

1200 BC
WAR, CLIMATE CHANGE
& CULTURAL CATASTROPHE

ABSTRACTS

1200 BC – A period of momentous change
Alan Peatfield, UCD

1200 BC stands as one of those symbolic dates in human civilisation. Its significance lies in its association with a period of momentous change, a period of catastrophic destruction and uncertainty for the people of the time. We, with the benefit of hindsight, can see it as a prelude to the archetypal Dark Age that separates the splendours of the Eastern Mediterranean Bronze Age from the glories of Classical Greece and Rome.

1200 BC is, of course, a generic rather than an absolute date, one that stands for the sweep of the history of the time, rather than a single event. If a single event is needed to justify the association, probably it should be the victory over the invading alliance of “peoples from the sea” that Pharaoh Ramesses III recorded at the mortuary temple of Medinet Habu, sometimes dated to 1190 BC. It is that vast movement of population, which current scholarship calls the “Land and Sea Peoples”, that lies at the heart of the changes in this period. Egyptian, Ugaritic, and Hittite sources all record threats from large numbers of invaders at this time. The Egyptians in particular had recorded previous incursions by some of the ethnic groups they later included in the muster of the Sea Peoples, especially the Shardana, in the earlier reigns of Pharaohs Ramesses II and Merneptah. Indeed by 1175 BC, a more likely date for Ramesses III’s victory, the empire of the other great power of the age, the Hittites, had been destroyed, as had the independent Canaanite kingdoms, exemplified by the great mercantile city of Ugarit. The kingdoms of Mycenaean Greece had already suffered a series of destructions in the 13th century, and the drawn-out end of the Mycenaean civilisation is characterised by the collapse of the centralised economy, radical changes in settlement patterns, including migration out of Greece, loss of literacy, and even linguistic changes. Later Greeks heroised this period with the myths and stories around the fall of Troy. In reality Troy was probably yet another of the the civilised cities of Asia Minor that fell prey to the military adventurers who thrived in the chaos of the period.

And chaos is a reasonably accurate description of the period. The events recorded in documentary archives and inscriptions, and those visible archaeologically, do not present a neat timeline, nor do they offer a clear explanatory narrative of what happened, let alone why it all happened. Military destructions caused cultural discontinuity and population shift decades before 1200 BC, and for more than a century afterwards. The resulting migrations, particularly of Greek-speakers to the Asia Minor coast and to Cyprus (the Greek colonies), or of mixed cultural groups to the Levantine coast (the Philistines), strongly influenced the cultural character and history of the region for centuries to come. Trying to establish some clarity for these events has exercised scholars since the Bronze Age was discovered.

Attracted by the apparent “historicity” of the Egyptian inscriptions, much scholarly energy has been devoted to the identity of the Land and Sea Peoples. The names of the various groups or tribes recorded by the inscriptions include: Sherden (or Shardana), Shekelesh, Teresh, Denyen, Peleset, Tjekker, Lukka. These names are tantalisingly reminiscent of names more familiar from Classical Greek and Roman myth and history: Sardinians, Sicilians, Etruscans, Danaans (Greeks), Philistines, Teucrians (Minoan Cretans), Lycians. Scholars have had much fun creating scenarios whereby these names, and the events associated with them, can be used to explain the foundation and origin myths of later peoples.

Within all these narratives, which emphasise the Eastern Mediterranean focus of events, there has been little satisfactory explanation for just WHY it all happened. Localised sociopolitical stresses and regional economic or environmental factors all clearly contributed to the flow of events. They allow scholars to play with hypotheses that move in and out of fashion – hypotheses based on the Greeks, the Trojans, on Italic peoples, on Anatolian or Greek droughts and famines. But such factors are unlikely, by themselves, to have provided sufficient impetus for the causal processes that characterise the period. They should not be viewed in such an individualist fashion but seen as part of a larger picture, as the trees rather the wood itself. Part of the problem in understanding these processes has been the very spectacular nature of the Eastern Mediterranean events. They attract the bulk of the attention. What has been relatively neglected by scholars of the Bronze Age Mediterranean is that there is evidence of similar disruptions elsewhere, particularly in central and northern Europe.

Interestingly, scholars of previous generations, notably Michael Grant and Moses Finley, and later Robert Drews, attempted to place the Mediterranean events within a much broader, even global perspective, citing large-scale migratory movements of peoples within Europe, and beyond. At the time when such interesting claims were made, the political realities of the contemporary world made it difficult to research the archaeology of eastern Europe and western Asia. Additionally the reaction against diffusionist theories of cultural change made archaeologists wary of global explanations, and encouraged regional and cultural specialisation, which in turn mitigated against dialogue between archaeologists who specialised in particular areas. Few Mediterranean archaeologists knew what colleagues in Northern Europe were finding and vice versa. This is surprising, because just as Mediterranean archaeologists were struggling to understand the Sea Peoples’ movements around 1200 BC, so too were Northern European, and especially Irish, archaeologists struggling with the archaeology of another iconic event on the edge of history and legend, the Coming of the Celts, also attributed to the period around 1200 BC.

The recent political changes which have opened up the previously communist countries have yielded an archaeological dividend. Even though we do not have documentary sources for cultures north of the Danube, it is clear from the emerging archaeological evidence of warfare, weapon technology and usage, site destructions and changes in settlement patterns, that the 1200 BC period is indeed one of immense cultural disruption.

In keeping with the opening up of political frontiers, archaeologists are also increasingly engaged in dialogues outside their regional specialities. Kristian Kristiansen in particular has encouraged archaeologists of all areas of Europe and the Mediterranean to develop the perspective of multi-regional process and transformation.

Another factor which allows explanations to transcend the previous regional isolation of scholarship, has been the increasing sophistication of scientific methods, including dendrochronology and ice-core sampling, which examine the global climates of the past, just as archaeology examines the human cultures. The synthesis of these disciplines has often been controversial, but although our modern world still struggles to come to terms with this point, it is clear that human cultures cannot be isolated from climate and climate change.

The agenda of this, the 1200 BC conference is thus quite explicit. From the Atlantic coast of North-west Europe to the shores of the South-east Mediterranean, from Ireland and Scandinavia to Egypt, archaeologists increasingly recognise that the 1200 BC period is one of dramatic cultural disruption giving way to profound cultural transformation. Even though there are regional differences in relation to the archaeological manifestations of this process of disruption and transformation, it is important for us to establish and explore the commonalities as well as the differences. We need to ask questions about the scale of these events. Are they linked? Are we witnessing a cascade of migrations of people throughout Europe? Is violence and warfare a common factor in these events? Does the multiple evidence for environmental factors point to global climate change? Are violence and migration the only solutions we witness to the crises?

Gathering together and offering our individual views on the phenomena of this period, we can collectively develop a global perspective. In 1200 BC we have an opportunity to examine the causes, pressures, and consequences of what seems to be one of the most disrupted and violent periods in the history of human civilisation. It is a truism that we live in a modern world that commentators increasingly characterise as driven by global cultural disruption, violence, and migration, all exacerbated by the crisis of climate change. It would be absurd to suggest that we as archaeologists can provide solutions for the world's contemporary problems. But as we bear witness to the events of 1200 BC, when the comfortable Bronze Age world was transformed by similar crises of war, climate change, and cultural catastrophe, there are some obvious lessons and warnings to be heeded.

Can the severe environmental downturn in the mid-12th century BC be implicated in the cause of the Greek Dark Age? **Mike Baillie, Queen's University Belfast**

The existence of an 18-year-long growth downturn (1159-1141 BC) in Irish bog oaks has served to focus attention on the mid-12th century BC. The environmental effect can be traced in other tree-ring chronologies and may have been at least hemispheric in extent. In searching for possible causes it is notable that both the Chinese and the Greeks have seminal 'battles', namely the Battle of Mu and the Battle of Troy, both set traditionally in the 12th century BC. What singles out these 'battles' is that both, independently, involve supernatural beings (sky gods?) and mortals. An obvious question is whether there is a message in these clearly unreal 'battles'? To state the question: do these ancient stories hint that there was a cosmic cause for the mid-12th century environmental events? This paper will review the evidence for the 1159-1141 BC environmental event and explore what its effects may have been.

Connectivity, climate and chronology: Ireland in 1200 BC

John O'Neill, UCD

The archaeological record for Ireland in the twelfth century BC does not immediately present itself as on the brink of catastrophe. Dependent upon mixed livestock and arable farming, it is by no means marginal for the types of agriculture practised there, nor does it suffer from depletion of woodlands or mineral resources. Copper mining was unaffected as it appears to have ended in Ireland several centuries beforehand (despite the continued availability of surface deposits). Gold production continued unchecked until considerably later, although there does appear to be a synchronous change in preferred source for gold objects. Exotic artefactual material, which can be taken as a reasonable shorthand for foreign connections, is present in Ireland at this time, and references a broad swathe of central and northern Europe, from south of the Alps to the Baltic.

Mortuary practice, which went through significant change sometime earlier, around the 15th century BC, continues in disparate forms, some of which clearly straddle the twelfth century. Hillfort building, once considered as a possible response in the twelfth century BC, now appears to have taken place over a number of centuries.

While the tree ring chronologies from Irish oaks indicate a significant climatic downturn during the twelfth century BC, our usual chronological tool, radiocarbon dating, is not precise enough to track society's response to these events in the twelfth century itself. Thus, while we can date many sites to the period around the twelfth century BC, the blending of the calendrical precision of dendrochronology and the broad brushstrokes of radiocarbon dating has proved problematic.

While we can identify clusters of dendrochronology dates at particular times, a review of the use of oak on archaeological sites indicates that these clusters reflect the presence of datable oaks (i.e. with 70 or more growth rings) as oak is present at other times, but with shorter growth spans (i.e. less than 70 year rings). This suggests that we may be identifying stylistic or cultural choices in the use of oak, rather than some factor dictated by environmental events. The real question, in Irish context, is how far should we privilege the records derived from dendrochronology? While they provide accuracy and detail that is otherwise absent from the archaeological record of this time, it is also simply too easy to allow them to act as a centre of gravity for an interpretative or explanatory model.

Crucially, allowing these narrow ring events to act as a centre of gravity for our understanding of the period makes an a priori assumption that their impact on society must have been significant enough to effect long term structural change. This, then, does not allow society to have the resilience to absorb the impact of these events and move forward. On a European level, it seems to preclude the possibility that major upheavals occurred along a different trajectory, determined by the connectivity of Mediterranean cultures and economies. In this context, Ireland, in its Atlantic hideaway, provides an interesting test case for examining some of these ideas of connectivity and climate change.

A long sleep at Tara? Muiris Ó Súilleabháin, UCD

In the centuries before 3,000 BC, a megalithic tomb was constructed on the summit of the Hill of Tara, one of the better known and more complex ceremonial landscapes of ancient Ireland. Located in county Meath, the Hill of Tara rises to no more than 150 metres in height, but the panoramic view from the summit stretches west across the central plain of Ireland to the mountains along the Atlantic fringe. Its status as a local high point coupled with this magnificent view would have been as impressive in prehistory as it is today. Evidence for pre-cairn human activity in the form of pits, fires and a ditch suggests that Stone Age people were congregating on the hill even before the megalithic tomb was constructed.

By about 1,700 BC, this relatively small monument housed the remains of several hundred individuals interred over the course of the previous 1,500 years. Then all activity at the site ceased abruptly for about a millennium, although some of the other monuments on the hill may conceivably have been constructed during this long pause. It is on this hiatus that my paper for the conference focuses because Tara ‘goes quiet’, so to speak, at a time when fundamental changes were taking place throughout extensive parts of Ireland.

By the 8th century BC, activity in the vicinity of the megalithic tomb had resumed and the Tara complex flourished during the Iron Age and into the early medieval period. Great enclosures were constructed, some with bank-and-ditch and others with massive timbers; imposing burial monuments appeared on the flanks of the hill; and, in the early centuries AD, specialised Roman pottery and glass was introduced. At the dawn of history in Ireland, in the mid-first millennium AD, Tara had acquired extraordinary status as a titular royal seat and symbol of the pagan past.

This presentation links the pause in activity at the Mound of the Hostages with other developments in Ireland during the centuries between c. 1,500 BC and 1,000 BC. This is the period when slashing swords were introduced; spectacular hilltop and cliff-top enclosures appeared in the landscape; and centuries of apparently unprecedented wealth began. Previously thought to be an Iron Age phenomenon linked with the putative arrival of the Celts around 500 BC, the hilltop and cliff-top forts have consistently produced radiocarbon dates beginning in the centuries around 1,200 BC.

The paper asks whether the traditional focus on a supposed Celtic invasion of Ireland in the final centuries of the first millennium BC has diverted attention from an even more dramatic period a millennium earlier.

A combat archaeology perspective on developments in warfare around 1200 BC Barry Molloy, UCD

Throughout Bronze Age Europe there were several broad regional trends in the evolution and subsequent development of combat weaponry, with characteristic typological traits differentiating these with relative clarity. Archaeological research to date examining the spread of these weapons has focussed almost exclusively on seeking meaning in morphological traits or typological studies (the volumes of the *Prähistorische Bronzefunde* series for example). The superficial characteristics of the weapons lend themselves readily to this mode of investigation, though there is a tendency for this to be at the expense of critical evaluation of the objects as weapons

of combat and violence. For the artefacts to be understood in this latter sense, focus needs to be placed on their active functionality as weapons and in particular how variations in form result in variations in these functions. Such an approach can re-contextualise the study of weapons in a dramatic fashion as focus shifts from developing convenient categories dictated by modern mandates to more holistic investigations of the meaning and purpose of the artefacts in the societies that created them.

This paper will focus on the evolution and impact of the grip tongue swords of the late Bronze Age throughout Europe. The initial development of combat weapons in the Early Bronze Age largely incorporated weapon forms common to the Neolithic hunting package – spear, bow and arrow, axe and small knife / daggers. The further development of the dagger in bronze, and indeed the evolution of weapons with laterally fixed blades on a longer shaft – halberds – represent the first weapons which appear to have had a dedicated focus towards interpersonal combat, as opposed to dual purpose weapons of hunting. Across the continent in the Middle Bronze Age (very broadly 1700 – 1200 BC), weapons developed which were undeniably tools for interpersonal combat, purpose designed and manufactured to that end. While there are marked regional variations in style, there was a commonality of combat functionality in broad terms, specifically in the realm of bladed weapons with the evolution of the so-called “dirks” and / or “rapiers”. The common aspect of these weapons from Greece in the east to Ireland in the west was that these early swords were invariably incapable of percussive cutting attacks, greater emphasis was clearly placed on lacerating cuts and thrusting attacks.

The spearheads of the Middle Bronze Age had considerably greater variation in size than their predecessors, with basic short socketed pieces suited to thrusting attacks (including throwing) manufactured alongside a range of types of sufficient length and variety to execute a variety of cutting as well as thrusting attacks. Such functional aspects of these weapons are dictated by both technological and martial traditions as well as local aesthetic trends. Similar modes of use in various broad timeframes can be seen to dominate the material record from many areas of the continent from Germany to Greece and beyond.

In the century before 1200 BC, a new type of sword evolved probably in Northern Italy and the Balkans commonly called the Naue II sword, particularly in Aegean studies. This sword had an integral tang with flanges and a straight-edged blade of robust proportions. Its popularity quickly spread beyond the area of its inception and throughout the Eastern Mediterranean. Moving in the other direction, the sword form went through a series of evolutions before reaching Ireland sometime after 1200 BC as variants of the continental Erbenheim and Hemigkofen traditions. In areas of central and Eastern Europe, these organic hilted grip-tongue swords were in use alongside variants which had bronze hilts. In functional terms these two separate classes of weapon would have operated with relative similarity, as blade lengths and morphologies were broadly similar. However, the grip-tongue swords represent the most widely distributed class of weapon of the period around 1200 BC and are the particular focus of this paper.

The spread of this form of sword throughout Europe changed a millennium old pattern of martial traditions whereby functional similarities in weapon systems often had little in common in typological terms. This new sword form had many manifestations with minor differences, though the basic functional attributes remained quite similar throughout the areas it was in use. This spread represents the first time that a particular weapon form saw such widespread popularity throughout Europe,

and its arrival into many areas has been seen as heralding upheavals and dramatic shifts in the conduct of warfare, particularly in the British Isles and Greece. This paper will explore some of the issues of why this category of sword came to dominate the material record in Europe (alongside the *vollgriffschwerter* in some areas) from a functional perspective, and in particular the impact that sword type this had at either extremity of Europe through the case studies of Ireland and the Aegean.

Influence, destruction patterns and the final years of Ramessid Egypt

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The Late Bronze Age is often characterised by destruction events that occurred in a number of cities throughout the eastern Mediterranean, but a large area of the Levantine coast seems to have escaped relatively unscathed. At a time when there was a good deal of attested seaborne raiding, this is somewhat unexpected and requires an explanation. My aim in this paper is to question to what extent the pattern of destruction evidenced along the Levantine littoral was tied to Ramessid influence, and whether it was possible for Egypt to still have been enough of a power in the last years of the New Kingdom to influence the activities of waterborne raiders, and even to help determine the course of the polities that succeeded it in the Iron Age.

On Helladic Ships and Sea Peoples

Shelley Wachsmann, Texas A & M

Groups of ship-based raiders first appear in the eastern Mediterranean in the 14th century B.C. when the king of Alashia (Cyprus) complains that the Lukka raid his land annually (EA 38: 10-12). These periodic raids evolved over several centuries into massive migrations by land and sea that sounded the death knell for great Bronze Age cultures and reshaped the Levant forever.

One of the most perplexing questions regarding the great migrations that marked this period pertains to the origins of the ethnic groups involved. Who were the Sea Peoples? What were their ethnic origins and from where did they originate? Scholars noting the remarkable similarities between the material culture of the Mycenaean Greeks and the Sea Peoples—from their houses, hearths, pottery and cities—have long proposed a close connection between these cultures.

The ships used by these peoples in their movements appear to have been a key factor in their maneuverability, whom the Egyptians knew as “Sea Peoples” (BAR III: §588 n. a, 601; IV: §129: 4, 6, 403). Echoes of this term reverberate in a text from Ugarit in which the Hittite king describes one group, the Sekels (Tjeker) as “those who live on their ships” (RS 34.129). It behooves us, then to examine what their ships might tell us about the identity of these seafaring migrants. To this end, I discuss four relevant ship representations.

Medinet Habu.—Study of Ramses III’s nautical battle scene at Medinet Habu reveals that the northern galley (oared ship) replicated five times in the scene finds its closest parallels in contemporaneous Aegean (Mycenaean) ships. One preeminent indicator of these vessels was an open rowers’ gallery below the deck through which oarsmen would have been visible to an observer. A series of vertical stanchions supporting the vessels’ superstructures create a horizontal-ladder like motif on many of these ships, although in some cases the stanchions are not represented due to artistic considerations.

A second indicator is the forward-facing bird-head device capping the stems of the Sea Peoples’ ships, which is similar to Aegean stem devices. The Medinet Habu ships are unique, however, among contemporaneous Mediterranean ship depictions in having an additional bird head mounted at the sternpost facing outboard. This makes the profile of the ship depictions similar to the Central European Urnfield “bird boat” (*Vogelbarke*) motif, and suggests a Central European origin for a segment of the Sea Peoples population.

Hama.—An Helladic galley appears on a cremation urn from Hama, Syria. The urn on which the ship appears is one of 1100 used for cremation burials uncovered in Level F, Early Period and dated by the site’s Danish excavators to circa 1200-1075 B.C. The material culture in this level included other European cultural markers, such as fibulae and flang-hilted swords.

In his review of the excavation report W.F. Albright set the scholarly tone for the interpretation of the Hama urnfields, explaining them as a local phenomenon with no connections at all to the Sea Peoples. This is the generally accepted scholarly view. The fact that an Helladic-style galley of the type documented in use by the Sea Peoples at Medinet Habu appears on a cremation urn at Hama clearly implicates one of the groups of Sea Peoples who are known to have used this ship type. The simplest explanation (*Occam’s Razor*) for this occurrence is that a group of migrating Central European Urnfelder folk, or their descendants, settled in Hama. Here, as at Medinet Habu, we see a direct link between elements of the Urnfield Culture and Helladic Style galleys employed by the Sea Peoples.

The Gurob ship model.—W.M.F. Petrie’s 1920 excavation at Gurob, in Middle Egypt, revealed a remarkable broken wooden ship model in an unmarked New Kingdom grave. The model is now housed at the Petrie Museum of Egyptian Archaeology, London. Despite the fact that Petrie and his assistants published descriptions and reconstructions of it, the model has until now missed further scholarly attention in the ongoing discussion on ancient seacraft.

Although found in Egypt the Gurob model clearly replicates the Aegean-style galley, perhaps copying a *pentakonter* (50-oared ship). This model is the most detailed representation presently known of this vessel type and the only one to exhibit three-dimensional evidence for the stanchions of an open rowers gallery. It is virtually unique in having polychromatic painted decoration: as such it contributes to our understanding of Homer’s epithets regarding his heroes’ galleys. The vessel bears a typical Helladic bird-head decoration topping the stempost. Four painted wheels and other evidence for a wagon-like support structure may have connections with European prototypes. The model is missing a number of its parts, indicating that it was broken, probably intentionally, prior to deposition. Textual evidence for Sherden living in and around Gurob raises the possibility that the model represents a galley used by that ethnic group. Comparative materials permit the tentative reconstruction of a virtual reality (VRML) replica of the model.

Dakhla Oasis.—In 1936-1937 H.A. Winkler discovered and photographed a ship graffito near Teneida in Dakhla Oasis. L. Basch published the graffito in 1994, and correctly identified it as representing an Helladic ship.

Nine complete stick figures inhabit the vessel. Some of the men hold models of ships with forward facing bird-head stem and sternpost ornaments. The men's appearance and accoutrement make their identification problematic. Possible suspects are Mycenaean (unlikely), a group of Sea Peoples, or Libyans.

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When Did It All Go Down?

1230? 1200? 1180? 1160? 1130? 1100? 900? 850?

Ilan Sharon, Institute of Archaeology, Hebrew University

Three questions critical for any evaluation of the 'crisis years' in a cross-cultural perspective are a) "When did it happen?" b) "Did it happen everywhere simultaneously? (and, if not, in what order?)" and c) "How long did it take?" Any comprehensive answer must correlate three facets – historical documentation, archaeological evidence, and chronometric (mainly radiocarbon) dates.

Historical evidence is hampered by the fact that – while the late Bronze Age is well-documented in Egypt, Anatolia, and Mesopotamia – the collapse of literacy causes large gaps in the documentation of the ensuing periods. Other regions critical for our understanding of the processes – the Aegean, the Levant, Cyprus -- were only proto-historical to begin with. Constructing their Bronze-Age history based only on internal primary sources is impossible. For the early Iron Age primary sources are virtually non-existent and historians have been forced to rely on temporally distant secondary narratives, with suspect agendas and arguable historicity (viz. Greek sources and the Hebrew Bible). Even for the ostensibly well-documented Late Bronze Age 'fertile crescent' the established chronological framework – a fragile network inter-correlating king lists pegged to an absolute time scheme by [debated] ancient astronomical observations – is under attack, and radical new formulations have been offered.

Archaeology can be used to ease the quandary in several ways. It can document the destruction of sites (a questionable method in and of itself since any one site may have been destroyed – and rebuilt – for any number of reasons) as well as plot general demographic trends and describe the eclipse of ‘higher’ culture. Artifactual seriation can be used for synchronizing the stratigraphic sequences of individual sites within each region, and (to a somewhat lesser extent) between regions. For the latter task the critical media are Aegean and Cypriot ceramics – which are widely imported to Egypt and the Levant in the Late Bronze Age; and Aegeanizing wares – locally made in Cyprus and in some parts of the Levant in the early Iron Age. Such synchronizations may, first, directly establish the contemporaneity and (in lieu thereof) the order of collapse. Second, the synchronization might aid in pegging the network to the few name-bearing artifacts (mainly of Egyptian Pharaohs) which appear in stratified contexts. Third, it can constrain the temporal distributions of chronometric date-ranges. Chronometric dating emerges in the last decade as our best hope to solve such puzzles. The two methods currently capable of the required resolution are dendrochronology and (only just) radiocarbon. Mediterranean weather and construction techniques do not facilitate the former, and the erratic behavior of the radiocarbon calibration curve in the 1250 – 1150 BC region render the latter a difficult task. Only many hundreds of dates from many contexts (along with a very precise seriation of these contexts) may ultimately solve the problem. Thus far, this particular transition has not been the focus of a determined radiocarbon research project. Nevertheless, radiocarbon determinations from several recently (and not-so-recently) excavated sites can narrow down the options, rule some of them out completely, and single others out as more likely.

**“Trouble from Within:
The Fall of the Late Bronze Age Levantine Kingdoms
as a Social Process”
Sharon Zuckerman, The Hebrew University of Jerusalem**

The 13th century BC was a time of uncertainty and culminating conflict for the peoples and polities along the shores of the eastern Mediterranean. This situation is vividly reflected in the (too) few contemporary written records of the period, such as the Amarna letters and Egyptian and Hittite documents. As archaeologists, however, we can and should make use of the detailed archaeological record of the area, especially the destruction layers characterizing the sequence of Near Eastern Tells during this turbulent period.

Destructions are highly visible in the archaeological record: they “freeze” a site at one moment of its existence, creating a window into the dynamic past, and thus are often jokingly invoked as every archaeologist’s most desirable find. But treating destruction as a single isolable event in the history of a site is misleading, and destruction and abandonment phases identified at a site should be placed within two larger frameworks: that of the site’s temporal development on the one hand, and that of the wider regional and cultural context on the other. No case of destruction can be studied in isolation of the phases preceding it, as destruction events mark the culmination of certain social, political, cultural and ideological circumstances. An analysis of a destruction should thus include not only the detailed description of the

loci of destruction themselves and a reconstruction of the last activities that occurred at the site, but also an analysis of the phases preceding the destruction and forming its context. Such a treatment might form a basis for the reconstruction of the causes of the final destruction (internal, external or combination of factors) and the identity of its agents. Given the ubiquity and prevalence of destruction layers in Ancient Near Eastern tells, especially in turbulent periods such as the “crisis years” of the 13th and 12th centuries BC, it is surprising that a systematic treatment of these phenomena was not attempted and that there is no conceptual paradigm for dealing with it. In my presentation, I would like to highlight certain aspects of the archaeological remains of selected destroyed sites, as a first step towards developing such a paradigm. I will introduce and discuss the concepts of ‘Crisis Architecture’ and ‘Termination Rituals’, and will attempt to show that these concepts can be usefully applied to the Late Bronze Age city-states of the 13th and early 12th centuries BC in the Levant and beyond. I will argue that the identification of these features in the destruction levels of these sites enables us to reconstruct mounting internal conflicts and gradual decline of the city, culminating in the final assault on the major political and religious foci of the urban elites. This reconstruction provides a plausible framework for the explanation of the destruction and abandonment of several Eastern Mediterranean sites in the 13th century BC, and hints to the important place of social and political processes within the Canaanite city-states towards the disintegration and final collapse of the Late Bronze Age system.

Contextualising Egyptian military technology in 1200 BC **Ian Shaw, University of Liverpool**

This paper examines the surviving evidence for developments in the technology of warfare practised in Egypt and the eastern Mediterranean during the Late Bronze Age. This is a complex and dynamic period with regard to the development of military equipment, with a great deal of exchange of ideas and technology between the various east Mediterranean and Near Eastern cultures and ethnic groups. The sources of evidence for this process vary from the iconography of warriors in battle reliefs to the survival of military artefacts, and the main aim of this paper is to discuss the problems involved in disentangling ethnic stereotyping from the distinct military strategies and technological systems of different regions.

How does the knowledge economy of military strategy (software) and weaponry (hardware) appear in the iconography of battle reliefs and in the terminology and tone of the near eastern diplomatic correspondence? Do the two types of source material overlap and/or correspond with one another? How are commodities (weapons), ideas (strategies) and people (mercenaries and prisoners of war) moving around the eastern Mediterranean in the Late Bronze Age? What do we know from Anatolian sources and what do we glean from Egyptian texts and images, and how well do they correlate?

1200 BC collapse: Crete & other South Aegean Islands and the case of the Sea Peoples in the Eastern Mediterranean

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The '1200 BC collapse' is a historical fact which affected many Mediterranean regions including the Mycenaean world. The nature of some events linked to this collapse is illuminated by written sources from the Near East and Egypt, although the latter do not explain in detail what initiated the collapse. Available texts deal only with the latest phases of the process, when disturbances entered the territories of the East Mediterranean states. The western peripheries of the Bronze Age Near East, such as the Aegean, were too distant to be represented in these texts, apart from a few and mostly indirect remarks, concerning probable Mycenaean involvement in political and military affairs in westernmost Anatolia. The Mycenaean world's social and political organization is probably best paralleled by that of the West Anatolian Late Bronze Age states. The occasional and fragmentary information on these states in the Hittite texts may shed some light on the political 'reality' of the Mycenaeans.

In the thirteenth century BC, the political map of western Anatolia consisted of many small kingdoms and chiefdoms, built on strong tribal identification, with borders shaped by natural geographical features. The political structures of these kingdoms or chiefdoms were unstable and often exposed to internal conflicts between different elements of ruling dynasties, which provoked the involvement either of neighbouring states or major powers from beyond the region, such as the Hittites on the east, and the strongest states of the Mycenaean world, on the west. The political structure of the Mycenaean world itself must have been very similar, but the absence of a 'superpower' on the Greek mainland, equivalent to the Hittites in Anatolia, meant that the strongest Mycenaean ruler may have played a role slightly similar to the Hittite king in the political disputes within the Mycenaean world. The political stability of this system was as vulnerable as that of the west Anatolian states, and may have depended not only on the strength and administrative efficiency of the ruling dynasty, but also on loyalty structures within different parts of the latter and the political and social situation around the Mycenaean states.

It seems that towards the end of the thirteenth century something went wrong with the stability of social structures within individual states, but also that some failures occurred in the agreements between the Mycenaean states and territories which had kept the Mycenaean *koine* for some time more or less secure. Investigations in Crete during the last three decades have brought to light substantial evidence for the reconstruction of the events at the turn of the LM IIIB and beginning of IIIC period, i.e. during the last decades of the thirteenth and in the early twelfth century BC. The changes of the entire settlement system were without precedents in Cretan history. They concerned nearly all the regions and almost every aspect of life. Only a few areas and settlements/towns survived, but even those experienced destructions, relocations, and impoverishment. The analysis of different regional landscapes and the new sites' topography suggest the involvement of a non-Aegean element which may have also been responsible for the unsettled conditions in the East Mediterranean. The increasing contacts with the Italian-Sardinian regions, attested in Crete already in the LM IIIB period, and the appearance of very defensible settlements at the beginning of LM IIIC on the southern coast of Western Crete may not be casual.

Beyond Crete, research of the problem is less intensive and the remarks on LH IIC defensive sites are isolated from the broad settlement contexts. However, the foundation, topography and fate of sites such as Koukounaries on Paros, Kastri on Astypalaia and Moulas on Karpathos (mentioning only a few sites of this kind scattered on the Cycladic and Dodecanesian islands) deserve more attention and further studies. The aforementioned sites belong to a group of relatively small, suddenly-founded and short lasting coastal citadels coexisting with the earliest and most defensible 'refuge sites' in Crete. Their abandonment (within the twelfth century BC) marked the end of the most dramatic and unsettled phase of the transition between the Bronze and the Iron Age and the beginning of the process of shaping new social and political systems in the Aegean. The paper will discuss the Cretan, Dodecanesian and Cycladic sites as different elements of the same historical phenomenon which marked the beginning of the Greek Dark Ages in the Southern Aegean and which must have been related to the '1200 BC' events in the Near East which are commonly described as the 'Sea Peoples' raids.

1200 BC – a case study from Crete **Birgitta P. Hallager & Erik Hallager, Danish School at Athens**

The site of Kastelli, Khania in western Crete is just one of a vast number of sites where one can observe some of the dramatic changes that happened around 1200 BC. Khania is one of the major settlements in the late Bronze Age Aegean, and we have sufficient evidence to show that it was in the years preceding 1200 a prosperous well-built settlement of a cosmopolite appearance with lively contacts to the northern, western and eastern Mediterranean. After 1200 the settlement continues to exist for a generation or two, but now with an entirely different appearance where much of the former glory has disappeared. To judge from the archaeological evidence the inhabitants left the coastal settlement around 1150 BC. In the paper we shall present the settlement before and after 1200 and present the evidence for its none-native inhabitants and finally speculate on the reasons for the dramatic changes which can be observed.