularly from its collective catacomb burials, where hundreds of metal and polished stone objects and complete ceramic vessels have been recovered. Large circular dwellings with internal features such as hearths and benches and made of dried mud-bricks, some of which were occasionally fired, characterized the earliest building horizon (Gadzhiev et al. 2000: 63). Subsequently, the architectural tradition changed, and deeply dug pit houses became the norm. An even later multi-roomed building, which had been extensively burned, was excavated above a series of these deep circular pit-houses, though the rooms of this building, which were reinforced with wooden posts, flat river boulders, and even columns of stones set on top of one another reinforcing the corners (ibid., 76–77), were dug down into the natural clay terrace and not built-up as in the first building horizon. This multi-roomed burned building was not a domestic structure but served some public function, possibly associated with ceramic production and storage.

Thus, there was a very significant shift in building traditions not long after Velikent had been initially settled. The earliest horizon has numerous parallels with Kura-Araxes materials from sites to the south, whereas the later levels, which are deeply dug down from the surface, may reflect more northern influences as well as represent a unique local adaptation to the dense clay terraces into which they were dug and into which they also dug their collective catacomb burials. The forms of the tombs with their attached entrance pits closely resemble or even consciously emulate the deeply sunken circular pit-house dwellings. Although one can trace strong continuities in the ceramics and stone and bone tool industries from the earliest to latest levels at the site, it is unclear whether the site was continuously occupied or periodically abandoned, possibly owing to transgressions and regressions of the Caspian Sea (M. Martín Sánchez, P. López Garcia, and J. A. López Sáez 2000). The initial settlers at the site arrived with metal-working skills, for arsenical copper/bronzes and ceramic molds for casting objects appear in the earliest levels.

They also initially produced very fine, highly fired ceramics with impressed designs that probably were turned on a wheel. These “high-quality” wares, which constitute approximately 10% of the total ceramic assemblage in the early levels (Fig. 3.23), are also found at the site of Serzhen-Yurt to the northwest in Chechnya (Munchaev 1975: 340, fig. 76) and also distantly resemble “Uruk-related” fine ceramics with impressed designs from northern Syria (Lyonnet, personal communication). Their quality of manufacture bespeaks more a connection with the south (northern Mesopotamia?) than with the ceramics from the steppes to the north, despite superficial similarities in terms of the impressed designs. These “high-quality” wares were not found in the multi-roomed building or in the latest excavated pit houses on the northern settlement mound at Velikent; that is, they disappear at some point during the occupational sequence at the site.
Figure 3.23. “High-quality,” apparently wheel-turned ceramic from Velikent – present at beginning of occupation of site, found as far west as Serzhen-Yurt in Chechnya and as far south as Serker-tepe (Borispol-tepe) in northeastern Azerbaijan.

A wealth of materials has been recovered from the salvage excavations of fifteen collective catacomb tombs at the site (Fig. 3.24). It is unclear how long such tombs were in use, and materials from them can be seriated into earlier and later groups. Two calibrated dates, taken from two separate tombs, almost perfectly overlap and date roughly 2850–2400 BC (Gadzhiev et al. 2000: 88, note 22), suggesting that burials were being interred in them during the first half of the third millennium. It is possible, if not likely, that some continued to be used during the latter part of the third millennium or Middle Bronze times and show clear relations with (or form part of?) the so-called later Middle Bronze Ginchi culture of mountainous Daghestan and Chechnya (Magomedov 1998; n.b., this culture should not be confused with the previously mentioned Chalcolithic site of Ginchi, which is also located in mountainous Daghestan).

A few highly burnished, occasionally incised vessels and fragments have been recovered from these collective tombs that closely resemble so-called Bedeni vessels found in the large early kurgans in the Kakheti and Kvemo Kartli regions of eastern Georgia (Gadzhiev et al. 2000: 88–89; Miron and Orthmann 1995: 233–236). These earliest pre-Trialeti kurgans will be described below; here it is
relevant to note that specialists divide them into two chronologically successive
groups: the earlier Martkopi and the later Bedeni phases, which are named
after excavated clusters of kurgans from these two areas in Georgia. Bedeni
materials also have been found in some of the kurgans excavated at Martkopi.
Calibrated radiocarbon dates from these kurgans are not entirely consistent,
as is also the case for the dates from the later Middle Bronze Trialeti kurgans
(compare Kavtaradze 1999: 81 and 86). In general, however, the calibrated dates
support a higher chronology, pushing the initial appearance of the Martkopi
phase kurgans back towards the middle, if not into the early, third millennium
BC. Thus, the presence of occasional Bedeni-like materials in the Velikent
collective catacomb tombs is not surprising in chronological terms. The more
interesting question is what their presence suggests in terms of the cultural and
historical relations between these two regions.

Spectroscopic analysis of 195 metal artifacts from the first excavated collective
tomb at Velikent showed that most were made of arsenical copper or bronze,
but surprisingly 15 (or approximately 8%) of the total analyzed corpus proved
to be deliberately alloyed tin-bronzes, representing some of the earliest tin-
bronzes found in the Caucasus. Only ornaments, not tools and weapons, were
made of tin-bronze at Velikent, possibly suggesting that the distinctive color
of the exotic metal enhanced its value (for a more extended discussion of
the cultural value inherent in the Velikent tin-bronzes and silver artifacts, cf.
Peterson 2003: 34–37). The ornaments made of tin-bronze at Velikent also
occur as arsenical copper/bronzes; thus, it is possible that the tin-bronzes were
received in semiprocessed forms or as ingots (Gadzhiev et al. 1997: 191, fig. 8,
no. 3), and then worked by the local smiths to produce distinctively colored,
but immediately recognizable ornaments, particularly bracelets.

A few tin-bronzes occur on late Kura-Araxes sites in Georgia and Armenia
(Kavtaradze 1999: 84–86; Tedesco, personal communication), but they begin
to appear with any regularity only during this early kurgan period. According
to Kavtaradze (ibid., 86), most of the bronzes from the Bedeni phase kurgans
are tin-bronzes, containing 8 to 15% admixtures of tin. The source(s) of the tin
are unknown, though not local, and lead-isotope analyses conducted on a few
of the previously analyzed tin-bronzes from Velikent suggest that they could
possibly be coming from the same eastern (?) sources that brought early tin-
bronzes to Troy in northwestern Anatolia and, at a later date, tin-bronzes to Tell
Abraq in the Arab Emirates (Kohl 2002a; Weeks 1999). This analytical evidence
is more tantalizing than definitive, but it is consistent with the notion of the
long-distance sporadic exchange of semiprocessed tin-bronzes and/or prestige
goods that may have indirectly linked sites from as far west as the eastern Adriatic
coast (Primas 2002: 304–305) to the northeastern Mediterranean across the
Black Sea and/or west Eurasian steppes to the Caucasus and eastwards possibly
to sources in southwestern Afghanistan or even farther east.

Most of the hundreds of bronzes artifacts from the collective tombs at
Velikent represent fairly typical forms, such as awls, chisels, simple tanged
Figure 3.24. Plan of collective catacomb tomb 11 from Velikent (adapted from Gadzhiev et al. 2000: 84, fig. 38).

knives, flat axes/adzes, and heavy shaft-hole axes, characteristic of Chernykh’s Circumpontic Metallurgical Province (Fig. 3.25). The metal ornaments from Velikent, such as the anchor-shaped pendants and the straight and crook-headed toggle pins perforated and flattened in the middle, are more distinctively characteristic of Velikent (Fig. 3.26), suggesting that they did not diffuse as widely as the tools and weapons; the circular bronze medallions with a characteristic bent loop for suspension, on the other hand, have been found repeatedly on the steppes, suggesting contact with that area (cf. Nechitailo 1991: cover illustration and 86–87). The ground polished stone industry includes circular, pear-shaped, and knobbed mace heads and ceremonial shaft-hole axe-hammers or battle axes that are frequently encountered in excavated kurgans found farther to the northwest, including burials of the Novotitorovskaya culture (Gei 2000: 156).

Clay models of wheels with projecting hubs have been found on the earlier settlement mound at Velikent and have been recovered from the surface of Velikent culture sites south of Derbent on the final coastal bay north of the Samur River and the border with Azerbaijan (Gadzhiev et al. 2000: 56, fig. 9). Such wheel models, which are typologically distinctive from the bone spindle whorls also found at Velikent, are frequently interpreted as evidence for the
existence of wheeled transport, and current opinion suggests that it is roughly around the middle of the fourth millennium BC that wheeled transport first appears, stretching across a vast interconnected region from northern Europe to southern Mesopotamia (Bakker et al. 1999). The precise determination of which area or which archaeological culture first developed wheeled vehicles may prove impossible to document archaeologically simply because the technology diffused as rapidly as it did across this vast contiguous area. The question

Figure 3.25. Characteristic metal (1–13, 25–28) and stone (14–24) tools and weapons from collective catacomb tombs at Velikent (drawn by R.G. Magomedov).
of origins, however, is much less significant than this phenomenon of convergence, this almost simultaneous evidence for the early use of wheeled vehicles stretching from northern Germany and southern Poland south across Anatolia to southern Mesopotamia, beginning ca. 3500 BC or immediately after the collapse of the gigantic Tripol’ye settlements.

Wheeled vehicles can be used for different purposes by different cultures (or different purposes by the same culture) across this interconnected area; they can serve military purposes, function to transport traded goods, such as semiprocessed metal ores and ingots, and facilitate the development of a new, more mobile way of life based principally on cattle herding. It is shortly after the introduction of wheeled transport that evidence for its massive utilization on the western Eurasian steppes is documented in the excavation of scores of kurgans containing wheeled carts with tripartite wooden wheels. These were not the chariots of a military aristocracy but the heavy, ponderous carts and
wagons of cowboys who were developing a form of mobile Bronze Age pastoral economy that fundamentally differed from the classic Eurasian nomadism that is later attested historically and ethnographically.

The actual existence of wheeled vehicles has been extensively documented in Novotitiorovskaya culture burials on the Kuban steppe to the northwest (Fig. 3.31) and, less frequently, in the monumental early kurgan tombs of Transcaucasia, both of which begin apparently during the first half of the third millennium BC, or during the period when the catacomb collective burials, occasionally with Bedeni-like vessels, were first utilized at Velikent. One does not yet have comparable evidence from kurgans on the Caspian coastal plain, many of which, unfortunately, have been leveled during the past fifty years with the intensive modern settlement and utilization of the plain. The plain once was dotted with kurgans dating to various periods, and it is now necessary to locate and excavate the earliest of them, such as still remain.

Currently available settlement pattern evidence suggests that this part of the Caspian plain extending south from Velikent to northern Azerbaijan may have been largely abandoned at the end of the third or beginning of the second millennium BC, though it is unclear whether the local inhabitants of the plain retreated into the mountains to the west for ecological reasons and/or were displaced south or north because of the periodic movements of peoples off the steppes and down the coastal plain into Transcaucasia, movements that may have begun roughly during the middle of the third millennium BC or even earlier, if the revised dating and cultural identification of the Sé Girdan kurgans in northwestern Iran is correct (cf. earlier discussion). Such postulated migrations did not represent armed invasions so much as cattle herders moving south with their families on oxen-driven wagons in search of better pastures for their animals. They partially assimilated with the local Velikent and Kura-Araxes peoples, as represented by continuities evident in the materials from both cultures.

There was a sharp break in the distribution of settlements in Transcaucasia that occurred during the late Early Bronze period, possibly beginning around the middle of the third millennium; specifically, the dense distribution of Kura-Araxes settlements was followed by a much more sparse distribution of known settlements and a sharp increase in burial sites during the late Early and Middle Bronze periods. This pronounced change in the material culture record, the dramatic decline in settlements and increase in burial sites, unfortunately, is not sufficiently emphasized in Kushnareva’s otherwise excellent discussion of Transcaucasia during the late Early and Middle Bronze periods (cf, her introductory comments to the Transcaucasian Middle Bronze Age 1997: 81); that is, if one superficially compares the distribution maps of Kura-Araxes Early Bronze remains in Transcaucasia with those of the subsequent Middle Bronze period (ibid., 46–86), the marked discontinuity in settlement pattern would not be immediately apparent. The difference, however, is striking: an abundance
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of known settlements and a relative paucity of mortuary remains is followed by a precipitous decline in known settlements and the advent of essentially new, monumental raised burial mounds (cf. Dschaparidze 2001: 101–102).

Moreover, the post Kura-Araxes settlements that have been investigated, such as the site of Uzerlik-Tepe in Azerbaijan, are impressively fortified on a scale not characteristic of the earlier Kura-Araxes settlements, and there is more diversity evident in the material culture remains, as is evident in Kushnareva’s delineation of five Middle Bronze overlapping archaeological cultures: Western, Trialeti, Karmirberd, Kizylvank, and Sevan-Uzerlik (Kushnareva 1997: 84–85). These supplanted the earlier, more homogeneous Kura-Araxes remains. What is the significance of such a sharp shift in settlement patterns?

THE EARLY KURGAN CULTURES OF TRANSCAUCASIA – THE ARRIVALS OF NEW PEOPLES, CHANGES IN SUBSISTENCE ECONOMIC PRACTICES, AND THE EMERGENCE OF SOCIAL COMPLEXITY

Some raised earthen burial mounds have been found in association with late Kura-Araxes settlements (e.g., at Satkhe in Djavakheti); they are not typical, however. Single, paired, and collective Kura-Araxes burials have been excavated both within settlements and in separate cemeteries adjacent to the settlements (e.g., at Amiranis-gora in Djavakheti). They are not typically mounded, but simple pits sometimes lined with stones. The mortuary evidence from Transcaucasia radically changes with the advent of the early kurgan cultures found initially in eastern and central Georgia. Georgian archaeologists distinguish two early phases of kurgan construction – Martkopi and Bedeni, which are named respectively after clusters of kurgans found immediately east and southwest of Tbilisi; other clusters of kurgans in the Alazan valley of eastern Georgia (e.g., at Tsnori) and some on the Tsalka plateau near Trialeti are also related to this period of the late Early Bronze kurgan cultures of Transcaucasia.

Absolute dating for the initial appearance of these large kurgans is somewhat contradictory, though most calibrated radiocarbon dates (cf. Kavtaradze 1999: 81) suggest that this process may have been underway at the end of the first half of the third millennium BC and then continuing into the second half of the third millennium. If this dating is basically correct, it suggests that the monumental early kurgans of Transcaucasia appear after the initial spread of Kura-Araxes peoples to the south, and that these kurgan cultures overlap chronologically with the latest phases of the Kura-Araxes culture in Transcaucasia (e.g., at Sachkere in Imereti). Mortuary remains continue to dominate the Transcaucasian archaeological record throughout the Middle Bronze Age, a period that traditionally continues – on the basis principally of synchronisms with the shaft-graves at Mycenae – down to the middle of the second millennium BC.
Unfortunately, very few settlement sites bridge the development from the Early Bronze Kura-Araxes culture to the regional Middle Bronze variants defined by Kushnareva. The important site of Berikldeebi (Glonti and Dzhavakhishvili 1987) along the left bank of the Kura River in Shida Kartli is an exception. This settlement has a ceramic sequence that extends from Late Chalcolithic pre–Kura-Araxes levels to the Late Bronze Age, including a well-defined occupation containing ceramics identical to those recovered from the early Bedeni kurgans. The site is small (0.5 ha.), badly pitted, and has a relatively thin cultural deposit (less than 2 m.). Berikldeebi’s long, apparently continuous sequence is most important for the relative ordering of materials, but, on current understanding, it is also exceptional and can hardly be cited to justify a general continuity of occupation in the Caucasus from Late Chalcolithic to Late Bronze times.

Some materials from the later collective catacomb tombs at Velikent mound III and from the synchronous, later levels of the settlement mound II at Velikent suggest that occupation at this site and presumably at other Velikent culture sites on the Caspian littoral plain may have continued into the late third and possibly into the beginning of the second millennium BC. As already mentioned, occasional Bedeni ceramic “imports” have been recovered from the later collective tombs, strengthening the basic chronological link between these materials and those from the early kurgan cultures of Transcaucasia. But afterwards settlement on the Caspian coast appears at least to have been largely interrupted, not resuming on a major scale until possibly Early Medieval times.

These shifts in settlement patterns must reflect a fundamental change in subsistence practices and increased social differentiation during late Early and Middle Bronze times. Some of the monumental, so-called great early kurgans (e.g., no. 1 at Tsnori) are spread across nearly 3 ha., encompassing a greater area than most known Kura-Araxes settlements! Kushnareva (1997: 229–233) has attempted to reconstruct the total number of “man-days” of labor needed to construct the kurgans found at Bedeni, Tsnori, and Uch-tepe on the Mil steppe of Azerbaijan and has come up with a figure of 48,000 days of labor for the largest kurgan from the last group. Although such calculations may be inflated or, at best, provide only approximate estimates of the required work, they still give some idea of the organization and expenditure of energy needed to construct these monumental houses for the dead with their elaborate wooden structures covered by massive stone mounds that can exceed 100 m. in diameter and 20 m. in height. Some kurgans on the Tsalka plateau in Georgia have stone-lined “procession ways” stretching more than 100 meters and sometimes linking one kurgan to another (Litscheli 2001: 65; Puturidze 2003; Fig. 3.27).

A plausible case can be made for the occasional practice of human sacrifice on the basis of the presence of secondary burials without grave goods accompanying the principal, richly accoutered interment found in these tombs.
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Figure 3.27. (a) Stone “procession way” between two kurgans near the Santa village, Tsalka (adapted from Litscheli 2001: 65); (b) Drawing of kurgans with stone-lined processional ways, Tsalka, Georgia (adapted from Puturidze 2003: 124, fig. 5.9); (c) Wooden “house of the dead,” the great Bedeni kurgan 5 (adapted from Lordkipanidze 2001: 13; caption translated from German: 1) construction pit; 2) plank wooden floor; 3) threshold; 4) longitudinal beams; 5) posts; 6) transverse beams; 7) roof beam; 8) grave chamber wall; 9) wall fill comprised of stones, earth, and wood; 12) interwoven bast mat; b) four-wheeled wagon; c) grave inventory; d) skeletal remains; e) metal objects).

Materials found in these tombs include precious silver and gold vessels, figurines, jewelry, and decorated felts. Tin–bronze weapons and tools are regularly found alongside arsenical copper/bronzes, and four-wheeled wooden wagons with tripartite wheels of the type earlier found in the Kuban region of the northwestern Caucasus also regularly appear in the larger kurgans from the Bedeni phase through Middle Bronze times.

Social differentiation and unstable political conditions also are evident in the iconographic representations on some of the vessels. The famous silver goblet from the Middle Bronze Karashamb kurgan found north of Yerevan is most instructive in this respect. This goblet, which closely resembles one earlier
excavated in Kurgan XVII in the Trialeti kurgans from the Tsalka plateau of southern Georgia, contains five bands of naturalistic and one band of geometric representations. The second and third bands from the top, which encircle the central body of the goblet, contain particularly vivid images (Fig. 3.28). A ceremonial banquet and procession scene occupies the second row with musicians playing behind a seated central figure, who is shown larger than the others and appears to be feasting on the various foods set on a table in front of him. This procession and feasting scene is then flanked by a row of fighting warriors. In the band beneath there appears a scene showing a warrior stabbing his opponent, followed by a lion, three standing headless figures, a feline-headed bird of prey of indisputably Mesopotamian or, more generally, West Asian inspiration, a fighter apparently decapitating a hapless victim or prisoner, and a seated figure holding a weapon before a column of disarticulated human heads set next to what can be interpreted as war booty: arrayed shields and metal weapons.

The representations are fascinating for their combination of local and more general, pan-West Asian traits, such as the feline-headed bird of prey and the processional scene with the central seated figure, feted by the musicians and the retainers serving him liquid and solid foods. Militarism, as reflected in the arrayed weaponry and depictions of combat and decapitation, appears endemic in the society. Social hierarchy and differential access to power are also clearly evident in these scenes.

The Karashamb goblet is unquestionably related to the earlier excavated silver goblet from Trialeti, the culture of which is dated traditionally to the Middle Bronze Age, or to the first half of the second millennium BC. Trialeti
black geometric designed and black-on-red painted wares can easily be distinguished from those from the earlier Martkopi and Bedeni kurgans, which are much more closely related to the preceding Kura-Araxes ceramic tradition. Similarly, there is a change in burial practice from the late Early Bronze monumental kurgans, with their principal interred and occasional accompanying individuals, to that of cremation in the Trialeti Middle Bronze kurgans. Possibly, such differences can be explained in terms of different ethnic groups who have successively crossed the Caucasus Mountains into Transcaucasia. It is true also that features of continuity can be observed and that the traditional division between late Early and Middle Bronze remains both on the western Eurasian steppes and in the Caucasus is imprecise, exhibiting considerable chronological overlap as based on calibrated radiocarbon determinations. At least some Middle Bronze sequences date to the third millennium BC (Chernykh et al. 2000: 41–42).

One striking illustration (Fig. 3.29) of chronological and typological continuity is provided by the anchor-shaped, shaft-hole ceremonial silver axe (Pilipossian 1996: 65, no. 33) that was found together with the silver goblet in the Karashamb kurgan. The highly distinctive shape of this axe is precisely paralleled by bronze axes from Idzhevan in northern Armenia (Kushnareva 1997: 107, fig. 45, no. 21), from kurgan 14 in the Kyurduluk cluster of kurgans just southwest of Sheki in northwestern Azerbaijan (Akhundov 2001: cover, and

Figure 3.29. Anchor-shaped, shaft-hole ceremonial axes from (a) Karashamb, (b) Bedeni, and (c) Kyurduluk (compiled from Pilipossian 1996: 65, no. 33 for the Karashamb axe; Dschaparidze 2001: 106 for the Bedeni axe; and Akhundov 2001: cover for the Kyurduluk axe).
Figure 3.30. Polished stone axe-hammers (or battle axes) from Novotitorovskaya culture sites and comparisons with other steppe examples, Troy (no. 12), and Daghestan 13–14; cf. also stone axe-hammers from Velikent, Fig. 3.24, nos. 14–19 above (adapted from Gei 2000: 156, fig. 47).

295, pl. XXXV, no. 3), from kurgan 12 at Bedeni (Dschaparidze 2001: 106), and from private grave 691 in the Royal Cemetery at Ur (Woolley 1934, vol. I: pl. 224, type A 14). The last example suggests that this type of axe was initially produced at least sometime toward the middle of the third millennium BC. It also should be noted that this ceremonial axe from the Bedeni kurgan was made of tin-bronze with a 9.2% concentration of tin (Gambaschidze et al. 2001: 270).
Figure 3.31. Wagons found in Kurgans of the Novotitorovskaya Culture (Lebedi 1, kurgan 2) (adapted from Gei 2000: 30, fig. 3).

Parallels from the early kurgans can be drawn also to materials found in Velikent “component” sites on the Caspian plain and in the steppes north of the great Caucasus range. Thus, a stone “battle-axe” of a type common in the northern Caucasus and southern Russia was found in one of the Martkopi kurgans (Dshaparidse 1995: 75), as were gold spiral pendants presumably worn about the temples or in the hair (ibid.), pear-shaped ground marble mace-heads (Miron and Orthmann 1995: 233), and perforated animal-toothed pendants (ibid., 228). Very similar materials are found in the collective catacomb tombs at Velikent (cf. Gadzhiev et al. 1997: 191; Gadzhiev et al. 2000: 91, 92), and the stone battle-axes are very typical for Novotitorovskaya culture remains in the Kuban region of the northwestern Caucasus (Gei 2000: 156; Fig. 3.30).

Most significant, of course, is the parallel appearance of oxen-driven wooden wagons in Novotitorovskaya kurgans and, more generally, in kurgans in the western Eurasian steppes from Novosvovodnaya, Pit-Grave, Early Catacomb, Kemi-Oba, and other related culture sites north of the Great Caucasus range and less frequently in the large kurgans of the Late Early Bedeni and Middle Bronze Trialeti-related cultures in Transcaucasia (Fig. 3.31). Gei (2000: 176–177) estimates that the remains of more than 250 wagons have been excavated in kurgans from the Kuban area and across the southeastern European steppes, 115 of them to be attributed to the Novotitorovskaya culture of the former region. The parallel appearance of similarly constructed wagons in both areas cannot be coincidental but must be historically related, possibly as suggested here through the continuous movement of cattle herders north to south around the great Caucasus range. One cannot fail to observe also the
nearly simultaneous appearance of such oxen-driven wagons in the “royal” tombs of southern Mesopotamia, tombs that contain striking parallels in precious jewelry and bronze weapons with remains from the Caucasus. It should be emphasized, however, that many more wagons have been excavated north of the Great Caucasus Mountains suggesting possibly their more practical, everyday use on the steppes than the apparently ritualistic/ceremonial purposes they principally performed south of the Great Caucasus.

The societies responsible for the construction of the large late Early and Middle Bronze kurgans in Transcaucasia were not egalitarian but must have been ruled by a paramount leader or chief who was capable of waging war and amassing labor on a significant scale to raise these monumental mortuary mounds. The number of known settlements decreased dramatically from the earlier time of the Kura-Araxes cultural community, and the later Middle Bronze settlements that have been excavated, such as at Uzerlik-Tepe, were heavily fortified, safely encircled behind massive stone walls, again reflecting unsettled, perpetually bellicose conditions. It is thought, though not yet conclusively demonstrated, that the earliest fortresses with cyclopean stone architecture, which typically are located in steep or relatively inaccessible locations such as the citadel of Schaori on top of a steep peak overlooking the western shore of Lake Paravani in Djavakheti (Litscheli 2001: 65), may first date to the Middle Bronze period. Later during the Late Bronze/Early Iron Age, such citadels became a characteristic feature of the Transcaucasian landscape (Badalyan et al. 2003).

Some of the early kurgan clusters, such as the Bedeni kurgans on the Tetri-Tskaro plateau, the Meskheti kurgans on the Niaili plateau, and the Trialeti kurgans on the Tsalka plateau, are found in highland areas more likely used as summer pasture lands than places of intensive agriculture. Others, located in the Alazan valley or on the Mil steppe, may have been areas where pastoralists drove their flocks and quartered themselves during the winter months. Kushnareva’s reconstruction (1997: 230) is reasonable:

The pasturing of herds of animals in the high mountains during the spring and summer seasons compels us to view those areas of the Mil steppe where kurgans were erected and the mountains of the neighboring Caucasus as a single cultural-economic region. And if the annual herding cycle was approximately the same in antiquity, it would seem logical that the building of the kurgans took place during the winter months with the slackening of herding activities, at a time when the herders had descended from the mountains.

Conversely, those kurgans found on the plateaus were most likely constructed during the summer months when the herders had driven their herds from the valleys and steppes onto these highland areas then covered with luxuriant grasses. Such annual movements of pastoralists are known ethnographically (e.g., herders wintering in the Alazan valley of eastern Georgia and then driving
their flocks to the Djavakheti plateau for its summer pastures), and the physical separation of the kurgan clusters and the general lack of obvious agricultural settlements suggest that a similar pattern of annual movement had been established already by late Early and Middle Bronze times. This interpretation does not mean that agriculture had been abandoned or that the composition of the herds during this initial period was similar to that recorded ethnographically. More data on settlement patterns and subsistence practices needs to be gathered to determine these issues.

Cattle herding pastoralists, who habitually utilized ponderous oxen-driven wagons, gradually moved south from the western Eurasian steppes into Transcaucasia. As they came into contact with the remaining Kura-Araxes related peoples, their material culture and economic activities necessarily changed. Assimilation is evident in the continuities between Kura-Araxes and Bedeni ceramics, such as sharply carinated, highly burnished black vessels, and is to be expected in other aspects of material culture, including basic economic activities. This reconstruction is potentially testable. Over time, the immigrant cattle herders developed a more mixed economy with more varied compositions of their herds, including greater reliance on sheep and goats. Replacement was partial, not total, and the Early Kurgan and Middle Bronze cultures that emerged were hybrids exhibiting features both local and nonlocal in origin.

CONCLUSION – SOME LATER DEVELOPMENTS IN CAUCASIAN PREHISTORY AND SHIFTS IN THE PRODUCTION AND EXCHANGE OF METALS

Traditionally the Late Bronze period in Transcaucasia begins around the middle of the second millennium BC. Several different regional archaeological cultures (e.g., in Georgia, Iori-Alazan, Shida Kartli or Samtavro, Colchidean/Koban) are recognized. Settlements once more are documented on a large scale and include the fortified sites with cyclopean stone architecture perched on inaccessible, easily defended promontories or on the steep slopes of mountains, as well as more open settlements located in lower-lying plains. The Caucasus now appears even more densely settled than in Kura-Araxes times, with Late Bronze sites located in valleys and in piedmont regions “beneath nearly every contemporary village” (Abramichvili 1984: 46).

Cemeteries, which usually now consist of individual pits, stone-lined cist graves, or stone-ringed cromlechs, but not raised kurgans, are often associated with these settlements. Male burials typically contain a relatively standard assemblage of functional and ceremonial metal weapons, including somewhat later the famous engraved Colchidean/Koban axes (e.g., at the Tli cemetery [Tekhov 1980; 1981; 1985; 1988]). Special “sanctuary” sites of ritually deposited hordes containing literally thousands of functional and miniature-sized metal weapons, jewelry, figurines, and ceramic vessels also now appear and are particularly well-documented in eastern Georgia (Pizchelauri 1984). The record
suggests that the times remained unsettled and that Transcaucasia had now filled up with different peoples armed with bronze weapons to defend the territories that they had staked out for themselves.

Tin-bronzes increasingly replaced arsenical copper/bronzes, though this process of replacement apparently took place in different areas at different times, occurring earlier, for example, in the Alazan-Iori plain than in Shida Kartli (Dschaparidze 2001: 114–116). Nevertheless, over time throughout the Caucasus, tin-bronzes became dominant and were readily available, despite the fact that there were no local sources of tin that were exploited at this time. During the Late Bronze and Early Iron periods, the Caucasus is one of the richest metalworking areas of the Old World, with tens of thousands of tin-bronze artifacts having been unearthed in clandestine and controlled excavations dating back to the nineteenth century.

E. N. Chernykh’s discussion (1992: 275–295) of this later “Caucasian Metallurgical Province,” which takes shape around the middle of the second millennium BC, refers extensively to the highly distinctive and isolated character of the bronzes produced in the Caucasus at this later time and contrasts its paradoxically isolated character with the range of metal products distributed across the contemporaneous vast “Eurasian Metallurgical Province” centered far to the northeast (Chernykh 1992: 192) and with the earlier role of Caucasian metallurgy in the late third and early second millennium for supplying metals over much of the western Eurasian steppes. What is perhaps even more paradoxical is that by the second half of the second millennium BC, the Caucasus was one of the most prolific metal-working areas of the Old World, and what it was dominantly utilizing were tin-bronzes, the tin of which had to be imported from sources lying far to the east (cf. Chernykh 1992: 194). If this picture is accurate, it is hard not to adumbrate the outlines of a structurally integrated, metallurgically linked, extensive system of production and exchange stretching across a vast area of Eurasia by the latter half of the second millennium BC.

BIOGRAPHICAL SKETCH

R. M. MUNCHAEV

Photo 3.1. R. M. Munchaev delivers remarks, while E. E. Antipina listens.
Rauf Magomedovich Munchaev was born in Zakataly, Azerbaijan on September 23, 1928. In 1949 he graduated from the Historical Faculty of the Dagestan Pedagogical Institute (now Dagestan State University). In 1953 he defended his Candidate’s Dissertation (first PhD) on *The Copper and Bronze Ages in the History of Dagestan (3rd to 2nd millennia BC)* [Epokha medi i bronzy v istorii Daghestana (III-II tyc. do n.e.)], and he finished his Doctoral Dissertation (second PhD) on *The Caucasus in the Aeneolithic and Early Bronze Age (5th to 3rd millennia BC)* [Kavkaz v epokhu eneolita i rannei bronzy (V-III tys. do n.e.)]. He began to work at the Institute of Archaeology, Academy of Sciences in Moscow in 1955, and he served first as Deputy Director of the Institute from 1968 to 1991 and then as Director from 1991 to 2003. He successfully led the Institute of Archaeology through the turbulent years that immediately followed the collapse of the USSR and the massive cutback in state support that drastically affected field-based sciences such as archaeology.

He has participated in archaeological field expeditions to the northern Caucasus, the Middle Volga, and Stavropol’ regions, and to Bulgaria. He directed the Soviet expeditions to northwestern Iraq (1969–1984), where extensive excavations were conducted on pre-Hassuna, Hassuna, Halaf, and Ubaid settlements (several articles of which were translated into English in the edited volume *Early Stages in the History of Mesopotamian Civilization: Soviet Excavations in Northern Iraq* [Yoffee and Clark 1993]), and since 1988 he has led the Russian excavations to northeastern Syria, where they have exposed the monumental remains of a fourth–third millennium cult-administrative center at Tell Khazna I (Munchaev, Merpert, and Amirov 2004). He has been the editor-in-chief of the central journals *Sovetskaya Arkheologiya* and its successor *Rossiiskaya Arkheologiya* and was the deputy editorial chief of the multivolume *Arkheologiya SSSR* series. He has published more than 250 archaeological articles and monographs, including his extensive overviews to the Maikop culture that are cited frequently in our study (Munchaev 1975, 1994). Most recently, he is the coauthor with V. I. Markovin of a semipopular overview to the prehistory, early history, and contemporary material culture of the northern Caucasus (Markovin and Munchaev 2003).

In order to convey something of the integrated “international” character of Soviet/Russian archaeology, let me relate one personal anecdote. In late December 1987 I accompanied the well-known ancient historian, Dr. Muhammed A. Dandamaev, to New York to attend the annual Archaeological Institute of America meetings. Dr. Dandamaev had spent the previous two weeks with me in Wellesley, MA, painstakingly compiling the indices for his book (coauthored with V. G. Lukonin) *The Culture and Social Institutions of Ancient Iran*, which was published by Cambridge University Press in 1989. It was the height of the Gorbachev era and several leading Soviet archaeologists, including Rauf M. Munchaev, had been invited to New York to participate in a special session on the origin of the state. Dr. Dandamaev and I had also been invited to participate in these meetings, but when we arrived at the hotel in
New York, Muhammed, who is an ethnic Lakh born in mountainous Dagestan, asked me to find where his fellow Lakh, Dr. Munchaev, was staying. We located Rauf’s room, and I was delighted to observe the two Lakhs embracing in this opulent setting. Rauf then opened the door of the desk where he had been working and took out a recent Russian newspaper article, reporting the activities of the Lakh Soviet cosmonaut who was then circling the globe. Two of the eighty thousand or so still extant Lakhs happily celebrated the exploits of their fellow countryman in the very incongruous surroundings of a fancy hotel room in midtown Manhattan – a classic, unforgettable moment.

BIOGRAPHICAL SKETCH

M. G. GADZHIEV

Magomed Gadzhievich Gadzhiev, an ethnic Avar, was born on December 1, 1935 in the mountain village (aul) of Okhli in the then Autonomous Soviet Socialist Republic of Dagestan; he died after a short illness in the Dagestan capital of Makhachkala on February 4, 2003. He was born into a family of teachers who worked in the rural countryside, but he left the mountains to study first in the regional center at Buinaksk and then in the Faculty of History at the Dagestan State University in 1954. Four years later he was accepted as a graduate student in archaeology at the Dagestan branch of the Russian Academy of Sciences, where he continued to work for the rest of his life. From 1980 until his death in 2003, he directed the Archaeological Department of the Institute of History, Archaeology, Ethnography of the Dagestan Scientific Center, Russian Academy of Sciences and also taught courses in archaeology as Professor in the History Department of the Dagestan State Pedagogical University.

He was an extremely active field archaeologist, conducting both research and salvage excavations on Chalcolithic and Bronze Age settlements and cemeteries, such as in the mountains at Ginchi, Irganai, Galgalatl, and Chirkei and on
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the Caspian coastal plain at Gemi-Tyube, Mamai-Kutan, and Velikent. He even investigated several fortresses and settlements of Albanian-Sarmatian and Early Medieval times near his ancestral mountain village of Okhli. He was also the Daghestan Director of the Daghestan American Archaeological Expedition to Velikent (or DAV), which conducted excavations at the site from 1994 to 1998, or until the political situation in neighboring Chechnya temporarily halted this collaborative project. He was the author of more than 140 scientific articles and coauthored several fundamental works, such as the four-volume History of Daghestan (1967), the first volume of which was completely revised, appearing in 1996 as Istoriya Dagestana s drevenishikh vremen do kontsa XV v. (with O. M. Davudov and A. P. Shikhsaidov). His expanded and revised doctoral dissertation (or second PhD) Ranne-Zemedel’cheskaya Kul’tura Severo-Vostochnogo Kavkaza appeared in 1991 and demonstrated clearly that the so-called Daghestan variant of the Kura-Araxes cultural community had not been introduced into Daghestan as part of the relatively later dispersal of this cultural community, but rather had local indigenous roots related to Chalcolithic settlements that dated back at least to the middle of the fourth millennium BC.

Magomed Gadzhiev’s contribution to the archaeology of Daghestan and of the Caucasus, in general, was simply immense. Those of us fortunate enough to have worked with him also remember him as a wonderful, warm individual who treated everyone alike with the same unpretentious, caring manner. M. M. Mammaev, the editor of the recently published volume dedicated to his seventieth anniversary (2005: 5), sums up these unforgettable personal strengths:

Being an uncommonly modest man, Magomed Gadzhiev never engaged in self-promotion or demanded special homage. He always maintained a Daghestan mountaineer’s sense of moral virtue (namus), honor, and dignity. His straightforwardness and accessibility won him the deep respect of all those who knew and worked with him.