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7: MINOAN CULTURE: RELIGION, BURIAL CUSTOMS, AND ADMINISTRATION

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RELIGION AND CULT PRACTICE

In the modern world, Western societies tend to separate religion and ritual from other aspects of society in a way that ancient or "primitive" societies did not. In ancient cultures religion was an integral part of daily life, including the treatment of the deceased after death. For a heavily agrarian society, cult practice centered on daily and seasonal activities and on human involvement with a perceived supernatural world. Although it is difficult to reconstruct belief systems without documentary evidence (below, pp. 173–82), the archaeological record preserves much evidence for ritual equipment and activities. What makes Minoan society interesting, as well as difficult for us to understand, is the apparent overlap between religion, society, and politics. Some of these issues have been addressed in detail,[1] but no consensus has emerged among scholars – an impossibility, perhaps, in any discussion of religion!

We assume that the foundations of Neopalatial religion were laid in the Protopalatial period, and probably much earlier, in the form of cults at caves (some at quite remote locations), at sanctuaries on mountain peaks throughout the island where offerings were made of terracotta human and animal figures, and at communal tombs, often deliberately situated to provide easy access from the homes of the living (Ch. 4, p. 93). At the time of the first palaces, there is evidence for the existence of small shrines outside the palaces, and for the adoption of certain symbols such as the **horns of consecration** (shaped like abstract bull horns; Ch. 6, p. 148) and short stone blocks ("altars") with incurved

sides. The palaces, moreover, may have promoted some official or public cults alongside personal or private belief systems for individuals (Ch. 5, p. 114). What is noteworthy, however, is that Crete lacks evidence for the large formal temples that are such a common feature of contemporary cultures such as those of Egypt and Mesopotamia, and the evidence for depictions of divinities in the form of cult statues is ambiguous at best.

With society's increasing focus on the major palaces and administrative centers at the beginning of the Neopalatial period, control of public religion and cult practice may have become increasingly dominated by the palatial elite, especially at Knossos. Although the number of peak sanctuaries on the island actually declined overall, activities at a few select sanctuaries (such as Mt. Iuktas near Knossos) became more intense, and the offerings richer and more varied. The connection between palace and peak should be emphasized because it is a feature that clearly distinguishes Crete from other ancient societies. One regular form of cult activity, perhaps with social overtones, was the periodic visit or pilgrimage to these peak sanctuaries, where food and drink was consumed and offerings were made at bonfires.

Kato Syme, high on the slopes of Mt. Dikte overlooking the south coast of Crete, was an important open-air sanctuary apparently unconnected with any major settlement, and perhaps inaccessible during the winter. Nevertheless, Kato Syme shows evidence of both Proto- and Neopalatial cult activity, with clear indications of cult continuity into the historical period, when the sanctuary was sacred to Hermes and Aphrodite. Below an imposing waterfall, small ritual structures were laid out on a steep slope around areas that included large bonfires and places where votive offerings such as stone offering tables were deposited.

Most ritual equipment was portable and was stored in small rooms or closets when not in use (as at Nirou Chani; Ch. 6, p. 149): metal double axes (some large and clearly meant for public display, others small and made of gold or silver appropriate for dedications), tripod offering tables, and stone and pottery vessels (both are often found in pairs). A special class of stone ritual vessels includes bull's head **rhyta** (ceremonial vessels) for holding and pouring liquid offerings and carved relief rhyta with scenes of men and male activities (Ch. 6, p. 158). Ivory was used mainly for statuettes of men, such as the elaborate youth from Palaikastro (Ch. 6, p. 160; Pls. 6.9, 6.10); the ivory "goddesses" in modern museums appear to be fakes.[2] Faience was used instead for statuettes of women and for plaques of female costumes clearly meant

for suspension. Bronze could be used for votive figures of both sexes, alongside the traditional terracotta examples. The portability of all these objects suggests that there were few fixed or permanent locations for religious ceremonies – activities could be staged in different locations as needed. The Zakros palace, for instance, had storerooms with built-in clay chests that contained stone chalices, maces, and faience shells, all of which may actually have been used in the adjoining "banqueting hall" or the central court nearby (Fig. 6.5).

Engraved sealstones and metal finger rings (or their impressions in clay) provide additional evidence of ritual activities and the locations where they occurred. Women and men tend to appear in sexually segregated groups, except on a few sealstones and in a few of the Knossos frescoes where large numbers of people are gathered (the "Grandstand" and the "Sacred Grove").[3] The west and central courts of palaces may have served as the gathering points for these large groups. Although there were few, if any, built temples in the Classical Greek sense, small tripartite shrines are depicted repeatedly, often associated with small trees or large plants – men may pull on the branches, men embrace boulders, and men and women can appear in dances that have been characterized as ecstatic. The tree-pulling, boulder-embracing, and dancing may have been designed to provoke the divine epiphany of a goddess or god (Chs. 6, p. 159; 11, p. 279; Pl. 6.1).[4]

Some of these shrines depicted in art are so flimsy they may have been only facades set up at certain times and then dismantled. On a carved ivory fragment from Ayia Triada, two young girls garland flimsy pavilions set up on bases and crowned by horns of consecration, perhaps temporary constructions. The Zakros Sanctuary Rhyton (Pl. 7.1) depicts a peak sanctuary consisting of a tripartite façade with horns of consecration and "masts" set in the background like a backdrop for the courtyard in front (below, p. 180). This contains two altars: one a long, rectangular table and the other a Minoan incurved base – examples of both have been found at Archanes.[5]

Few images of goddesses or gods can be recognized beyond doubt. Because so many representations of important women survive, some scholars have hypothesized the existence of a supreme Minoan goddess, or of a whole series of goddesses. A suggested compromise proposes the existence of one main goddess with various aspects.[6] That these are speculations, rather than fact, should remind us again how nebulous our reconstruction of Minoan religion still remains.

Most convincing as the depiction of a goddess is the appearance in some scenes of a large woman, often placed centrally, seated on a rocky outcrop, built platform, throne, or abbreviated palatial architecture, and attended by extraordinary or supernatural animals such as lions and griffins (Pl. 7.2). Other depictions are more controversial. One such "mistress of animals" who could represent a divinity wears unusual headgear with wide, curving horns, surmounted by a double axe (the so-called **snake frame** headdress) whose significance is disputed. Other women may hold a staff (scepter or spear?) stiffly out in front of them in what is called the "Commanding Gesture," a conventional pose that could denote either divine or temporal authority. The figure of a man in similar pose on a clay **sealing** (a lump of clay impressed by a seal) from Chania (Pl. 7.3) has likewise been interpreted as a god or as a ruler; he stands atop a cityscape that includes a cliff, cave, and waves, perhaps depicting the ancient harbor of Chania itself.[7]

The presence of unusual animals is sometimes interpreted as signifying the divinity of the anthropomorphic figures that they accompany. These animals include lions and other felines, griffins (with eagle heads and wings and leonine bodies; Figs. 11.5c, 11.5e), Cretan **agrimia** (wild goats), monkeys, and various birds. Lions, griffins, and monkeys are clearly exotic creatures, associated with rulers or divinities in other ancient cultures of the eastern Mediterranean; their presence on Crete (Pl. 7.2) suggests a borrowing on at least the iconographic level. The presence of agrimia in a variety of Minoan scenes such as the Zakros Sanctuary Rhyton (Pl. 7.1) likewise suggests that they signaled something special.

Another clear instance of iconographic transfer from the supernatural realm is the figure of Taweret, a hippopotamus goddess associated with women and childbirth in Egypt.[8] She appeared on Crete in Protopalatial times, and continued in later periods, but we cannot be sure if the Minoans kept her original religious meaning when they borrowed and changed her image. On Crete, these creatures often hold libation jugs for pouring offerings, but they also have lion heads and perform a range of other activities. Because the image continued to evolve in the Aegean, this being is often called the "Minoan **genius**," and the Mycenaeans adopted her as well (Ch. 11, pp. 275–6, 279; Fig. 11.5d).

During the Neopalatial period, Minoan religious iconography and even specific cult practices such as peak sanctuaries and associated equipment spread off Crete to some of the "Minoanized" sites in the Cyclades

such as Ayios Yioryios on Kythera, Akrotiri on Thera, Phylakopi on Melos, and Ayia Irini on Keos (Ch. 8, pp. 189–97). Possibly this spread represents a form of religious colonialism with political overtones, similar to the role that the Catholic church played in the European colonization of the New World, the Far East, and much of the rest of the globe from the fifteenth century CE onward.

Most experts accept that the Ayios Yioryios peak sanctuary on Kythera, with its bronze and terracotta figurines and stone vessels (including one with an inscription), functioned like its religious counterparts on Crete. Similarly, Cretan style frescoes have been found on Melos, on Keos, and especially on Thera. Xeste 3 at Akrotiri on Thera (Ch. 8, pp. 192–3) had an intriguing fresco depicting two young women flanking a seated "Wounded Woman" with a bleeding foot, above a **lustral basin** (small sunken room of unknown function; Ch. 6, p. 148) on the ground floor; an adjacent wall shows a shrine façade and tree, motifs familiar from Cretan religious iconography. On the second floor of Xeste 3 another complicated scene (Pl. 7.2; Fig. 7.1) depicts a woman in Minoan costume, seated on a stepped architectural platform and attended by a blue monkey, a leashed griffin, and four young girls – the woman flanked by her exotic animals can be accepted as a (or the) Minoan goddess. A later sealstone, now in the Benaki Museum in Athens, shows a man standing on horns of consecration between a winged agrimi with a lion's body and a Minoan genius – like the Akrotiri goddess, he too should be divine.[9] As we travel farther afield, the evidence for Minoan religion becomes more tenuous and harder to interpret: the faience "sacral knots" and lion and bull's head rhyta in the Mycenae shaft graves could represent exotica rather than an adoption of Cretan belief systems (Ch. 11, pp. 259–61).

A special class of objects, stone offering tables, were dedicated at peak sanctuaries. Many of them carry a formulaic inscription in the script known as Linear A; these inscriptions seem to refer to a single goddess, "*JA-SA-SA-RA*" (below, pp. 174–7). Another aspect of Minoan religion is debated as well: the possible role of animal sacrifice, which is such a prominent feature of Greek religion in historical times.[10] Because of the repeated depiction of bulls and bull-leaping at Knossos (frescoes and relief frescoes, stone rhyta and relief vessels, terracotta vessels and figurines, seals, sealings, and finger rings), the capture of and playing with bulls as a prelude to sacrifice has been investigated from a number of viewpoints.[11] Because some scenes show bulls trussed on low tables, there seems little doubt that some of them were killed and consumed, in a practice that may have been social, religious, or both.

But in contrast to the historical period, there is little indication that portions of the animal were burnt as offerings to a divinity.[12]

More disturbing are the indications of possible human sacrifice in the Knossos area. A basement room in a LM IB house west of the palace contained cooking pots and the bones of several children that appear to have been defleshed deliberately.[13] Such defleshing is a practice in later Greek culture, but some have suggested that the children had been cannibalized, perhaps as the result of siege conditions or as an extraordinary sacrifice. At Anemospilia south of Knossos on the route up to Mt. Iuktas, a stone building (way station?) collapsed in an earthquake at the beginning of the Neopalatial period, burying four individuals, one of whom, a young male, was lying on a platform next to a lance blade. The excavator thinks the young male had been sacrificed[14] (he may more likely have been the victim of a hunting accident); without a complete and detailed excavation report it is difficult to interpret the event.

Finally, we should note that Minoan religion might have fluctuated considerably during the Neopalatial era. And it probably contained local elements; hundreds of sealings at Zakros, for instance, were impressed with the faces of three-sided prisms that depict bull-women, lion faces carrying snake frames, winged goat-men, and other strange monsters. At a number of sites, like Palaikastro, objects like stone horns of consecration were discarded or reused as building material during LM IB, perhaps indicating resistance in parts of the island to the tenets of established religion following the destabilizing eruption of the Thera volcano (Ch. 8, p. 189). Other locations, such as the island of Pseira, were given a relief fresco of a goddess and other cult equipment only in LM IB, following the eruption. What can be said with certainty is that the widespread destructions at the end of LM IB marked a significant change in Minoan religious practices.

Burial Customs

Despite the impressive remains of Neopalatial habitation sites, the accompanying cemeteries have proved elusive, leading some scholars, such as ourselves, to wonder if some Minoans of the New Palace period were buried at sea. Recent excavations, however, are helping to redress this imbalance, though most of the burials uncovered thus far represent the elite members of society, not the common people. The large

FIGURE 7.1. Goddess in upper fresco from Xeste 3, Akrotiri, Thera. Drawing by Paul Rehak.

cemetery at Archanes–Phournoi (Pl. 7.4) extends over much of the long ridge below and to the north of Mt. Iuktas, and includes burials that run continuously from Early Minoan times through the Proto- and Neopalatial periods into the Late Minoan period. A wide variety of practices are represented, however: **tholos** tombs (round domed tombs), burial in built structures, **inhumation** (burial) and the use of terracotta sarcophagi, and the collection of skulls following the decomposition of the body.

Several cave tombs were found at Mavrospelio northeast of the Knossos palace, now augmented by the discovery of half a dozen pit-cave tombs used for successive inhumations (many of them warrior graves and burials with bronzes) excavated at Poros near Herakleion, one of the port towns of the Knossos area.[15] The Odos Poseidonos tomb at Poros consists of an antechamber and two main rooms with built dividing walls. Material from the earlier burials was brushed into a pit to make room for new arrivals, continuing an earlier Minoan practice. Though the tomb was partially robbed in antiquity and the entrance passage used for a dump, skeletal material – especially skulls – survives from a score of individuals. Some of these burials included rich grave goods: sealstones of semiprecious stone and an imported scarab, a gold finger ring and silver earrings, beads of various semiprecious materials, many small cups, an ivory comb, and plaques from a boar's tusk helmet. The complete lack of bronze and precious metal vessels suggests that the looters may have targeted these objects.

The Leophoros Ikarou tomb, located nearby, was similar in form but included an antechamber with a carved pillar along with several rooms. Once again, earlier burials were collected and redeposited in special areas, especially the skulls, which far outnumbered the complete bodies. Significantly, the use of the tomb began in MM IIB and expanded in Neopalatial times to the end of LM IB. In addition to the ubiquitous cups, there were signet rings of gold, silver, and bronze, an imported Canaanite amphora, more sealstones, and a wide range of personal ornaments.

In both tombs, individuals were laid to rest initially on plain or painted wooden biers or beds, sometimes deposited atop a low, built platform or dais. Significantly, this burial practice foreshadows by some seven centuries the later Greek rituals of **prothesis** (mourning the deceased on a bier) and **ekphora** (carrying a bier to a grave site) that we see on Late Geometric vases (Ch. 13, pp. 338–9; Pl. 13.2). The Minoan burials in Neopalatial sarcophagi at Archanes–Phournoi remind us that at least two types of funerary rites coexisted in Crete, but only in the succeeding period (LM II–IIIA) would sarcophagi begin to carry painted decoration that included the human figure.

Finally, two unique and enigmatic funerary structures deserve mention: the so-called Temple Tomb just south of Knossos and the Royal Tomb to the north at Isopata.[16] Both constructions seem to belong to the latter half of the New Palace period. The Temple Tomb was partially built into the side of a hill, with an open courtyard separating

an anteroom from a pair of chambers with a pillar; skeletal material (some of later date) suggests a funerary function for the building. The Royal Tomb, dismantled during World War II, consisted of a **dromos** (entrance passage) leading to a large, vaulted, rectangular chamber where the dead were buried. These different structures illustrate inventive approaches to funerary architecture for elite individuals or families in the Knossos area.

WRITING AND ADMINISTRATION

We first see administration on the Greek mainland in EB II, a sealing administration adapted from that which had already operated in the Near East for a millennium (Ch. 2, pp. 30, 34–5). Basic administration is simple: certain people and regions are expected (i.e., taxed) to produce specific goods; these are collected at an administrative center and redistributed back to the people.

A simple scenario for Minoan Crete would go like this: administrators at the regional center assess several villages to provide the state with a certain number of bushels of olives and jars of wine (both products ready for consumption by February). By the due date one village has contributed its total assessment, but other villages have made only partial payments – we can assume the remainder eventually will be paid. As the commodities enter the palace for storage, the administrators in charge tie string around the handles of the bushels of olives and over cloths that cover the mouths of the wine jars. Over the knots of these tied strings they then press lumps of clay and impress the clay lumps with the engraved seals and finger rings provided by the state; these sealings authenticate the transaction (Fig. 1.3). After the standardization of seal shapes at the beginning of the Neopalatial period, the styles of the engravings began to change in regular succession to correspond with major changes in administration. If olives and wine can be represented by tokens, say olive pits and grape seeds, and if the quantities needed are standardized (each bushel with a specified volume, each jar with a specified quantity of wine), then the entire transaction can be conducted without writing: as each village contributes its olives and wine, the administrators move the representative numbers of pits and seeds from an already established pile (the assessment) to create a new pile representing the commodities brought into the system. When the commodities are redistributed, specific quantities of wine and olives,

for example, going for state-sponsored ceremonies and other quantities to towns and people that provide other commodities to the state, then that amount of seeds and pits is removed from the "income" pile. At the end of the auditing period, the remaining wine and olives are counted in the storerooms and matched against the remaining tokens in the income pile. If the numbers match, then the procedure has been conducted honestly. Something like this system was probably happening at the Early Helladic II sites such as Lerna, where quantities of sealings have been recovered (Ch. 2, pp. 34–5; Pl. 2.1). These sealed string that tied the pegs of baskets and chests, perhaps containing textiles.

So few sealings survive from Early Minoan Crete that it is not yet possible to say whether a sealing system like that on the Greek mainland existed on the island at that time. At the very beginning of the Middle Minoan period, however, several sealings from Knossos testify not only to a sealing system of administration but also to writing (Fig. 1.3; Ch. 5, p. 130). A sealing system without writing can record income and expenditures but it cannot specify names, and the early Knossos sealings were impressed by seals bearing the name "*JA-SA-SA-RA*" in the script commonly known as Cretan Hieroglyphic (below, pp. 175–7); *JA-SA-SA-RA* may be the name of a goddess akin to the Hittite "Esha-sara" or the Levantine "Asherah."[17]

There were four scripts in preclassical Crete. All were syllabaries with approximately 100 signs, each of which represented either an open vowel, such as *a* or *e*, or a consonant plus vowel, such as *da* or *de* (Ch. 1, pp. 12, 14). The scripts also included "logograms," signs that stand for entire words such as the signs for "wine" and "olives" (and in Hieroglyphic and and in Linear A and B), and there were signs for pure numbers (base 10 system, like ours), standardized capacities (such as the bushel and wine jar and their subunits) and weights (such as the *talent*, 29 kg or 64 lbs.), and both common and unusual fractions. A few signs resemble Egyptian hieroglyphic signs, but not, apparently, with the same phonetic values.

Cretan Hieroglyphic is not a religious script (as the term "hieroglyphic" should mean) but a pictographic script, where many of the signs seem more like cartoons of common animals (such as a bull head for "*MU*") and things (such as a double ax for "*A*"). Because Hieroglyphic writing was often messy, the scribes usually prefixed an initial "X" to the beginning of words and phrases, to let the reader know where to start. Linear A (Pl. 7.5) began developing almost immediately (MM IB or IIA) from Hieroglyphic. Its signs present cursive

and abstract versions of Hieroglyphic signs (hence, "Linear"; cf. Linear A for "MU" and Hieroglyphic for "*MU*"), and the words and phrases are written on ruled documents with clearly marked dots to separate the words. In MM II and III Hieroglyphic and Linear A were apparently written simultaneously at the major sites of Knossos, Malia, and Phaistos.

Although we do not see Linear B until much later, it apparently began developing from Linear A early (Ch. 1, p. 14). Cypro-Minoan, another script derived from Linear A, appeared on Cyprus also early; the first CM document dates to the sixteenth century BCE. There may have been other early scripts in the eastern Mediterranean influenced by Linear A.

Cretan Hieroglyphic was incised onto sealstones (many of which record the name of the presumed goddess "*JA-SA-SA-RA*"), stone and clay vessels, and clay documents. The last come primarily in three different shapes, each presumed unique to a specific administrative function (Fig. 1.3): sealings over knots of string, "medallions" pierced to hang from a loop of string, and small rectangular bars that present administrative summaries. Linear A is found on different kinds of clay documents: sealings over knots of string, prismatic sealings over tightly wrapped leather "packages" (Pls. 7.3, 7.6; probably written documents on parchment), "roundels" that look like discs and are impressed by seals around the rim, and neat rectangular clay tablets (Pl. 7.5). Linear A inscriptions also appear on a variety of other objects: clay pots and storage vessels, gold hair pins, the insides of cups painted in a spiral (a gold finger ring also has a long inscription incised in a spiral), and many offering tables – but only one seal carries a Linear A inscription. Cretan Hieroglyphic and Linear A may have been written contemporaneously, but perhaps on different kinds of documents for different purposes or even different administrations.[18]

A few words appear in both Linear A and Linear B (the Mycenaean writing system, deciphered in 1952 as Greek; Ch. 1, p. 12); we can therefore be certain of the phonetic values for about 15 Linear A syllabograms, though the language written in it has not yet been deciphered.[19] For the other signs that look similar in both Linear A and B, scholars assume a similarity in phonetic values; with caution we may postulate similar phonetic values for signs in Hieroglyphic that look like predecessors to Linear A and B signs. Many Hieroglyphic and Linear A documents, especially the clay bars and tablets, record the same basic administrative transactions described above (pp. 173–4): the logogram for the commodity and a large number (its assessment), names of towns

or people, and their payments or non-payments. Linear A tablets often record subtotals of payments and deficits, each amount preceded by a two-syllable word, "KU-RO" for "payment" and "KI-RO" for "deficit." Hieroglyphic also records similar words preceding similar subtotals, "*KU-RO*" for payment but "*KI-RU*" for deficit. Because other words occur in both Linear A and Hieroglyphic (including important place-names and other transaction terms), it is likely that the scribes writing Hieroglyphic and Linear A were writing the same language – that which we call "Minoan."

What the Minoan language was, however, we are not sure. Because the earliest habitation levels in Crete betray a full knowledge of developed Neolithic culture and many of the objects look Anatolian in inspiration, it is presumed that Crete was deliberately colonized by people from southwest Anatolia (Ch. 4, pp. 79, 98–9). If so, the Minoan language may have developed from one of the languages in that region, perhaps Luvian. Other scholars see Semitic influences in Minoan,[20] but these depend solely on Semitic loanwords, such as "sesame," a word that appears in both Linear A and B (and English!). Because Hieroglyphic and Linear A documents are mostly accounting lists and because we have very few of these (only about a page and a half of Hieroglyphic when compressed into a single-spaced statement, and only about six or seven pages of Linear A), we therefore see only a few words whose prefixes or suffixes change according to grammatical function. Some words could be verbs, ending in *-SI* (singular?) or in *-TI* (plural?), such as '*U-NA-RU-KA-NA-SI*' and '*U-NA-RU-KA-NA-TI*' in the Libation Formula below. Other words look as if they could be Indo-European adjectives, ending in *-I-JA* (feminine?) or *-U* (masculine?); and some words look like nouns in an objective case ending in *-ME*, such as "*JA-SA-SA-RA-ME*" in the Libation Formula below. So far, however, Minoan resembles no single known language.

One of the more intriguing Linear A texts is the so-called "Libation Formula" that occurs on some 30 artifacts, most coming from peak sanctuaries.[21] The Formula consists of eight words. The first word occurs in many spelling variants, some of which transpose syllables (an invocation?); the fourth through eighth are always the same. The second usually consists of an identifiable place name ("*DI-KI-TE*" for Mt. Dikte, "*I-DA*" for Mt. Ida, and "*SE-TO-I-JA*" probably for Mt. Iuktas), whereas the third is always different and therefore is probably a personal name (or, in the case below, the names of two persons). Here is how

the formula goes when it is complete (the place name and the names of two people as found on a libation table from Palaikastro):

1: introduction	2: place name	3: personal names	4: Jasasara
A-TA-I-*301-WA-JA	A-DI-KI-TE	PI-TE-RI A-KO-A-NE	JA-SA-SA-RA-ME

5: 'dedicate' ?	6. Ipinama	7. Sirute	8: 'and' Inajapa
U-NA-RU-KA-NA-TI	I-PI-NA-MA	SI-RU-TE	I-NA-JA-PA-QA

We do not understand the formula completely but we can imagine the sense of it to be something like, "Oh! at Mt. Dikte, Piteri and Akoane dedicate [this] to Jasasara, something, something, and something."

The fourth script appears primarily on the Phaistos Disc (Pl. 7.7), a unique object found in a bin in the northeast corner of the palace (along with a Linear A tablet, but no distinctive pottery to suggest a date other than early Neopalatial at the latest). About the size of a large cookie, the disc was incised on both sides with a spiral and then stamped with individual metal stamps (like cookie-cutters) to create the signs that run along the spiral. Because some signs overlap their neighbors, we know that the inscription was stamped from the exterior to the interior, and probably should be read that way. Vertical lines divide the words, and every so often the last sign in a word receives an oblique stroke under it, as if to mark the end of a phrase. There are 45 different signs on the disc and 7 more on a bronze ax from Arkalochori; if there were more than 52 signs in the complete Phaistos signary, it too was probably a syllabary. Arranging the words by their apparent phrases (the oblique strokes), we can see that both sides end with similar series of phrases. The phrases on side A begin with similar signs, and those on side B end in similar signs, suggesting repetitious phrases on A and rhyming phrases on B. For these reasons, it is likely that the Phaistos Disc records a poem or song, or, if it is religious, as some suppose, a chant or hymn.[22]

HOW MINOAN SOCIETY OPERATED: POLITICS AND BELIEF SYSTEMS

If Crete in the Neopalatial period was heavily urbanized across most of the island, then it is difficult to imagine it fragmented into mutually exclusive states; instead, we should imagine a centralized political control, Knossos with some sort of hegemony symbolized by its throne, with secondary (Phaistos, Malia) and tertiary (Galatas, Gournia, Petras) regional centers, along with large (Chania) and small (Gournia) towns and farms (Ano Zakros, Zou; Ch. 6, pp. 150–52). The centers collected commodities as taxes from specialized producers and redistributed them to the general population. For this, the centers undoubtedly provided a navy and army to protect the population from piracy and brigandage, some kind of justice system to maintain order, a road system, and state-sponsored festivals and ceremonies that created a sense of divine protection and cultural identity. A similar set of functions characterized Mycenaean states, for which we have written as well as archaeological evidence (Chs. 12, pp. 292–303; 13, pp. 350–52, 354–6).

The dense urbanization also implies that the inhabitants enjoyed some kind of mobility. Under what circumstances a general freedom of travel could exist is difficult to imagine, or for what purpose other than commerce and pilgrimages to regional festivals. We have some evidence for business in the modern sense. Standardized weights and measures and complicated transaction documents reflect an agreed-upon system of exchange and procedure. Bronze "oxhide" ingots from many sites and a stone weight with an octopus in relief all weigh approximately a Minoan talent (29 kg or 64 lbs.). The inscribed **pithos** (large storage jar) from Ano Zakros states that it holds 32 Minoan units of wine. If filled to the brim it would have held 998 liters (or 32 units of 31-plus liters). But the pithos would not have been filled to the brim, and so the Minoan unit would have to have been less than 31-plus liters. If the Minoan unit was the same as the Mycenaean unit (28 liters) the pithos would have held 896 liters. Finally, an odd document sealing found at Chania was impressed twelve times with eleven seals, perhaps indicating as many as eleven individuals involved in a transaction. The Linear A documents, unlike those in Linear B, do not seem to characterize individuals or list large numbers of people. Only the Harvester Vase, a stone relief rhyton (below, p. 181; Ch. 6, p. 158), depicts a large undifferentiated group of male workers led by an important man and his overseers. The workers carry winnowing fans or flails but no produce; perhaps the scene represents nothing more than the owner of a villa leading his seasonal

agricultural workers to the fields or orchards. It is possible, therefore, to imagine much of the population free, and free to travel when they needed.

Society was ranked, however; the differences in domestic architecture (for example, the houses of Gournia that share partition walls, and the more elegant independent residences such as Nirou Chani (Pl. 6.7), villas, and farm complexes) and the differences in costume (long robes or work shorts for men) make it clear that people differed greatly in status and wealth. Evidence from frescoes also suggests that Minoan society was sex-segregated, at least at ceremonial gatherings. The Grandstand fresco portrays women in elegant flounced dresses sitting together and apart from a large undifferentiated red mass of men dressed (like the agricultural workers on the Harvester Vase) only in breechcloths with codpieces, their chests and limbs bare. In the Dance in the Grove fresco these lightly clad men and formally dressed women watch several women dance in what may be the West Court at Knossos.[23]

The representations on sealstones and in frescoes show major gender differences as well. There are clear representations of powerful men and women, but their power is expressed in different ways. Female deities usually sit on a platform associated with a small built structure, perhaps an altar or shrine; animals and people bearing gifts approach them. In a couple of instances the women are accompanied by supernatural animals, a leashed griffin in the fresco from Xeste 3 at Akrotiri (Pl. 7.2), Thera, and "genii" on a gold finger ring from Tiryns on the mainland (but datable to the very end of the Neopalatial period). Far fewer representations depict what could be male divinities: men who stand between two rampant lions or who hold griffins on a leash.

Powerful human men also appear: men standing erect hold out a staff in front of them in the Commanding Gesture, as on the "Master" seal impression from Chania (Pl. 7.3), and on the Chieftain Cup from Ayia Triada; and in the ship fresco from the West House, Akrotiri, men sit bundled up either alone in open shipboard cabins or under awnings.[24] Several important human women can also be detected, but they are not obviously wielding or enjoying power. In frescoes and on gold signet rings women are portrayed in a variety of settings: kneeling in a luxuriant rocky landscape, dancing in a courtyard, getting dressed, picking crocus flowers, holding or fingering necklaces.

Several women and men toward the bottom of the social scale also appear. In frescoes from the West House at Akrotiri, a woman has fetched water from a fountain and now carries it back in a jar balanced

on her head; men take out goats and bring back sheep; soldiers in line march off to duty; and townsfolk, both men and women, eagerly expect the arrival of important men in festive ships, each paddled by a cramped line of hard-working sailors.[25]

More women than men, however, appear in powerful roles, at a larger relative scale, and their importance seems assured by the number of them who sit on camp stools, stools like hassocks, and thrones (chairs with arm rails and backs). Besides the throne at Knossos, several other stone seats have also survived; Evans made the interesting comment that the tops of these seats have been hollowed to suit a woman comfortably.[26] The throne at Knossos faced a lustral basin and was flanked by benches, but in the other palaces we find only benches, no thrones; perhaps we can imagine a powerful woman on the throne at Knossos flanked by male counselors, and similar arrangements at the secondary centers. At Ayia Triada the benches in room 4 could seat more than twenty-five people – perhaps too many for a cabinet meeting! – and next door is another complex of a **polythyron** (room with pier and door partitions) and a narrow shrine that once contained a fresco of a kneeling woman in a luxuriant garden landscape with crocus and lilies. On the opposite wall is a mountainous scene with more plants, along with cats and agrimia. Connecting these scenes is a woman or goddess standing among myrtle plants in front of an architectural platform.[27]

Women are not the only ones associated with religion; the stone relief vases depict only men at peak sanctuaries, but we know from the terracotta figurines left at peak sanctuaries that women attended them as well – perhaps at different times. For example, the Sanctuary Rhyton from Zakros depicts a peak sanctuary in its entirety, but no people (Pl. 7.1; above, p. 167); on the top of a mountain sits a shrine approached by steps all surrounded by a tall wall. Agrimia lie on top of the shrine and others scamper in a rocky landscape strewn with clumps of crocus plants whose flowers have all been plucked – except for one clump that retains most of its flowers. Does the vase imply that girls have been there, gathered the crocus, and left? And does the absence of human figures imply we should anticipate the next visit, that of men? Akrotiri's Xeste 3 fresco and paintings at Knossos identify only girls and monkeys as crocus-gatherers, an activity that probably took place in late October, when the autumn crocus produces the saffron stigmas.

Bull-leaping was probably another seasonal activity, perhaps in the late spring or early summer after calving;[28] it is possible that it and its subsequent events may have corresponded to the Bouphonia festival in classical Athens in early July. From various depictions in fresco,

on seals, and on ivories we can reconstruct almost the entire cycle: young men first had to net and subdue huge wild bulls of the now-extinct species *Bos primigenius*; at some point, youths also wrestled bulls to the ground, and may even have trained them, having presumably brought them back to palace compounds. Both young men and young women, to judge by the color conventions in fresco (red flesh for men and white for women), leapt the bulls, probably in the central courts (there are architectural arrangements at Phaistos and Malia for providing temporary barricades along the sides to protect the spectators).[29]

In the late Neopalatial period, the representations of bull-leaping have the leapers grabbing hold of the bull's horns, anticipating that the bull would toss its head obligingly back so the leaper could be flipped over the bull's head to land feet-first on the bull's back before finally jumping neatly off onto the ground. Front and rear assistants helped with the leap. And all this while the bull was charging! In the LM II–III period, however, the sequence changed: leapers stood on an elevated platform or on an assistant's shoulders and when the bull charged they flung themselves headlong over the bull's neck to push off with their hands on the bull's withers and execute a somersault before landing on the ground (Fig. 11.5b). Several seals and a panel on the LM IIIA Ayia Triada sarcophagus show the slaughtering and butchering of bulls, and it is possible that the bull-leaping ceremony ended with the sacrifice of the bull and general feasting.

There must have been other celebrations and ceremonies at other times of the year; the calendars of the classical period and of our own time are full of get-togethers to celebrate agricultural seasons and religious events. The Harvester Vase (above, pp. 178–9) portrays agricultural workers going out to the fields singing. If they are threshing wheat, as their flails suggest, this must have occurred in early summer, as their light clothing also attests. The naval procession depicted in the fresco from the West House, Akrotiri, probably celebrates the opening of the sailing season in late April. To predict these events, the Minoans must have had some notion of astronomy, heliacal risings of important stars like Sirius, and the procession of the zodiac – peak sanctuaries would have offered ideal locations for studying the stars.[30]

The most vexing problem for students of Minoan culture is the secure identification of rulers and gods. The goddess in the fresco from Xeste 3, Thera, attended by extraordinary animals and girls (Pl. 7.2), may correspond to Artemis (known in Linear B),[31] but other depicted divinities are difficult to identify by name. Because mythological animals such as griffins, sphinxes, Minoan genii, and winged agrimia logically

belong to the divine world, the human figures they attend (the seated woman amongst the crocus gatherers in Xeste 3, Akrotiri, and the male figure on the Benaki sealstone [above, p. 169][32]) should be divinities. Without these mythological creatures, other humans in powerful poses such as the Commanding Gesture or being saluted by other humans are probably powerful mortals.

The prominence of females in Neopalatial art, important mortal women and goddesses (by the definition above), makes it possible to imagine that women dominated Neopalatial society, perhaps even politics. All human societies, however, ancient and modern, have been patriarchies with men in positions of authority; no matriarchy has ever been documented. But Neopalatial Crete offers the best candidate for a matriarchy so far. If Neopalatial Crete was matriarchal, or partially so (in religious matters?), we might imagine that when the Mycenaeans took Crete over, presumably after LM IB, they imposed a patriarchal system, perhaps even violently, thus accounting for the LM IB destructions by fire and the concomitant loss of many Minoan art forms, many of which are religious (see, however, Ch. 12).

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