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THE ARCHAEOLOGY OF FERTILITY AND BIRTH: A RITUAL DEPOSIT FROM CHALCOLITHIC CYPRUS

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The recent discovery of a pit containing figurines and a building model at the Chalcolithic site of Kissonerga-Mosphilia in Cyprus sheds important new light on our understanding of fertility and birthing rituals before the Bronze Age. Although figurines of similar type have been found in Cyprus and elsewhere in the Mediterranean prior to the discovery of the Kissonerga deposit, their precise functions have often remained elusive on account of their fragmentary state and unstratified find contexts. Close scrutiny of the contents and context of this deposit has yielded a wealth of information regarding the use and function of the objects it contained and enables us to make important inferences regarding their ritual use. In addition, ethnographic studies of traditional fertility and birthing ritual allow us to amplify these inferences by providing a cross-cultural framework for the interpretation of their social and cultural significance.

EXCAVATIONS BY THE Lemba Archaeological Project at Kissonerga-Mosphilia in Cyprus have been underway since 1982, when soundings near the coast several kilometers north of Paphos (Figure 1) revealed the first remnants of an important settlement of the Chalcolithic period (ca. 4000–2300 B.C.).¹ A plan of the settlement after ten excavation seasons illustrates some of the salient features of the buildings, including a long-standing tradition of predominantly, though not exclusively, circular architecture and internal features such as partitions, postholes, and centrally disposed hearths (Figure 2). The finds recovered from in and around the buildings have revealed a culture still firmly rooted in the stone tool tradition of the Late Neolithic period, but one for which metallurgy in copper was by no means unfamiliar. Other artifacts such as finely painted handmade pottery, dentalium shell necklaces, picrolite pendants, and a wide range of stone and pottery figurines testify to increasing levels of technical achievement, wealth, and social complexity. Study of the evidence thus far has made it possible to divide the nearly two-millennia-long cultural sequence into five successive periods from the Late Neolithic period to the beginning of the Early Bronze Age (Peltenburg and Project Members 1987:1–2).²

The present article focuses on a discovery made at the end of the 1987 season when test trenches were sunk in order to refine the excavation strategy for the remaining digging seasons. Near the wall of one of the Phase 3 circular buildings (994 on Figure 2) and cut down from an extensive extramural surface immediately below the building was an oblong flat-bottomed pit, Unit 1015

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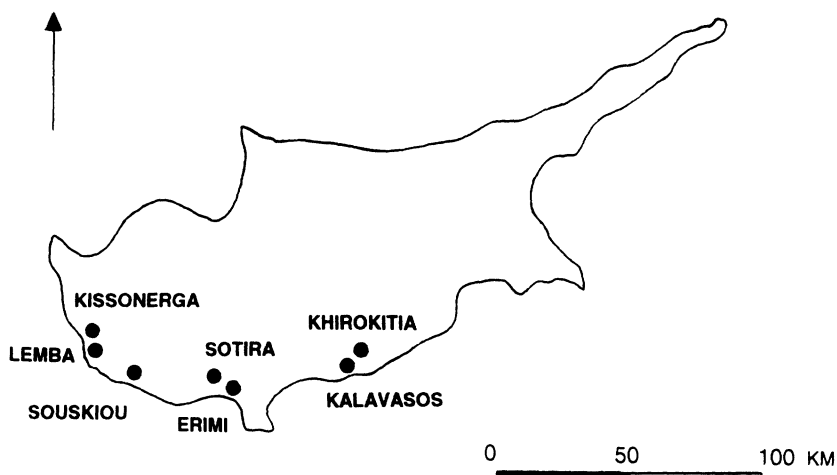


Figure 1. Map of Cyprus with Locations of Sites Mentioned in Text

(Figure 2), containing not the customary refuse or burial remains but an unprecedented assemblage of artifacts, fire-cracked stones, pebbles, and organic material embedded in a matrix of soil and ash. More than fifty objects of pottery, stone, bone, and shell were found in the pit. Close scrutiny of the stratigraphy and arrangement of the finds has verified that the contents are deliberate deposits rather than backfill.

The focal point of the group was a Red-on-White ware vessel lying *in situ* at the bottom of the pit adjacent to one of its walls (KM 1446, Figure 3). To judge from its circular plan, rectangular entryway, central hearth, and internal dividers, the vessel was modeled in imitation of a Chalcolithic building. A rectangular door found leaning against the interior wall of the vessel had been designed to swivel in socket-and-bracket attachments, perhaps conveying the manner in which actual buildings at Kissonerga were constructed. Painted designs on the interior and exterior walls of the vessel may have been intended to replicate decorative features of some of the buildings, since remains of painted plaster have been found inside several of the excavated structures (Croft 1987:4–5). The model has no parallel prior to the well-known Vounous model a thousand years later (Dikaos 1940).

On technical and stylistic grounds, the vessels in Unit 1015 are datable to the Middle Chalcolithic period (ca. 3000 B.C.), as are many of the objects packed tightly inside the model or wedged between the vessel and the wall of the pit. Detailed analyses of all finds from Unit 1015 appear in the final excavation report, *A Ceremonial Area at Kissonerga* (Peltenburg and Project Members 1991). For present purposes, only a small group will be discussed and illustrated.

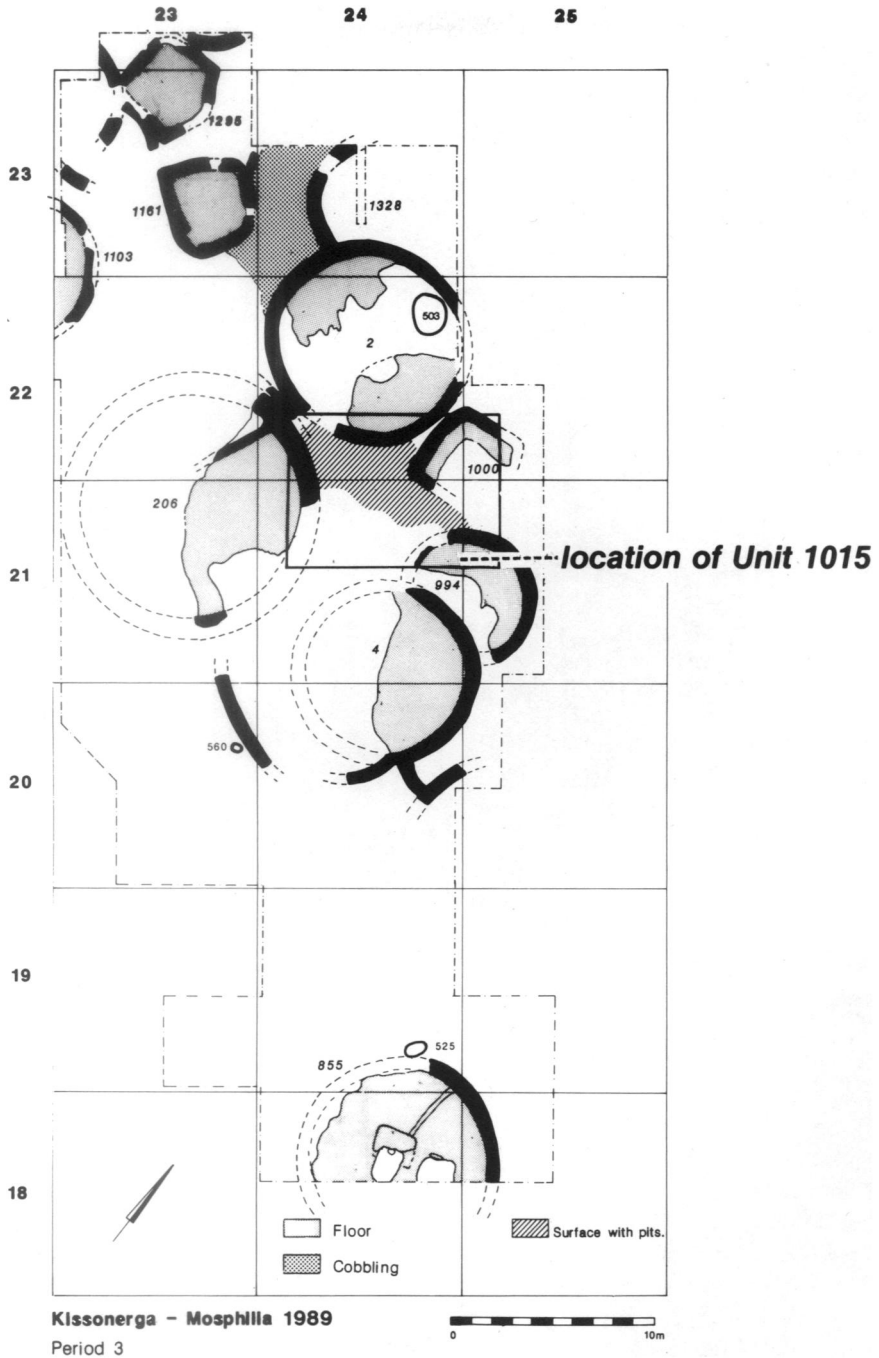


Figure 2. Kissonerga-Mosphilia: 1989 Excavation Plan

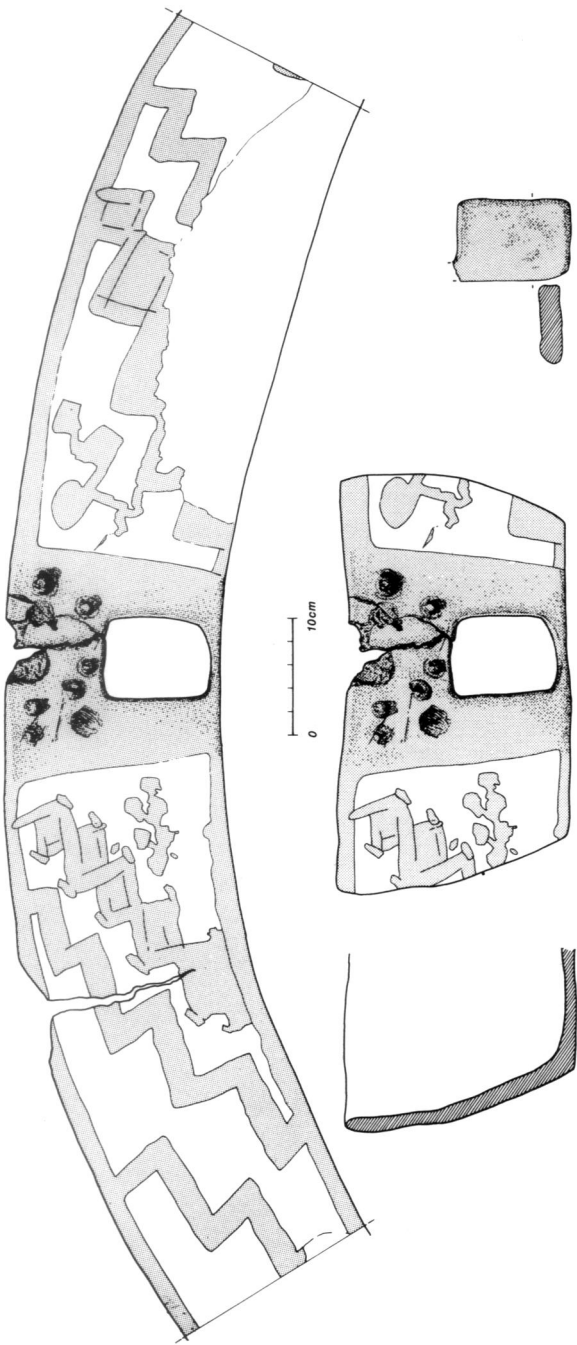


Figure 3. The Kissonerga Building Model (KM 1446)

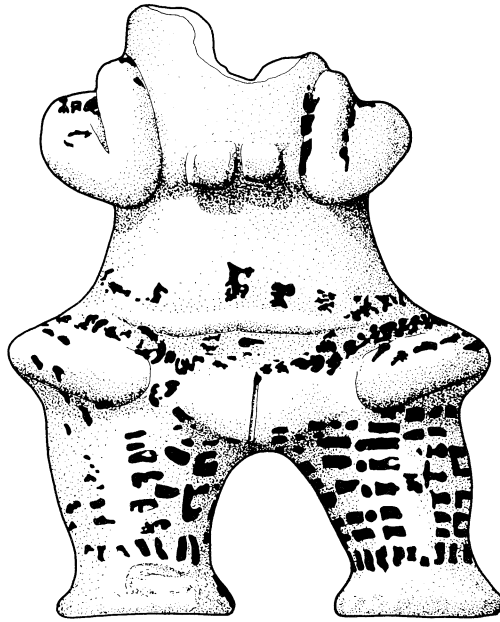


Figure 4. Anthropomorphic Figurine (KM 1475)

Ten stone figurines ranging from 13 to 17 cm in height were found in the deposit; all but one were abstract in form. In addition, eight pottery figurines were included; all are Red-on-White ware, the same as the building model, and they range in height from 9 to 20 cm. Some of the pottery figurines are freestanding, including a large hollow example with massive body, wide hips, and swollen belly (KM 1475, Figure 4). Others are seated on stools. KM 1451 (Figure 5) is an example of the seated type, although the stool is missing. Beneath the belly of this figurine, a child schematically painted in red is depicted emerging from between its mother's legs. The association on KM 1451 of the seated position with the act of birth allows us to generalize and interpret the other seated examples as birthing figurines and the stools as birthing stools.

Among the other objects in the deposit was an anthropomorphic vessel with beaked nose, bulging eyes, and prominent punctured mouth (KM 1449, Figure 6). It was found resting upon the rim of the building model. Immediately above it rested two large fragments of Red-on-White ware bowls which had been carefully placed on top of the deposit as "lids." Inside the model, amidst the vessels and figurines, lay a triton shell. Triton shells occur elsewhere in Cyprus, the Aegean, and the Levant in ritual contexts, but again not before the Bronze Age.

Although many of the above-mentioned finds have no precise parallels at

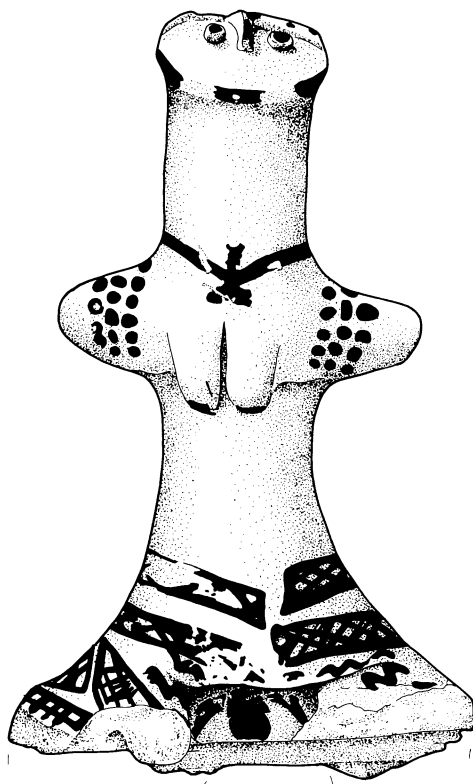


Figure 5. Anthropomorphic Birthing Figurine (KM 1451)

other sites on the island, figurines akin to the Kissonerga examples have been found at a number of Chalcolithic sites (see illustrations in Vagnetti 1980, South 1985, Bolger 1988, and Peltenburg and Project Members 1985 for recent examples). There has been much speculation concerning the meaning and function of Chalcolithic figurines. Did they represent mother goddesses? Did they serve as fetishes or votive objects in rituals of sympathetic magic? Or were they merely children's toys? Prior to the discovery of the Kissonerga deposit, we had not been in a position to answer these questions with any degree of specificity since previous finds have been fragmentary and unstratified. With the Kissonerga deposit we can proceed much further, since here we have been furnished with evidence not only of ritual objects but of the ritual activities that incorporated them.

CONTEXT AND RITUAL

In a recent work on the archaeology of cult, Renfrew (1985:19–20) has drawn up a list of “behavior correlates” (artifacts and associated actions) shared

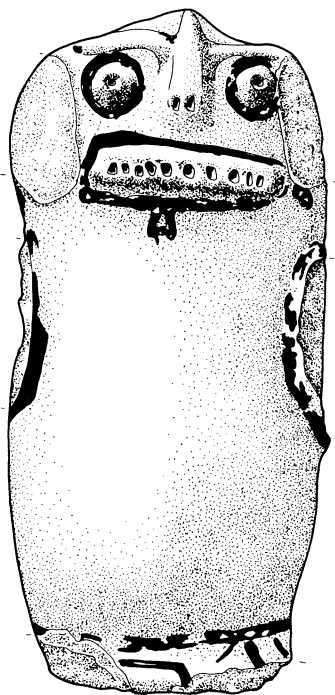


Figure 6. Anthropomorphic Vessel (KM 1449)

by practitioners of communal rituals in preindustrial societies which is intended to serve as a general guide to the identification of ritual centers within prehistoric settlements. The list includes the existence of a “special” place where rituals were enacted, evidence of burnt or liquid offerings, particular portable equipment, special facilities such as altars or benches, and certain objects such as votive figurines and “attention-focussing devices.”

According to these criteria, it would appear beyond question that activities of a ritual or ceremonial nature were enacted at Kissonerga. Although the pit feature itself does not appear to be morphologically “special,” it is one of a group of pits containing fire-cracked stones and burnt debris which distinguish it from the vast majority of Mosphilia pits. Unit 1015 is further distinguished by its contents, and, indeed, the technical and iconographical affinities of the representational objects within this deposit attest to its “special” nature.

Abrasion patterns on the surfaces of the figurines suggest that at least several had been used or handled before they were buried (Goring 1991:51–52). Building model KM 1446, another important component of the assemblage, was also abraded and, like several of the other vessels and figurines, exhibits signs of deliberate breakage. Among those objects deliberately mutilated was the anthropomorphic vessel, KM 1449 (see Figure 6), for which there is no parallel

in Cyprus. Its monstrous expression is quite startling and merits its classification among Renfrew's "attention-focussing devices." Deliberate breakage of the "ears" and base of this unique vessel can be inferred from observable fresh breaks in places where we would not expect them to occur naturally. KM 1449 was apparently designed to contain some liquid, an offering or libation perhaps; in any event, its unusual form is suggestive of the more mysterious, hidden aspects of the rituals into which it may have been incorporated.

If establishing a generic ritual context for the Unit 1015 deposit is a relatively straightforward exercise, interpreting the precise functions and symbolic meanings of the artifacts and reconstructing the rituals in which they were employed are formidable tasks. We have no direct evidence concerning the specific functions of these objects, nor do we have knowledge of the rituals which were performed in conjunction with their use, or whether those ritual activities were accompanied by music or dance, prayers or other incantations. We are constrained by the physical, material evidence—the relics of events through which we must work in order to speculate upon more remote, metaphysical phenomena. However, evidence pertaining to the formal aspects of the objects and their contextual associations can be enhanced by ethnographic analogy. While keeping in mind the inherent dangers involved in this process, we can use the evidence of the deposit itself as a foundation for the careful application of ethnographic data; observable data of manufacture, use, and context thereby serve as a skeletal framework onto which we shall attempt to restore bits of the original cultural flesh.

In the pages that follow, functional and ritual aspects of the figurines and pottery vessels from Unit 1015 will be explored on the basis of their specific attributes and contexts and by recourse to cross-cultural ethnographic evidence for fertility and birthing ritual. The latter includes ritual offerings associated with fertility and birth, the use of figurines, their deliberate defacement, and their ceremonial burial.

THE USE OF FIGURINES AND OFFERINGS IN PROCREATIVE RITUAL

Careful inspection of the figurines in Unit 1015 has established beyond question that they are closely connected with fertility and birth (Peltenburg and Goring 1991; Goring 1991). Of the ten stone figurines from the deposit, eight are abstract and lack any indication of gender. The other two employ techniques of modeling and incision to emphasize buttocks, swollen belly, and pubic triangle. The pottery figurines appear unambiguously to be female, as indicated by modeling for breasts, swollen bellies, hips, buttocks, and pubic area. The frequency of features suggesting pregnancy and in one case birth (KM 1451) demonstrates that the focus of artistic expression is on fertility rather than sexuality. Despite the overall similarities among the figurines, Goring (1991)

has succeeded in distinguishing various groups on the basis of posture, execution, damage, and wear. These observations are crucial to a functional analysis of the figurines and will be considered in greater detail below.

Much of the ethnographic evidence for the use of votive objects in fertility and birthing rituals reflects societal fears concerning, and attempts to overcome, infertility. C.S. Ford's early study of human reproduction concluded that over 50 percent of the societies considered had "negative attitudes" toward women who did not bear children (Ford 1945:36). While medically speaking those women may not have been infertile, culturally they were judged to be at fault. In traditional societies, therefore, women, rather than men, are more likely to undergo "treatment" by a variety of remedies to promote conception and facilitate birth. These include medical treatments, which demonstrate the social regard of infertility as an illness, and spiritual remedies, based on the perceived role of the supernatural in procreation, in which attempts are made to influence fertility through use of spells, charms, offerings, or consultations with a medium. For the present purposes we shall address the latter since they often entail the use of figurines and other offerings similar to those of the Kissonerga deposit.

One of the largest private artifact collections ever amassed in Africa is a group of nearly a thousand clay figurines once used in puberty rites and rites of matrescence by Bantu tribes of Tanzania (Cory n.d.:17). In his account, which unfortunately is not dated (although his collection began in 1926 and continued into the 1930s), Cory bemoans his frequently foiled attempts to learn about the specific functions of the figurines, for even by the 1930s, many of the rituals involving their use were becoming obsolete and informants were often hesitant to disclose carefully guarded secrets. These difficulties notwithstanding, Cory managed to piece together the basic events that took place during the ceremonies: figurines were commissioned from local craftspeople, who carried them to the initiation hut; in the hut they were incorporated into ceremonies involving the singing of ritual songs. Figurines also had a didactic purpose, emphasizing community values regarding sexuality, conception, procreation, and motherhood (Cory n.d.:52-65). Traditionally, Bantu initiation ceremonies lasted several months. Although Cory does not mention what happened to the figurines at the conclusion of the ceremonies, we can infer from his ability to collect them that they were either reused or simply saved.

Two further examples illustrate alternative uses for fertility figurines. Ford (1945:37), citing Ratray (1927:54), describes a doll-like Ashanti figure, known as the *Akua'ba*, carried around by an expectant mother as a good luck charm to ensure a healthy baby: "its long-shaped neck and beautiful head will help her bear a child like it." Dolls and good luck charms such as these are forms of sympathetic magic intended to promote a successful birth. Finally, evidence from traditional Tamil society in Sri Lanka demonstrates the use of figurines as votive offerings. There, pilgrimages to regional shrines involve the dedication

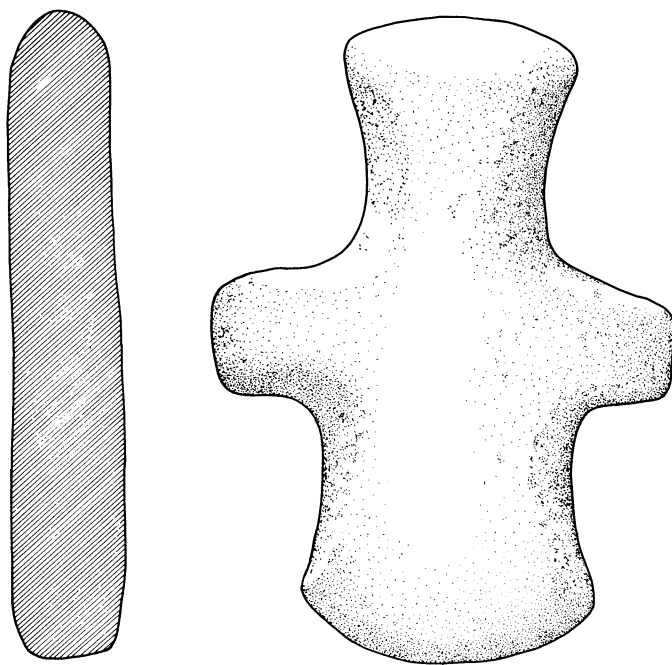


Figure 7. Cruciform Figurine of Chalk (KM 1470)

of specially crafted silver objects. The most common offering made to influence fertility was a tiny silver child-and-cradle (McGilvray 1982:64). For those not able to afford silver, simpler offerings, especially unworked pebbles, could be substituted. The latter, McGilvray (1982:67) notes, are found “conspicuously heaped atop hills associated with nearby . . . temples.”

Which of the above uses of figurines, if any, provides a workable model for the use of figurines and other objects of the Kissonerga deposit? Goring's (1991) analysis of the figurines includes several observations which have direct bearing on this question. The first concerns the posture of the figurines. None of the stone figurines are self-supporting (Goring 1991:53)—only on KM 1471 is the posture known (it stands); on other examples, including KM 1470 (Figure 7), legs are not indicated. In contrast, all of the pottery figurines are self-supporting (Goring 1991:53). A variety of postures are indicated, moreover: standing (KMs 1464, 1475), seated on a stool (KMs 1443, 1451, 1463), and squatting (KM 1442).

A second relevant set of observations made by Goring concerns evidence of wear and abrasion. Again, differences were noted for stone and pottery types. On five of the stone figurines, patches of polish or other markings were identified that have been interpreted as evidence of handling. Likewise, the pottery figurines show signs of abrasion, here in the form of worn paint. It is

curious that several of the pottery figurines exhibit signs of abrasion on specific areas: on the torso below the arms on the birthing figurine (KM 1451) and on the genital area, breasts, belly, buttocks, and arms of KM 1475. It is noteworthy that all pottery figurines show signs of wear.

Goring's observations of the Kissonerga figurines warrant a number of intriguing hypotheses regarding their use. First, the fact that the stone figurines are not self-supporting and that many show signs of polish seems to indicate that at least some of these types were held in the hand—by whom, and for how long, we cannot say. Since wear is not localized, it is very likely they were not used for didactic purposes but were clutched or rubbed as fetishes. The pottery figurines, in contrast, exhibit localized wear, as if they had been used as dolls or dummies to demonstrate aspects of pregnancy and birth. Secondly, the manufacture of the pottery figurines in a variety of positions (standing, with swollen bellies; standing, with swollen bellies and arms flexed toward the shoulders; seated on stools) and at different stages of gestation (pregnant; giving birth) supports this view. On the basis of her careful observations, Goring has concluded that all of the figurines in the deposit are associated with fertility and birthing ritual; there is little or no evidence to support an interpretation of the figurines as deities or charms. The only possible candidate for a "goddess" from Chalcolithic Cyprus is the limestone figurine from the nearby site of Lemba-Lakkous (LL 54), which differs from the present group in its relatively abstract form, its large size (36 cm), and its find context (Peltenburg 1977).

Although the figurines form an important basis for understanding birthing ritual in Chalcolithic Cyprus, we should be cognizant of other types of offerings that may have been incorporated into fertility rituals as well. Cross-culturally, in fact, the most common types of offerings made to promote fertility and healthy birth are not figurines at all, but simple foods and liquids. In Sri Lanka, *pukkai*, a sweet rice pudding, is offered to the deity by the childless couple as they utter vows and fulfill pledges to impose no blame upon the deity if fertility is not granted (McGilvray 1982:64). Among the Aowin of Ghana, foods, such as eggs, and animals (hens and sheep) are offered by the infertile woman if the spirit medium has attributed the cause of her "polluted" condition to her neglect of the gods (Ebin 1982:141).

Evidence of childbirth ritual in Java provides a third, more complex, example. Among what may be the most elaborate rites of passage known to anthropologists, the Slametan cycles of Javanese religion, are four ritual feasts surrounding the birth of a child (Geertz 1960:Chapter 4). Each feast is scheduled at a specific date: the first at the end of seven months of pregnancy, the second at birth, the third five days after birth, and the fourth seven months later. The first feast, known as the *Tingkeban*, is the most elaborate and is held only for the birth of the first child. It takes place in the home of the pregnant woman's mother and consists of foods and dishes culturally endowed with elaborate symbolic meanings, such as seven small mounds of rice on a plate to symbolize

the seven months of pregnancy attained and a special rice-mush thought to ward off harmful spirits during the remainder of pregnancy. Other dishes are offered to the Prophet Mohammed and the legendary bringers of Islam to Indonesia.

The examples just cited, along with similar cross-cultural practices, serve as reminders of the categories of evidence the archaeological record cannot furnish. At Kissonerga, a pit adjacent to Unit 1015 contained three vessels—Red-on-White rim-band bowls, one of which had a deliberately broken rim outlined in paint to create a notch for pouring. In Unit 1015 itself, small quantities of burnt food, the anthropomorphic vessel (KM 1449), and perhaps the two other hollow figurines (KMs 1475 and 1466) provide additional, although indirect, evidence that simple offerings of the same sort may have been used.

THE BUILDING MODEL: CROSS-CULTURAL ANALOGIES

Since the building model has no close parallels for comparison, we would do well to begin by asking to what extent it imitates actual Chalcolithic structures. Peltenburg (Peltenburg and Project Members 1991:16) has compared measurements of the model with those of excavated buildings at Kissonerga and has concluded that although the artist was not striving for mathematical accuracy, the dimensions and features of the model closely replicate actual excavated structures—not all structures, however, for only a limited number of buildings at Kissonerga have the rectangular hearth and radial partitions of the model. These unusual features suggest that the model was made in imitation of a building conforming generally to standard building types, but one which was distinguished from the majority of buildings by the presence of special internal features. Moreover, since the model was found in close association with birthing figurines, we would also do well to inquire whether its unorthodox structural features can be explained by reference to birthing ritual.

When one considers “special” buildings associated with childbirth in traditional societies, the first thing that comes to mind are so-called “birthing huts” in which women are confined immediately before, during, and for up to two or more months after childbirth. Birthing huts appear in the ethnographic literature in a variety of forms; all are rudimentary, since they have been constructed for short-term use. The simplest of all are unroofed areas defined by a circular wall of bound branches or a ring of adjacent trees. Such structures are more appropriately termed “birthing groves,” and both their structural features and remote locations do not provide very satisfactory parallels for the Moshilia model.

The more common “birthing hut” is a separate structure adjacent to, or close by, the domicile proper. Schapera’s account (1941:231–32) of the birthing huts of the Kgatla tribe of South Africa serves as a good example. Here a birthing hut is erected within the family compound and is distinguishable from

the main hut (which is furnished with plastered and painted walls) in that it is a rather makeshift affair. Women remain secluded in the hut for one to two months after giving birth. During that time, long sticks called "cross poles" are laid in the courtyard outside the hut, symbolically barring entry to men and menstruating women. Although allowed occasional visits by other women, mothers may be accompanied only by their birth attendants during the entire period of seclusion. After about a month, the new mother is allowed to resume sexual relations with her husband, although he is not permitted to sleep with her until the end of confinement. At that time, the birthing hut is cleaned and outfitted with a new floor, the cross poles are removed, and access is granted to all those previously excluded.

Birthing groves and special birthing structures represent the most extreme form of the separation-segregation-reincorporation model (Van Gennep 1960). Because they correspond so closely to the "classic" model, they have perhaps received undue emphasis in ethnographic accounts of traditional birthing practices. Cross-culturally, however, extreme forms of social segregation during birth occur relatively infrequently. A study by Clellan Ford, based on data from the Human Relation Area Files at Yale University on sixty-four traditional societies, and the earliest study of its kind, determined the combined frequency of birthing huts and birthing groves to be about 26.5 percent (Ford 1945:102). More recently, Paige and Paige (1981) have established a "scale of maternal restrictions" for birthing practices culled from primary ethnographic sources on more than a hundred societies. The scale measures the degree of societal constraint upon women's behavior during pregnancy and birth, ranging from "low scores" of 1-3, where restrictions are relatively minor (limiting dress, diet, sexual relations, and physical exertion), to "high scores" of 4-5, where restrictions are placed not only upon personal behavior, but upon interaction with other members of the community. A score of 4 corresponds to the category "social avoidance," where contact with people, especially men, is taboo; a score of 5 represents the most extreme form of social restriction (called "social seclusion") and is characterized by long-term confinement in a birthing hut. According to the results of this study, only 24.3 percent of the cultures coded were given a score of 5. This finding corroborates Ford's less empirical result, indicating that only about a quarter of all traditional societies incorporate extreme forms of structural segregation.

The architectural form of the model casts further doubt upon its interpretation as a birth hut. It is simply too splendid. Birthing huts do not have plastered walls or floors, much less wall paintings. Moreover, the buildings at Kissonerga which the model imitates are typical Period 3 structures with stone foundations and pise superstructures and bear no resemblance to the flimsy structures associated with special purpose birthing facilities.

The Paiges' results have shown that 48.6 percent of the societies coded in the study practice the less extreme "level 4" version of social segregation.

Ford's results also tally to about 50 percent on this score (1945:126). At this level of restriction, women are still separated from society-at-large during and after childbirth, but access is not so restricted; husband and close relatives are often permitted unlimited visitation rights. Structurally, the great difference between this level and the more extreme "level 5" is that confinement takes place not in a special shelter, but at home: either in the woman's own home or, as is usual in the birth of the first child, at the home of her mother. Homes are specifically outfitted for the event. A certain room may be transformed into a birthing ward, or if the house has only one room, it is partitioned by a temporary screen (Ford 1945:55). In addition, the birthing chamber may be furnished with a specially constructed hearth and a bed or sleeping platform (Engelmann 1882:fig. 39; Hanks 1963:49–50).

The model of "home birth" seems better suited to the Kissonerga model, with its internal partition ridges and special, rectangular hearth. Painted walls and swivel-hinged door likewise suggest that the artist intended to represent an elaborate domestic structure. The domestic character of tools found inside the model (bone needles, stone grinders, and a clay spindle whorl) strengthens this interpretation, as does the model's close imitation of actual domestic structures. It is unlikely that the model represents a sacred building. There is little ethnographic evidence to suggest the existence of specially constructed shrines or temples within the villages of small-scale cultivating societies; the lack of such evidence accords well with the archaeological data from Cyprus before the Bronze Age, where little or no architectural differentiation between sacred and secular structures is in evidence (Peltenburg 1988:292). Thus, in terms of both its proportions and its construction, the model replicates a standard building of the period. Ongoing excavations at Kissonerga have succeeded in uncovering two more buildings of this type, giving us a total of three. The bizarre painted motifs on the interior and exterior walls of the model may in the end represent the only remaining features that have not been found in actual buildings on the site; perhaps, though, this is really how some Chalcolithic buildings were painted. The motifs do not conform to standard decorative canons of Red-on-White ware, and their possible symbolical meanings are not easily deciphered (Bolger 1991:14–15).

Although ethnographic and archaeological evidence fails to sustain an interpretation of the Mosphilia model as a shrine or proto-temple, this does not mean that we must ascribe a purely secular function to the model. Ritual practices related to childbirth involve preparations for the physical *and* meta-physical well-being of the mother and her newborn. Indeed, the two appear to be inextricably bound. A fire is built because it will promote the health and comfort of the mother during the postpartum period *and* because it is thought that not doing so might invite the ill will of the gods and thus endanger the survival of mother and child. Diet during pregnancy may be restricted because certain foods have proven less beneficial than others in facilitating labor and

birth, but also because these foods have evil or dangerous associations thought to increase the likelihood of miscarriage or deformity. Several cross-cultural studies, in fact, have elucidated real, palpable relationships between cultural taboos during pregnancy and their positive biomedical effects, suggesting that ritual practices outwardly appearing irrational or superstitious can function latently to promote conception and facilitate birth (Ford 1945; Spencer 1950). On this basis it may be reasonable to conclude that the Mosphilia model replicates a domestic birthing structure and conveys symbolical messages associated with that function. Its association with birthing and fertility figurines broadens the scope of those messages to include the communal recognition of social transitions attendant upon the birth of a child, as well as an awareness of the medical risks to mother and child during and after the event.³ Social awareness of these risks may help to account for the widespread use of ritual practices attendant in traditional societies upon every stage of childbearing, from conception to postpartum recovery (Oakley 1977).

The human skeletal evidence from Kissonerga demonstrates a high incidence of infant mortality at the site (Domurad 1986, n.d.; Lunt n.d.). Infant mortality also accounted for nearly one-third of the burials at the nearby site of Lembalakkous (Niklasson 1985:50, 143–44). In addition, statistics of longevity of adult females at numerous sites of the early prehistoric period (including Neolithic Sotira and Khirokitia) indicate somewhat shorter life spans for females than for males. Many of the females at these settlements died during childbearing years, and although it cannot be assumed that pregnancy and childbirth were the only causes, they must undoubtedly have been major contributing factors.

On the basis of preliminary studies of human skeletal remains from Kissonerga, the male/female longevity ratio appears to have been higher for the Chalcolithic period than for the preceding Neolithic. This pattern may reflect an insubstantial data base, and certainly we need more information about the human skeletal material that has been uncovered at all of the above sites. However, the apparent lack of birthing figurines at sites of the Late Neolithic period starkly contrasts with their prevalence during the Chalcolithic period. For the Late Neolithic period, we have only schematic cruciform figurines made of stone, not unlike the stone examples from the Kissonerga deposit. The clay variety appears to have been a later development and may signify greater concern for reproductive success at a time when the archaeological record attests to growing difficulty and danger to women and newborn children.

Recent studies on human interaction during pregnancy and birth demonstrate that the greatest fuss at childbirth occurs when a woman is pregnant with her first child (Raphael 1975). This important transition, also a time of great medical risk, is known as “matrescence” and is marked by biological developments, emotional upheavals, and social transformations more profound than those of subsequent births. It begins at a culturally, rather than a biologically, determined

point, encompasses various stages of gestation, and ends with the successful birth of the child and the reincorporation of mother and child at the end of the postpartum period. Such a range of circumstances and events might well account for the joint association of fertility and birthing figurines with the model of a standard Chalcolithic building type transformed internally to replicate the place where women gave birth and where they remained until, according to custom, they had become successful, fully fledged mothers.

According to this interpretation, the pottery figurines, as suggested by Goring's observations, would have been used as didactic models. Their degree of anatomical detail, wear patterns, and iconographic range of postures representing women in different stages of pregnancy appear to bear this out. Likewise, evidence of wear and the abstract nature of the design of many of the stone figures suggest their use as fetishes or magical charms, perhaps clutched by a woman as she gave birth.

The function of the model is more difficult to define. Wear marks on the socket inside the threshold suggest that the door had indeed been repeatedly opened, perhaps as part of didactic rituals which may also have employed the ceramic figurines. If, as argued earlier, the model is meant to be an actual model of a Chalcolithic building "renovated" for the birthing event, then the painted designs on its walls must have a real or symbolic connection to fertility and birth as well.

DESECRATION AND BURIAL OF RITUAL OBJECTS

There are few examples in the ethnographic literature of the ritual desecration or burial of objects associated with fertility and birth ritual. By and large, anthropological interest in ritual objects is rooted primarily in the interaction between the objects themselves, their makers, and those who used them in the ceremonies for which they were intended. However, the contextual evidence of Unit 1015 argues that we distinguish between the use of the objects during their "lifetime" and the circumstances which may have governed their ultimate "fate." Surely the artifacts in Unit 1015 were not made in order to be buried; on the contrary, their desecration and burial may have signified the end of their practical use as well as the abandonment of associated beliefs and values.

The building model, anthropomorphic vessel, all of the clay figurines, and several of the stone figurines from Unit 1015 appear to have been deliberately defaced prior to interment (Goring 1991:49–52; Bolger 1991:15–16). Disfigurement of anthropomorphic vessel KM 1449 accords with that of the figurines: its arms and legs have been broken off, and the ears have been shorn away. Two bowl fragments used as cappings for the deposit (KMs 1445 and 1495) also resulted from deliberate breakage. Peltenburg (1989:116) has interpreted these breakages as ritual killings not dissimilar to the ritual "killings" of weapons from tombs of the Bronze Age.

The building model incorporates an additional element: apart from the mutilation of several features (door tenon and swivel loop, relief knobs above the door), the entire interior surface and the area above the doorway on the exterior were covered with a coating of yellowish clay of varying thicknesses. While this had the effect of concealing the painted designs underneath, it did no actual damage to the motifs: removal of the clay layer during conservation revealed the unusual configuration of motifs discussed above. Although no ethnographic evidence for the use of clay to deconsecrate ritual objects was found, it is interesting to note that the purification rites of the Aowin of southwest Ghana include the covering over of certain objects with white clay as a prophylactic against evil spirits (Ebin 1982:150).

The implications of this practice for an interpretation of the Kissonerga building model are threefold. In the first place, it signals the ritual importance of those elements selected for concealment and thus furnishes additional proof of the sacred aspects of the vessel. Secondly, it visibly demonstrates an intended metamorphosis—from dangerous to safe in the Aowin example, from sacred to desanctified for the model. Thirdly, the concealment of powerful symbols renders them ineffective without destroying them. While the latter course of action may have met with disfavor among supernatural powers—that is, obliteration had the dual merit of achieving the desired effect and achieving it with impunity.

Elsewhere in the Mediterranean, archaeological evidence of deconsecration shows a similar cautiousness. The main room (Room XV) of a tripartite shrine at Mycenae, for example, contained a low step and platform perpendicular to its eastern, frescoed wall; both step and platform were coated with clay. Three circular depressions in the platform served as fireplaces, and immediately adjacent to these were painted horns of consecration. At some point, the sacred symbols were coated with white paint. Rutkowski (1986:180) has interpreted this as the abandonment of the room as a place of religious activity, and this seems the most likely interpretation for the deliberate defacement and burial of the objects in Unit 1015 as well. Peltenburg (1989) has suggested a closure ceremony in which the figurines and other objects of the deposit were collected from various parts of the settlement (or perhaps even from outside the settlement) for burial. The objection he raises to this hypothesis—that the figurines are too varied in form (and ergo function) to warrant their contemporary use—could be answered in one of two ways.

One possibility is that they were not used contemporaneously (we do not know the precise chronological range of the Period 3 settlement, but it may have lasted half a millennium or more). According to this view, some of the objects would have been saved as heirlooms and passed on through successive generations during the period. Unfortunately, there is little ceramic or chronometric evidence to support such an interpretation. It seems implausible that significant changes could have taken place in ritual customs in Cyprus when other aspects of material culture demonstrate cultural continuity and at a time

when evidence for foreign contact on a wide scale has not yet been attested.

The second possibility hinges on the belief that the figurines, while displaying a variety of postures and decorative styles, are not so dramatically different from one another. They may represent different aspects of the birthing process, and if the rituals governing the manufacture and use of these objects encompassed multiple stages in the transition to motherhood, including puberty, pregnancy, delivery, and postpartum recovery, we might not be troubled by a multiplicity of representational forms.

What is troubling is that as close as we might come to understanding the ritual significance of the Kissonerga deposit, we have little hope of determining the factors and conditions that led to its abandonment. The failure of the ritual practices attested here to continue into the succeeding periods of the settlement suggests that the deconsecration and ceremonial burial of the vessels, figurines, and other objects at approximately 3000 B.C. signaled the demise of long-held beliefs about man's relationship to the supernatural. At the same time, it adumbrated the arrival of new ways of spiritual and secular thinking which in time inspired the foundation of more complex and highly organized religious centers in Cyprus during the Bronze Age.

NOTES

1. The Kissonerga excavations are being undertaken by the Lemba Archaeological Project, under the direction of Dr. E.J. Peltenburg of Edinburgh University. I would like to thank Dr. Peltenburg for providing the plan and drawings which appear here and for criticizing an earlier draft of this paper. Responsibility for all material presented herein rests, as always, with the author.

2. For preliminary reports on these excavations, see Peltenburg and Project Members (1986, 1987, 1988, 1989); other preliminary reports on the ritual deposit appear in Peltenburg (1988, 1989) and Peltenburg and Goring (1991); the final excavation report on Unit 1015 and related areas has recently appeared (Peltenburg and Project Members 1991). A report on ten years of the Kissonerga-Mosphilia project is being prepared (Peltenburg and Project Members n.d.).

3. The risk to the lives of mothers in the Third World has recently been the subject of an in-depth report by a Washington-based world health agency. The findings dramatically reinforce what was already suspected—that about half of Third-World women who die during childbearing years die as a result of complications resulting from pregnancy and birth. Some of these deaths resulted from improper abortions, but a far greater percentage resulted from complications during birth and postpartum infection (reported in the *Frankfurter Rundschau*, June 5, 1991:1).

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