

1200 BC FROM THE ATLANTIC TO ASIA: SOCIAL COLLAPSE AND RESILIENCE IN REGIONAL PERSPECTIVE. PART 1

Theme: 2. Pandemics and climate change: responses to global challenges

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Keywords: Collapse, Resilience, Bronze Age, Migration, Europe, Southwest Asia

East Mediterranean societies in the 13th century reached a zenith of connectivity and material affluence. This globalised world suffered a dramatic collapse around 1200 BC in less than 100 years. A comparison of East Mediterranean between 1300 and 1100 BC reveals fundamentally different places in terms of social organisation and connectedness. At around the same time social crises and collapse took place within several parts of Bronze Age Europe. Such rapid, transformative phenomena had a wholesale effect on domestic, subsistence, mortuary, ritual, economic and political spheres. The contemporaneity of such rapid developments across a broad region suggests possible causal connections.

A basic tenet of archaeology is to explain how such sharply punctuated changes transform the material features of an established socio-political order. However, simple mono-causal models explain poorly why and how societies collapse. Longer-term, integrative perspectives that explore the lead up, unfolding and aftermath of collapse horizons may better reveal the character of material and social change. Alongside papers that explore what is lost during crises, a core tenet of collapse studies, contributions exploring the nature of resilience in social change are also sought for this session.

A comparative approach to Late Bronze Age societies between the Atlantic and southwest Asia within a narrow window of time (1300-1000 BC) will be developed. This enables exploration of factors shaping change that go beyond the parameters of any given social network. Uniquely, this session draws upon contemporary complex urban and non-urban case-studies. Our contributors will focus on the pace, nature and physical markers of social change in the decades around 1200 BC using a variety of evidence from Europe, southwest Asia and north Africa. We will explore theoretical approaches which seek to explain rapid and catastrophic cultural change, and ultimately, how this specific period of crisis unfolded on a large geographic scale.

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Abstracts for session #114

NEW OPPORTUNITIES IN TURBULENT TIMES: ATTICA IN THE 12TH C. BC

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Mycenaean civilization survived the disasters of ca. 1200 B.C., however the 12th century on Mainland Greece and the Aegean was clearly a period of upheaval. The centrally administered palace economies of the 13th c. gave way to more dispersed forms of economic organization. Athens was not highly centralized, and the Attic countryside, especially its western, eastern coast and the plain of Mesogaia, flourished in the palatial times. In the 12th c., the continuity of occupation in Athens and the eastern coast of Attica indicate a region that did not suffer a major destruction or abandonment. The fragmented landscape of the Postpalatial Aegean points to the existence of new decentralized coastal and maritime networks, which frequently consist 'small worlds'. Any narrative of collapse in Attica has to be compatible with the foundation and century-long life cemetery of Perati, a site with imports from Cyclades, Dodecanese, Crete, Cyprus, Egypt and Syria. A second Late Helladic IIIC chamber tomb cemetery, 2 km western from Perati, at Porto Raphti: Drivlia, as well as Mycenaean finds from nearby sites of the eastern coast indicate that Attica participated in long-distance trade, but it was also incorporated in a mainland-looking network.

This paper will focus on the networks around the Saronic and Euboean gulf, and their connectivity with the wider Eastern Mediterranean world. In order to understand the ascendance and decline of these regions and microregions, and even individual sites, network analysis will be used, attempting to identify the changes of the maritime networks from Palatial to Postpalatial times, as well as to the transition to the 11th century BC. The study of the archaeological finds along with the changes detected in the settlement pattern will contribute to review Attica's role, suggesting that times of crisis and recession are also times of new opportunities.

Keywords

Late Bronze Age Attica and Athens, Eastern Mediterranean, coastal and maritime networks, 'small worlds'/ micro-regions, decentralized economy, resilience

Note/comment

HEGEMONY AND FRAGILITY: THE CASE OF MYCENAEAN GREECE

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Whilst a series of high profile studies (eg. Kaniewski et al. 2019; Kaniewski and Van Campo 2017) have maintained a rigid fixation on finding evidence for climate change that can then be blamed for the c. 1200 BC collapse of the Mycenaean palace societies, a number of recent studies on collapse have shifted the focus away from the identification of external causes and towards a recognition of the inherent structural fragility of many ancient states and empires (Scott 2017; Yoffee 2019; already Kaufman 1988). Fragility studies force us to acknowledge that complex societies and political units can and do collapse without any impact from climate change or indeed any external drivers – collapse can take place within distinct culture zones and/or political units for purely historical and particular reasons. This is clearly the case, for example, with some of the Classic Maya polities (Demarest 2014), and ‘empires’ within Mesopotamia (Yoffee and Seri 2019).

Rather than focusing on external causes and constructing narratives of apocalyptic collapse, a much more simple and local explanation for the Mycenaean collapse c. 1200 BC may be more plausible. That is, that in competing with each other and seeking to extend hegemony and influence, the activities and ideologies of the palace states and their rulers resulted in mutual and eventually self-destruction, resulting in an end to the palace-system and its culture. In addition, it could be plausibly suggested that the social fallout from this period may have been an increasingly egalitarian social ideology.

Keywords

Collapse, Late Bronze Age Greece, Fragility, Hegemony, Conflict

Note/comment

DIFFERING TRAJECTORIES OF COLLAPSE IN THE LATE BRONZE AGE ARGOLID: MYCENAE AND TIRYNS FROM 1250 BC TO 1100 BC.

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Argolid was one of the core regions of the Mycenaean civilization, which dominated the Aegean in the Late Bronze Age (Late Helladic period = LH, 1700 – 1050 BC). In the 14th century BC it formed a locally specific palatial culture and entered an era of complex, urbanized, functionally and structurally organized settlement networks, centred around palatial towns, formed of palaces and lower towns surrounding them. In the Argolid, a Mycenaean state developed around the site of Mycenae, with another palatial town at Tiryns, serving probably as a secondary capital and a main harbour. However, this dynamic changed in the 13th century BC, when a series of events started to unfold that ultimately lead to the collapse of the Mycenaean palatial system around 1200 BC. Although both natural disasters and human agency contributed to the fall of the palaces, the chain of events and their results seem to differ in Mycenae and Tiryns. In the post-palatial period (LH IIIC, 1200 – 1050 BC) Mycenae experienced a gradual loss of political and economic status, while Tiryns soon expanded as a settlement and became the main centre of the region. This paper, built on a comparative perspective, aims at elaborating and explaining differing trajectories of collapse and resilience, of both palatial towns of the Argolid. Drawing from the systematic, relational approach to settlement studies and urbanization, as well as the entanglement theory, I discuss the disintegration of palatial culture and urbanized settlement networks as a long-term, multi-causal and gradual process of de-urbanisation and disentanglement of the social and economic networks organized around the palaces, which in the same time formed a new, post-palatial Mycenaean world.

Keywords

Late Bronze Age, Mycenaean, Mycenae, Tiryns, Collapse, Settlement network

Note/comment

VULNERABLE MYCENAEANS? A HUMAN-ENVIRONMENT PERSPECTIVE

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The breakdown of the seemingly thriving Mycenaean palatial societies on the Greek mainland around 1200 BCE has received a lot of attention, not least because similar processes played out in other areas in the Eastern Mediterranean at roughly the same time. A combination of internal and external drivers been suggested as contributing to the outcome, including a recent focus on the possible negative effects of climate change. However, any effects of climate change, negative or positive, depend on the societal as well as environmental settings in the study area. It is thus crucial to consider a broad spectrum of factors and the co-evolution of changes leading up to 1200 BCE events. Few attempts have been made to understand the breakdown of the Mycenaean palatial societies in view of the preceding periods during which the Mycenaean ways of life first emerged and thereafter consolidated over time into the scenario that can be reconstructed for the final decades of the palatial period, and for its post-palatial repercussions. In this paper, we take on a human-environment perspective, assessing evidence for climate change, in parallel with a discussion of the overall scale of human activity and resourcefulness, socio-political control functions, societal cohesion and land use. Such factors likely contributed to the vulnerability load of these societies, affecting their inherent sensitivity and adaptive capacity and making them more or less able and willing to adapt to and to utilise changing environmental conditions stemming from climate change.

Keywords

Late Bronze Age, Greece, human-environment interaction, vulnerability, climate change

Note/comment

GENETIC CHANGE AND POPULATION MOVEMENT C. 1200 BCE: A VIEW FROM THE NORTH AND WEST

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⁵ *SUERC*

The last centuries of the second millennium BC were a period of intense connectivity in Central and Western Europe. This is clear from studies of material culture that demonstrate the widespread distribution of specific objects, the exchange of raw materials, and shared patterns of deposition.

A new study of whole genome ancient DNA from Bronze and Iron Age populations, focusing on Britain but including substantial new datasets for areas of continental Europe, has also identified major genetic changes in the Middle-Late Bronze Age (c. 1300–800 BCE). In Britain specifically, a rise in ancestry derived from Early European Farmers (EEF) appears to represent an influx of people from a region most likely located in present-day France. Due to a paucity of aDNA coverage in the potential source region(s), it is presently impossible to determine whether the movement of people was reciprocal or unidirectional. It is striking, however, that many of those who moved appear to have been female. Similar genetic changes are evident in the Netherlands and Czechia, although based on fewer samples, while in Iberia we see a decrease in EEF ancestry.

Taken together, the genetic data suggest a period of complex connectivity between regions in Central and Western Europe, including significant movements of people. The underlying social processes are likely to be complex and not reducible to the simple outward spread of a single population. While there is presently no genetic evidence to link these population movements with upheavals seen in the east Mediterranean c. 1200 BCE, their chronological proximity is striking. This paper will discuss the recent genetic results in the context of broader archaeological understandings of the period in Central and Western Europe and consider their potential relevance to events further afield.

Keywords

ancient DNA, Bronze Age, Europe, Population movement

Note/comment

Abstract #: 06

WHEN THE PENDULUM SWINGS BACK: THE 12TH CENTURY BCE AS THE BEGINNING OF A PERIOD OF GROWING EUROPEAN INTEGRATION

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As the title of this session clearly emphasizes, the beginning of the 12th century BCE is considered in the Eastern Mediterranean as the first step in the quick dismantlement of the sophisticated Late Bronze Age social and political structure. Such a point of view would likely be dismissed by an archaeologist studying Western European Late Prehistory. In western context, the 12th century may rather be considered as the beginning of increasing connectivity (thus giving birth to wide complexes such as the Atlantic one), growing technological complexity (development of copper alloy sheet hammering and lost-wax technique), dynamic social changes, etc.: the beginning of a new dynamic that would last until the 10-9th centuries BCE at least, with strong regional variations. In some regions, as in the north-western Mediterranean, it is probably the beginning of *longue durée* processes, that will develop well into the Late Iron Age. This paper will defend the idea that the “collapse” observed in Greece will mark the beginning of a period when social and political structures were more akin to forms observed elsewhere in Europe, in particular in Western Mediterranean Europe. Last, this paper will question the possible dynamics of this process (without trying to provide an explanation to the fall of the Palaces!) and to broadly assess its consequences. This will lead us to have a glance beyond the threshold of the 2nd millennium into the first centuries of the 1st millennium BCE, if the organizers allow me.

Keywords

Bronze Age, Iron Age, Europe and the Mediterranean, Crisis, Social complexity, Connectivity

Note/comment

I am not really happy about my title. If you consider my proposal worth of your session, I would gladly welcome suggestions about it.

Abstract #: 07

1200 BC: A PERSPECTIVE FROM THE NILE DELTA

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² *Roemer- and Pelizaeus-Museum Hildesheim*

The reliefs of Ramesses III's temple at Medinet Habu are still being used as a central argument in many if not the most, broader discussions of the period around 1200 BC in the Eastern Mediterranean. In addition, texts and archaeological evidence are brought in which in their vast majority come from Upper Egypt, especially the Theban area.

Archaeological evidence from the Nile Delta is rarely referred to, even though the region is central to one of the most important events – the battles between the Egyptian forces and the sea peoples.

The lecture will take the perspective from the site of Pi-Ramesse, Egypt's capital during this time and discuss the results of more than 40 years of archaeological research and their implications for the discussion. While no large-scale destruction layers can be observed, the end of the New Kingdom seems to have been preceded by an end of monumental construction in the capital. Moreover, official buildings seem to have been used as squatter residences. These results will be analyzed within the framework of the general historical development in Egypt.

One of the central points which need to be discussed is whether the events around 1200 BC and their aftermath were really behind the end of New Kingdom Egypt which took place only about 100 years after the end of the Late Bronze Age.

Keywords

Late Bronze Age, Egypt, Qantir-Piramesse, New Kingdom, Nile Delta

Note/comment

CHANGE AND ADAPTABILITY DURING THE LATE BRONZE TO IRON AGE TRANSITION: INSIGHTS FROM RADIOCARBON AND POTTERY IN THE SOUTHERN LEVANT

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The transition from the Late Bronze to Iron Ages in the southern Levant has been the subject of intense debate concerning the timing and nature of major, multifaceted cultural and political changes. During this period, local communities suffered a series of catastrophic events, witnessed the stepwise collapse of their centuries-old city-state system and observed the nonlinear decline of Egyptian 'colonial' rule; in addition, they were confronted with new cultural influences and migrating/displaced peoples.

Key to elucidating the complex chain of events and adaptive response of societies during the Late Bronze/Iron Age transition, are ceramic studies and radiocarbon dating (14C). An accumulating body of 14C data now enables an absolute chronological framework that is independent of external factors such as Egyptian texts and foreign material parallels. It confirms some aspects of the traditional chronology while challenging others and bringing clarity to the most debated issues. The date of widespread destruction events, the end of Egyptian rule, and the introduction of local Aegean-style (so-called 'Philistine') material culture can each be addressed in considerable detail.

Pottery studies, on the other hand, can illuminate the relative chronological framework of the Late Bronze/Iron Age transition. Ceramic studies in the southern Levant – specifically the coastal 'Philistine' heartland and adjacent Shephelah region – have tended to emphasize new foreign elements at the expense of the indigenous 'Late Bronze-style' pottery traditions. However, close examination of the latter provides particular insight on how communities preserved and adapted their traditions through the tumultuous 13th–11th centuries BCE. It seems that the local artists were influenced by the appearance of foreign potters and adapted their own traditions within the indigenous ceramic workshops. Such insights allow a fine-tuning of relative chronology that neatly corresponds the 14C evidence, while also providing a crucial window on the resilience and adaptability of southern Levantine society.

Keywords

Pottery, Radiocarbon dating, Shephelah, Late Bronze Age, Iron Age

Note/comment

If possible, we would prefer to use the slightly longer title:

"Change and adaptability during the Late Bronze to Iron Age transition: insights from radiocarbon and pottery studies in the southern Levant"

DECENTRALISED COMMERCIAL STRATEGIES IN THE MEDITERRANEAN AFTER 1200 BC AND THE ROLE OF CYPRUS

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The spectacular collapse of the majority of the palatial and imperial political regimes in the eastern Mediterranean ca. 1200 BC, and the disintegration of the centralised commerce that characterised interregional connectivity in the previous centuries, had a profound impact on the Cypriot communities, whose prosperity relied heavily on the extra-insular bulk transshipment of copper. The transformations of the island's settlement pattern and material culture notwithstanding, the 12th century BC in Cyprus does not correspond to the disruption of the island's idiosyncratic politico-economic forms. For instance, the persistence of the indigenous syllabic writing system indicates an impressive level of continuity. More importantly, it was during this transformative era that the Cypriot communities rose to the forefront of the emergent interregional commercial strategies in the Mediterranean, which were characterised by entrepreneurship in smaller and regional spheres.

The presentation will elaborate on the transformed character of copper trade in the eastern Mediterranean, aggregating new data from contexts within Cyprus and beyond. The study will also focus on the commercial links between Cyprus and the Levant, as evidenced by the deposition of Cypriot finewares in Levantine contexts. Finally, a critical indicator of the uninterrupted trading connections between Cyprus and the rest of the eastern Mediterranean are the large numbers of imported Maritime Transport Containers recovered in Cypriot contexts of the 12th century BC. The sheer quantities of these ceramic containers, predominantly "Canaanite Jars" produced in various centres of the Levant, but also Egyptian Jars and Minoan Transport Stirrup Jars, are indicative of the scale of maritime trade during the post-"crisis" era. The contribution ultimately aspires to address the transformations in the character of interregional connectivity in the Mediterranean after ca. 1200 BC, and to highlight the role of Cyprus as an important nexus within the emergent decentralised commercial strategies.

Keywords

Cyprus, Interregional Trade, 1200 BC, Canaanite Jars, Maritime Transport Amphorae

Note/comment

Abstract #: 10

USING MACHINE LEARNING TO ILLUMINATE SOCIAL CHANGE: INTEGRATING DATA SETS FROM 1300-1000 BC FROM THE ATLANTIC TO SOUTHWEST ASIA

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Advances in machine learning have yet to find widespread application in Archaeology even though this technology is used extensively to identify patterns in, for example, economic, financial and medical data. The ability to sift efficiently through the enormous, and rapidly growing, literature on Late Bronze Age and Early Iron Age Eurasia, from the Atlantic to Southwest Asia, using machine learning could be an important step in advancing understanding of how the scope and intensity of long-distance interactions and external factors, such as climate change, contributed to cultural change over time.

This paper evaluates the potential of applying machine learning to identify and correlate the markers of cultural change and societal resilience between 1300 and 1000 BC across Eurasia. It will highlight the value of this method in rapidly extracting meaningful trends from academic literature and digital sources written in multiple modern languages and across multiple disciplines (archaeology, philology and all relevant scientific disciplines including climate, provenance studies and ancient DNA analysis). Assembling relevant evidence efficiently in this way paves the way for resources to be directed towards evolving research questions and building, and testing, explanatory hypotheses for cultural change in Eurasia between 1300 and 1000 BC.

Keywords

Machine Learning, Late Bronze Age/Iron Age Transition, Climate Change, Trade and interactions, Eurasia, Multidisciplinary approaches

Note/comment

This paper will showcase the value of using machine learning to review massive bodies of knowledge in order to build narratives and hypotheses by digesting data over a wide geographical area. This will be illustrated by showing the results of a pilot study.

RADICALLY DIFFERENT? RESPITE AND RESILIENCE OF THE BRONZE AGE IN THE NORDIC REGION

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The paper discusses the extent to which '1200 BC' impacted S. Scandinavia. The Nordic Bronze Age was utterly reliant on European metal trade and should logically respond to interrupted channels of metal transfer. Indeed, significant changes occurred in the North during this tumultuous time: they tie up with European-scale crises, but were also rooted in the preceding period. An environmental downturn is observable immediately prior to 1200 BC, seemingly linked to generations of unsustainable, aggrandizing mound construction (land) and house-building (timber). The Lössen glacial maximum (c. 1300–1100 BCE) may be understood as an overall background of environmental instability.

In Scandinavia, the time around 1200 BC appears generally less troubled by collapse and crisis than other parts of the Bronze Age world. The 'fall' of 1200 BC in the North marks a significant threshold out of which the culturally distinct Nordic Bronze Age (c. 1600–600 BC) appeared born anew through the integration of rooted tradition with Urnfield and Mediterranean ideas. Especially the period 1000–750 BC was a booming climax driven by European partnerships and political control of metal trading until interrupted c. 750–700 BC when deep crisis began to manifest likely connected to the Göschenen glacial maximum (c 800–700 BCE).

The paper asks how susceptible Scandinavia was to change and collapse in the Bronze Age world through complex explanatory models. A *longue-durée* approach looks for continuity and disruption, degrees of success and failure. Should the Nordic region be regarded as 'respite' or 'resilience'? Drawing on evidence from mortuary traditions, hoarding, conflict, landscape use as well as ritual and spiritual developments, glimpses of crisis as well as resilience transpire. These fluctuations appear intertwined with accelerating influx of impulses from the Urnfield region and even further away, which encourages a renewed cultural frame of reference for people in the Nordic region.

Keywords

Nordic, Bronze Age, Collapse, Resilience, Cultural change, Environment

Note/comment