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Inequality in life and death: bridging divides between domestic and funerary archaeology in Middle Bronze Age Transylvania

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ABSTRACT

Domestic and funerary archaeology provide complementary perspectives on life and death in the past that can sometimes be contradictory. Institutional approaches provide a way of reconstructing a holistic portrait of past societies and resolving these analytical tensions. This study examines the tensions between lived and performed inequalities in the Middle Bronze Age (2000–1500 BCE) in Transylvania (Romania). While evidence from settlements and domestic spaces suggests that social differences and inequality were increasing during the Middle Bronze Age, evidence from cemeteries suggests that Middle Bronze Age communities were using funerary practices to mask inequality in death. Through a theoretical framework of institutional consonance and dissonance, this study bridges seemingly contradictory views of the past derived from domestic and funerary archaeology and can be used to explore the relationship between inequality in life and death in other contexts across the globe.

KEYWORDS

Bronze age; inequality;
Romania; cremation; daily
life; institutions

Introduction

There has been a persistent and growing analytical divide between domestic and funerary archaeologies. Increased specialization within the discipline, a necessary byproduct of the growing complexity of archaeological science, has the potential to narrow the scope of archaeological research questions and silo archaeological researchers. However, there are two important ways to bridge this divide. The first is through investment in collaborative archaeological research. The second is through innovations in archaeological theory that centres the relationship among different realms of society, as well as among different lines of archaeological evidence. Fortunately, archaeologists have invested in both collaborative research (e.g. Buikstra et al. 2022; Kerr 2020) and theoretical innovations to focus on the ways in which different aspects of daily life and mortuary ritual are connected (e.g. Brück and Booth 2022).

Examining the tensions between lived and performed experiences through an institutional perspective is one approach towards a holistic view of societies in the past (see Quinn and Beck 2016, 19). *Institutions* are socially mediated rules, rights, and obligations that shape, and are shaped by, human action and interaction (North 1990; Wiessner 2002).¹ Institutions are emergent phenomena that have real-world impacts on the choices human agents make, that extend across space and endure through time (Giddens 1984, 16–34). As such, institutions provide archaeologists with a framework for identifying cultural norms, as well as the ways in which social structures come to

be defined, challenged, and redefined. The institutional approach has become an important way archaeologists address questions of social organization and change (see Holland-Lulewicz et al. 2020).

In this paper, I employ an institutional approach to examine the tensions in the experience and expression of inequality in life and death in Transylvania (Romania) during the Middle Bronze Age (ca. 2000–1500 BCE). Inequality is persistent ascribed differences in access to economic resources and other valued ends (Beck and Quinn 2022; Bowles et al. 2010). The institutionalization of inequality, where hierarchical political authority creates lived experiences of difference that are legitimized through ritual performance, is an important part of Bronze Age European archaeology (e.g. Earle and Kristiansen 2010). Combining domestic and funerary archaeology is necessary to understand institutionalized inequality in the past.

Theorizing inequality in life and death

Domestic archaeology focuses on everyday life in residential contexts. Inequality in the past is measured through the distribution of people, activities, social relationships, and material wealth across domestic contexts at multiple scales. House sizes – particularly with the rise in applications of the Gini co-efficient in archaeology, which is a measure of the variability commonly used to quantify inequality – have become critical to this endeavour (see Kohler et al. 2025). The analysis of settlement patterns to identify settlement hierarchies based on how people distribute themselves, economic tasks, and political power across residential spaces has an even deeper history in the archaeology of inequality (see Duffy 2015).

Funerary archaeology focuses on the suite of activities from death to burial – and beyond (see Parker-Pearson 1999). Funerary archaeology has developed to centre on the performative and political aspects of death and burial, including body treatments, funerary architecture, grave goods, and how space is used. As the dead do not bury themselves, archaeologists bring a critical eye to the mortuary record as a venue of performance. The living may choose to perform idealized cultural norms, focus on an individual's identity (or not), and even reject norms altogether. Inequality in mortuary spaces is therefore no longer seen as a reflection of how social prestige, economic wealth, or political authority were distributed in life.

In addition to the clear analytical difference between studying human remains and associated activities on one hand and the remains of domestic life on the other, funerary archaeology and domestic archaeology are divided by considerations of time and space. Domestic archaeology often centres on the routine, mundane, and ongoing processes of daily life, while funerary archaeology often centres on less common, more emotionally charged, events. Approaches to bridge the divide between domestic and funerary archaeology would benefit from considerations of both daily life and ritual performance as *both* event and process; as part of a holistic, dynamic, and recursive interaction between human agency and larger institutions and systems. Daily life also takes place across multiple spatial scales from houses to settlement systems. Mortuary activity spans individual graves and cemeteries to full ritual landscapes that bodies traverse.

There is overlap in the information archaeologists can investigate in these distinct archaeological contexts. Domestic spaces are also contexts in which symbolically and religiously significant ritual activities are performed. Funerary contexts encode aspects of social relationships that were critical to everyday life. Other contexts, such as hoards, defy this analytical divide. As cultural practices rooted in the same landscapes, domestic and funerary activities play an important role in how

people mediate their relationship with each other and the environment. Domestic and funerary archaeology therefore provide complementary perspectives on social organization.

Not all societies, or their constitutive institutions, are organized the same way. I use two complementary theoretical concepts to characterize how institutions articulate: consonance and dissonance.² I define *institutional consonance* as a characteristic of societies where institutions act to reaffirm and reinforce one another. Societies with institutional consonance possess institutions that support each other in a cohesive and coherent manner. If institutional consonance describes societies where different institutions reinforce each other, then *institutional dissonance* describes societies where different institutions contradict each other (Henry and Barrier 2016). Societies are characterized as dissonant when different institutions establish or legitimize alternative forms of inequality and vertical decision-making hierarchies (Quinn and Beck 2016, 21). Social organization would have made intuitive sense to most people in the past, even if the constellation of institutions was dissonant. It is not the goal of an institutional approach to simply identify consonance and dissonance in past societies, but rather discuss *how* these arrangements were created, maintained, and transformed over time.

As an analytical approach to institutionalized inequality, focusing on institutional consonance and dissonance has several benefits. First, it does not rely on a single institution, or archaeological measure, to define a society. Second, by looking at institutional *constellations*, it is possible to question how individual institutions affect and are affected by others. This has been a major component of mortuary archaeology, where mortuary practices are seen to have the capacity to mask or exaggerate social inequalities in lived contexts (see Brück 2004a, 2004b, 2006; Cannon et al. 1989; Keswani 2004; Kuijt 1996; Parker-Pearson 1993, 1999). Third, because institutions can be dissonant in different ways, it is possible to have multiple, historically specific, pathways of complexity (see Feinman 1995; Green et al. 2024; Kohler et al. 2025; Price and Feinman 2010). Fourth and finally, it provides a way to conceptualize society as a suite of quantitatively and qualitatively different organizational forms. This challenges archaeologists to discuss social organization while not ossifying social dynamics in similar ways to traditional typological approaches (see Holland-Lulewicz et al. 2020).

This institutional approach provides a way to put domestic and funerary archaeologies in conversation that does not reinforce an analytical binary between the two. The lived experiences of people can be materialized in their skeletons as well as their middens. The performance of idealized identities can take place in ritualized body treatments and grave good placement, as well as in the layout houses that create and reinforce gender roles and facilitate interaction and activities. The material record of bodies, graves, and cemeteries are thus not the only places where we see religion and ideology. They also inform our reconstructions of daily life. In cases where there is a rich material record of both domestic and funerary activities, archaeologists can use an institutional approach to consonance and dissonance to provide a more holistic view of social life in the past. The Transylvanian Middle Bronze Age is one such context.

Transylvanian Middle Bronze Age

Transylvania is located with the modern borders of Romania (Figure 1). This region, particularly the southwest portion of Transylvania, is home to rich metal and salt deposits that were important to Bronze Age economies (Beck, Ciugudean, and Quinn 2020; Boroffka 2006; Ciugudean 2012; Quinn 2024). The procurement of natural resources would have been a critical factor in the development of sociopolitical complexity for both Transylvanian communities and communities in the surrounding

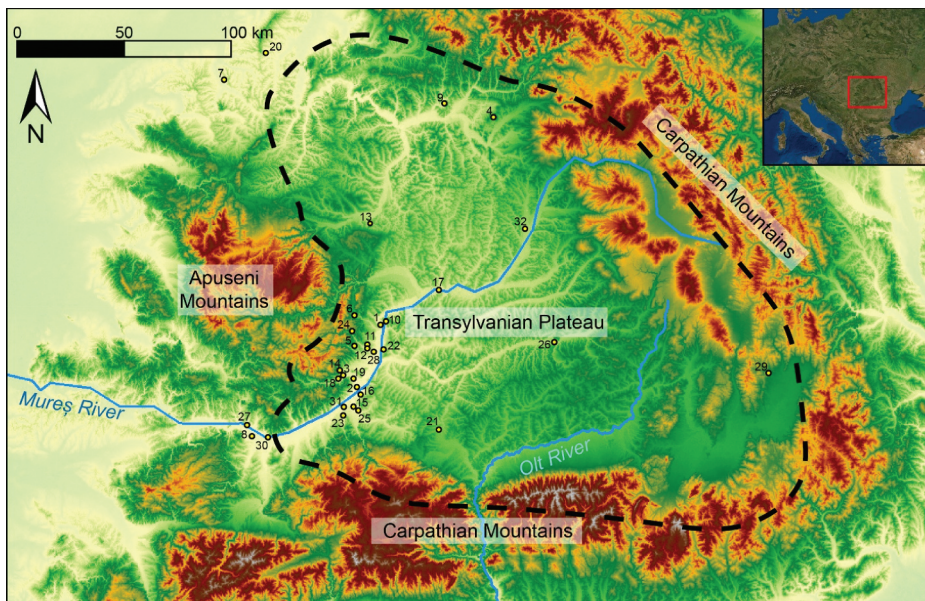


Figure 1. Transylvania and extent of the Wietenberg culture (black-dashed line). Sites mentioned in the text are indicated on the map: (1) Aiud-Groapa de Gunoii; (2) Alba Iulia-Recea/Monolit; (3) Ampoia-Dealul Doștorului; (4) Bistrița-Dealul Târgului; (5) Cetea; (6) Cheile Aiudului-Bogza Poienarilor; (7) Derșida; (8) Deva; (9) Dumbrăvița; (10) Gâmbaș; (11) Geoagiu de Sus-Fântâna Mare; (12) Geoagiu de Sus-Viile Satului; (13) Gheorgheni-Valea Mare; (14) Ighiel; (15) Lancrăm-Glod; (16) Limba-Oarda de Jos-Șeșul Orzii; (17) Luduș; (18) Meteș-La Meteșel; (19) Micești-Cigaș; (20) Oarța de Sus-Ghiile Botii; (21) Ocna Sibiului; (22) Pețelca-Cascada; (23) Pianu de Jos-Lunca Pârâului; (24) Râmeț-Gugu; (25) Sebeș-Între Râstoace; (26) Sighișoara-Dealul Turcului/Wietenberg; (27) Șoimuș-Lângă Sat; (28) Stremț-Fabrica de Alcool; (29) Turia; (30) Uroi-Sighet; (31) Vințu de Jos/Sibișeni-Deasupra Satului; (32) Voivodeni-La Școală.

regions of the Carpathian Basin and beyond where these resources were not locally available (Quinn and Ciugudean 2018). The Mureș River provides a corridor for interregional exchange between southwest Transylvania and the Carpathian Basin, just as riverine transportation and large-scale economic networks were intensifying across Europe at the start of the 2nd Millennium BCE.

The Middle Bronze Age in Transylvania spans from 2000 to 1500 BCE (Andrișoiu 1992; Bălan, Quinn, and Hodgins 2018; Boroffka 1994; Ciugudean and Gogâltan, 1998; Ciugudean and Quinn 2015; Chidioșan 1980; Horedt 1960; Quinn, Ciugudean, Bălan, et al. 2020). The start of the Middle Bronze Age corresponds with the emergence of the archaeological culture referred to as the Wietenberg culture (Figure 2). The Wietenberg culture is spatially contiguous across Transylvania and marked by shared ceramic production techniques and decoration, food production strategies, and mortuary practices. Across the Carpathian region, other similar spatially distinct archaeological cultures have been identified. The end of the Middle Bronze Age occurred approximately 1500 BCE, marked by large-scale migration from the Eurasian Steppe (Noua culture), the persistence of Wietenberg in southwest Transylvania, and the abandonment of larger tells in the Carpathian Basin (Ciugudean and Quinn 2015; Duffy et al. 2019). The Middle Bronze Age in Transylvania can be divided into two phases, the Formative Wietenberg (2000–1875 BCE) and the Classical Wietenberg (1875–1500 BCE), the transition most clearly seen in the development of ‘baroque’-style highly decorated ceramics after 1875 BCE (Quinn, Ciugudean, Bălan, et al. 2020).

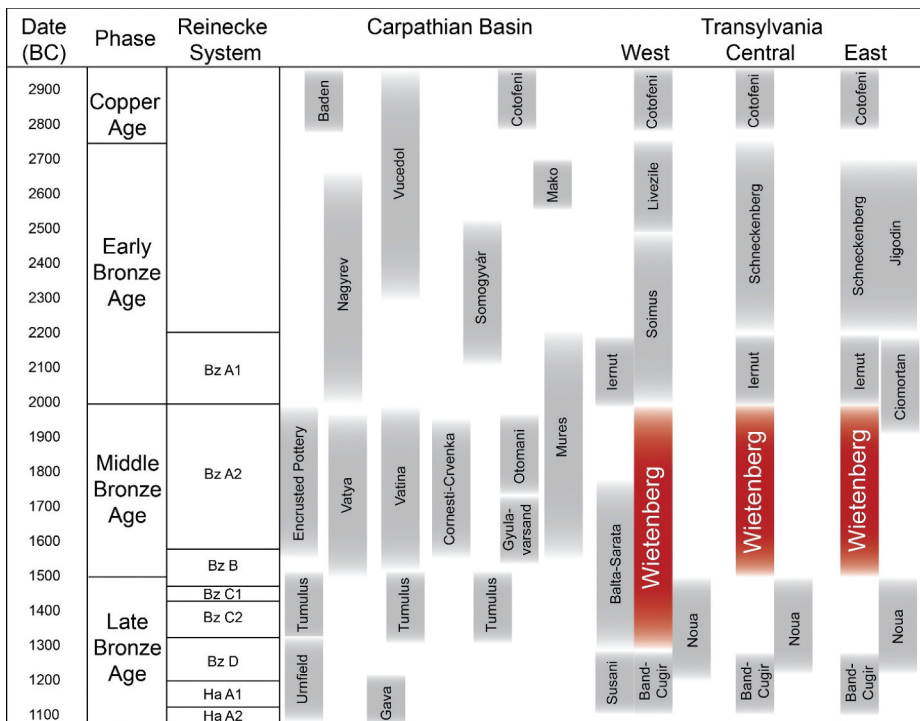


Figure 2. Chronological and archaeological culture schematic for Bronze Age Transylvania and Carpathian Basin.

One of the most persistent questions in Transylvanian and Carpathian Basin archaeology is whether, and to what extent, inequality was present and institutionalized during the Middle Bronze Age (see Cavazzuti et al. 2025; Duffy 2014, Găvan and Kienlin 2021; Gyucha and Parkinson 2022; Kanne 2022; Kienlin, Fischl, and Marta 2017; Laabs 2023; Molloy 2025; Nicodemus 2014; Sava and Gogâltan 2022). In Transylvania, recent advances in the archaeology of settlement systems and residential contexts (Dietrich 2010, 2014; Puskás 2018; Quinn 2024; Quinn, Ciugudean, and Beck 2020), as well as in bioarchaeology and cemetery archaeology (Beck, Ciugudean, and Quinn 2020; Ciută, Quinn, and Totoianu 2021; Fântâneau et al. 2017; Marc 2016; Palincaș 2014), make it an ideal context to study institutional consonance and dissonance that draws upon both domestic and funerary archaeological evidence.

Modelling Bronze Age institutions: lived and performed experiences

In this study, I focus on seven institutions, grouped together in terms of three *realms*: social, economic, and ideological (Figure 3a; Table 1). Collectively, the institutions discussed in this study affect lifeways across Bronze Age communities in Transylvania. However, they are not exhaustive of all institutions in Bronze Age life.

In cases where social organization is consonant, it is expected that at least one institution in each realm will be organized at the same maximum scale. Bronze Age communities were likely consonantly organized as (1) autonomous villages at the local scale, (2) asymmetric semi-autonomous regional networks, or (3) complex hierarchical regional polities (see Figure 3b). For societies to be considered consonant, at least one institution within each of the three realms must be organized at

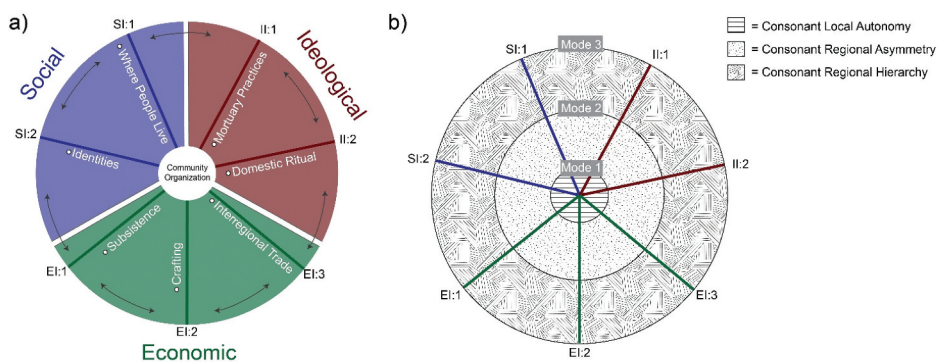


Figure 3. Schematic models of (a) Bronze Age Transylvanian realms and institutions, and (b) consonant institutional articulations at three modes (autonomous villages; regional asymmetries; regional hierarchies) for the seven institutions discussed in this study.

Table 1. Realms and some of their constituent institutions focused on in this study.

Realm	Institution
Social	How people situate themselves across the landscape. (SI:1) What identities are present and marked. (SI:2)
Economic	How crafting is organized. (EI:1) How subsistence is organized. (EI:2) How trade and exchange is organized. (EI:3)
Ideological	How in/equality is legitimized in mortuary rituals. (II:1) How in/equality is legitimized in domestic/residential space. (II:2)

the most encompassing mode represented in the institutions. In cases where social organization is dissonant, it is expected that institutions within the three realms will be organized at different encompassing modes (Figure 4).

Tensions between Middle Bronze Age Transylvanian institutions

Segmentation and lived inequality in domestic life

People were distributed unevenly into small villages and larger towns during the Middle Bronze Age. Alba Iulia-Recea/Monolit and Peșelca-Cascade were two of the larger towns, each over 7 hectares, during the Middle Bronze Age. While many people aggregated into larger settlements, others lived in smaller villages. These larger towns were occupied for longer periods of time – Peșelca-Cascade was likely continuously occupied throughout the Middle Bronze Age – while the smaller settlements were abandoned and communities moved at a much higher frequency – perhaps every 70–125 years (e.g. Geoagiu de Sus-Fântâna Mare; Stremț-Fabrica de Alcool; Geoagiu de Sus-Viile Satului), perhaps due to the depletion of local timber resources (Quinn 2024). While there is limited evidence of persistent settlement hierarchies that are markers of the complex regional polities at the time, life in small villages and larger towns may have had important differences.

Settlements were mostly placed in good agricultural land, which would have decreased the need for inter-settlement provisioning. While there is autocorrelation between agricultural land

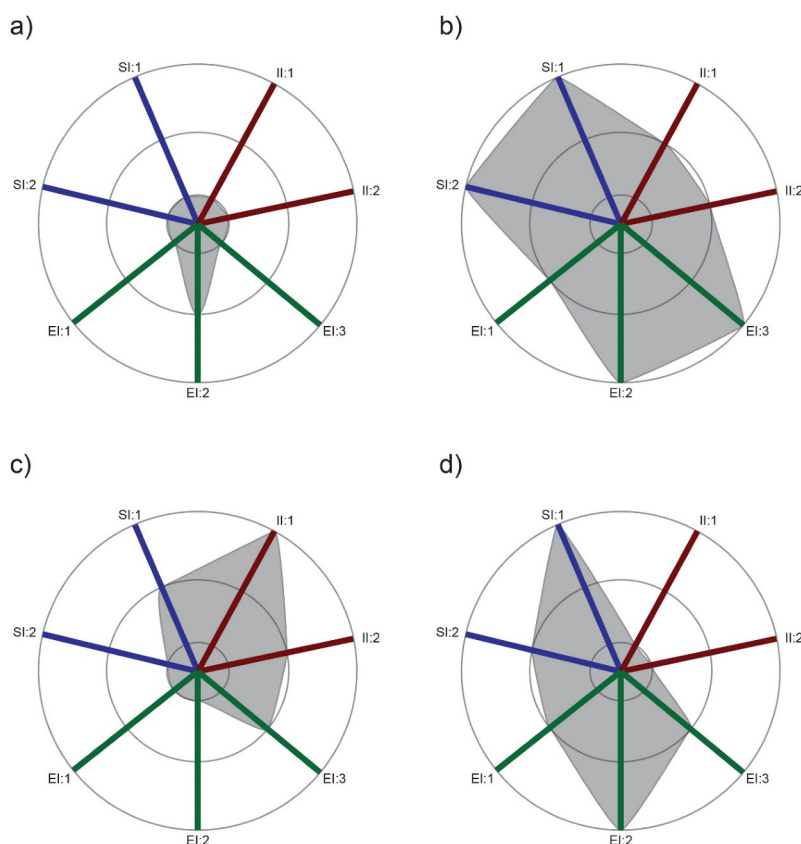


Figure 4. Potential examples of dissonant inter-institutional articulations for the seven institutions in this study: (a) a society in which social, ideological, and two economic institutions minimize inequality and promote local autonomy, but in which crafting is in part influenced by regional elite; (b) a society in which settlement systems, identities, crafting economies, and exchange economies indicate the presence of regional elite with hierarchical control, but where subsistence economies are coordinated at a smaller scale and mortuary and domestic ritual do not justify ideologies of regional hierarchy; (c) a society in which mortuary practices exaggerate inequalities that are not present in social and economic realms; (d) a society in which mortuary practices and domestic rituals promote more egalitarian world-views to mask inequalities that exist in residential and crafting economic contexts.

and trade routes in most of the region, the abandonment of much of the upper Ampoi Valley, which had rich agricultural land but was located over 10 km from the Mureş River suggests that access to trade routes was a major factor in how people organized themselves in space (Quinn and Ciugudean 2018). The metal-rich uplands were now less densely utilized for settlements or cemeteries (Quinn, Ciugudean, and Beck 2020). When possible, such as at Alba Iulia-Recea /*Monolit*, people also sought out direct access to metal ores, though not at the expense of access to good agricultural land and trade networks (Quinn and Ciugudean 2018). Controlling the flow of metal out of the region, rather than within the region, would have provided the most opportune bottleneck for any emerging elites to control (see Earle et al. 2015). The importance of trade was reinforced through toys and ritual objects in domestic contexts. The Wietenberg Culture has more waggon models, highly typical of the Bronze Age in the

Table 2. Summary of known Wietenberg house sizes.

.Site	Number of Houses	Average House Floor Area (m ²)	Site Gini*	Citations
<i>Aiud-Groapa de Gunoi</i>	8	124.1	0.15	Burlacu-Timofte and Bălan (2016)
Bistrița-I.C.H.V.	1	9.9		Boroffka (1994, 101)
Boiu-Măgulița	2	6.6		Boroffka (1994, 101)
Cornești-Podeiul Mic	1	72.0		Boroffka (1994, 101)
Corpadea	1	3.1		Boroffka (1994, 101)
Cugir-Cetate	1	18.7		Boroffka (1994, 101)
Derșida	5	15.8	0.27	Boroffka (1994, 101)
Deva-Dealul Cetății	2	6.8		Boroffka (1994, 101)
Păuleni-Ciuc	1	9.8		Cavruc and Rotea (2000)
Pianu de Jos-Lunca Pârâului	2	17.7		Bălășescu et al. (2016)
Porumbenii Mici	2	9.2		Boroffka (1994, 101)
Sebeș	1	3.7		Boroffka (1994, 101)
Sintimbru-Le Ieruga	1	3.0		Boroffka (1994, 101)
Țimpa	1	7.1		Boroffka (1994, 101)
Vințu de Jos/Sibișeni -Deasupra Satului	1	25.6		Andrițoiu, Popa, and Simina (2004)
Wietenberg Gini:			0.60	

*Site Gini coefficients calculated only for sites with $n > 5$ houses (see Feinman et al. 2025).

Carpathian Basin and Transylvania, than all other cultural groups in the macroregion combined (see Bondár 2012; Boroffka 2004).

There have been few systematic excavations of Middle Bronze Age houses (Table 2). Overall, there are 30 known Wietenberg houses where house size can be estimated. The site of *Aiud-Groapa de Gunoi* is one example of a site where larger-scale horizontal excavations have been conducted and there is minimal variability across the 8 identified houses (Gini = 0.15) (Burlacu-Timofte and Bălan 2016). At *Derșida*, five Wietenberg houses were identified during excavation (Gini = 0.27) (Boroffka 1994; Chidioșan 1980). An analysis of variability among Wietenberg house sizes (m²) results in a Gini coefficient of 0.60, which is indicative of a significant amount of inequality at the regional scale. However, there are several reasons we should be cautious in drawing conclusions from Gini coefficient analyses of Wietenberg houses. First, there may be significant preservation issues that may bias our recovery, as wattle and daub houses are primarily visible when burned. Second, no houses have been directly dated, so we cannot assess the contemporaneity of structures during this 500-year-long period. Third, there is significant variability in excavation strategies, recording techniques, and reporting of house sizes, especially from early excavations. There may be additional scalar differences; just because a few houses in one sector of one site are similar in size does not mean that there is no inequality at different scales (Crema et al. 2025). Given the uncertainty, house floor size cannot yet be used as a reliable indicator of the degree of inequality in Wietenberg communities.

Wietenberg identity was maintained and reinforced in daily life through crafts – especially ceramics. The Wietenberg decorative array, plus the forms and fabrics of ceramics, were substantially and visibly different from ceramic assemblages in surrounding regions (Quinn, Ciugudean, Bălan, et al. 2020) (Figure 5). While the Wietenberg ceramic production was consistent across Transylvania, there are some motifs that are specific to certain regions and local communities (Boroffka 1994). There are also distinct technological traditions in how decorations are created – initially defined by Boroffka (1994) as Wietenberg A-D – which overlap in time (Quinn, Ciugudean, Bălan, et al. 2020). During the Classical Wietenberg and the rise of more ‘baroque’ pottery, there was an increase in the co-occurrence of different decoration techniques in time and space. At the single-



Figure 5. Wietenberg ceramics from settlements (a-c) and cemeteries (d-e): a) and b) vessels from *Șoimuș-Teleghi* (courtesy of Deva Museum); c) lid from *Ghirbom*; d) urn and lid from *Vințu de Jos/Sibișeni-Deaspura Satului*; e) urn and lid from *Sebeș-Între Răstoace*.

component site of *Geoagiu de Sus-Viile Satului*, Wietenberg C and D ceramics were found together in a pit (Ciugudean and Quinn 2015: Plates 6–8). At *Pețelca-Cascadă*, Wietenberg C and Wietenberg B ceramics were found in different parts of the site but these assemblages were likely contemporaneous based on radiocarbon dates (Quinn, Ciugudean, Bălan, et al. 2020). While Middle Bronze Age communities signalled Wietenberg identity through ceramics, they were concurrently signalling the presence of smaller-scale distinct social identities and segments within Transylvania.

Wietenberg communities also shared subsistence practices, relying on agropastoral products and species such as wheat and barley, sheep/goat, pig, and cattle (Bălășescu et al. 2016; Ciută 2023). Overall, Wietenberg faunal assemblages in the *Geoagiu Valley* are made up of 74% domesticated species, such as horse, cow, sheep/goat, and pig, and 26% wild resources (not including river mussels) such as red deer, roe deer, hare, and birds (Quinn 2017). There are small differences in the species represented in domestic faunal assemblages among Wietenberg sites based on their position within the landscape, with more evidence for hunting at sites at higher elevations away from the *Mures River*. For example, *Pețelca-Cascadă*, along the banks of the *Mures River*, had significant quantities of river mussels (*Unio spp.*), while *Geoagiu de Sus- Fântâna Mare* had almost none, but did have higher quantities of hare (*Lepus europus*) and red deer (*Cervus elaphus*). At *Pianu de Jos-Lunca Pârâului*, in the *Mures Valley*, the assemblage is almost exclusively from domesticated animals (Bălășescu et al. 2016). While there is significant evidence for some variability in subsistence economies, there is as yet no evidence of any ranked-based differences between different Wietenberg groups.

In ore-rich southwest Transylvania, metal was an important part of the Bronze Age economy (Boroffka 2006; Thomas 2014). Copper and gold were key resources from the *Apuseni Mountains* that were important to the local economy and connected to the expanding interregional trade networks through the *Carpathian Basin* at this time. Wietenberg communities used metal to produce utilitarian tools such as axes and pins, personal adornment items such as beads, pendants, and bracelets, and weapons such as axes and swords (Boroffka 1994; Rotea 2004). The presence of



Figure 6. Metal objects from non-funerary contexts: a) gold vessel from Bistrița-Dealul Târgului; b) gold hair-rings from Măgura, c) bronze dagger from Ardeu-Cetățuie; d) bronze hoard from Igheș.

intricately decorated objects and indicates the presence of highly skilled metal artisans in Transylvania (Figure 6). Many metal objects are decorated, some with close connections to motifs on ceramics. For example, the gold vessel from Bistrița-Dealul Târgului is decorated with motifs and techniques associated with Wietenberg A-B styles, including channelling, incised triangles, and spirals (Figure 6a) (Gogâltan and Marinescu 2018). Gogâltan and Marinescu (2018) argue that the presence of prestige items made of metal at this large hilltop site suggests that Bistrița-Dealul Târgului provides evidence of political inequality Middle Bronze Age communities. Other scholars have also made similar arguments about the presence of regional elites in Wietenberg communities in southeast (Dietrich 2010) and northwest (Bejinariu 2011) Transylvania.

Complex metallurgy was not solely under the purview of emerging elites in regional centres. Metal procurement appears to have been organized at the local scale as some communities engaged in metallurgy to meet their own domestic needs and others that may have produced for exchange or elite consumption. Aiud-Groapa de Gunoi is a small site positioned along the Mureș River, but not in a strategic position within the settlement network, where evidence of skilled metallurgy, including moulds for complex bronze axes have been found (see Bălan, Burlacu-Timofte, and Muntean 2017). It is possible that some segments of Wietenberg society were able to differentially access certain high-quality trading partners, or produce metal at more industrial scales than others, but these possibilities will require more substantial fieldwork to assess.

In daily life, there is evidence of intramural ritual activities and symbols of rank (Figure 7). At the 'type site' for the Wietenberg Culture, Sighișoara-Dealul Turcului/Wietenberg, a decorated plaster and clay altar feature was found covered with ash (see Figure 7a) (Boroffka 1994). An ornately carved

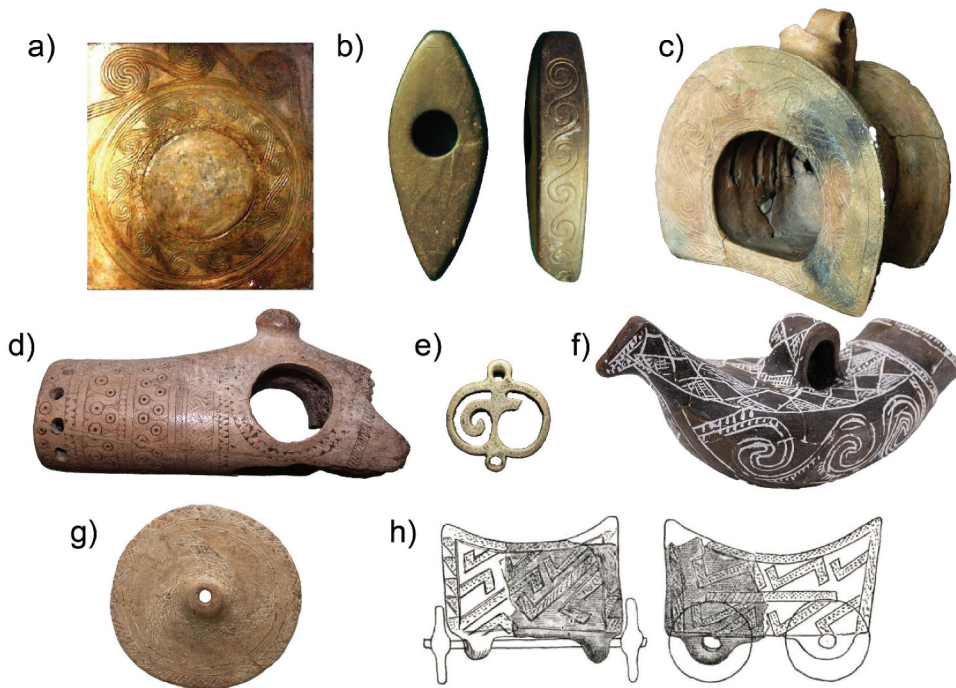


Figure 7. Ritual items and prestige items from settlements: a) decorated plaster hearth from Sighișoara-Dealul Turcului/Wietenberg; b) decorated groundstone axe from Vințu de Jos; c) incense burner from Oarța de Sus-Ghiile Botii; d) decorated antler sceptre from Lancrăm-Glod; e) antler garment fastener from Șoimuș-Teleghi; f) zoomorphic vessel Uroi-Sighet; g) decorated clay waggon model wheel from Geoagiu-Piatra lui Gotar; h) Wietenberg waggon model from Novaj, Hungary.

sandstone axe-head was recovered at Vințu de Jos/Sibișeni-Deasupra Satului (see Figure 7b) (Popa 2019a). There is also an increase in decorated antler pieces in the Classical Wietenberg. At Lancrăm-Glod, there is a decorated antler piece that was likely hafted to a wooden stick that the excavators have interpreted as a sceptre, and a marker of a leadership that would have been carried by the ruling elite (see Figure 7d) (Popa and Simina 2004). An antler garment fastener from Șoimuș-Teleghi incorporated Wietenberg spirals and dotted decoration into clothing (see Figure 7e) (Rișcuța 2022). Zoomorphic vessels, including from Uroi-Sighet, may have had special purposes in daily life (see Figure 7f) (Rișcuța 2022). The potential ‘sanctuary’ site located on the hill of Oarța de Sus-Ghiile Botii represents another potential loci for ritual action where social relationships may have been negotiated (Boroffka 1994; Kacsó 2011, 2013; Palincaș 2014).

Segmentation and performed equality in death

The most common funerary practice for Wietenberg communities was cremation and burial of the remains in spatially distinct flat cemeteries near settlements across the landscape (Boroffka 1994; Marc 2016; Palincaș 2014). The largest Wietenberg cremation cemeteries include Limba-Oarda de Jos-Șeșul Orzii ($n = 74$), Sebeș-Între Răstoace ($n = 61$), Vințu de Jos/Sibișeni-Deasupra Satului ($n = 39$), and Bistrița ($n = 38$) (Ciută, Quinn, and Totoianu 2021; I. H. Crișan 1970; Fântâneau et al. 2017; Marc 2016; Paul 1995; Popa 2019b). While this was the most common practice, there were other pathways

from death to burial. There is evidence of Wietenberg cremations interred in Early Bronze Age burial mounds, including at Ampoița-Dealul Doștiorului, Cetea, Cheile Aiudului-Bogza Poienarilor, Meteș-La Meteșel, and Râmpeș-Gugu (Ciugudean 1996; Ciugudean et al. 2025). There are inhumations interred in the cremation cemetery at Vințu de Jos/Sibișeni-Deaspura Satului (Paul 1995; Popa 2019b). Some Wietenberg dead were buried as inhumations in pits in settlements, such as at Aiud-Groapa de Gunoi, Micești-Cigaș, and Gâmbaș (Bălan 2014a, 2014b; Burlacu-Timofte and Bălan 2016; Fântâneau et al. 2016). In a few cases, multiple burials have been identified in settlements, such as four bodied thrown into a pit at Șoimuș-Lângă Sat (Marc et al. 2016) and seven individuals buried in a single pit at Voivodeni-La Școală (Németh 2015).

There is evidence for spatial clustering within Wietenberg cremation cemeteries that may indicate the performance and maintenance of distinctive social groups within communities. There are multiple larger spatial clusters at Sebeș-Între Răstoace, Vințu de Jos/Sibișeni-Deaspura Satului, Luduș, Dumbrăvița-Stricata, Deva, Bistrița, and Turia (Bălan 2014b, 25–26; Bălan, Quinn, and Hodgins 2018, 190–191; Berecki 2016, 49–50; Marc 2016, 60; Motzoi-Chicideanu 2011, 531, 534, 540; Popa 2019b, 40). There is also evidence for smaller-scale spatial clustering, perhaps associated with nuclear families, at several cemeteries, including at Sebeș-Între Răstoace (Bălan, Quinn, and Hodgins 2018, 190) and Limba-Oarda de Jos-Șeșul Orzii (Ciută, Quinn, and Totoianu 2021).

Based on the available osteological analyses, cremation and inhumation body treatments are not isolated to a particular age or gender class (see Fântâneau et al. 2017; Marc 2016). At Sebeș-Între Răstoace, adults, children, males, and females were buried in urns with and without stone cists (Bălan, Quinn, and Hodgins 2018). Of the 31 cremation graves at Luduș, there were 17 adults (5 woman, 8 males, four unidentifiable) and 12 subadults (Berecki 2016, 51). Grave goods have been found with males, females, adults and children at several sites. Burial in settlement was also open to all ages and biological sexes (see Bălan 2014a), though the multiple burial in a pit at Șoimuș-Lângă Sat stands out as a multiple burial with only adult males present (Marc et al. 2016). Even isolated parts of bodies, such as special deposits of unburnt skulls, represent a wide range of the population (Marc et al. 2016). Overall, it appears that identity categories were not used to determine who was eligible for burial. Funerary rites were available to most people within the community. This is a major shift from the preceding Early Bronze Age, where burial was restricted to only a small subset of society (see Beck, Ciugudean, and Quinn 2020). At the same time, it remains unclear why some people were buried rather than cremated and why some were placed in settlements or Early Bronze Age tombs rather than in formal cemeteries.

Wietenberg communities rarely, if at all, used funerary practices to conspicuously consume material wealth as grave goods. The most common grave good was the urn in which a cremation was buried (see Figure 5d,e). Cremation urns were also often accompanied by an additional ceramic vessel that served as a lid. Vessels in cremation graves followed common Wietenberg forms, fabrics, and decorative motifs. In a few cases, such as M12 and M32 at Sebeș-Între Răstoace, people were buried with imported ceramics – in this case from the Carpathian Basin and Vátya culture (Bălan, Quinn, and Hodgins 2018, 191). The next most common type of grave good, found in a small portion of graves, are personal adornment items made from various materials. A total of 7 graves with faience beads have been found – 6 of which were associated with the cremated remains of infants (Gr. 15 at Luduș [Berecki 2016, 55]; M3, M4, M24, M25, and M42 at Sebeș-Între Răstoace [Bălan, Quinn, and Hodgins 2018, 185]). At Luduș, bronze pendants have been found in the graves of an adult male (Gr. 1) and adolescent (Gr. 2), a bronze needle was found in an adult grave (Gr. 5), and a sandstone amulet was found in the urn of an adult male (Berecki 2016). Among the few other grave goods are bronze wire at Gheorghieni (V. Crișan et al. 2009, 304), a bronze needle at Vințu de Jos/Sibișeni-

Deaspura Satului (Bodea 2013, 6) and a gold lock-ring at Florești (Rotea et al. 2008, 52–53). Bone beads and pendants have been found in a few graves at Deva (Andrițoiu 1978, 246), Dumbrăvița-Stricata (Soroceanu and Retegan 1981, 199, fig. 4/2), and Ocna Sibiului (Boroffka 1994, 61).

The scarcity of metal in funerary contexts is surprising for a region that has abundant metal sources nearby. The only weapon potentially associated with a grave is a sword from Gheorgheni-Valea Mare found below a double cremation (Marc 2016, 62). In addition to metal in residential contexts described in the previous section, there are other non-mortuary contexts in which metal objects were deposited. There are metal hoards across Transylvania, such as that at Igheș (see Figure 6d), in which tools, adornment items, and weapons were deposited. Hoards are important contexts in Bronze Age Europe in which material wealth can be disposed of or stored. The lack of metal items in funerary contexts, however, means that Wietenberg communities sought to obscure the connection between material wealth in this vital economic resource and individual people in death.

Institutional consonance and dissonance in Middle Bronze Age Transylvania

The material remains from domestic and funerary contexts come together to create a portrait of Middle Bronze Age Transylvanian society. The Formative Wietenberg was characterized by institutions exhibiting some regional integration but primarily local autonomy (Figure 8a, Table 3). The shift from the Formative Wietenberg to the Classical Wietenberg did not include a change in overall cultural identity. Rather than a rupture, this shift at around 1875 BCE was a continuation of the processes of regional integration and internal segmentation. The Classical Wietenberg was characterized by institutions exhibiting mostly regional integration with asymmetries (Figure 8b).

Together, Middle Bronze Age societies in Transylvania were composed of institutions that were dissonant between life and death. There was increasing segmentation within Middle Bronze Age societies and uneven distributions of population and access to resources could have led to greater inequality, particularly related to access to interregional trade routes. However, Transylvanian communities used mortuary rituals and shared cultural practices to mask social difference and perform lifeways that may have been more egalitarian than people may have been experiencing in daily life. Most community members were buried, and minimal material wealth was interred with the dead as grave goods. Despite the importance of metal, both locally in this mining region and as

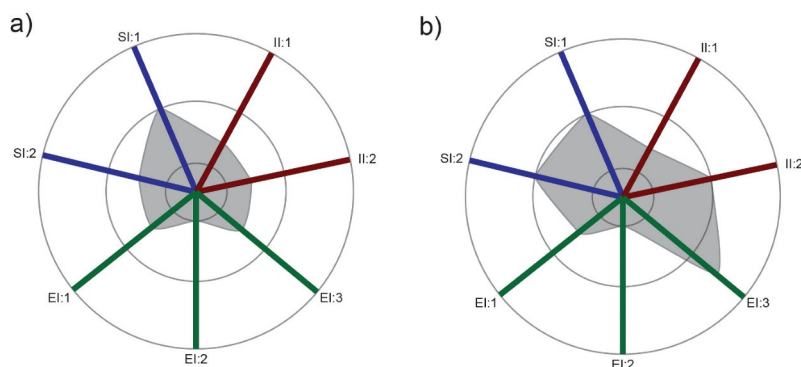


Figure 8. Formative Wietenberg institutional articulations, and b) Classical Wietenberg institutional articulations.

Table 3. Summary of Formative and Classical Wietenberg institutions.

Institution	Formative Wietenberg Organization	Classical Wietenberg Organization
Social Institution 1 (Sl:1)	Regional asymmetry in how people situated themselves across the landscape (Mode 2).	Regional asymmetry in how people situated themselves across the landscape (Mode 2).
Social Institution 2 (Sl:2)	Individual and lineage or household identities were present and marked; large regionally integrative cultural identities marked (Mode 1/2).	Individual and lineage or household identities were present and marked; large regionally integrative cultural identities strongly marked (Mode 2).
Economic Institution 1 (El:1)	Some regional integration of metal crafting but minimal asymmetries (Mode 1/2).	Some regional integration of metal crafting but minimal asymmetries (Mode 1/2).
Economic Institution 2 (El:2)	Subsistence production was organized at or below the village level (Mode 1).	Subsistence production was organized at or below the village level (Mode 1).
Economic Institution 3 (El:3)	Some regional integration of trade and exchange but minimal asymmetries (Mode 1/2).	Trade and exchange differentially influenced by a subset of the regional community (Mode 2/3).
Ideological Institution 1 (Il:1)	Minimal inequality was legitimized in mortuary contexts (Mode 1/2).	Minimal inequality was legitimized in mortuary contexts (Mode 1/2).
Ideological Institution 2 (Il:2)	Minimal inequality was legitimized in daily contexts (Mode 1/2).	Some inequality was legitimized in daily contexts (Mode 2).

part of the larger Bronze Age economic system, there is a surprising underrepresentation of metal objects included in burials. It is possible that Transylvanian metal was reserved for use in daily life and as an economic export, as Vandkilde and colleagues (2024) argue to explain the modest consumption Baltic amber in local Scandinavian contexts. Unlike the Nordic Bronze Age, however, there is minimal evidence of imported wealth consumption in Wietenberg graves. At the same time, the social segmentation seen in daily life was maintained through different spatial dimensions of burial.

A mortuary program that expressed lower amounts of inequality than was experienced in daily life may have been an important part of maintaining a cohesive society during a time of widening social and economic inequality in domestic spaces. The presence of different mortuary treatments is not in and of itself evidence of inequality. Stig Sørensen and Rebay-Salisbury (2023) note that the co-occurrence of inhumation and cremation is an important phenomenon in Bronze Age Europe and their analyses of mortuary patterns across multiple scales reveal no evidence that the different treatments were associated with status or wealth-based differences. The adoption of cremation, along with other changes in the mortuary program at the onset of the Middle Bronze Age (see Quinn, Ciugudean, and Beck 2020), likely coincided with changing belief systems and ideologies. Cremation is a fiery transformative process that can destroy individual identity while emphasizing collective identity and concepts of personhood (Cerezo-Román 2014). Consequently, Wietenberg funerary practices delegitimized emerging inequalities, reinforced an idealized social levelling, and ultimately kept inequality from becoming institutionalized during the Middle Bronze Age. The tensions between institutions reflected through domestic and funerary spaces were how Wietenberg communities maintained themselves.

The transformation of Transylvanian society over the first half of the second millennium BCE changes in both the nearby Carpathian Basin region as well as more broadly across Europe. The shift from Formative to Classical Wietenberg around 1875 BCE was roughly contemporaneous with increasing decorative elaboration of ceramics, economic centralization, population aggregation, and the construction of fortification ditches at the tell sites in the Carpathian Basin (Georgescu 2024; Molloy et al. 2023; O'Shea and Nicodemus 2019; O'Shea et al. 2019; Staniuk 2021). Across Central

Europe, changes and variability in metallurgical technologies at this same time reflected strategies of local communities to participate in larger-scale networks (Brunner et al. 2020; Stockhammer et al. 2015). Changes in the Carpathian Basin, including increased elaboration of ceramics and mortuary practices, were contemporaneous with the introduction of tin bronzes (Kiss et al. 2019; Williams et al. 2025), a multi-scalar process often referred to as ‘bronzization’ (Vandkilde 2016). During the first half of the second millennium BCE the flow of people, ideas, and materials at increasingly encompassing scales became central to the trajectories of societies across all of Eurasia (Vandkilde 2022). The expansion and institutionalization of exchange networks were driven by differential distribution of natural resources and influenced procurement, distribution, and consumption practices (Earle et al. 2015; Radivojević et al. 2019). The broad synchronization of social changes, as well as the variability in their local expressions, are likely the result of local communities employing different strategies as social, economic, and political networks became increasingly interconnected across Europe.

Conclusion

Bronze Age societies in Transylvania and the Carpathian Basin were a multi-scalar mosaic of complexity, where local histories and variable landscape affordances shaped and were shaped by larger-scale political, social, and economic networks. In Middle Bronze Age Transylvania, incipient disparities in material and social wealth were likely threats to collective identity and funerary practices that masked these differences were central to maintaining society. This dissonant institutional arrangement eventually collapsed, replaced in the Late Bronze Age by a more consonant hierarchical social order that legitimized inequalities in both life and death.

The case study of Middle Bronze Age Transylvania highlights the importance of bridging the divide between domestic and funerary archaeology. The routinization of daily life and the episodic nature of death and burial create and maintain institutions, while also generating tensions that lead to dynamism in social organization. Through institutional perspectives that bridge the analytical divide between domestic and funerary archaeologies, we can generate a more holistic view of the past.

Notes

1. This definition is closer to the new institutional economics approach (North 1990; Ostrom 1990) than definitions from sociology which are more directly linked to hierarchical social structures (Soskice, Bates, and Epstein 1992; Turner 2003). In archaeology, it subtly differs from the definition used by Holland-Lulewicz et al. (2020), who instead ‘conceptualize institutions as organizations of people that carry out objectives using regularized practices and norms, labor, and resources’. This is a more accurate definition of organization, not of institutions (see discussion in Smith 2024). This is also different than Smith’s (2024) definition of institution as ‘a large-scale social structure, organized by a system of rules, that persists longer than a generation and contains a division of labor’.
2. Elsewhere I have used the term coherence in place of consonance (see Quinn 2017; Quinn and Beck 2016).

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References

- Andrițoiu, I. 1978. "Cimitirul de incinerare din Epoca Bronzului de la Deva." *Studii și Cercetări de Istorie Veche și Arheologie* 29 (2): 241–256.
- Andrițoiu, I. 1992. *Civilizația Tracilor din Sud-Vestul Transilvaniei în Epoca Bronzului*. Bucharest: Bibliotheca Thracologica Institutul Român de Tracologie.
- Andrițoiu, I., C. I. Popa, and N. M. Simina. 2004. "Raport de săpătură: Șantierul arheologic Vințu de Jos-Deasupra Satului' (Jud. Alba) (1994-1998)." *Acta Musei Porolissensis* 26:141–192.
- Bălan, G. 2014a. "Deviant Burials of Wietenberg Culture at Micești-Cigaș (Alba County, Romania)." *Annales Universitatis Apulensis: Series Historica* 18 (II): 95–118.
- Bălan, G. 2014b. "Așezarea Wietenberg de la Micești." *Terra Sebus. Acta Musei Sabesiensis* 6:25–86.
- Bălan, G., R. Burlacu-Timofte, and T. Muntean. 2017. "Așezarea din Epoca Bronzului de la Aiud-Groapa de Gunoi: Considerații Preliminare." *Apulum* 54:41–78.
- Bălan, G., C. P. Quinn, and G. Hodgins. 2018. "The Cultural and Chronological Context of the Bronze Age Cemetery from Sebeș-Între Răstoace." In *Bronze Age Connectivity in the Carpathian*, edited by S. Berecki, 183–216. Târgu Mureș: Mega.
- Bălășescu, A., M. Voicu, M. Mărgărit, and V. Radu. 2016. "Bronze Age Fauna from Pianu de Jos-Lunca Pârâului (Wietenberg Culture)." *Studii de Preistorie* 13:187–212.
- Beck, J., H. Ciugudean, and C. P. Quinn. 2020. "Bioarchaeology and Mountain Landscapes in Transylvania's Golden Quadrangle." *Bioarchaeology International* 4 (2): 89–110. <https://doi.org/10.5744/bi.2020.2002>.
- Beck, J., and C. P. Quinn. 2022. "Balancing the Scales: Archaeological Approaches to Social Inequality." *World Archaeology* 54 (4): 572–583. <https://doi.org/10.1080/00438243.2023.2169341>.
- Bejinariu, I. 2011. "Noi descoperiri ale culturii Wietenberg din zona orașului Șimleu Silvaniei." *Acta Musei Porolissensis* 33:71–85.
- Berecki, S. 2016. *The Bronze Age Site at Luduș*. Târgu Mureș: Mega.
- Bodea, M. V. 2013. *The Spiritual Life of Wietenberg and Otomani Communities Reflected by Archaeological Discoveries, Faculty of History and Philology, "1 Decembrie 1918"*. Alba Iulia: University Alba Iulia.
- Bondár, M. 2012. *Prehistoric Wagon Models in the Carpathian Basin (3500-1500 BC)*, Budapest: Archaeolingua.
- Boroffka, N. 1994. *Die Wietenber-Kultur*. Bonn: Universitätsforschungen Zur Prähistorischen Archäologie. Habelt.

- Boroffka, N. 2004. "Bronzezeitliche Wagenmodelle im Karpatenbecken." In *Rad und Wagen: Der Ursprung einer Innovation Wagen im Vorderen Orient und Europa*, edited by M. Fansa and S. Burmeister, 347–354. Mainz am Rhein: Philipp von Zabern.
- Boroffka, N. 2006. "Resursele Minerale din România și Stadiul Actual al Cercetărilor Privind Mineritul Preistoric." *Apulum* 43 (1): 71–94.
- Bowles, S., E. A. Smith, and M. Borgerhoff Mulder. 2010. "Intergenerational Wealth Transmission and Inequality in Premodern Societies: Introduction to the Special Section." *Current Anthropology* 51 (1): 7–15. <https://doi.org/10.1086/649206>.
- Brück, J. 2004a. "Material Metaphors: The Relational Construction of Identity in Early Bronze Age Burials in Ireland and Britain." *Journal of Social Archaeology* 4 (3): 307–333. <https://doi.org/10.1177/1469605304046417>.
- Brück, J. 2004b. "Early Bronze Age Burial Practices in Scotland and Beyond: Differences and Similarities." In *Scotland in Ancient Europe*, edited by I. Shepherd and G. Barclay, 179–188. Edinburgh: Society of Antiquaries of Scotland.
- Brück, J. 2006. "Fragmentation, Personhood and the Social Construction of Technology in Middle and Late Bronze Age Britain." *Cambridge Archaeological Journal* 16 (3): 297–315. <https://doi.org/10.1017/S0959774306000187>.
- Brück, J., and T. J. Booth. 2022. "The Power of Relics: The Curation of Human Bone in British Bronze Age Burials." *European Journal of Archaeology* 25 (4): 440–462. <https://doi.org/10.1017/eea.2022.18>.
- Brunner, M., J. von Felten, M. Hinz, and A. Hafner. 2020. "Central European Early Bronze Age Chronology Revisited: A Bayesian Examination of Large-Scale Radiocarbon Dating." *PLOS ONE* 15 (12): e0243719. <https://doi.org/10.1371/journal.pone.0243719>.
- Buikstra, J. E., S. N. DeWitte, S. C. Agarwal, B. J. Baker, E. J. Bartelink, E. Berger, K. E. Blevins, et al. 2022. "Twenty-First Century Bioarchaeology: Taking Stock and Moving Forward." *Yearbook of Biological Anthropology* 178 (S74): 54–114. <https://doi.org/10.1002/ajpa.24494>.
- Burlacu-Timofte, R., and G. Bălan. 2016. "A Pit with Child Bone Remains from the Bronze Age Settlement at Aiud-Groapa de Gunoi (Alba County, Romania)." In *Settlements of Life and Death: Studies from Prehistory to Middle Ages*, edited by F. Gogâltan and S.-C. Ailincăi, 145–167. Cluj: Mega.
- Cannon, A., B. Bartel, R. Bradley, R. W. Chapman, M. L. Curran, S. C. Humphreys, I. Morris, J. Quilter, N. A. Rothschild, and C. Runnels. 1989. "The Historical Dimensions in Mortuary Expressions of Status and Sentiment." *Current Anthropology* 30 (4): 437–458. <https://doi.org/10.1086/203764>.
- Cavazzuti, C., A. Horváth, A. Gémes, K. Fülöp, T. Szeniczey, J. G. Tarbay, A. McCall, et al. 2025. "Isotope and Archaeobotanical Analysis Reveal Radical Changes in Mobility, Diet and Inequalities Around 1500 BCE at the Core of Europe." *Scientific Reports* 15 (1): 17494. <https://doi.org/10.1038/s41598-025-01113-z>.
- Cavruc, V., and M. Rotea. 2000. "Locuirea Wietenberg de la Păuleni (Ciomortan)." *Angustia* 5:155–172.
- Cerezo-Román, J. I. 2014. "Pathways to Personhood: Cremation as a Social Practice Among the Tucson Basin Hohokam." In *Transformation by Fire: The Archaeology of Cremation in Cultural Context*, edited by I. Kuijt, C. P. Quinn, and G. Cooney, 148–167. Tucson: University of Arizona Press.
- Chidioșan, N. 1980. *Contribuții la Istoria Tracilor din Nord-Vestul României: Așezarea Wietenberg de la Derșida*. Oradea: Muzeul Țării Crișurilor.
- Ciugudean, H. 1996. *Epoca Timpurie a Bronzului în Centrul și Sud-Vestul Transilvaniei*. Bucharest: Biblioteca Thracologica.
- Ciugudean, H. 2012. "Ancient Gold Mining in Transylvania: The Roșia Montana - Bucium Area." *Caiete ARA* 3:219–232.
- Ciugudean, H. and F. Gogâltan. Eds. 1998. *The Early and Middle Bronze Age in the Carpathian Basin: Proceedings of the International Symposium in Alba Iulia, 24-28 September 1997*. Alba Iulia: Bibliotheca Musei Apulensis.
- Ciugudean, H., and C. P. Quinn. 2015. "The End of the Wietenberg Culture in the Light of New 14C Dates and Its Chronological Relation Towards the Noua Culture." In *Bronze Age Chronology in the Carpathian Basin*, edited by R. Németh, B. Rezi, and S. Berecki, 147–178. Târgu Mureș: Bibliotheca Musei Marisiensis.
- Ciugudean, H., A. Waterman, J. Beck, C. P. Quinn, and D. Peate. 2025. "The Highlanders of Western Transylvania and Their Neighbours: An Interdisciplinary Study of the Early Bronze Age Tumulus at Meteș." In *The Bronze Age at the Edge of the Carpathian Basin*, edited by B. Rezi and H. Ciugudean, 39–102. Cluj: Mega.
- Ciută, B. 2023. "Novel Archaeobotanical Insights and New AMS C14 Dating from the Sanctuary of Oarța de Sus-Ghiile Botii (Maramureș County, Romania)." *Journal of Ancient History and Archaeology* 10 (3): 53–64. <https://doi.org/10.14795/j.v10i3.922>.

- Ciută, M.-M., C. P. Quinn, and R. V. Totoianu. 2021. "Radiocarbon Data of Funerary Discoveries from the Middle Bronze Age in the Mureș Valley: The Wietenberg Cemetery from Limba-Oarda de Jos (Alba County, Romania)." *Journal of Ancient History and Archaeology* 8 (2): 75–83. <https://doi.org/10.14795/j.v8i2.653>.
- Crema, E. R., M. Fochesato, A. G. Mejía Ramón, J. Munson, and S. G. Ortman. 2025. "Toward Multiscalar Measures of Inequality in Archaeology." *PNAS* 122 (16): e2400700121. <https://doi.org/10.1073/pnas.2400700121>.
- Crîșan, I. H. 1970. "Necropola de Incinerare Apartinând Culturii Wietenberg-Sighișoara de la Bistrița." *Materiale și Cercetări Arheologice* 9 (1): 137–160. <https://doi.org/10.3406/mcarh.1970.1354>.
- Crîșan, V., P. Pupeză, Z. Nagy, B. Gergely, and T. Tecar. 2009. "Gheorgheini, Com. Felacu, Jud. Cluj, Punct: Valea Mare." *Cronica Cercetărilor Arheologice Din România* 2008:303–305.
- Dietrich, L. 2010. "Eliten der frühen und mittleren Bronzezeit im südöstlichen Karpatenbecken." *Praehistorische Zeitschrift* 85 (2): 191–206. <https://doi.org/10.1515/pz.2010.011>.
- Dietrich, L. 2014. *Die mittlere und späte Bronzezeit und die ältere Eisenzeit in Südostsiebenbürgen aufgrund der Siedlung von Rotbav*. Bonn: Dr. Rudolf Habelt GmbH.
- Duffy, P. R. 2014. *Complexity and Autonomy in Bronze Age Europe: Assessing Cultural Developments in Eastern Hungary*. Budapest: Archaeolingua.
- Duffy, P. R. 2015. "Site Size Hierarchy in Middle-Range Societies." *Journal of Anthropological Archaeology* 37:85–99. <https://doi.org/10.1016/j.jaa.2014.12.001>.
- Duffy, P. R., G. M. Pardiťka, J. I. Giblin, and L. Paja. 2019. "The Problem with Tells: Lessons Learned from Absolute Dating of Bronze Age Mortuary Ceramics in Hungary." *Antiquity* 93 (367): 63–79. <https://doi.org/10.15184/aqy.2018.179>.
- Earle, T. K., and K. Kristiansen, eds. 2010. *Organizing Bronze Age Societies: The Mediterranean, Central Europe, and Scandinavia Compared*. Cambridge: Cambridge University Press.
- Earle, T. K., J. Ling, C. Uhnér, Z. Stos-Gale, and L. Melheim. 2015. "The Political Economy and Metal Trade in Bronze Age Europe: Understanding Regional Variability in Terms of Comparative Advantages and Articulations." *European Journal of Archaeology* 18 (4): 633–657. <https://doi.org/10.1179/1461957115Y.0000000008>.
- Fântâneanu, C., G. Bălan, S. Popa, and D. Tentiș. 2017. *Necropola din Epoca Bronzului de la Sebeș*. Alba Iulia: Istros.
- Fântâneanu, C., A. C. Bolog, O. Oarga, and C. Radu. 2016. "Wietenberg Culture Inhumation Graves Discovered at Gâmbaș (Aiud, Alba County, Romania)." In *Settlements of Life and Death: Studies from Prehistory to Middle Ages*, edited by F. Gogâltan and S.-C. Ailincăi, 191–200. Cluj: Mega.
- Feinman, G. M. 1995. "The Emergence of Inequality: A Focus on Strategies and Processes." In *Foundations of Social Inequality*, edited by T. D. Price and G. M. Feinman, 255–279. New York: Plenum Press.
- Feinman, G. M., G. Cervantes Quequezana, A. Green, D. Lawrence, J. Munson, S. Ortman, C. Petrie, A. Thompson, and L. M. Nicholas. 2025. "Assessing Grand Narratives of Economic Inequality Across Time." *PNAS* 122 (16): e2400698121. <https://doi.org/10.1073/pnas.2400698121>.
- Găvan, A., and T. L. Kienlin. 2021. "Introduction: Bronze Age Settlements in North-Western Romania." In *Bronze Age Tell Settlements in North-Western Romania: Current Approaches and Recent Investigations*, edited by T. L. Kienlin and A. Găvan, 9–20. Bonn: Habelt.
- Georgescu, A. 2024. "Mureș Culture Pottery Motifs and Decorations: A View from the Past- Dorin Popescu's Excavations at Pecica-Șanțul Mare and Senglac-Livada Lui Onea." *Ziridava* 38 (1): 81–100.
- Giddens, A. 1984. *The Constitution of Society: Outline of a Theory of Structuration*. Berkeley: University of California Press.
- Gogâltan, F., and G. G. Marinescu. 2018. *Gold for the Gods: A Bronze Age Discovery from Bistrița-Dealul Târgului (North-East Transylvania)*. Cluj: Mega.
- Green, A. S., T. C. Wilkinson, D. Wilkinson, N. Highcock, and T. Leppard. 2024. *Cities and Citadels: An Archaeology of Inequality and Economic Growth*. New York: Routledge.
- Gyucha, A., and W. A. Parkinson, eds. 2022. *First Kings of Europe: From Farmers to Rulers in Prehistoric Southeastern Europe*. Los Angeles: Cotsen Institute of Archaeology Press.
- Henry, E. R., and C. R. Barrier. 2016. "The Organization of Dissonance in Adena-Hopewell Societies of Eastern North America." *World Archaeology* 48 (1): 87–109. <https://doi.org/10.1080/00438243.2015.1132175>.
- Holland-Lulewicz, J., M. Conger, J. Birch, S. Kowalewski, and T. Jones. 2020. "An Institutional Approach for Archaeology." *Journal of Anthropological Archaeology* 58:101163. <https://doi.org/10.1016/j.jaa.2020.101163>.
- Horedt, K. 1960. "Die Wietenbergkultur." *Dacia* 4:107–137.
- Kacsó, C. 2011. *Repertoriul Arheologic al Județului Maramureș*. Baia Mare: Bibliotheca Marmatia.

- Kacsó, C. 2013. "Contribuții La Cunoașterea Ceramicii De La Oarța de Sus-'Ghiile Botii'." *Terra Sebus. Acta Musei Sabesiensis* 5:111–139.
- Kanne, K. 2022. "Riding, Ruling, and Resistance: Equestrianism and Political Authority in the Hungarian Bronze Age." *Current Anthropology* 63 (3): 289–329. <https://doi.org/10.1086/720271>.
- Kerr, S. 2020. "The Future of Archaeology, Interdisciplinarity and Global Challenges." *Antiquity* 94 (377): 1337–1348. <https://doi.org/10.15184/aqy.2020.138>.
- Keswani, P. 2004. *Mortuary Ritual and Society in Bronze Age Cyprus*. London: Equinox.
- Kienlin, T. L., K. P. Fischl, and L. Marta. 2017. "Exploring Divergent Trajectories in Bronze Age Landscapes: Tell Settlement in the Hungarian Borsod Plain and the Romanian Ier Valley." *Ziridava* 31:93–128.
- Kiss, V., M. Csányi, J. Dani, K. P. Fischl, G. Kulcsár, and I. Szathmári. 2019. "Chronology of the Early and Middle Bronze Age in Hungary: New Results." *Studia Hercynia* 23 (2): 173–197.
- Kohler, T. A., A. Bogaard, S. G. Ortman, E. Crema, S. Chirikure, P. Cruz, A. Green, et al. 2025. "Economic Inequality is Fueled by Population Scale, Land-Limited Production, and Settlement Hierarchies Across the Archaeological Record." *Proceedings of the National Academy of Sciences* 122 (16): e2400691122. <https://doi.org/10.1073/pnas.2400691122>.
- Kuijt, I. 1996. "Negotiating Equality Through Ritual: A Consideration of Late Natufian and Pre-Pottery Neolithic A Period Mortuary Practices." *Journal of Anthropological Archaeology* 15 (4): 313–336. <https://doi.org/10.1006/jaar.1996.0012>.
- Laabs, J. 2023. "Wealth Consumption, Sociopolitical Organization, and Change: A Perspective from Burial Analysis on the Middle Bronze Age in the Carpathian Basin." *Open Archaeology* 9 (1): 20220281. <https://doi.org/10.1515/opar-2022-0281>.
- Marc, A. T. 2016. "Mortuary Practices in the Wietenberg Culture from Transylvania." In *Funerary Practices During the Bronze and Iron Ages in Central and Southeastern Europe*, edited by V. Sîrbu, M. Jevtić, K. Dmitrović, and M. Ljuština, 53–73. Belgrade: National Museum Čačak.
- Marc, A. T., I. L. Barbu, D. C. Țuțuianu, M. G. Barbu, I. C. Codrea, M.-M. Barbu, C. Bodó, A. Osterholtz, and A. Gonciar. 2016. "A Multiple Burial in the Wietenberg Settlement at Șoimuș-Lângă Sat." In *Settlements of Life and Death: Studies from Prehistory to Middle Ages*, edited by F. Gogâltan and S.-C. Ailincăi, 165–190. Cluj: Mega.
- Molloy, B. 2025. "Approaching Societal Complexity in 2nd Millennium BC Europe Through the Lens of Megaforts and Related Settlements of the Carpathian Basin." In *Interactions-Transmission-Transformation: Long-Distance Connections in Metal Ages of Southeastern Europe*, edited by A. Bulatović, 199–226. Belgrade: Institute of Archaeology.
- Molloy, B., D. Jovanović, C. Bruyere, M. Estanqueiro, M. Birclin, L. Milašinović, A. Šalamon, K. Penezić, C. Bronk Ramsey, and D. Grosman. 2023. "Resilience, Innovation and Collapse of Settlement Networks in Later Bronze Age Europe: New Survey Data from the Southern Carpathian Basin." *PLOS ONE* 18 (11): e0288750. <https://doi.org/10.1371/journal.pone.0288750>.
- Motzoi-Chicideanu, I. 2011. *Obiceiuri Funerare în Epoca Bronzului la Dunărea Mijlocie și Inferioară*. Bucharest: Editura Academiei Române.
- Németh, R. 2015. "The Middle Bronze Age 'Mass Grave' from Voivodeni–La Școală." In *Bronze Age Chronology in the Carpathian Basin*, edited by R. Németh and B. Rezi, 179–2200. Târgu Mureș: Mega.
- Nicodemus, A. 2014. *Bronze Age Economies of the Carpathian Basin: Trade, Craft Production, and Agro-Pastoral Intensification*, Department of Anthropology. Ann Arbor: University of Michigan.
- North, D. C. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.
- O'Shea, J. M., and A. Nicodemus. 2019. "'... The Nearest Run Thing ...' The Genesis and Collapse of a Bronze Age Polity in the Maros Valley of Southeastern Europe." In *Coming Together: Comparative Approaches to Population Aggregation and Early Urbanization*, edited by A. Gyucha, 61–80. Albany: SUNY Press.
- O'Shea, J. M., G. Parditka, A. Nicodemus, K. Kristiansen, K.-G. Sjögren, L. Paja, G. Pálfi, and L. Milašinović. 2019. "Social Formation and Collapse in the Tisza-Maros Region: Dating the Maros Group and Its Late Bronze Age Successors." *Antiquity* 93 (369): 604–623. <https://doi.org/10.15184/aqy.2019.40>.
- Ostrom, E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Palincaș, N. 2014. "Body and Social Order in Middle Bronze Age Transylvania (Central Romania, c. 1900–1450 BC)." *European Journal of Archaeology* 17 (2): 301–328.

- Parker-Pearson, M. 1993. "The Powerful Dead: Archaeological Relationships between the Living and the Dead." *Cambridge Archaeological Journal* 3 (2): 203–229. <https://doi.org/10.1017/S0959774300000846>.
- Parker-Pearson, M. 1999. *The Archaeology of Death and Burial*. Stroud: Sutton Publishing.
- Paul, I. 1995. "Die Wietenberg-Nekropole Und- Siedlung Von Sibişeni (Kreis Alba)." In *Vorgeschichtliche Untersuchungen in Siebenbürgen*, edited by I. Paul, 164–174. Alba Iulia: Bibliotheca Universitatis Apulensis.
- Popa, C. I. 2019a. "The Bronze Age Prestige Axe from Vințu de Jos." *Journal of Ancient History and Archaeology* 6 (4): 30–40. <https://doi.org/10.14795/j.v6i4.468>.
- Popa, C. I. 2019b. "Când din morți nu mai rămâne decât cenușa: Restitutio Iuliu Paul și unele remarci privitoare la necropola Wietenberg de la Sibişeni." *Terra Sebus. Acta Musei Sabesiensis* 11:37–97.
- Popa, C. I., and N. M. Simina. 2004. *Cercetări Arheologice la Lancrăm-"Glod"*. Alba Iulia: Editura ULISE.
- Price, T. D., and G. M. Feinman, editors. 2010. *Pathways to Power: New Perspectives on the Emergence of Social Inequality*. New York: Springer.
- Puskás, J. 2018. "Middle Bronze Age Settlement Patterns and Metal Discoveries in the Valley of the Black River." In *Bronze Age Connectivity in the Carpathian Basin*, edited by B. Rezi and R. E. Németh, 217–278. Târgu Mureș: Mega.
- Quinn, C. P. 2017. *Crucible of Complexity: Community Organization and Social Change in Bronze Age Transylvania (2700-1320 BC)*. Ann Arbor: Department of Anthropology, University of Michigan.
- Quinn, C. P. 2024. "Settlement Ecology of Bronze Age Transylvania." *Frontiers in Human Dynamics* 6:1360479. <https://doi.org/10.3389/fhumd.2024.1360479>.
- Quinn, C. P., and J. Beck. 2016. "Essential Tensions: A Framework for Exploring Inequality through Mortuary Archaeology and Bioarchaeology." *Open Archaeology* 2 (1): 18–41. <https://doi.org/10.1515/opar-2016-0002>.
- Quinn, C. P., and H. Ciugudean. 2018. "Settlement Placement and Socio-Economic Priorities: Dynamic Landscapes in Bronze Age Transylvania." *Journal of Archaeological Science: Reports* 19:936–948. <https://doi.org/10.1016/j.jasrep.2017.05.046>.
- Quinn, C. P., H. Ciugudean, G. Bălan, and G. Hodgins. 2020. "Rethinking Time, Culture and Socioeconomic Organisation in Bronze Age Transylvania." *Antiquity* 94 (373): 44–61. <https://doi.org/10.15184/aqy.2019.231>.
- Quinn, C. P., H. Ciugudean, and J. Beck. 2020. "The Politics of Placing the Dead in Bronze Age Transylvania." *Journal of Archaeological Science: Reports* 34:102574. <https://doi.org/10.1016/j.jasrep.2020.102574>.
- Radičević, M., B. W. Roberts, E. Pernicka, Z. Stot-Gale, M. Martín-Torres, T. Rehren, P. Bray, et al. 2019. "The Provenance, Use, and Circulation of Metals in the European Bronze Age: The State of Debate." *Journal of Archaeological Research* 27 (2): 131–185. <https://doi.org/10.1007/s10814-018-9123-9>.
- Rișcuța, N. C. 2022. *Piese reprezentative din colecția de arheologie a Muzeului Civilizației Dacice și Romane*. Cluj: Mega.
- Rotea, M. 2004. "Non-Ferrous Metallurgy in Transylvania of Bronze Age." *Acta Musei Napocensis* 39-40:7–17.
- Rotea, M., M. Tecar, S. Nagy, P. Pupeză, T. Tecar, and L. Săsăran. 2008. "Florești-Polus Center: Preliminary Observations." *Acta Musei Napocensis* 43-44:47–88.
- Sava, V., and F. Gogâltan. 2022. "Before the Rise of the Late Bronze Age Mega Sites/Forts in the Lower Mureș Basin (20th–15th Centuries BC)." *Ziridava* 36:85–164.
- Smith, M. 2024. "How Do Archaeologists Study Early Urban Life? Institutions, Generative Processes, and Urban Order." *Discover Cities* 1 (1): 26. <https://doi.org/10.1007/s44327-024-00026-2>.
- Soroceanu, T., and A. Retegan. 1981. "Neue Spätbronzezeitliche Funde im Norden Rumäniens." *Dacia* 25:195–229.
- Soskice, D., R. H. Bates, and D. Epstein. 1992. "Ambition and Constraint: The Stabilizing Role of Institutions." *Journal of Law, Economics, & Organization* 8:547–560.
- Staniuk, R. 2021. "Early and Middle Bronze Age Chronology of the Carpathian Basin Revisited: Questions Answered or Persistent Challenges." *Radiocarbon* 63 (5): 1525–1546. <https://doi.org/10.1017/RDC.2021.83>.
- Stig Sørensen, M. L., and K. Rebay-Salisbury. 2023. *Death and the Body in Bronze Age Europe: From Inhumation to Cremation*. Cambridge: Cambridge University Press.
- Stockhammer, P. W., K. Massy, C. Knipper, R. Friedrich, B. Kromer, S. Lindauer, J. Radosavljević, F. Wittenborn, and J. Krause. 2015. "Rewriting the Central European Early Bronze Age Chronology: Evidence from Large-Scale Radiocarbon Dating." *PLOS ONE* 10 (10): e0139705. <https://doi.org/10.1371/journal.pone.0139705>.
- Thomas, P. 2014. "Copper and Gold: Bronze Age Ore Mining in Transylvania." *Apulum* 51 (1): 177–194.
- Turner, J. H. 2003. *Human Institutions: A Theory of Societal Evolution*. Maryland: Rowman and Littlefield.

- Vandkilde, H. 2016. "Bronzization: The Bronze Age as Pre-modern Globalization." *Praehistorische Zeitschrift* 91 (1): 103–223. <https://doi.org/10.1515/pz-2016-0005>.
- Vandkilde, H. 2022. "Entrepreneurs, Metals and Change: Scandinavia Meets Its Neighbours in the Earliest Bronze Age." In *Trade Before Civilization: Long Distance Exchange and the Rise of Social Complexity*, edited by J. Ling, R. J. Chacon, and K. Kristiansen, 309–333. Cambridge: Cambridge University Press.
- Vandkilde, H., C. F. Stephansen, P. Suchowska-Ducke, L. Ahlqvist, C. S. Andersen, L. Felding, M. Bjørnevad-Ahlqvist, J. Czebreszuk, and H. W. Nørgaard. 2024. "Metal-for-Amber in the European Bronze Age." *Praehistorische Zeitschrift* 99 (2): 280–338. <https://doi.org/10.1515/pz-2024-2003>.
- Wiessner, P. 2002. "The Vines of Complexity: Egalitarian Structures and the Institutionalization of Inequality Among the Enga." *Current Anthropology* 43 (2): 233–269. <https://doi.org/10.1086/338301>.
- Williams, R. A., M. Montesanto, K. Badreshany, D. Berger, A. M. Jones, E. Aragón, G. Brüggemann, M. Ponting, and B. W. Roberts. 2025. "From Land's End to the Levant: Did Britain's Tin Sources Transform the Bronze Age in Europe and the Mediterranean?" *Antiquity* 99 (405): 708–726. <https://doi.org/10.15184/aqy.2025.41>.