

An aerial photograph of a wide river valley. The river flows from the upper right towards the center, then curves to the left. The surrounding landscape is a mix of green and brownish-yellow, suggesting a highland or semi-arid environment. In the distance, there are rolling hills and mountains under a clear sky.

early transcaucasian cultures and their neighbors

The Muş province is a highland zone to the west and northwest of Lake Van.

Unraveling Migration, Trade, and Assimilation

BY STEPHEN BATIUK AND MITCHELL S. ROTHMAN

MUCH OF WHAT happens in our modern world depends on how people define their identity (and their loyalties), how they adapt to local conditions, and how they interact economically, politically, and socially to create new impetus and opportunities for change. When people migrate, they affect the places to which they move, causing both the old and new populations to assimilate to one another to some degree.

Sometimes, the migrants' identity is retained; at other times it mostly disappears. Since the distribution of resources for subsistence and trade shapes this process, we must see culture change in a broad geographical context and in many cultural dimensions.

Archaeologists are interested in how these same factors determined the evolution of the ancient world and how insights from the modern world can solve ancient puzzles. One example using this framework concerns the spread of a series of cultures called Early Transcaucasian or ETC. Marked largely by distinctive pottery styles and associated artifacts, ETC cultural materials appeared across the Near East in the Late Chalcolithic and especially the Early Bronze Age (4th–3rd millennia BCE). At this time the world was erupting with new social and political realities: kings, cities, armies, bureaucrats, specialized and large-scale economic production, and increasingly formal systems of intra- and inter-regional trade. These changes were the impetus for new adaptations in pastoral nomads', village farmers', and artisans' traditional lifestyles.

A number of theories have been proposed to explain the geographically wide distribution of ETC pottery over a period of almost 2,000 years. The earliest theory saw a single mass migration of small farmers out of the ETC homeland in the Transcaucasus, moving progressively southwest into modern Turkey, Iraq, Syria, Lebanon, Jordan, and Israel/Palestine, and southeast into western Iran. Others have emphasized the role of trade and emulation, in which ETC pottery and pottery styles passed along the same routes as metals, precious and semiprecious stones, and perhaps viticulture (the cultivation of grapes). None of these possibilities alone, however, is completely satisfactory for all cases.

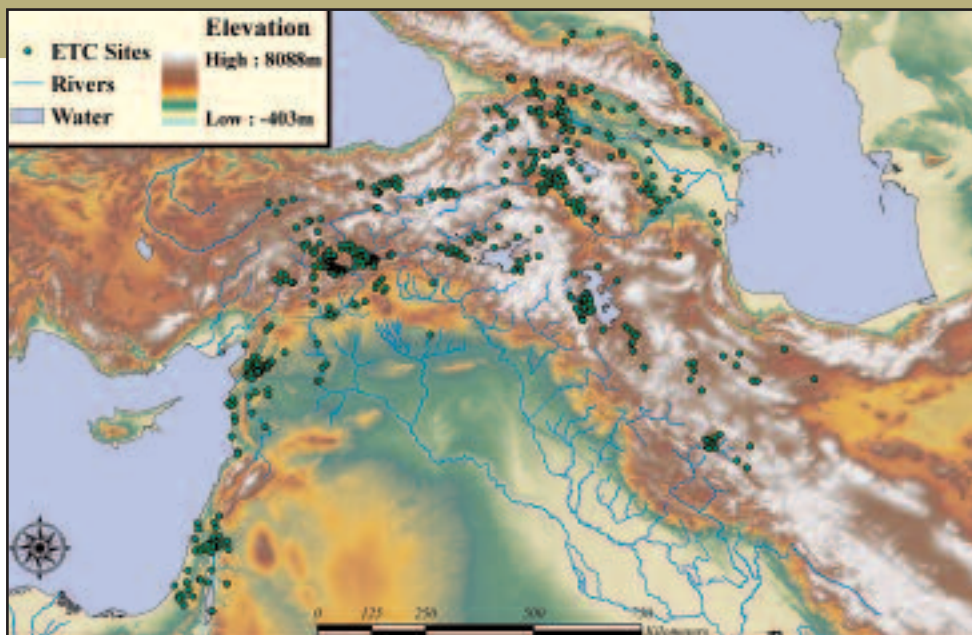
Some archaeologists say that only cultures within the ETC homeland are truly Transcaucasian. Others, like us, see it as a broader phenomenon that requires explanation wherever it appears. Solving this problem requires learning how the bearers of various ETC cultures interacted and adapted to new

contacts—whether peoples, trade goods, or pottery styles.

Recent excavations and surveys have determined that ETC sites were small villages occupied by farmers and pastoral nomads, who were wedded to their particular pottery styles. In the Transcaucasus this indicates a persistent cultural tradition, while in the areas to which the pottery spread, it may indicate the migration of peoples who brought their pottery styles with them. In some localities outside of the Transcaucasus, this ETC ware became the dominant style. In other places, it existed alongside local pottery-making traditions.

To further the discussion we focus here on the appearance of ETC artifacts in the hills and valleys of eastern Turkey (particularly the Muş province, the Malatya plain, and the 'Amuq plain), central western Iran (the Kangavar valley), and the Levant (the north Jordan valley). These are diverse ecological zones—some quite similar and others quite different from the original ETC homeland—and all are situated on traditional routes that connect regions.

For each we will describe the natural environment, the changing balance of preexisting local populations and potential immigrants over time, and the ETC pottery styles in each area. From this analysis, we will propose patterns of migration, trade, and assimilation, despite the problems faced in finding archaeological evidence of pastoral nomads, transhumants (pastoralists with a settled home base who practice some agriculture), or very small farming communities.



The Early Transcaucasian Culture is distributed across the Near East. Topography derived from GTOPO 30 Data, courtesy of NASA.

THE MUŞ PROVINCE

The Muş province lies west and northwest of Lake Van in highland eastern Turkey. The lowest elevation on the plain is 1,500 m above sea level, with mountains rising up to 2,900 m. Although it is a marginal zone for agriculture, with poor soils, bad drainage, and six feet of snow six months of the year, there are large areas of rich pasture for sheep and goat. It is also endowed with rich sources of fine tool-making obsidian (volcanic glass), providing opportunities for trade.

During the Late Chalcolithic, settlements were sparse and isolated in the middle and northern edges of the plain. The only new sites founded during the following Early Bronze Age I and IIA periods (EB 1/2A) were located in the hills on the routes toward the Transcaucasus, an ideal zone for pastoralism and gardening. During the subsequent Early Bronze Age IIB and III periods (EB 2B/3), the number of sites, including many on the plain, increased dramatically.



While the number of settlements increased, new pottery styles using Transcaucasian forms and techniques appeared in Muş alongside preexisting local styles. Through time ceramics appeared that were admixtures of both pottery-making techniques. This seems to indicate ETC migration in the form of numerous separate migrations or ripples in streams of migration. The first ones, during the EB 1/2A, consisted mostly of pastoral nomads, while the latter ones, during the EB 2B/3, involved small groups of transhumant pastoralists mixing with the local population.

THE MALATYA PLAIN

The Malatya plain presents a contrasting picture. Approximately 900 m above sea level, its soils are rich for agriculture and horticulture, and it experiences much less snow during the winter. Malatya is also a transportation hub where routes from the east over the Taurus Mountains

Period (Abbreviation)	Local Phase	Dates
Late Chalcolithic	Kura-Araks I	3500-3000 BCE
Early Bronze Age I/IIA (EB 1/2A)	Kura-Araks II	3000-2700 BCE
Early Bronze Age IIB/III (EB 2B/3)	Kura-Araks III	2700-2200 BCE
Middle Bronze Age I (MB 1)		2200-2000 BCE
Middle Bronze Age II (MB 2)		2000-1500 BCE

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What Defines the ETC?

ETC CULTURES WERE first identified on the basis of their pottery in the Transcaucasus area between the Kura and Araxes Rivers and between the Caspian and Black Seas. Their very distinctive pottery is handmade and predominantly black on the outside and red or black on the inside. It is highly burnished and often has incised or raised designs of particular shapes. In contrast, the pottery traditionally made in the areas to which ETC pottery spread was wheel-made, buff in color, often painted, and used different shapes for possibly different functions.

Although recent research indicates that the black-red variant may have originated in northeastern Turkey and then spread into the Transcaucasus, over time both ETC pottery types (black-red and black-black) spread south. Early archaeologists interpreted this as evidence for the migration of a monolithic ETC culture, since, at the time, archaeologists saw cultures as collections of distinct artifacts that were thought to represent distinct peoples.

Today our anthropological understanding sees cultures consisting of people organized in definable groups who share belief systems and behavioral patterns which may or may not correspond directly to collections of artifacts. As a result, we must ask what this pattern of spread meant in terms of the cultures involved. Is it evidence of a migration of people? Does it indicate the trade of goods between neighboring cultures? Or does it reflect the assimilation of a foreign pottery style by local people?

The fabric and manufacture of ETC ceramic types are easily distinguished from local pottery. Local wheel-made types include: (a) EB 1 Mesopotamian pottery from Arslantepe, Turkey, and (b) Tilbes Höyük, Northern Euphrates, Turkey. ETC ceramics include: (c) EB Nachichevan lugs from the Urmia Basin, northwest Iran; (d) EB 1 pots from Arslantepe; (e, f, g) EB 1/2 ceramics from Godin Tepe, central west Zagros Mountains, Iran; (h) a Georgian-style EB sherd from Könk in Elazığ, Turkey; (i) EB 2b/3 groove and line ware sherds that combine ETC and local techniques from Muş, Turkey; (j) EB 3 jars from Lorut, Armenia; (k) a EB 3 hole-mouthed bowl from Karnut, Armenia; (l, m) Red Black Burnished Ware / Khirbet Kerak Ware from Tell Taiyinat, 'Amuq, Turkey; (n, o) MB 1 pots from Sos Höyük, Erzurum, Turkey; and (p) MB 2 pots and fireplace andiron from Sos Höyük, Erzurum, Turkey. Photos courtesy of Marcella Frangipane, University of Rome, Italian Mission in Turkey (a, d); Mitchell S. Rothman, Widener University (b, e, f, g, h, i); Stephan Kroll, University of Munich (c); Armine Hayrapetyan, National Academy of Sciences, Yerevan, Armenia (j, k); Timothy Harrison, University of Toronto (l, m); and Antonio Sagona, University of Melbourne (n, o, p).



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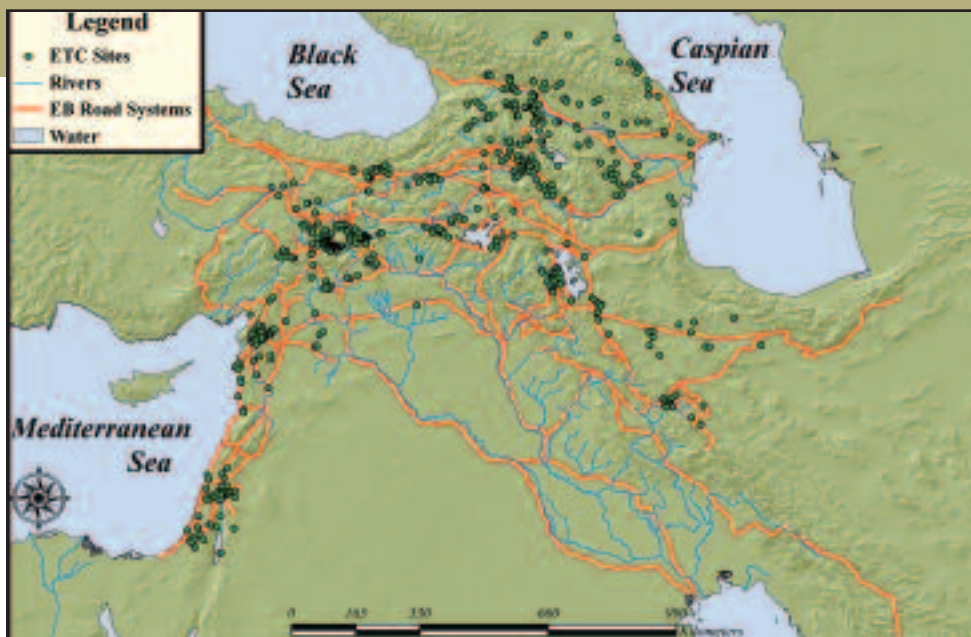


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This royal tomb at Arslantepe contained rich grave goods with the bodies of two sacrificed people on top. The tomb also had both ETC and local Early Bronze Age ceramic types, as well as objects of unusual metal alloys of silver or electrum (a form of gold) and copper (i.e. potential technology from the Transcaucasus).





The topography of the Taurus Mountains to the northwest and the Zagros Mountains to the east limits trade routes and defines connections among sites.

built a small walled town with houses and pottery more typical of the pre-ETC period once again, a reestablishment of the earlier local culture as dominant.

THE 'AMUQ VALLEY

The 'Amuq valley sits between the Anatolian plateau to the north and the low plains of the Levant to the south, much closer to sea level than either Malatya or Muş. Snows are limited in winter, and its fertile soils are fed by many streams, rivers, and springs, providing rich agricultural and horticultural potential

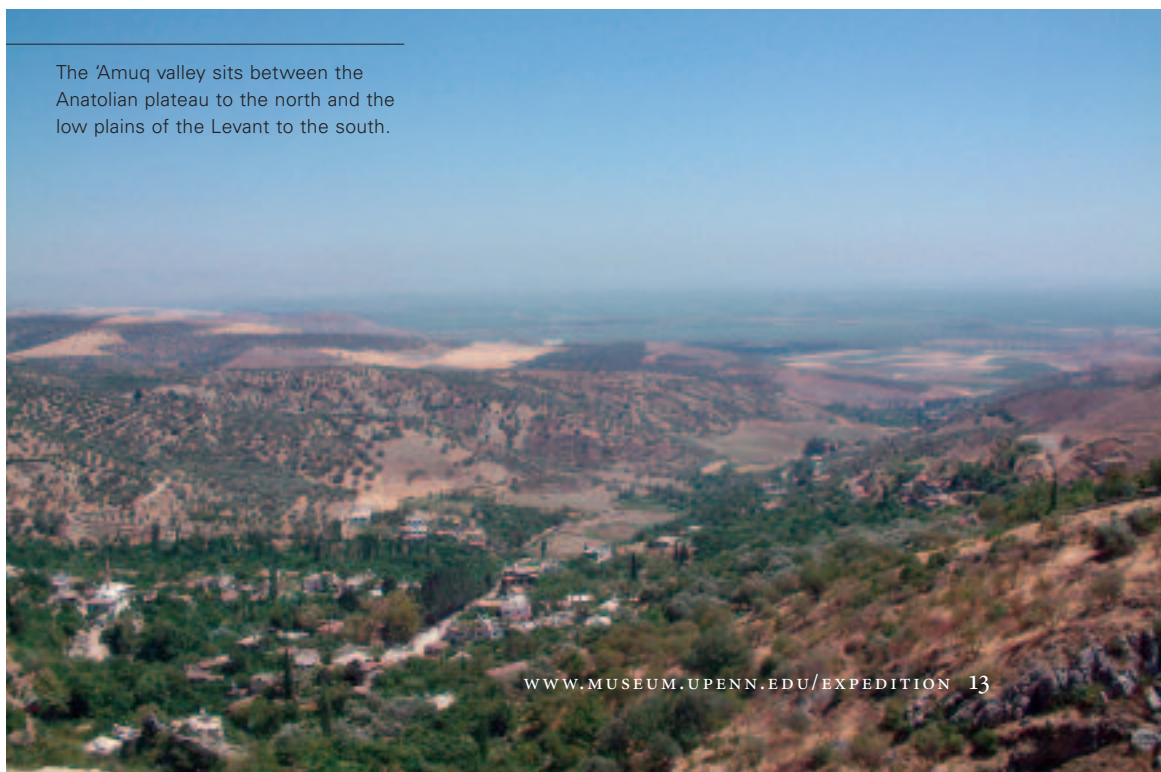
and along the Murat River intersect with those through passes from the west to the Anatolian plateau and those from the south along the Euphrates River.

Although comprehensive archaeological surveys have just begun and settlement patterns are not yet available, modern excavations at Arslantepe—the center of a late 4th millennium BCE state—have identified some of the earliest examples of ETC pottery to appear outside the high mountain areas. These finds seem to indicate the presence of traders, or perhaps pastoral nomads (rather than settlers), from the Transcaucasus. Later, toward the end of the 4th millennium, the number and percentage of ETC pottery types increase, and suggest the appearance of actual ETC settlements. After the collapse of Arslantepe (*ca.* 3000 BCE), settlers with their largely ETC-styled pottery occupied the settlement. Excavators recovered a tomb with sacrificed individuals and rich funerary goods from this period that contained both ETC wares and local Plain Simple Wares. Following this occupation, ancient residents

along with pasture land and mineral deposits in the surrounding foothills and mountains.

At the end of the Late Chalcolithic and the beginning of the Early Bronze Age the first ETC ceramics appear, followed by a dramatic increase during the EB 2B/3 of ETC wares alongside local wares. This increase in ETC ceramics corresponds with a dramatic shift in settlement from relatively large sites found in the valley's center during the earlier period to a proliferation of small sites (1-2 ha) along its outskirts during the later period. Furthermore, at large sites (e.g. Tell Tayinat) excava-

The 'Amuq valley sits between the Anatolian plateau to the north and the low plains of the Levant to the south.



tors found a mixture of local wheel-made pottery and hand-made ETC wares. In contrast, the smaller sites (e.g. Tabarat al-Akrad) yielded almost exclusively ETC ceramics.

This situation is similar to the Muş region and probably indicates multiple migrations—first, pastoralists and/or traders, followed by farmers establishing themselves on the outskirts of the indigenous settlement system. During the EB 2B/3 the local and “foreign” cultures assimilated to each other. Variations in the fabrics of the ceramics suggest that all were made locally, perhaps in households, following local forms and those from Elazig.

THE SOUTHERN LEVANT

The southern Levant provides an interesting contrast to the other regions and an environment completely different from the Transcaucasus. Ranging from 300 m above to 200 m below sea level, and with higher temperatures and lower precipitation, it is still marginal in some senses. However, sites are located on predominantly arable or irrigable land and, similar to the ‘Amuq, have high agricultural and horticultural potential.

Although ETC ceramics (the local variant is Khirbet Kerak ware) are found at 45 sites over substantial parts of the southern Levant, they are most intensely concentrated in the north Jordan and adjacent river valleys. ETC wares make a sudden appearance in the southern Levant around 2700 BCE at sites generally located in the lowlands on fertile soils with good

access to water. Once again, larger sites (e.g. Khirbet Kerak or Megiddo) yielded a mixed assemblage of local pottery and ETC wares, while smaller (2 ha) sites (e.g. Beth Shean or Tell Yaqush) produced almost exclusively handmade, slipped, and heavily burnished ETC ceramics.

Variations in the ceramic fabrics again suggest that ETC wares are being locally made in the north Jordan valley at each site, mixing earlier local traditions with the intrusive Transcaucasian forms and techniques. Although some pottery appears to be inspired by local traditions, a number of forms are either unique or innovations from the ‘Amuq assemblage from the north. Some forms can even be traced back to eastern Anatolia.

THE KANGAVAR VALLEY

The Kangavar valley in the central western Zagros Mountains of Iran has a natural environment similar to Muş. Its small valley bottoms are surrounded by highlands where snow is deep in winter, herding is common, and large-scale agriculture is not possible. Like Malatya, Kangavar sits along a major trade route, the High Road, which later became part of the Great Silk Road to the East.

Unlike Muş, however, the number of valley bottom settlements here declined dramatically during the Late Chalcolithic, including the abandonment of the largest site, Godin Tepe. At the same time, the number of cave sites, open air sites, and

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ETC ceramics are intensely concentrated in the north Jordan and adjacent river valleys.



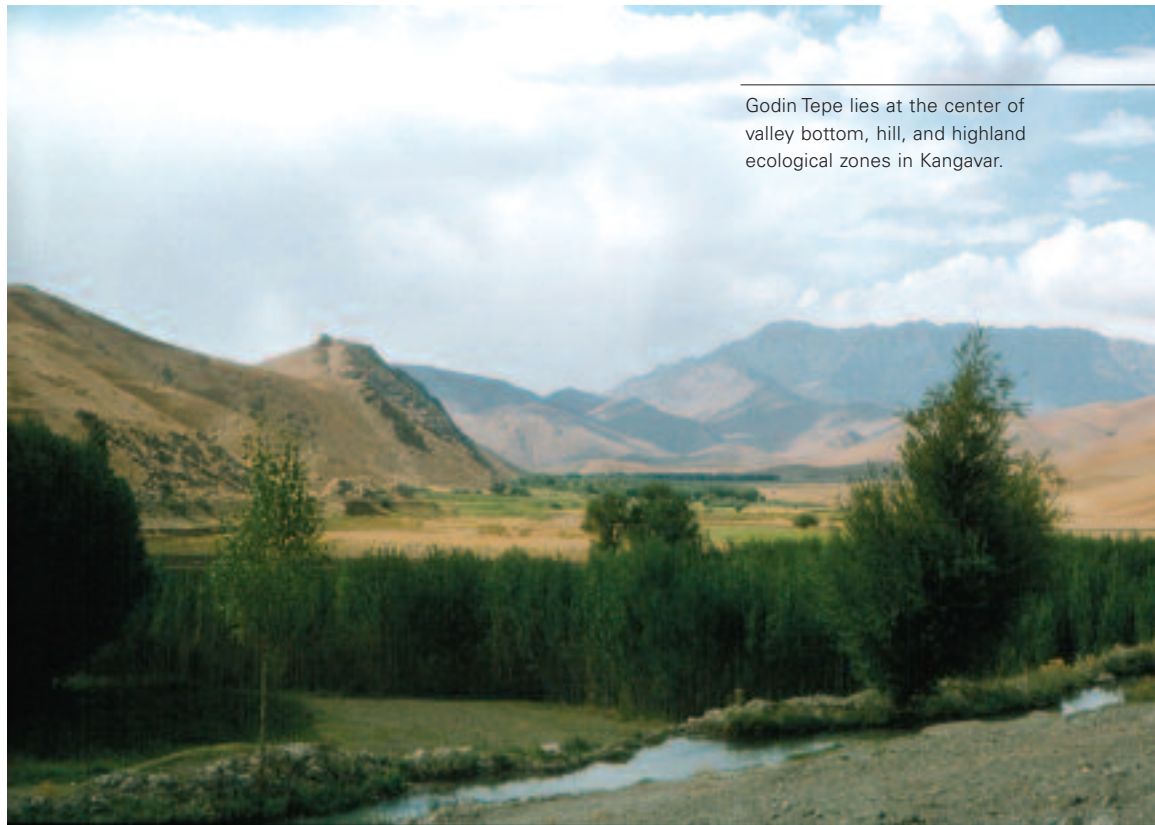
graveyards unattached to settlements increased along the slopes. This pattern and the few pieces of ETC pottery found in these early slope sites suggest that ETC pastoral nomads arrived at this time. This was followed in the Early Bronze Age by the founding of many sites with exclusively ETC ceramics on the valley bottom (e.g. Karkhaneh). While local peoples may have continued to occupy smaller sites in the area, few of the abandoned Late Chalcolithic sites (e.g. Godin Tepe) were reoccupied by ETC immigrants.

At Godin Tepe, highly burnished, ETC black-black, hand-made wares are found with no Late Chalcolithic local wares mixed in. The style of these ceramics, however, is unlike the pottery of eastern Turkey or much of the Transcaucasus at the time. Instead, it corresponds to material found on the eastern side of Lake Urmia from Yanik Tepe to Hamadan, suggesting that Godin Tepe was the southernmost extension of this ETC migration.

INTERPRETING THE ARCHAEOLOGICAL RECORD

The ETC is clearly not a unitary phenomenon, but probably *does* represent the significant movement of peoples. Rather than a single outward migration it probably consisted of stream after stream of people moving out of the Transcaucasus and northeastern Turkey with their subsequent generations migrating again later. Sometimes they jumped over territory, sometimes they filled in that territory, sometimes they moved from one migration site along to others, and in some cases, probably returned to territories from which they came.

The pattern of ceramics linked with settlements is fairly consistent. First a trickle of potsherds appeared at sites, then



Godin Tepe lies at the center of valley bottom, hill, and highland ecological zones in Kangavar.

the number of sites with almost exclusively ETC ceramics increase, and finally, a mixture of ETC pottery types and local wares appear at large sites, while small sites with only ETC wares continue as scattered enclaves. Although the pattern is becoming clear, the social dynamics behind it remains to be explained. Why and how did this happen?

Charles Burney has suggested that population pressure “pushed” ETC migrants out of the Transcaucasus. Tony Sagona, in contrast, has argued that environmental degradation did the pushing. But could there have been other reasons, possibly “pulling” immigrants to the lands to which the ETC spread? One of us (Batiuk) has proposed such a model that focuses on the political and social opportunities that migration provides nascent leaders.

Based on archaeological evidence and ethnographic parallels, the Transcaucasian and eastern Anatolian cultures of the Late Chalcolithic and Early Bronze Age were tribally based societies with social systems that limited opportunities for individuals to achieve a higher social rank. In such egalitarian

societies, decision making by consensus is the norm. Opportunities for individuals to attain special influence tend to arise only when there is a need to coordinate essential tasks, such as raiding neighbors, distributing supplies, or settling disputes. At these times, individuals who are well placed in the local kinship system or who are well respected because of their personal achievements can sometimes parlay their designation as raid leader, supply coordinator, or dispute settler into a higher social rank. Ethnographers call these “Big Man” societies.

Another opportunity could arise when there was a need (or a desire) for a group to fission and establish new groups, for example, to better exploit the limited resources found in the natural environment. In such cases, some individuals might have realized that they could achieve a higher social rank if they led the way to a new location and founded a new community. In that way, these new lands could have “pulled” would-be leaders to migrate, whether or not they or their people were being “pushed” from their traditional lands.

Given that the ETC migrations took place over 2,000 years, no one theory can explain all of the patterns we observe. Each theory or a combination of them may be true at certain times and places, and other processes still need to be identified.

IDENTIFYING PATTERNS

One pattern that seems clear is the early appearance of some ETC ceramics in the various areas we discuss. Who were the agents who brought these goods to these new places?

Pastoral nomads, wandering far afield looking for water and pasture in often marginal agricultural lands, are a good possibility. Consistently on the move, such nomads carry their possessions with them over long distances and typically must interact with local farmers to obtain agricultural goods and pasture rights. In exchange for these goods, pastoral nomads often trade animal products (e.g. milk, wool, and meat), exotic goods (e.g. ceramics, metals, tool-making and precious or semiprecious stones), and technical knowledge (e.g. grape-growing and wine-making skills). Of these items, ETC nomads transporting pottery in significant amounts on donkey-back seems unlikely—horses only appear toward the end of the ETC period and camels long afterward. This might explain the relatively low number of ETC sherds found during the earliest phase of ETC migration and the evidence for local

production of ETC pottery by these nomads or local potters attracted to its qualities.

Another pattern that seems clear is the subsequent appearance of sites, especially small villages, with exclusively ETC pottery in these areas that were previously dominated by local Late Chalcolithic and Early Bronze Age cultures (and pottery styles). This suggests that the later spread of ETC material resulted from streams of immigrants who came as settlers (farmers or transhumants), not pastoral nomads. Whether or not they were pushed out of the ETC homelands, they apparently were pulled toward the places where earlier ETC pastoral nomads spread, particularly to those places where their native ETC subsistence practices were most easily adapted, and their skills could be of some value in local societies.

AN AGENDA FOR FUTURE RESEARCH

Clearly, the ETC phenomenon represents a geographically broad, chronologically deep, and culturally complex series of evolutionary processes. In many ways, scholars have only recently begun to use modern perspectives to engage with it. How did these migrants adapt to their new surroundings, and how were they organized? Did they come into conflict over resources with indigenous peoples? Why did they retain their pottery styles in the midst of alternative local ones? Did ETC people have a unique economic niche that separated them from their neighbors?

We, as archaeologists, must develop a new agenda to find answers to these pressing questions—not only where did they live, but, more importantly, what economic activities did they conduct, and how did their activities complement those of other groups in their new homelands? What continually pushed them farther from the Transcaucasus and pulled them south? How did they integrate with the local economic, social, and political networks in these new areas? Without understanding each of these elements we will largely be guessing at the answers to what the ETC phenomenon represents and why it happened in all of its variation and complexity over a long span of time.

One step will involve excavating sites with broad horizontal exposures in order to discover the range of economic, social, and political activities people engaged in across the whole range of ETC settlement. Only by painting a picture over time and space of the subsistence and economic variations among

ETC groups, in contrast to the cultures around them, will we really understand what happened.

Although pottery style has been recognized as the marker of ETC culture, researchers must more systematically study the variations in pottery style and decoration over time and space to define styles zones and change more precisely. Our point is that retaining these ETC styles over 2,000 years must have had meaning for these people.

Furthermore, as studies of modern cultures indicate, the ratios of functional types (e.g. various types of cooking pots versus ceramics for serving) help us understand subsistence practices, social statuses, and ethnic differences among groups. Analysts need to monitor these functional variations in context and collect floral and faunal samples that correlate with them.

Finally, the fabrics of ETC pottery need to be studied in detail in order to identify where and how the pots were made. This involves both petrography—the study of temper inclusions in the pots’ clay—and the chemical characterization of the clay itself to identify its geographical source. Besides telling us if the pots were locally made or obtained via trade, we can also determine how they were made—whether in a courtyard or by a tent or baked in an open pit or in a kiln in a specialists’ workshop. Obtaining such information is essential to understanding past economic organization, as well as the degree of cultural assimilation between ETC and local techniques.

With these strategies archaeologists will make great advances in comprehending the ETC phenomenon and its impact on the ancient world. 🏠

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Above, Stephen Batiuk in the dolmen field at Temel Kizilkaya in the 'Amuq. Right, Mitchell S. Rothman with a son of one of the Tilbes village elders.

