

The Near Eastern Contribution to Aegean Wall Painting and Vice Versa

To Irene J. Winter, in friendship

A building known as the South-West House, located just southwest of the edge of the western court of the palace at Knossos, was first investigated by Sir Arthur Evans in 1923 and was reexplored, with special attention to its complex stratigraphy, in a series of campaigns in 1992/93 by the British School of Archaeology at Athens under the direction of Dr. Colin Macdonald.¹ In nearly every phase of the building's long and complicated history fragments of wall, floor, and ceiling plaster were recovered. Unfortunately, most of the fresco fragments with figural decoration, which include flowers, a male head, and possibly fish, were found in Evans's backfill, and thus can only be dated by style. Based on comparisons with paintings from Knossos and Late Cycladic/Late Minoan (LC/LM) IA Akrotiri, it appears that none of the figural fragments dates earlier than the Neopalatial era, at the earliest Middle Minoan (MM) III, that is, after ca. 1700 B.C. and probably no earlier than 1600 B.C., when the house appears to have been renovated (MM IIIB–LM IA).²

However, in the more recent excavations, the corner of one room was preserved, sealed by a destruction level, and could be dated by its context pottery to MM IIA.

Among the material found on its floor were two nonjoining fragments of wall paintings with very well-preserved surfaces, one of which is illustrated (fig. 1). On the well-polished white intonaco layer an abstract linear pattern of thick and thin connected curving lines was painted in black. This pattern closely resembles the color scheme and decoration that occur on an unusual class of Kamares pottery sometimes called print ware, which also dates to MM IIA (fig. 2).³ Unlike the light-on-dark polychrome decoration of standard Kamares ware, print ware reverses the system, for a black-on-white decorative scheme, like the wall paintings. Furthermore, like the wall paintings, Kamares print ware is also decorated with abstract curvilinear patterns of uneven thickness.

These new fresco fragments join a small but significant corpus of Minoan wall paintings that date to the Protopalatial era (MM IB–IIB) or sometime in the first quarter of the second millennium B.C.⁴ Each one is painted with an abstract linear motif such as spirals, quatrefoils, a “labyrinth,” or crescents; one fragment may have a stylized foliate band.⁵ Notably absent are representations of any human figures. Rather, as Irene Winter has observed, these patterns closely resemble the motifs found on Kamares ware.⁶ Indeed, the few extant anthropomorphic images on Kamares ware are based on inventive recombinations of familiar abstract motifs and thus appear more like one-time experiments than traditional ceramic decorative elements.⁷ Thus, considering the close similarity between wall painting and vase painting, it would seem unlikely that future discoveries of Protopalatial wall paintings would include a figural repertoire.

How then are we to explain the skillfully painted and thematically varied repertoire of figural images that seems to appear ex nihilo at the beginning of the Neopalatial period, in the seventeenth century B.C.? Not infrequently—indeed since the time of Evans—Aegean archaeologists have

turned their gaze eastward to explain cultural innovations on Bronze Age Crete, be they impulses from Egypt, Anatolia, or the Levant. For example, while some Aegean archaeologists argue that the Minoan palaces evolved from an indigenous Cretan architectural idiom and were only generally influenced by Near Eastern models, others, perhaps more convincingly, argue that the court-centered palace complexes also appear ex nihilo, adapting their ground plans and building techniques, such as the use of a leveling course, or *krepidoma*, and orthostats, directly from Near Eastern models.⁸ While the palace at Mari has been most often cited as a possible model for the Cretan palaces, the more recently excavated Middle Bronze Age palace at Tilmen Höyük, in the northern Hatay, also offers striking parallels to the Cretan palaces, with its paved western courtyard and irregular western facade, as well as its use of a *krepidoma* and orthostats.⁹

The tablets from the Mari archives record the role of local middlemen in the shipment of tin to Crete from the port of Ugarit and the receipt in return of high-quality finished products for Mari, including gilded weapons with lapis lazuli inlays, metal daggers and vases, textiles, and leather footwear.¹⁰ Most remarkable is the reference to a Cretan interpreter at Ugarit who was paid in tin, perhaps directly by the king of Mari.¹¹ This document may place an actual Minoan in the court of Zimri-Lim of Mari and, of course, implies that contacts between Cretans, Amorites, and Canaanites were frequent enough to require a full-time resident translator. In the same way that a Cretan translator could be employed in the Levant, on account of his possession of a special skill, in this case his multilingualism, other tablets from Mari document the movements of craftsmen and artisans within the Near East, often lent out by rulers.¹²

It is therefore not at all unlikely that when the decision was made to construct palaces on Crete, Minoan architects traveled east to see these grand edifices, which may have been in various stages of construction,

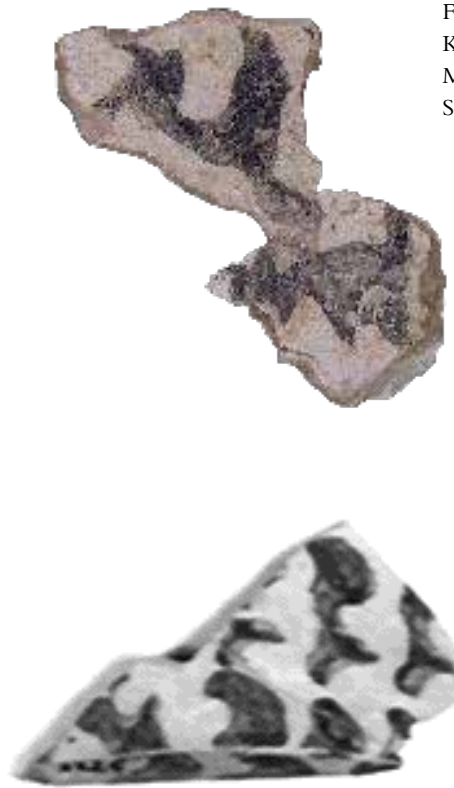


Fig. 1. Fresco fragment. Knossos, South-West House. Middle Minoan IIA. Knossos Stratigraphical Museum

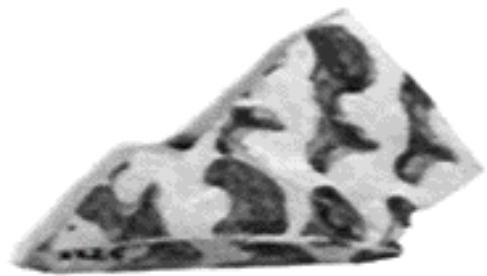


Fig. 2. Kamares “print ware” sherd. Knossos. Middle Minoan IIA. Knossos Stratigraphical Museum

and learn from their skilled and experienced architects and engineers. Indeed, the tablets from Mari make it clear that the palace was famous in its day for its beauty and the feats of engineering it represented, and requests were made from foreign notables to secure visits.¹³ Its sophisticated plumbing system has been cited as another element that Cretan architects may have learned through firsthand observation and instruction in the Near East and brought back to Crete.¹⁴

Some scholars have suggested that the Cretans also adopted the practice of figural fresco painting from the Near East.¹⁵ But, as noted above, the frescoes on the walls of the first Cretan palaces most likely displayed no figural imagery, unlike their Near Eastern counterparts. Human, faunal, and floral imagery first appears in frescoes on Crete at the start of the Neopalatial period, in MM IIIA, as discussed below.¹⁶

Nonetheless, it is possible that Minoan craftsmen saw the painted walls of Mari and, indeed, as some scholars have suggested, even had a hand in decorating surfaces there, specifically the upper face of the podium in Room 64 (figs. 3, 4).¹⁷ While plaster pavements with painted decoration are otherwise unknown at Mari, the first Cretan palaces had floors made of durable plaster, decorated with monochrome red and painted patterns.¹⁸ And though the podium's white-on-black decoration may also be unique at Mari, whose walls were painted with a varied polychrome palette, this was the standard color scheme for contemporary Cretan Kamares ware. Indeed, the podium's framing motif of retorted

spirals is a common motif on Kamares ware.¹⁹ On ceramics, this motif appears as a continuous spiral chain, whereas on the podium the paintbrush was lifted at the retort, that is, the center of the spiral.²⁰

What seems most problematic here is the main motif, which has been interpreted generally as an imitation of a pavement composed of heavily veined stone slabs, a *faux marbre*. A fragment of painted plaster from the Loom-Weight Basement at Knossos, dated to MM IIB, preserves part of a zone of polychrome wavy bands, which has sometimes been identified as an imitation of stone.²¹ However, convincing examples of frescoes with *faux marbre* begin only in the Neopalatial era.²² Winter thinks that the

faux marbre podium from Mari may have been painted by local craftsmen to compensate for the scarcity of high-quality decorative stones suitable for paving and locally available.²³ Yet, precisely because of this shortage, the plasterers and painters working at Mari might have been unaware that richly veined or variegated stone even existed, let alone that they were used as decorative pavements. But on Crete, where these stones are abundant and occur in a wide range of colors, they had been used for vases and pavements by Minoan stoneworkers since the beginning of the Bronze Age.²⁴ Perhaps Minoan artists visiting Mari offered their services to paint not only the edge of the podium but an improvised pattern to fill its interior.²⁵ Thus, as Winter proposes, this *faux marbre* painting may well have been created spontaneously in response to the monochromatic nature of Mari's lithic environment, but by Minoans who were well versed in the wonders and potential uses of Crete's varied geomorphology. The fact that each slab is painted with a unique pattern of veins may underscore the artist's familiarity with these kinds of stones.²⁶

Like the Minoan paintings in the first palaces, the decoration of the podium is purely nonfigural, with abstract and geometric elements; figural imagery would have required knowledge by these "guest" artists of local ritual and religious iconographies. In return, the Minoan painters may have been inspired by the figural wall paintings from Mari, filled with their images of ritual activities, where the mundane and divine spheres intersect in a world populated by a repertoire of flora and fauna simultaneously familiar and exotic, natural and supernatural. The opportunity to put into practice what they may have seen in the east came soon enough when one or more earthquakes demolished the first palaces at the end of the MM IIB and the beginning of the MM IIIA periods.²⁷ This seems to have occurred about the time or just before Mari was destroyed by Hammurabi.²⁸ Immediately thereafter, in the MM III era, new palatial constructions were undertaken, as at Galatas; older palaces were rebuilt from scratch, as at Phaistos, whose new palace may never have been completed; and other palaces were heavily renovated, as at Knossos.²⁹

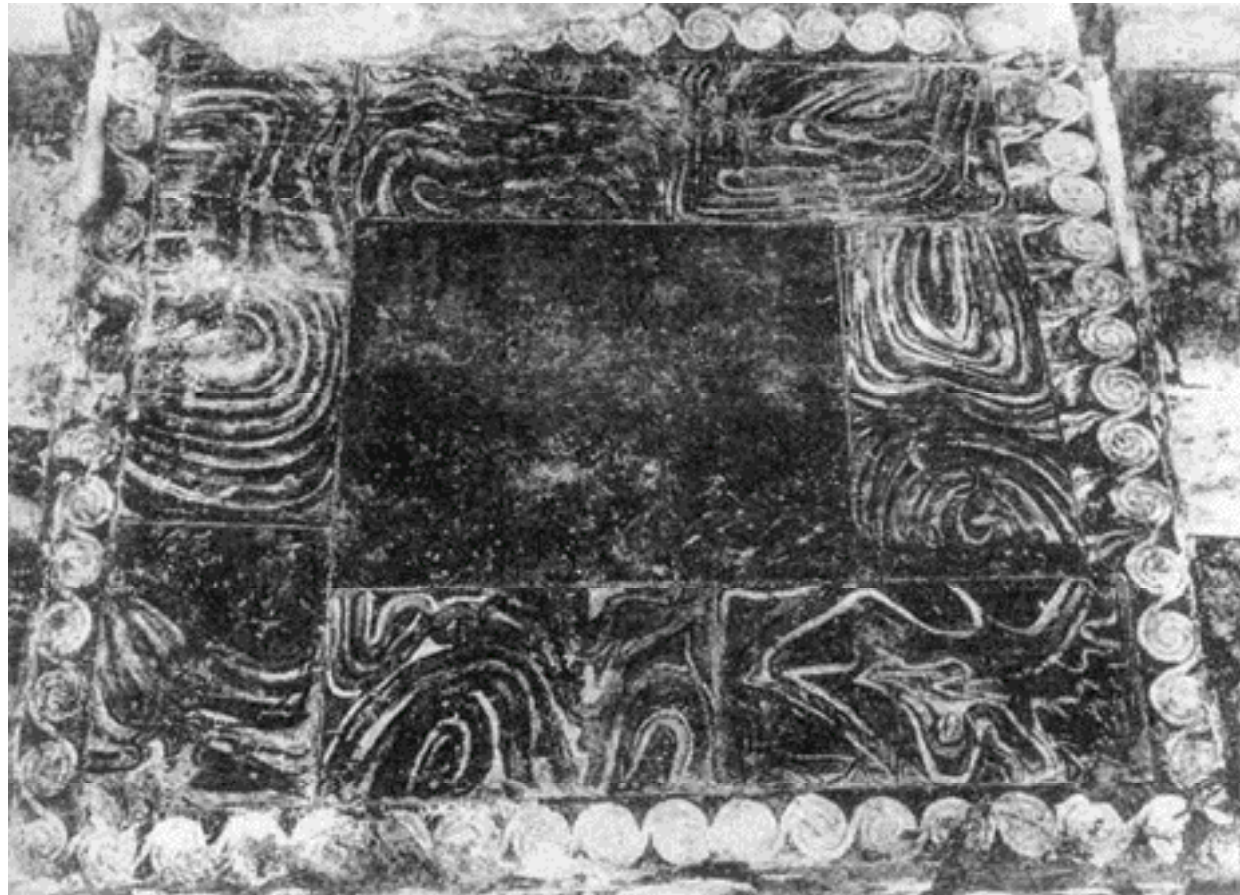


Fig. 3. Painted mudbrick and stone podium. Mari, Palace of Zimri-Lim, Room 64. Old Syrian period



Fig. 4. Painted fragment of podium in fig. 3, excavated 2004, previously unpublished

The MM IIIA period may have begun shortly after construction started on a new palace at Alalakh (Tell Atchana), the so-called Yarim-Lim palace of Level VII. This palace formed part of a major building program that also included new fortifications and a temple. The palace archives reveal that Yarim-Lim was a contemporary of Hammurabi of Babylon, Shamshi-Adad of Assyria, and Zimri-Lim of Mari, suggesting that construction on the Level VII buildings began in the middle to the second half of the eighteenth century B.C.³⁰ (For further mention of the Alalakh paintings, see Pfälzner essay, p. 202.) The city was most likely destroyed by Mursili I, ca. 1600 B.C., on his way back to Hattusa after razing Babylon.³¹

Ever since Sir Leonard Woolley discovered wall paintings in the Yarim-Lim palace, he and others noted their resemblance to wall paintings from Minoan Crete, even suggesting that Minoan painters were present at Alalakh and lent their skills to the decoration of its walls.³² One group of paintings appears to have decorated the walls of a large room that Woolley restored above the small storerooms 11, 12, and 13.³³

In the doorway between rooms 11 and 12 and in the southeast corner of Room 12, at least 2 meters above the floor, Woolley found fragments of yellow, red, blue, and black horizontal bands, a possible bull's horn, and a fragment that he believed depicted the ear of a bull. At the southwest end of Room 12 and in and outside Room 13, Woolley found fragments of painted plaster that included a design of light-colored spiky leaves against a red background (fig. 5). To Woolley, the large room restored over rooms 11, 12, and 13 had the look of a Minoan hall (which he misnamed "megaron"). He surmised that the room had been divided unequally by two wood (?) columns and that at its southwest end there had been a large window divided by two columns with stone bases, similar, in its use of columns to divide floor space and windows, to the so-called King's and Queen's Megara at Knossos. One entered from a staircase at the east end, where the walls were decorated with a bull procession; at the west end the walls were painted with a more naturalistic scene of swaying sprays of spiky leaves.

These paintings have been recently restudied by Barbara and Wolf-Dietrich Niemeier, who have offered new reconstructions.³⁴ They restore the bull's horn and the dark curved fragment that Woolley thought was a bull's ear as a frontal bucranium with a double axe between the horns, citing parallels from Aegean representational art.³⁵ Woolley's suggestion that the horn came from a procession with a bull is also plausible, and indeed such a scene was painted at Mari, where the bull also has front-facing horns, but in combination with a profile face.³⁶ As the Niemeiers point out, frontal bucrania do occur in the Near East, although they cite only examples painted on Halaf pottery, dated to the late Neolithic, and on the walls of the fifteenth century B.C. Mitannian palace at Nuzi, claiming a gap in the evidence.³⁷ However, the gap in frontal bucranium imagery from western Asia may be filled by glyptic

evidence, where it appears as a motif on Old Syrian seals from the region of Alalakh dated contemporary with Level VII.³⁸ Rather than a Minoan double axe between the horns, the curved fragment from Alalakh might be part of a rosette placed between the bull's horns, as on the fresco from Nuzi, although the Niemeiers note that the rosette would be rather large.³⁹ With so little preserved, it is simply not possible to determine whether this particular fresco was painted by an Aegean artist or a local one. In either case, it may, indeed, have influenced Aegean iconography, where the frontal bucranium first appears regularly in the Neopalatial era in a variety of media.⁴⁰

In the same area as the spiky-leaf fresco, that is, the southwest end of Room 12 and in and outside Room 13, Woolley found two nonjoining fresco fragments of red bands on a white ground with undulating borders and white overpainting. While he believed that one fragment depicted a tree—it is reconstructed as such in a drawing by William Stevenson Smith—the Niemeiers have shown that this is incorrect.⁴¹ By turning the fragment 90 degrees, they demonstrate that it is a lower red band with two white overpainted parallel horizontal lines.⁴² On the other fragment, in its upper-right-hand corner, Woolley saw an overlayer of pale greenish-gray "on which twigs or leaves were painted in a darker green."⁴³ In their recent restudy, the Niemeiers reidentified the fragment as the wing tip of a crouching griffin, decorated with a typically Aegean "notched plume" motif.⁴⁴ While this is plausible, what is perhaps just as surprising is the unimpressive quality of the painting, notable in the summarily painted feathers on the griffin and the wobbly white overpainted ladder and curved arc patterns on the red zones. The work seems to betray an uncertain and inexperienced hand.

Because the griffin does not appear in the Aegean with any regularity or with a specific set of characteristics until the Neopalatial era (except for a few examples in

Protopalatial glyptics), if this is indeed the work of a Minoan craftsman, perhaps it represents a new artistic experience: the rendering for the first time of large-scale representational figures under the tutelage of Near Eastern painters.⁴⁵ Or it may be the work of local craftsmen, for whom the crouching or seated griffin was a familiar motif, as evidenced by its frequent occurrence on Middle Bronze Age Syrian seals.⁴⁶ Indeed, its appearance in no-longer-extant, large-scale Middle Bronze Age Syrian wall paintings has been surmised by Bernice Jones, who has perceptively drawn attention to the grand tableau depicted on an Old Syrian-style seal impression from Kültepe Ib, dated about fifty years earlier than Level VII at Alalakh, on which a suppliant stands beside an enthroned divinity who is flanked by a squatting monkey and a seated griffin.⁴⁷ Jones furthermore convincingly proposes that the composition and iconographic elements prefigured, and indirectly inspired, the LC I/LM IA "goddess" fresco from Xeste 3 at Akrotiri, with its suppliant and enthroned divinity, who is flanked by a stepping monkey and seated griffin.⁴⁸ Also striking is the parallel between the imagery on a later MB Syrian seal in Vienna with Minoan elements and the "goddess fresco," as discussed by Joan Aruz.⁴⁹

The one painting from Alalakh Level VII that most scholars would agree is closest in style and character to Minoan painting is the fresco with swaying sprays of spiky leaves.⁵⁰ However, while it is usually compared with the developed naturalistic figural style of Neopalatial frescoes, several of its features suggest it is actually rooted in an earlier tradition, one that is closer in date to its context at Alalakh. Susan Sherratt finds its red background troubling, as she thinks red backgrounds are rare in Minoan wall painting, and the Niemeiers look for parallels in much later Mycenaean painting. However, this fresco seems rather to reflect the contemporary ceramic style of MM IIB–IIIA Kamares ware, with its light-on-dark color scheme.⁵¹ Furthermore, the motif of spiky

Fig. 5.
Reconstruction of
fresco with spiky
leaves; color
restored. Alalakh,
Level VII Palace,
Room 13. Middle
Bronze Age



leaves appears frequently on MM IIB and III pottery. Indeed, the curvature of the sprays seems to hint at a growing interest in naturalism and movement in Minoan painting, as attested, for example, by the curved stems on fragmentary MM III frescoes from Galatas and the swaying palm trees with spiky leaves that decorate several MM III vases.⁵² Thus, as at Mari, and, perhaps, at Alalakh we can detect the presence of guest craftsmen from Crete who contributed to a portion of the wall paintings in the grand salon of the Yarim-Lim palace, while observing their Levantine colleagues paint the large-scale figures of bulls and griffins.

Woolley also discovered painted plaster *faux marbre* on the basalt orthostats of Room 5, the “Chamber of Audience,” which he dated to the second phase of the palace, shortly before its destruction in ca. 1600 B.C.⁵³ By this time, however, the practice of imitating veined stone in painted plaster was a familiar technique in the Aegean and western Asia. As will be discussed below, a plaster floor painted with *faux marbre* panels and floral motifs has recently been discovered in the palace at Tel Kabri (northern Israel), whose construction may be contemporary with or slightly later than that of the Level VII palace at Alalakh, that is, MM III, in the Cretan Bronze Age sequence.⁵⁴

If craftsmen from Crete were indeed present at Alalakh, observing the local wall painters and contributing their own talents, perhaps other Minoan craftsmen were engaged in other activities at Alalakh, as they may have been at Mari. In the current campaign of excavations, fragments of fluted painted plaster were discovered in the stratum equivalent to Woolley’s Level VII. K. Aslihan Yener, director of the current Alalakh excavations, ascribes these to the wings of large-scale sphinxes or griffins that she reconstructs as flanking a throne (see Yener essay, pp. 142–53). It may not be a coincidence that just when the first figural wall paintings appear on Crete, at the start of the Neopalatial era in MM IIIA, as

discussed above (see note 27), a new technique of wall decoration was adopted: the depiction of large-scale figures in painted plaster relief.⁵⁵ Perhaps it was at Levantine sites like Alalakh that Minoan craftsmen first became acquainted with the method of modeling plaster figures in three dimensions, in the region where its roots may be traced back to the Pre-Pottery Neolithic B era of the eighth millennium B.C.⁵⁶ And although the subject here is wall painting, it is worth recalling that Minoan bull-leapers may also have been present at Alalakh, as suggested by their depiction on seal impressions from Level VII.⁵⁷

Chronological primacy also implies that the architectural features which Woolley ascribed to Minoan influence in the grand salon that he reconstructed above storerooms 11, 12, and 13 of the Yarim-Lim palace—specifically, the use of multiple columns to divide floor space and windows—should be regarded the other way around: as Levantine influences on the visiting Minoan architects who were restoring and redesigning the new palaces on Crete at that time. There is another feature in Minoan architecture that it is tempting to consider an adaptation of something seen by Cretan craftsmen in the Near East. In the course of recent core-sampling work at Tell Atchana, it has become apparent that the Orontes River originally ran up to the base of the mound, at a point where Woolley identified a gate in the Level VII fortification wall.⁵⁸ This may now be identified specifically as a “river” or “water” gate, similar to the one that Woolley excavated at Carchemish, which led down to the Euphrates River.⁵⁹ Perhaps the river gates of the Near East inspired Neopalatial architects to construct one at Knossos, in the so-called East Bastion. Erected in LM IA (ca. 1600 B.C.) up against the massive terracing of the palace site, the East Bastion was built of ashlar blocks and resembles a fortified tower in its massive appearance, not unlike the typical Middle Bronze Age Syrian gatehouse. However, this feature at Knossos is

not a fortification but supports a staircase, flanked by a drain and settling tanks, that connected the west bank of the Kairatos River directly to the palace.⁶⁰

The floor and wall paintings recently discovered at Tel Kabri have already been cited in connection with the debate regarding the relationship between Near Eastern and Aegean figural wall painting. In addition to the painted *faux marbre* floor noted above (oddly overpainted with irregular floral chains), the Niemeiers have reconstructed wall paintings that seem to show technical, stylistic, and iconographic affinities with Cycladic wall painting, specifically the miniature fresco from the West House at Akrotiri, with its depiction of coastal towns and griffins, painted against a white background.⁶¹ In the absence of parallels from the Near East, one is inclined to conclude, with the Niemeiers, that the Tel Kabri frescoes were likely painted by Cycladic artisans.

Although the paintings from Tel Kabri date to Middle Bronze IIB or IIC and thus predate their LC I counterparts, new evidence from Thera can now be brought into the discussion about the role of Cycladic wall painters in the eastern Mediterranean.⁶² During the 1990s, excavations were conducted in the process of constructing a new roofing system at Akrotiri. In the course of digging the foundations for its columnar supports, substantial portions of the MC III town were revealed immediately below the LC I town, which had been the focus of excavations since their inception in 1967. Interestingly, although nearly every building in the LC I town has been found to contain beautifully executed figural wall paintings on a wide range of subjects, none were discovered in the MC III town. Rather, an astonishing assemblage of polychrome vases, decorated with a rich repertoire of human and animal imagery—including griffins—was uncovered. These polychrome figural vases are roughly contemporary with the Cycladic-style wall paintings from Tel Kabri.⁶³ Although they appear somewhat

naive in style, it is difficult to explain their ambitious imagery, which includes hunting scenes and libation rituals, in the absence of contemporary wall paintings.

Perhaps the vase painters of Middle Bronze Age Akrotiri were inspired by the newly emerging interest in naturalistic figural imagery just developing on Crete, as evidenced, for example, by an imported MM IIIA flask from Akrotiri depicting in ceramic relief a lion attacking a bull.⁶⁴ Yet the Cycladic vase painters appear to have been freer in their style of execution, composition, and choice of subjects than contemporary wall painters on Crete and in the Near East. Indeed, these Cycladic vase painters seem to have taken the lead in developing the new artistic vocabulary that by the LC I era emerged in the outstanding series of wall paintings for which Akrotiri is justifiably famous.⁶⁵ Perhaps at Tel Kabri, we might again detect the relatively untried hands of Aegean craftsmen working in the Levant, offering their assistance, and experimenting on the spot with images and styles that were only just beginning to take hold in the Aegean.

ACKNOWLEDGMENTS

I am grateful to Dr. Colin Macdonald for his kind invitation to study and publish the plaster and frescoes from South-West House; my contribution will appear as a chapter in the publication, written in collaboration with Polly Westlake, and currently in preparation (Koehl and Westlake forthcoming). I am also grateful to him for allowing me to illustrate and discuss the fragments presented here, and for his very helpful comments on this essay. I also wish to thank Bernice Jones and Michele Mitrovich for their comments and Laetitia Raiciulescu for research assistance. All mistakes are my own.

1. Evans mentions the house briefly in Evans 1921–35, vol. 2 (1928), p. 672.
2. Ibid. According to Macdonald, there are several destruction deposits belonging to the earlier part of MM III, after which major renovations seem to have taken place; Macdonald forthcoming.
3. MacGillivray 1998, p. 58, and see esp. no. 547, pl. 91.
4. Immerwahr 1990, pp. 21–22. On the absolute dating of the Protopalatial era, see Warren and Hankey 1989, pp. 127–35; see also MacGillivray 1998, pp. 107–8. The archaeologically derived absolute chronology for Egypt, whose synchronisms form the basis of the Aegean absolute chronology, is now largely confirmed by carbon 14; see most recently Bronk Ramsey et al. 2010.
5. Immerwahr 1990, fig. 6.
6. I. J. Winter 2000, p. 746.
7. Immerwahr 1990, pp. 33–34, colorpls. II and III.
8. For the indigenous argument, see, for example, Branigan 1970a, pp. 50–52; Graham 1987, pp. 229–33; Warren 1987, pp. 49–50; Schoep 2006; Driessen 2007. For a Near Eastern derivation, see, for example, Watrous 1987, p. 69. On the history of orthostat construction on Crete, see J. W. Shaw 1973, pp. 83–97. For a recent assessment of the question, with bibliography, see Aruz 2008, pp. 74–75.
9. Duru 2003; Marchetti 2006, pp. 277–78. On the adoption of Near Eastern, specifically Anatolian, sealing practices by Protopalatial Cretan society, see Weingarten 1990b; for the influence of Anatolian metalwork on Protopalatial Crete, see Davis 1979.
10. Dossin 1939; Dossin 1970; Malamat 1971; Wiener 1987, p. 262; Cline 1994, p. 27; Guichard 1999; Aruz 2008, pp. 68, 91.
11. Villard in Bardet et al. 1984, p. 528 (text no. 556, ll. 29–31); Villard 1986.
12. Zaccagnini 1983; Sasson in *Beyond Babylon*, pp. 95–100.
13. Graham 1987, p. 240.
14. Ibid., p. 232.
15. See Militello 1999; for additional discussion, see Aruz 2008, pp. 74, 130–31.
16. On the efflorescence of Neopalatial figural imagery in MM IIIA, see papers in Macdonald and Knappett forthcoming.
17. Parrot 1958a, pp. 105–6, 165; Parrot 1958b, pp. 67–69, 109–10, fig. 54, pl. 15. For discussion with bibliography on the question of Minoan painters at Mari, see B. Niemeier and W.-D. Niemeier 2000, pp. 772–73; I. J. Winter 2000.
18. Hirsch 1977, pp. 7–22. The floors of the MM IIA (nineteenth century B.C.) South-West House at Knossos were largely of red painted plaster; Koehl and Westlake forthcoming.
19. Walberg 1976, fig. 37.5; Betancourt 1985, fig. 70K; MacGillivray 1998, for example, pls. 11, 15, 25.
20. Although spirals have a long history in Near Eastern imagery, especially on seals, the retorted running spiral seems to be a specifically Minoan type. For a discussion of Near Eastern and Aegean spirals, see Collon 1975, pp. 135–36; Aruz 2008, *passim*.
21. Immerwahr 1990, p. 22, fig. 6f; on its date, see Hood 2005, pp. 48–49.
22. Evans 1921–35, vol. 1 (1921), p. 356, fig. 255; B. Niemeier and W.-D. Niemeier 2000, pp. 769–72.
23. I. J. Winter 2000, pp. 750–51.
24. Warren 1969, pp. 124–56; J. W. Shaw 1973, pp. 19–20, 26, 113, 217; Hirsch 1977, pp. 7–22.
25. For similar conclusions, see B. Niemeier and W.-D. Niemeier 2000, p. 773.
26. I owe this observation to Michele Mitrovich.
27. Warren and Hankey 1989, pp. 52–54, 131–35; MacGillivray 1998, p. 107. Debate continues over when major cultural changes occurred on Crete; their nature, duration, and effects; and the terms used to mark these changes. For example, while most date the end of the Protopalatial era to the end of MM IIB, MacGillivray now dates it to MM IIIA; MacGillivray 2007, esp. pp. 105–6, 143–44. As this subject clearly lies beyond the scope of this essay, for the most recent discussion of the problems, see Macdonald 2010; Macdonald 2012. I am grateful to Colin Macdonald for his advice and guidance through the subtleties of these murky issues.
28. Margueron in *Beyond Babylon*, p. 27.
29. For Galatas, see Rethemiotakis 2002; for Neopalatial Phaistos, see La Rosa 2002; for Knossos, see Macdonald 2002; Macdonald 2005; Hood 2005; Macdonald forthcoming.
30. On these synchronisms, see Collon 2000, p. 290; B. Niemeier and W.-D. Niemeier 2000, pp. 767, 772; Aruz 2008, pp. 71, 73; Cline, Yasur-Landau, and Goshen 2011, p. 256.
31. B. Niemeier and W.-D. Niemeier 2000, p. 780; Cline, Yasur-Landau, and Goshen 2011, p. 256.
32. Woolley 1948, p. 14; Woolley 1955, pp. 228–34; W. S. Smith 1965, pp. 102–4; W.-D. Niemeier 1991. For the most recent discussion of the issue, with bibliography, see I. J. Winter 2000; B. Niemeier and W.-D. Niemeier 2000; Cline, Yasur-Landau, and Goshen 2011.
33. Woolley 1948, p. 14; Woolley 1955, pp. 228–34.
34. B. Niemeier and W.-D. Niemeier 2000.
35. Ibid., p. 781, figs. 14, 15.
36. J. M. Evans in *Beyond Babylon*, p. 33, no. 8.
37. B. Niemeier and W.-D. Niemeier 2000, p. 781.
38. Buchanan 1966, pp. 177–78, nos. 901, 906; Collon 1975, p. 44, no. 76; Pfälzner in *Beyond Babylon*, p. 228, no. 138.
39. W. S. Smith 1965, p. 113, fig. 51; *Beyond Babylon*, p. 194, fig. 62; B. Niemeier and W.-D. Niemeier 2000, p. 781.
40. B. Niemeier and W.-D. Niemeier 2000, p. 781, n. 40.
41. Woolley 1955, pp. 230–31; W. S. Smith 1965, p. 103, fig. 137; B. Niemeier and W.-D. Niemeier 2000, pp. 784–89, figs. 17–21.
42. B. Niemeier and W.-D. Niemeier 2000, p. 787, fig. 22.
43. Woolley 1948, p. 14; Woolley 1955, p. 231.
44. B. Niemeier and W.-D. Niemeier 2000, p. 787, figs. 17, 19, 20, 22.
45. For the few examples of Protopalatial griffin images, see Aruz 2008, pp. 107–8, figs. 229, 230.
46. Buchanan 1966, p. 177, no. 901, p. 178, no. 906; Collon 1975, p. 79, no. 145; Buchanan 1981, p. 421, nos. 1214, 1216, p. 422, nos. 1217, 1221, p. 425, nos. 1225–1227, p. 426, nos. 1231, 1232, p. 430, no. 1250; Aruz 2008, p. 108.
47. Jones 2005, p. 714.
48. Ibid.
49. Aruz 1995, pp. 14–16; Aruz 2008, pp. 142–43.
50. B. Niemeier and W.-D. Niemeier 2000, p. 784, for discussion and bibliography; see also I. J. Winter 2000, p. 753.
51. S. Sherratt 1994, p. 237; B. Niemeier and W.-D. Niemeier 2000, p. 783.
52. Betancourt 1985, pp. 107–9, fig. 84G; Rethemiotakis 2002, pls. XVIa, XVIIa.
53. Woolley 1955, p. 92.
54. B. Niemeier and W.-D. Niemeier 2000, p. 772. On the dating of the paintings from Tel Kabri, see B. Niemeier and W.-D. Niemeier 2000, pp. 767–69; Cline, Yasur-Landau, and Goshen 2011, pp. 254–57.
55. Hood 2005, pp. 49, 52.
56. Grissom 2000.
57. Collon 1975, p. 60, no. 111; discussed recently by Collon 2000, pp. 286–87, figs. 1b, 1c; Aruz in *Beyond Babylon*, pp. 132–33.
58. Yener 2012.
59. Woolley 1921, pp. 103–10.
60. On the East Bastion at Knossos, see most recently Macdonald 2002, p. 43; Macdonald 2005, pp. 140–42.
61. B. Niemeier and W.-D. Niemeier 2000, pp. 776–80.
62. On the date of the Tel Kabri frescoes, see most recently Cline, Yasur-Landau, and Goshen 2011, pp. 254–57.
63. Papagiannopoulou 2008a.
64. Knappett and Nikolakopoulou 2008, pp. 19, 27–29, fig. 17.
65. Vlachopoulos forthcoming.