ΒΙΟΙ ΠΑΡΑΛΛΗΛΟΙ: ΑΡΧΑΙΕΣ ΝΗΣΙΩΤΙΚΕΣ ΚΟΙΝΩΝΙΕΣ ΣΤΗΝ ΚΡΗΤΗ ΚΑΙ ΤΗΝ ΚΥΠΡΟ

PARALLEL LIVES: ANCIENT ISLAND SOCIETIES IN CRETE AND CYPRUS

Περιλήψεις/Abstracts

Opening Session: The study of Crete and Cyprus to date

Vassos Karageorghis

Detecting Cypro-Cretan relations in the Bronze Age

In this paper I try to trace the history of research regarding the above topic, from the time when Sir Arthur Evans detected similarities between the prehistoric scripts of Crete and Cyprus to later periods, which scholars started researching contacts between Cyprus and Crete, based on archaeological evidence. I refer in particular to Proceedings of International Conferences, organised both in Cyprus and Crete, as well as to major articles or monographs which appeared on this subject during the 40 years or so which elapsed since the date of my first relevant article. I examine the archaeological evidence from major excavations in Cyprus and the Aegean which illustrate connections between the two islands and stress the reasons which may have generated such connections.

Nicolas Coldstream

Cypriot kingdoms and Cretan city-states: what parallels?

My matter of Crete and Cyprus will be the Early Iron Age. What parallels? The most immediately obvious are in death rather than life. In both large islands, interments accumulated in rock-cut family tombs, producing thousands of whole pots from which internal chronology has been extracted. Thanks to the work of James Brock and Einar Gjerstad these give us a historical life line without which we should be hopelessly in the dark.

   Less parallel and less explored are the settlements. After the Aegean migration to Cyprus the two islands went their separate ways: Cyprus towards 10 absolute monarchies, Crete splintering into about 100 towns, eventually developing oligarchic constitutions. How far can we see these political conditions on the archaeological

ground? In Crete much progress has recently been made by our Italian colleagues at Gortyn, Prinias and Phaistos, sites not overwhelmed under a Roman overlay. This causes a problem in most Cypriot city-kingdoms, but our present hopes are centred chiefly on the French excavations at Amathus, exploring an early palace and its chief sanctuary. In Crete many sanctuaries recorded in inscriptions, especially those at Knossos, still await discovery; in Cyprus, eclectic cults combining Greek, Phoenician and indigenous elements deserve more attention, especially those in the countryside.

Plutarch's parallels were between eminent Greeks and Romans facing similar challenges. How 'parallel' were the lives of early Greeks living in two islands, and of their pre-Greek and non-Greek contemporaries? In the Early Iron Age, for example, how Eteo- were the Cretans of Praisos and the Cypriots of Amathus?

In brief: specialists in Crete and Cyprus are faced with similar questions and, by comparing notes, have much to learn from one another.

Introducing Parallel Lives

Katerina Kopaka and Gerald Cadogan

Two Mediterranean island life modes, two island archaeologies. Crete and Cyprus: how near, how far?

The declared aim of this Conference is to start a discussion on Crete and Cyprus first as being islands: two of the few, truly large *isle-lands* within a "small" Middle-sea – the Mediterranean – which remains, however, The Sea for all of us, our *Mare Nostrum*, as regards our universal cultural resources.

Accordingly, this paper will start with a brief assessment of some of the main insular features of Crete and Cyprus, and the possible ancient life modes, behaviours, identities and perhaps even destinies that derive from them. Cretan or Cypriot, men or women, they were – and are – islanders! How often, until now, has archaeological research considered, in earnest, what these insularities may have meant in diachronic material and symbolic codes?

We shall then review the history of archaeology in Crete and Cyprus, starting from 1878 – the year that Minos Kalokairinos founded Cretan prehistory, and also when the British administration began in Cyprus (and archaeology began to be a serious discipline rather than treasure hunting). This will lead quickly to the systematising of Arthur Evans (with Duncan Mackenzie) and Federico Halbherr in Crete, and John Myres and, in the 1920s, Einar Gjerstad and his colleagues in Cyprus. We shall compare the methodologies behind the chronological and cultural sequences in the two islands, and their different paths in survey, excavation and classification.

This will lead, we hope, to some thoughts on convergences and divergences in the two islands' – and their islanders' – voyages through time, and a few modest suggestions about the scientific way ahead, including, if possible, attitudes to avoid in the future.

First Session: Environments, landscapes and settlements

Anaya Sarpaki and ?

We regret to say that Mary Ann Murray has had to withdraw suddenly from the Conference. We hope that another palaeoenvironmentalist will be able to take her place, and that a new title and abstract will be ready soon.

Peter Warren and Ian A. Todd

Islandscapes and the built environments: the placing of settlement from village to city-state (3rd–1st millennia BC) in Crete and Cyprus

The Braudelian three-level model (long-term processes, medium-term political structures, short-term episodes or events) well suits discussion of the location of settlement to form the Cretan built environment, particularly when interactions between the three levels are explored. The model may also be applied to Cyprus. Synthesis is much aided in Crete by the large series of intensive surveys over the last thirty years across the island and from coasts to mountains; these have hugely increased the database, especially of smaller sites. The same cannot, however, be said for Cyprus where large areas of the mountains remain unsurveyed and the settlement pattern is biased toward the foothill and coastal zones.

In Crete almost every kind of terrain had built occupation, often long-lasting after the initial foundation. Suitable land for cultivation and peripheral herding was always fundamental to location. In general terms the 3rd millennium built environment comprised independent villages on low hills and small towns with natural harbours or beaches, and their immediate territory. Regionalism developed around the turn to the 2nd millennium, including regional peak sanctuaries, and regional capitals (the first palaces) soon afterwards on already old sites. Supra-regional capitals under Mycenaean control were established at Khania and Knossos for a short period in the later 14th and 13th centuries BC. Thereafter came reversion to independent towns and villages. The disturbed social and political conditions of the late 13th and 12th centuries BC, including new Mainland Mycenaean incursions, brought about a wider range of settlement locations, some of the most difficult and inaccessible being in fact old sites reused after a long period without occupation. In the politically more stable 9th-8th centuries BC, the Dorian polities developed and Eteocretan polities continued, often on naturally defensible and in some instances eventually walled acropolis sites. These locations testify to ever-present inter-state conflict or the threat of it down to the Hellenistic period. Despite these factors the chosen locations supported exceptional achievements in material culture.

In Cyprus in the first (Philia) phase of the Early Bronze Age the settlements were basically villages, although proximity to copper deposits may have been significant. Taking the Early and Middle Bronze Ages together, settlements continue to be in the form of villages, but in the Vasilikos valley, where MBA settlement was dense, the settlement pattern suggests a distinct connection with metallurgy. In MC III and LC I a phase of instability is marked by the construction of fortresses in the north, central and eastern regions of the island. The phase is also marked by the founding of coastal sites such as Enkomi which were later to become major towns involved in

international trade. Specialized sites such as a sanctuary (?) and a pottery-making area are attested. LC II was a period of settlement on a wide scale with major centres, mainly on and near the coast. But at least in the Vasilikos valley, the growth of these centres did not result in the depopulation of the countryside. LC IIIA marks a clear change in settlement; many sites were abandoned, never to be reoccupied on any scale. Life at some large sites continued into LC IIIA, perhaps with the erection of fortifications, but gradually ceased by, or even before LC IIIB. In LC IIIB all previous sites had been abandoned except for Kition and Kouklia and new settlements were founded. Almost all of them were to become the seats of Iron Age kingdoms. The Cypro-Geometric period is poorly represented in the archaeological record of settlement although quantities of tombs are known. The Cypro-Archaic period is marked by much more extensive settlement, but the architectural record of the city sites is far from complete. In some cases excavations have concentrated on temples, but elsewhere, as at Salamis, the Archaic period settlement has not been found. Conversely sanctuaries, which are rural in location if not in nature, are quite well represented, and specialized sites associated with metallurgy, pottery manufacture, olive oil processing etc are also in evidence in the countryside.

Comparison of the archaeological evidence for settlement in Crete and Cyprus indicates that whereas rural settlement was the norm on both islands in the early part of the 3rd millennium BC, the move towards a more complex form of society occurred at an earlier date in Crete than in Cyprus. There were no Middle Bronze Age palatial structures on Cyprus in the early centuries of the 2nd millennium, but the nature of settlement architecture in this period is poorly known; some clustering of settlement may have taken place at this time associated with the acquisition of copper from the sources. The coast was generally shunned for settlement in Cyprus in the earlier Bronze Age (pre-MC III), in contrast to the situation in Crete. Another difference is marked by the apparent lack of settlement in Crete located with clear reference to the exploitation of natural resources, whereas such seems to have been relatively common in Cyprus. Major nucleations of population only occurred in Cyprus in the LC II (1450-1200 BC) coastal towns, and a settlement hierarchy of any sort only started to occur in the preceding MC III/LC I phase. Comparison of the nature of Late Bronze Age settlement on the two islands is not facilitated by the lack of understanding of the settlement hierarchy on Cyprus at this period, but the ranking of sites in the two islands does not seem to be particularly similar. Ca. 1200 BC, events on the two islands may become more closely similar with the incursion of new population and occupation of defensive (so-called "refuge") sites (e.g. Maa-*Palaeokastro*), but the implications of the occupation of such sites are not universally accepted. The wholesale abandonment of long-established sites in Cyprus and the foundation of the sites destined to become the kingdoms of the island in the Iron Age (ca. 1050 BC) does not seem to be mirrored in Crete, although contacts between the two islands are clearly in evidence. During the course of the Iron Age, the general picture of the kingdoms of Cyprus with their associated acropoleis and hierarchies of sites and sanctuaries and their apparent prosperity and sometimes inter-city warfare is generally parallel to that of Crete. Both islands ultimately became part of the globalised Hellenistic and later world.

David Frankel and Jan Driessen

Minds and mines: settlement networks and the diachronic use of space on Crete and Cyprus

The interplay of environmental, technological, social and historical factors, operating at varied scales of time and space, influences settlement networks and the diachronic uses of space. A comparison of different organisational systems provides an opportunity to examine the nature and impact of these elements, setting the local and contingent developments against broad-scale and universal processes. The present papers defines some of the major parameters and explores the ways in which specific circumstances dictated, enhanced or more subtly influenced events and patterns on the two islands, Crete and Cyprus. We find certain parallels but also contrasting elements in the diachronic use of space. For Crete, the deficiency of traditional, territorial explanatory approaches suggests the possibility of a symbolic landscape. The potential existence of imagined communities spread over geographically differing zones and across physical boundaries is explored using the interpretative possibilities offered by GIS. For Cyprus, the existence of a series of different economic systems remains the most valid framework for understanding the changing networks of relationships in most periods.

Second Session: Technologies of the hand and mind

Jenny Webb and Judith Weingarten

Seals and seal use: markers of social, political and economic transformations on two islands

This paper will look at the different circumstances in which seals and sealing systems were adopted in Crete and Cyprus and explore some of the ways in which different relationships with the external world and differing trajectories toward state formation and urbanisation on the two islands influenced glyptic form and function during the Bronze and Iron Ages. The very nature of the seal invites multiple levels of investigation: a precious possession often made of auspicious materials, in forms that designate cultural zones, with imagery that is highly charged with ritual and social meaning.

In particular we will investigate the role of glyptic as a mechanism of long-distance exchange and as an operational tool within newly developing forms of social, political and economic organisation and the negotiation of institutionalised inequality. This will allow us to define some of the ways in which different external relationships and the differing nature and timing of organisational change on the two islands impacted on seal iconography and function and to distinguish local and contingent factors from broader-scale processes.

Anna Morpurgo-Davies and Jean-Pierre Olivier

Scripts and languages in the second and first millennia

Introduction
Some strong links join Crete and Cyprus in the second and first millennia BC: first, the syllabic writing, secondly, the alphabetic writing, and, finally, the use of the Greek language. These are shared features, but they are not on the same level; they must each be judged in its own terms.

Cyprus, on the one hand, is an island which first borrowed, perhaps in the seventeenth century, the form of writing used in Crete by the Minoan thalassocracy, the Linear A script. Cyprus, on the other hand, is an island where the first arrival of peoples speaking some form of Greek probably goes back to the end of the fifteenth century, as the start of a process which through successive waves must have seen the introduction of other Greek speakers until the last wave which in the twelfth century brought the Arcado-Cypriot dialect after the end of the Mycenaean kingdoms. Differently from Crete, this dialect, of Mycenaean origin, survived and was written in two local syllabaries derived from the script of the second millennium. It was eventually phased out by the koine, written in the Greek alphabet, through a process which started in the sixth century and perhaps even earlier and which reached its completion in the third century (even if we have a few residual traces of the syllabic writing in sealings towards the end of the first century BC).

We shall discuss these borrowings, these imports or these survivals on the one hand from the point of view of the content of the inscriptions which have been preserved, on the other from that of the languages or dialects which these inscriptions attest or may have attested.

The content of the inscriptions
We shall assume that the main content of the Cretan texts, written in Cretan hieroglyphic script or in Linear A or in Linear B is generally known: in each of the three forms of writing we mainly have economic archives or documents on clay; in addition in Cretan hieroglyphic there are inscriptions on seals (and consequently clay sealings) and rare inscriptions on "other supports" whose content we cannot even guess at; in Linear A we have "votive inscriptions" on stone "offering tables" as well as some inscriptions on "other supports", which are also limited in number but are equally incomprehensible.

The Cypro-Minoan scripts of the second millennium (labelled Cypro-Minoan 1, 2 and 3 by Émilia Masson) are as undeciphered as Linear A and the Cretan hieroglyphic script and consequently their content can only be inferred with a great deal of caution.

If we compare them with Cretan and Near-Eastern documents we can at least say what they are not; they are not economic archives (we would find logograms and numbers), or letters or contracts (the latter would probably have imprints of seals which authenticate the signatures). Since none of the clay documents appear to have been deliberately baked, it is even less likely that we deal with international treaties or even library items!

For the short documents (with fewer than 12 signs) on various supports we may suppose that they indicate personal names; for the somewhat longer texts, that they are dedications; for the clay "cylinders" (one at Enkomi with 217 signs, four at Kalavasos including the longest one which has 141 signs, though it is a draft which preserves traces of three writing stages superimposed on each other) we cannot say anything. We know nothing about the content of the three fragments of large clay tablets at Enkomi, which together have some 2000 signs, i.e. slightly less than half of the corpus of the second millennium. All that we can say is that they were carefully written texts, with signs c. 50 millimetres high, arranged in two or three columns; the words were separated and no word was split between two lines; each tenth line was indicated by a large dot on the right margin.

The syllabic scripts of the first millennium (there are two varieties, the Paphian syllabary and the "common" syllabary, both derived from Cypro-Minoan 1) are used for very different contents and are preserved on all sort of unperishable supports: a bronze tablet with more than 1000 signs with a contract between the city of Idalion and some doctors, a few stone stelae with epitaphs, the walls of Egyptian sanctuaries with some signatures by Cypriot mercenaries, seals normally in stone with most often the name of the carrier, coins with their legend, ostraca, which include some of economic nature. But also various objects in metal, stone or clay, often very different from each other. Not only are we dealing with an "all purpose" script (a vocation which is shared by most scripts), but above all with a script widely spread among the people (in contrast with e.g. Linear B), which explains the diversity of supports on which we find it. If we only know some 1300 documents with a total of less than 15,000 signs (all attested over a period of slightly more than five centuries and in more than one hundred places distributed over three continents) this is due to the fact that we did never find any large concentrations of inscribed pieces (in contrast with Linear B for which we have more than 60,000 signs but spread through a period of 250 years and in a dozen findplaces only).

Languages
We are of course at the mercy of our evidence when drawing comparisons between Cyprus and Crete or between the two islands and the Greek mainland. Crete and Cyprus are unique in the Greek speaking world because in the second millennium BC they provide evidence for forms of writing in all likelihood used for non-Greek languages. They are also unique in providing inscriptional evidence in the first millennium for non-Greek local languages, the two or more (presumably different) languages, conventionally named Eteocretan and Eteocypriot. As with writing we can compare the linguistic evidence in the two islands from at least two points of view: first, in terms of reciprocal influences: who influenced whom and in what sequence? Second, in quasi-typological terms both from a synchronic and a diachronic point of view: how are writing and language used and perceived at any given moment? How do writing and language develop through two millennia?

Since we can read the Linear B syllabic script and we can make at least negative extrapolations about the other two syllabic scripts, Linear A and the Cretan hieroglyphic script, both of which are undeciphered, we assume that we have evidence in Crete for at least two different language families - Greek and non-Greek; it is not possible to say whether non-Greek refers to one language or two or more and whether it subsumes one or more language families. In the first millennium there is

direct evidence once again for Greek and non-Greek, i.e. Eteocretan with its incomprehensible short texts from Central Crete written in the Greek alphabet. It is frustrating that we cannot even guarantee that there is one rather than two Eteocretan languages. It is even more frustrating that we do not know whether Eteocretan continues a second-millennium non-Greek language, though this is the most obvious hypothesis. On the Greek side, however, we find a form of Greek which is not the Greek of Linear B, though almost certainly there are features which may continue Mycenaean features. In its turn this so-called Doric Greek is replaced by the koine in the third century or round that period. In other terms we know from Crete three different forms of Greek: Mycenaean Greek, "Doric" Greek and the koine.

If we turn now to Cyprus, we are in difficulties when we try to define the second millennium situation. The Cypro-Minoan scripts have not been deciphered; the most likely assumption is that they are used for one or more non-Greek languages. The evidence for Greek in the second millennium is only indirect, though real. There is of course the question of how to interpret the obelos of Palæpaphos which will have to be discussed largely in terms of the script. In the first millennium the situation has changed. Differently from Crete, the alphabet does not prevail; the two syllabic scripts of the first millennium (see above) are used to write a form of Greek which is classified as belonging to the Arcado-Cypriot group and whose nearest cognates are Mycenaean Greek and the dialect of Arcadia. The alphabet will eventually prevail and koine Greek written in the alphabet is the final outcome. The syllabic script is also used for the so-called Eteocypriot, which we cannot understand and believe with good reason not to be Greek; here too we may have more than one language. Once again we cannot link the Eteocypriot language(s) to one of the second millennium languages though it is highly probable that some link existed. And finally Cyprus had Phœnician settlements which have left behind Phœnician inscriptions in reasonable number.

Even this superficial account reveals some striking similarities as well as contrasts between the two islands: both Crete and Cyprus use syllabic scripts in the second millennium BC; in both islands the scripts, which are related, seem to be used for non-Greek languages, though we simply cannot say whether the languages had anything in common; in both islands the second millennium sees the arrival of the Greek language which will eventually prevail. In the last quarter of the second millennium the forms of Greek found in Crete and in Cyprus must have been reasonably similar (even if we do not have direct evidence from Cyprus). The first millennium can be looked at from two contrasting view points. On the one hand similarities: the unique preservation of non-Greek languages, Eteocretan and Eteocypriot; the high level of linguistic conservatism (preservation of [w] till a relatively late period, etc). On the other, some remarkable differences. Cypriot Greek is clearly a direct descendent of second millennium Greek so that the conservatism extends from the second to the first millennium in the language as well as in the script; Cretan Greek is dialectally different from the Mycenaean Greek of the second millennium so that we can only speak of conservatism within the limits of the first millennium. In the first millennium the Greek Cypriots clearly saw a link between language and writing: though the very earliest examples of Greek alphabet have forms which preserve long [a:], most latish texts use the alphabet for Attic or koine-like forms and the syllabic script for Cypriot; by contrast Crete is one of the first adopters of the alphabet and uses it both for the dialect and the koine. In Cyprus clearly language and writing fulfil a conscious function of self-identification; are we able to

identify with certainty a similar attitude in Crete? It remains true nevertheless that we lack an in depth sociolinguistic study of the use of writing and language in the two islands. This should take into account the way in which onomastics (particularly personal names) reveal levels of continuity or otherwise which may differ from those of the rest of Greece. At the same time we need to ask why, given the complex political history of Cyprus, we do not find more evidence for foreign influence in the Cypriot dialect of the first millennium.

J. D. Muhly and Vasiliki Kassianidou

Parallels and diversities in the production, trade and use of copper and iron in Crete and Cyprus from the Bronze Age to the Iron Age

The production and trade of copper, one of the principal raw materials in the Bronze Age, was one of the reasons behind Cyprus´ flourishing economy, especially in the latter part of the period. It is believed that it was also one of the reasons behind the establishment of contacts between the two islands, as Crete itself possessed no significant copper ore deposits and yet demanded and consumed considerable amounts of metal. Was Cyprus indeed one of Crete´s suppliers and when was this trading relationship established? In order to answer this question, both archaeological and analytical evidence will be critically reviewed. Furthermore, the history of the production and use of copper in the two islands, will be examined in order to identify parallels and diversities. An effort will especially be made to understand the diversities, which are more numerous and more striking than the parallels. For example, how can one explain the fact that excavations in Crete have produced so many more bronze artefacts than those in Cyprus, the island which boasts some of the richest copper ore deposits in the Eastern Mediterranean.

   Moving on to the Iron Age and the use of iron, a quick survey of the evidence for the early use of the metal in Crete and in Cyprus during the years c. 1200 - 800 BC suggests that like the case with copper, there were very few parallels between the two islands. Cyprus seems to have totally surpassed Crete in the early use of iron and the development of iron technology. If we look more closely, however, comparing finds from the North Cemetery at Knossos with those from contemporary cemeteries in Cyprus, we see that the two islands were actually not that far apart. What has skewed the reality of the situation is the great amount of analytical work that has been done on early iron artefacts from Cyprus compared to the almost total lack of such work on Crete. In understanding how things developed on Crete and on Cyprus a brief look at developments from Lefkandi, on Euboea, will also be most instructive.

Iris Tzachili and Joanna S. Smith

Late Bronze Age weaving in Crete and Cyprus

The Late Bronze Age (c. 1650-1050 BC) is significant for textile arts in Crete and Cyprus. At the time, travel by sea was increasingly common, leading to more distant and more frequent overseas contacts. Among the most valued of commodities for the ruling elite and merchant travellers of the Mediterranean were textiles, second in

value only to precious metals such as gold, silver, and bronze. Actual textiles from Crete and Cyprus are few and fragmentary in the archaeological record. Scraps, some preserved only in mineralised form, are found; it is also important to note those being retrieved from Thera. Cretan wall paintings illustrate the splendid garments worn by people there; seals, statuettes, and other objects from Crete and Cyprus also show what clothing was like, although in an idealised or abbreviated form. Cloth coverings for furniture and cloth for ship sails underline the everyday and special purpose functions of textiles. The Linear B tablets preserve evidence not only for the textiles, but also those who contributed to their manufacture. While the actual locations of textile production were not centralised, the central administration exercised close administrative control, especially for the circulation of raw materials on Crete. Increasingly, studies of spinning and weaving tools along with washing and dyeing installations aid in the reconstruction of woollen and linen textiles that were created in household, workshop, and industrial-scale locations. In the absence of texts on Cyprus that detail the industry, these contexts indicate the scale of production, the identities of the producers, and their likely customers. Evidence from Palaikastro, Malia, Gournia, and Knossos on Crete along with Apliki, Enkomi, and Kition on Cyprus illustrate the expansion and elaboration of the textile industry during the Late Bronze Age. Taken together, it is possible to reconstruct multi-coloured textiles from Minoan sites and patterned cloths such as tapestries from Cyprus to expand our understanding of the textile arts for the period.

Angelos Chaniotis and Sophocles Hadjisavvas

Wine and olive oil in Crete and Cyprus: socio-economic aspects

The production of wine and oil on Crete and Cyprus is attested through archaeological sources from the Early Bronze Age onwards. However, although for Crete we have an abundance of written sources concerning these economic sectors from the late second millennium onwards (first Linear B texts, later inscriptions, from the Classical period onwards also literary sources), in the case of Cyprus the almost complete absence of texts of economic and administrative nature is a misfortune for any attempt towards the investigation of the socio-economic history of the island during the prehistoric period. But exactly this difference between the two islands allows us to contrast the methods and the theoretical models for the study of viticulture and oil production. On the other hand, because of the close connection of oil and wine production and consumption with economy, society, and religion the development of these products reflects in a paradigmatic way the transformations of Cretan and Cypriot society, administration, and economy.

   Both macro-botanical and archaeological evidence attest to the presence of the olive and the vine plants as early as the Neolithic period in Cyprus, and as early as the Early Bronze Age in Crete. It is difficult, however, to make any assumptions concerning the time the two plants were brought to cultivation thus becoming part of the economic crops. No doubt, it was only after the knowledge of turning the fruits into wine and oil that the two crops acquired a real economic significance. Chemical analyses recently undertaken on Cyprus provide evidence of wine production as early as the Chalcolithic period (3900-2500 BC). From the Middle Bronze Age onwards, representations of everyday life scenes and archaeological finds give some idea about

wine and oil producing installations and transportation vessels. In Crete, in the period of the Minoan palaces and of the Mycenaean rule of Crete these activities were part of a system of collection and redistribution of goods, under the close control of a central administration and in close connection with overseas trade and with the production of secondary products (e.g., perfumes). Although the documentary evidence is lacking in the case of Cyprus, circumstantial evidence points to a more intensive cultivation of the two plants during the Late Bronze Age in order to meet the ever-increasing needs of the emerging elites. This evidence appears in the form of large capacity installations, mostly dated to the LC IIC period in combination with immense storage facilities unseen in the record of previous archaeological horizons. The capacity of the installations in relation to the storage facilities of the ashlar buildings and associated structures provide an insight into some socioeconomic aspects of the LBA societies on the island.

After the end of the Bronze Age the two islands follow quite different paths. Again, a contrast of the developments is very instructive. In Cyprus, the relationship between production and consumption is manifested in different ways, all leading to the conclusion that wine was produced for the elites, while the oil for the elite and the masses. In both cases, the elite exercised the control. The recovery of Cypriot pottery used as oil containers, that was found in Palestine is an indication for export of oil to Palestine during the Persian period. This paradox along with others related to the import and export of wine will be discussed in the presentation.

The situation is entirely different in Crete. Here, the political fragmentation combined with the establishment of a social system characterised by an one-sided orientation towards subsistence did not decrease the production of oil and wine dramatically, but changed the character of this production. As we can infer from the sources of the Archaic and Classical period, these economic sectors were an integral part of the system of the syssitia. Although there must have been limited trade with these goods within the island, the export of oil and wine did not play any significant part in Cretan economy in the Archaic and Classical period, but retained an important position in the subsistence of the Cretan communities - in addition to their use in rituals. In the Hellenistic period, the political relations between the Cretan communities and the rest of the Hellenistic world were very intense, and this lead to an increase of trade activities, which, however, were primarily limited to the trade with war booty and slaves and to transit trade. Until the late second century BC there is no evidence that can support the assumption that the character of the Cretan economy and society had changed and that the agricultural production on Crete was connected with trade activities abroad. Only the internal pacification of Crete in the last decades of the second century BC brought a substantial change, with a more intensive production of wine for export. This trend continued and increased after the conquest of Crete by the Romans (67 BC), the abolishment of the syssitia and of the military organisation of the Cretan communities, the coming of immigrants from Italy (especially from Campania), and the radical change of the Cretan social structure. In the Roman Imperial period Cretan wine was massively produced in order to be exported. We also observe a specialisation in production and the development of particular types of wine, connected with the production of amphorae. It is only from this period that we have an abundance of sources (medical authors, poets, inscriptions, amphorae, graffiti and dipinti on vases, archaeological sources) and that we can identify major production centres (e.g., Lyttos) and trade routes. This leaves no doubt

that the Cretan wine was one of the dominant products in the Mediterranean. Although Cyprus wine was praised by Strabo, and Pliny the Elder considers Cyprus wine superior to all other wines, the island was importing wines from world famous centers such as Rhodes, Thasos and Chios. As was the case with oil this perhaps took place within a complicated trade system. Although there are hardly direct sources concerning the export of oil, it is reasonable to assume that the Cretan oil production was determined by similar factors in this period. The development of these economic sectors in the course of c. two millennia supports the assumption that oil and wine production were connected with oversees trade primarily in the periods of Cretan history in which the island formed an administrative unit (Roman Empire) or in which large territories existed (Mycenaean period, late Hellenistic period), Crete was under the control of an external power (Rome, later Venice), or had close contacts with mainland Greece, the Aegean, and Eastern Mediterranean (Bronze Age).

Lindy Crewe and Carl Knappett

Technological innovation and island societies: wheelmade pottery on Bronze Age Crete and Cyprus

This paper explores technological innovation as a socio-cultural process, with a particular focus on the use of rapid rotation to make pottery. Potters on Crete and Cyprus began using wheel devices for rapid rotation in quite different periods – MM IB (c. 1900 BC) and LC IA (c. 1650 BC) respectively – but in each case this major change in production technology occurs alongside a range of other social changes and intensified long-distance interactions. Although in both instances it seems that the first use of the wheel is bound up with socio-political processes, such as the demand for finely-made artefacts for elite conspicuous consumption, in many other respects there are profound differences in the ways that wheel techniques develop in pottery production on the two islands. On Crete, on the one hand, there is a gradual increase in the range of products manufactured on the wheel, with all wares and types wheelmade by LM I (some 300 years after the initial invention); there is also a definite evolution from earlier handmade types. On Cyprus, on the other, the range of wheelmade products fluctuates over time, with early wheelmade wares showing radical changes from MC wares, and with direct emulation of features from neighbouring regions (northern Levant). Moreover, handmade techniques continue throughout the LBA for certain wares.

   The major differences in the trajectory of wheel innovations on the two islands may in part be attributable to technical reasons: on Crete it seems that coils were combined with rotation in fashioning pots on the wheel, but Cyprus may not have seen quite the same process. However, even if the process was one and the same, very different trajectories of innovation can, generally speaking, follow from the same initial invention. Such variation depends largely on socio-cultural conditions, both for the producers (how is technological knowledge transmitted?) and consumers (how far is the technology linked to particular vessel shapes that are in demand?). We will examine the very different regional and temporal contexts of the innovations on Crete and Cyprus, with a view to explaining the observed patterns in the evidence. Is there anything to suggest that technological innovation in island societies shares certain characteristics cross-culturally? Or are we seeing two parallel innovations with very

little common ground in terms of socio-cultural processes, despite their common grounding in clay?

Third Session: Economic strategies: acquisition, production, distribution, consumption

Yannis Hamilakis and Sue Sherratt

Thinking through the consuming body

This paper explores the changing social roles and meanings of consuming food, drink and other substances in prehistoric and early historic Crete and Cyprus. Here are some of the questions to be investigated: How do practices of eating and drinking relate to the processes of the negotiation of identities, and the dialectics of power? What are the extent, the role, and the social implications and effects of the phenomenon that we call feasting, and how does it relate to processes of social and political competition through time? What makes the phenomena of consumption such powerful means in the arena of identity and politics? How are the remnants of consuming food, drink and other substances (animal and plant remains, pottery, other eating, drinking and smoking/inhaling paraphernalia) deposited in various contexts, and how are these depositional processes linked to notions of place, time and memory? While this paper will focus more on detecting and interpreting these phenomena in the two contexts, it is hoped that the points raised will also provide some indirect, broader insights at both the theoretical and the methodological level, applicable to wider contexts.

Metaxia Tsipopoulou and Alison South

The economics of monumental buildings

In the Bronze Age East Mediterranean and surrounding regions, monumental buildings with a major role in economic organisation (not excluding various other functions), often called palaces, were no doubt as important to ancient society as they have been to our modern view of it. The two largest islands in the area, of similar size and both very well positioned relative to trade routes, have surprisingly different histories with regard to such buildings. Palaces have been the central issue in Minoan archaeology since the beginning. It is very significant that the chronology for Minoan Crete is subdivided into Pre-, Proto-, Neo-, (Final-) and Post-Palatial periods. Yet, despite one century of intense research in the island, and more importantly, despite many examples of this architectural form, we are still unable to fully understand their *raison d'être*, the reasons for their construction in the first place, as well as their destructions and final disappearance. It is clear that they reflect a sophisticated urban development, that they are the fruit of a long evolution, and they have strong roots in the Prepalatial society, which in its final stage was highly developed and lacked only the architectural expression of its complexity. How this architectural form was

introduced and whether it reflects also a local architectural development is also a thorny matter. Minoan archaeologists have been desperately seeking for Pre-palatial plans and features, which could argue for a local development, but the fact is that the origin of the form of the first palaces (as far as we know them) still remains a puzzle. The issue is further complicated by the excavation, in recent years, of more and more central administrative buildings in many areas of the island, which have the basic features of what Evans established as the *sine qua non* for "The Palace". One is now forced to reconsider their role and functions, as well as the degree of their independence or inter-dependence. A recent conference (on The Monuments of Minos, Louvain 2002) challenged previous stereotypes, but failed to give a generally acceptable interpretation of the social and political organization these particular architectural forms reflect. A central point in examining the palaces of Crete is to try to distinguish the Proto- from the Neo-palatial phase, as there seem to have occurred important political and social changes following the Middle Minoan IIB destructions on the island, which could be hidden by the rebuilding of many of the palaces, and the continuation of their occupation. Although the material culture seems more or less uniform all over the island in the Protoplatial period, it is by no means certain that the social and administrative organisation was also uniform. The use of two different scripts in the Protopalatial period (Linear A and Hieroglyphic) might be significant in this respect. The Neopalatial system was probably different, and a supremacy of Knossos over the whole of the island is not unlikely. The so-called villas, large buildings, having industrial, and probably administrative function, in connection with relatively large scale storage capacity, and often the presence of written documents in them, could point into that direction. It is also very significant to note that after the collapse in Late Minoan IB, the Minoan Palatial System was succeeded by a different system, the Mycenaean. The fact that the administrative documents of Knossos in Late Minoan III are written in Greek and can be read, further complicates the issue, as we cannot decide how far one is allowed to trace similarities and even comparisons with the previous administration, whose documents have not been deciphered. Also in this Creto-Mycenaean period, the various megara in many areas of Crete did not necessarily have the same function(s) as the earlier minoan palaces (or even the villas). After the destruction of the Mycenaean palaces the situation changed again radically in Crete, as well as in the rest of the Aegean, and in the various small settlements one can detect the roots of what was to become the Greek Civilisation of the Early Iron Age.

In Cyprus, there are many contrasts with the Cretan situation, among which it is essential to appreciate that due to a very different scholarly background our viewpoint is not from the same angle. The nature and quantity of relevant archaeological evidence is also very different and further, ancient administrative texts which can be read are lacking (for most of the Bronze and Iron Ages). Monumental buildings with a major economic function, together with urbanism and other features of complex society, appeared surprisingly late in Cyprus, and were not contemporary with the floruit of the Minoan palatial system. Relatively few examples have been excavated, and we have been reluctant to define any as a "palace" except for one or two examples from late in the Iron Age. Three good examples of 13th century BC administrative buildings in southern Cyprus were large and well planned with impressive ashlar masonry, substantial storage facilities, inscriptions (undeciphered), and seals or sealings; they were probably central to the economic organisation of small agricultural and copper-producing regions. In contrast the eastern city of

Enkomi contained many impressive ashlar buildings, but none which stands out very clearly or has been widely accepted as a "palace". Interpretation of these buildings relates to wider questions concerning the Bronze Age political and economic organisation of the island. Evidence is lacking for whether elements of the Late Bronze Age economic system as expressed in monumental buildings survived into the Iron Age - the Late Bronze Age administrative buildings were not at sites which continued into the Iron Age. The few known Iron Age candidates for palatial or administrative buildings are widely scattered in time and space and the interpretation of many is disputed, although there are examples (Vouni, Idalion) which can probably be accepted by all as "palaces". New influences (Phoenician, Persian, Greek) came into play and must be assessed.

It is difficult to account for all these differences, and any attempt to do so must include consideration of the two islands' differing geography, natural resources, and relations with the mainland, as well as the many other aspects of society to be discussed at this conference.

Jennifer Moody and Louise Steel

Hinterlands and hinterseas: a comparison of Cretan and Cypriot resources and their exploitation from the early 3rd millennium to the end of the 1st millennium BC

Our paper compares and contrasts aspects of the organization of resource exploitation in Crete and Cyprus from the 3rd millennium through the end of the 1st millennium BC. We are concerned with how resource similarities and differences impacted the cultural trajectories of the two islands, especially in terms of production. Climate, geology, environment, agriculture, gathering, herding, hunting, minerals (metals, clay, stone) fishing, murex production, settlement patterns, intra-island exchange and long distance trade are taken into account.

Although Crete and Cyprus are both large islands in the Eastern Mediterranean, in terms of landscape and resources they are poles apart. Crete with its multitude of micro-climates is environmentally more diverse than Cyprus. Its resources, however, are fragmented and repetitive, encouraging the proliferation of small-scale, self-sufficient polities. Cyprus, on the other hand, is richer mineralogically than Crete; its resources are also less fragmented. These differences in the nature and distribution of resources have profoundly influenced the organization of production on the two islands — as reflected in settlement patterns — from the 3rd millennium BC.

For example, in 3rd millennium Crete settlements increase strikingly along the coast. Vibrant ports such as Mochlos develop alongside small villages. The emphasis on coastal settlement and the concomitant increase in exotic materials, demonstrate the importance of overseas procurement at this time. Although household production seems to be the norm for most goods, there is increasing evidence for specialised craft centres.

In Cyprus at the beginning of the 3rd millennium there is an apparent shift in occupation to the lower reaches of the Troodos mountains, reflecting early

exploitation of the island's mineral resources. This is associated with the introduction of new architectural forms indicative of new patterns of domestic organisation. Overall the picture is one of small self sufficient villages.

The proximity of the two islands to continental margins has also played a decisive role in the organization of their production. Crete being more remote than Cyprus, was less subject to external pressures and occupation. However, as the centre of the Mediterranean world shifted westward during the 1st millennium BC the island's position became more central, eventually becoming a standard port-of-call on the grain trade route between North Africa and Rome. Cyprus, although geographically less central, remained an important part of the Roman world because of its mineral wealth, the large-scale, agricultural richness of the Mesaoria, and its important regional sanctuaries.

Fourth Session: Ritual expressions in cult and burial

Anna Lucia D'Agata and Antoine Hermary

Ritual and cult in Crete and Cyprus in the second and first millennia BC: towards a comparative framework

The many and marked differences in the socio-political developments of Crete and Cyprus in the second and first millennia BC make any comparison between the cult activity of the two islands of an extremely peculiar type. While a unified culture is shared on Crete since at least the Early Bronze Age and the emergence of complex societies is a very precocious phenomenon, the social fragmentation of the earliest phases of the Bronze Age, the deep changes of the Late Bronze Age, and the formation of kingdoms in the first millennium appear as landmarks of Bronze Age and Iron Age Cyprus. Nevertheless, beyond single objects connected to cult which circulated in both islands, a few recurrent patterns of behaviour of cultic nature are discernible within socio-political contexts which, independently from chronology, may be considered similar. We shall concentrate on the use of cemeteries as main focus of cultic activities, the adoption of independent buildings as sanctuaries, the use of "ruins" as sacred areas. Finally, in order to achieve a better definition of larger, cultural patterns of behaviour on Crete and Cyprus, the kind of relation with the mainland (respectively Greek and Anatolian) in terms of cult activity, and the "continuity of cult" at the end of the Bronze Age and the beginning of the Iron Age will be taken into consideration.

Giorgos Papasavvas and Sabine Fourrier

Votives from Cypriot and Cretan sanctuaries: regional *versus* an island-wide radiance

The votive assemblages from Cretan and Cypriot Iron Age sanctuaries vary greatly in their types and distribution patterns and indicate that sacred places had a distinct

status in each of these islands. Although it is clear that a uniform picture for the whole of the one or the other island and for the entire Iron Age cannot be formulated, there is an evident difference in the choice of offerings and the distribution of workshops within each island which produce them. At least this seems to be the case for the most prominent sanctuaries of Crete and Cyprus.

This difference can be taken to reflect the two totally diverse political systems, the Cretan poleis on the one hand and the Cypriot kingdoms on the other, and the strategies employed by Cretan and Cypriot votaries in maintaining their political institutions through cult and sacred places. Thus, on Crete, among many sanctuaries of local importance, there have been some that were functioning at an infra-regional scale, receiving votives from various places of the island and operating with no obvious attachment to a single city. On Cyprus, on the contrary, even the major sanctuaries of the Great Goddess at Palaipaphos or Zeus in Salamis are primarily connected to the kingdoms they were established at, and cannot raise any claim of a island-wide radiance. Accordingly, Cypriot offerings to the Gods are overwhelmingly of local production, that is from workshops operating in the vicinity of the sanctuaries. In both cases, the patterns of distribution of votives and the ascertainment of their place of production helps to define political boundaries and strategies. Although there are some notable exceptions, cultic and political geography seem to have corresponded to each other in most cases.

Moreover, whereas some Cretan sanctuaries receive "exotic" offerings from the East in rather large numbers, very few imports are attested in Cypriot sanctuaries, even the most important ones. This is of course not due to a lack of foreign contacts, since such imports are common in contemporary tombs, but again to a different strategy of the votaries, and in particular of the elites in the decisive phases of the formation of the Greek cities and of the Cypriot kingdoms.

Priscilla Keswani and Eleni Hatzaki

Mortuary practices and ideology in Bronze-Early Iron Age Crete and Cyprus: comparative perspectives

Did the mortuary practices of Bronze-Early Iron Age Crete and Cyprus involve "cults" as this term is generally defined and as it is applied in Archaic and later Greek historical contexts? We shall discuss the problematic usage of expressions such as "tomb cults" and "cults of the dead" in their respective study areas and time periods, along with the related question of whether the material remains of mortuary practices are better interpreted as evidence for "funerary rites" or "ancestor rituals" as distinguished by Barrett (1994). The thorny issue of what, if anything, mortuary practices can tell us about beliefs concerning the afterlife is also addressed. The authors then focus their attention on long-term changes in the relationships between the living and the dead in Crete and Cyprus, with particular consideration of the dynamic articulation between mortuary rituals and socio-political transformations. The paper concludes with a discussion of cultural differences and similarities in the ideology and practices pertaining to death in Crete and Cyprus from the third through the early first millennia BC.

Fifth Session: social, political and institutional developments

Alexandra Alexandri and Diane Bolger

Gender and social complexity in prehistoric Crete and Cyprus
Issues of gender, agency and identity are central to an understanding of "parallel lives" in prehistoric Crete and Cyprus, yet they have scarcely been incorporated into traditional models of social complexity in the archaeology of either island. Genderless narratives tend to project an anonymous, faceless past that obscures issues of social agency and implicitly privileges males as the primary agents of social change. In the first part of this paper we challenge traditional narratives by discussing some of the ways in which genderless approaches to the past have distorted our understanding of social developments on both islands. In the second part we consider some of the archaeological evidence for long-term changes in technology, material culture and social organization in Crete and Cyprus that shed light on the interfaces between gender, agency and social complexity on the islands during their prehistoric and proto-historic occupations.

Jeremy B. Rutter and Sturt W. Manning

Spatial ranges of material cultural complexes: diachronic variations in identity at the scales of site, region, and island in Bronze Age Crete and Cyprus

The word "regionalism" is a term often invoked in discussions of the material culture of Bronze Age Crete and Cyprus, but all too rarely defined in any detail. The variable significance of this term as applied to discrete aspects of the long and dense archaeological record on the two islands (e.g. burial customs, ceramics, architecture, metallurgy, glyptic, sculpture, iconography, settlement patterns, faunal and botanical assemblages, etc.) is one facet of the broader topic of spatial variation that merits comparative investigation in the context of this conference. A second is diachronic change in the nature and degree of "regionalism" exhibited in the culture history of each island. A third is the range of scales (from site to region to all-island) at which spatial variation is manifested on Minoan Crete as opposed to Bronze Age Cyprus. Finally, some comparative assessment of how "regionalism" as a concept may have been or is currently being employed in explanations of cultural change on the two islands is called for, with an assessment of the utility of appropriate future descriptors.

These issues may be most profitably explored by way of a few case studies specific to one island but with potentially significant implications for or analogies in the cultural history of the other. In all likelihood, the most closely comparable situations will not occur at the same times or even in the same relative positions in the developmental histories of the two islands, but this need not adversely affect the utility or interest of the comparisons in question. For Crete, the analytical foci will be the Prepalatial era (essentially the entire Early Minoan sequence), the Neopalatial era (Middle Minoan III through Late Minoan IB), and the ups and downs of Knossocentrism, with respect to the Late Minoan II and IIIA periods in particular. For Cyprus, the targets of particular attention will be the Philia (culture, phase, or facies) question, the Middle Cypriot period, and the key but controversial Late Cypriot I

period through to Late Cypriot IIC. The onset of what is usually considered to be pronounced "regionalism" in the 12th century BC on both islands may receive only minor consideration due to constraints of time.

Christina Hatzimichael and James Whitley

Differential complexities: political evolution, devolution and re-evolution in Crete 3000-300 BC

The political history of Crete is particularly difficult to understand. This paper proposes that two means be used to understand the peculiarities of Cretan political structures in both the Bronze and Iron Ages. The first is the "threshold argument": communities larger than 500-600 individuals cannot function as 'relatively egalitarian' societies; both politics and ritual are needed. Site size affects but does not determine structure, and another approach is needed. The second means is what might be called the "negative argument" – determining what Cretan political communities were not. For clearly the "palace states" (if that is what they were) of Old and New Palace Crete are not directly modelled on (though they may be inspired by) the Near Eastern palaces, and functioned quite differently. Second, the austere, oligarchic Cretan "polis states" of late Archaic and Classical times differ sharply both from mainland "polis" states and from Cypriot kingdoms. The paper will be devoted to exploring these differences, taking specific archaeological arguments from both North Central and Eastern Crete, and focussing on three key periods: the "formative" period of Prepalatial and Protopalatial times (EM III–MM II); the end of the Bronze Age (LM IIIA-IIIB), where we appear to have functioning towns that are not clearly part of any state structure; and late Archaic to Classical times.

Edgar Peltenburg and Maria Iacovou

Cyprus and Crete: contrasting political configurations

The absence of obvious palaces in Cyprus during the Middle and Late Bronze Ages presents a striking contrast with Crete and its imposing "palaces". To the extent that palatial organisations characterise virtually all societies in the East Mediterranean, the Cypriot situation is often presented as generally anomalous. This has led to interpretations of its socio-political structure as one of chiefdoms or oligarchies. Yet integration of textual analyses with archaeological studies means that we must consider the fact that Cyprus, referred to with the toponym Alasia in Near Eastern, Egyptian and Anatolian state archives of the second millennium, was treated as a state with, in the later 13th century BC, a king, Kismesusu. As many have pointed out, there is a poor fit between the existence of a state and material correlates for statehood in the archaeological evidence of Bronze Age Cyprus. Few, however, have noted that the situation is not much different in the Iron Age. We owe the identification of Cypriot 'kings' to inscriptions in different languages (and different scripts) of the (late) 8th to 4th centuries BC; not to state archives, nor to edifices that conform to a single architectural plan - an identifiable palatial model.

In this paper, we intend to put forward:

- first, that re-assessment of the variety of contemporary Bronze Age states indicates that expectations are based on imposed neo-evolutionary models that overlook the existence of a much greater diversity of Ancient Near Eastern state structures, whose political leaders were acknowledged (epigraphically) as kings;
- second, that a re-configuration of Late Cypriot statehood recognises de-centralising tensions, ones that were resolved at the end of the Bronze Age in favour of economically independent and politically autonomous territorial authorities.

In Crete, a fundamental change occurred, one that wiped out its indigenous Bronze Age palatial organisation (as well as its pre-Hellenic language) and substituted it with a completely new Iron Age model, the preponderantly Dorian "oligarchic Cretan polis state" (Hatzimichael and Whitley, this conference). In Cyprus, the first millennium "city-kingdoms" developed smoothly from the island's own idiosyncratic state model. Irrespective of the state language that was fostered within each kingdom's boundaries, the royal families - Greek, Phoenician or Eteocypriot in terms of their linguistic identity - continued to support with fervour the same intractable tradition of political segmentation. They would probably have continued to do so even after the end of the fourth century BC, had they not been brutally exterminated for this very reason. They were the living representation of the island's indigenous political configuration. They had to die with it if the people of Cyprus were to redirect their allegiance from their small polities to the Ptolemaic empire.