The Greek island of Crete, located southeast of the mainland in the eastern Mediterranean Sea (Branigan 1988), has long been the setting for fantastic legends and spellbinding myths. Archaeology, the study of material remains of the past (Palmer 1965), has been the tool used in uncovering the mysteries of this island and its ancient civilizations. Perhaps one of the most widely recognized civilizations that flourished on this island is that of the Minoans during Crete’s bronze age from about 3000 BC to 1100 BC (Castleden 1993). The term “Minoan” is derived from the name of King Minos, and was first proposed by Sir Arthur Evans in the early 1900s (Evans 1964). The Minoans are famous for their distinctive craft industries and metalworking, but perhaps more than anything else they are renowned for their magnificent palaces. Thus, the focus of this research is the archaeological evidence of Minoan palaces in Crete: the origins of the Minoan palatial form, common features of palaces, when specific palaces were constructed, and where these palaces were constructed.

ORIGINS OF THE MINOAN PALATIAL FORM

As with any form of monumental architecture for which there is archaeological evidence there is the question of where it came from or how it originated. Like henges constructed in prehistoric temperate Europe, there are numerous hypotheses about how the Minoan palatial form came about. According to J.W. Graham (1962), there are at least three possible explanations for the rise of the Minoan palatial form. The first explanation is that a palace plan developed from earlier structures such as the “House on the Hilltop” at Visiliki (2600 BC) or from the settlement complex at Fournou Koripi (Graham 1962). Like the later palaces, the House on the Hilltop at Visiliki had a central court with apartments surrounding it (Castleden 1990). Also, it seems the house was constructed outwards from the courtyard, also a feature of later palaces (Castleden 1990). Another similarity is found in the building materials of both the House at Visiliki and the palaces. Both
had mud-brick components: the house at Visiliki was mainly mud-brick and the upper floors of palaces were made of mud-brick, but had first floors built of stone (Castleden 1990). The complex at Fournou Koriphi also shares similarities with the house at Visiliki. At Fournou Koriphi, the complex had plastered ceilings similar to those at Visiliki and was also constructed mainly of mud-brick (Branigan 1988). Features common to the house at Visiliki, the complex at Fournou Koriphi, and the palaces include painted walls, narrow corridors, light-wells, wall timbers, wall benches, offset doorways, paved staircases, western and central courts, and inter-mural wells (Branigan 1988). Although these features do not indicate a direct connection between these earlier buildings and the later palaces, it does suggest the concept of palace construction already existed within the Minoan civilization (Branigan 1988).

A second explanation for the origins of the Minoan palatial form is that the palace plans were imported from other regions (Graham 1962). Graham (1962) suggests the palatial form may have been introduced from the region of Anatolia or Syria. Buildings found at Beycesultan in Anatolia and at Mari and Alalakh in Syria are very similar in complexity and construction to the Minoan palaces and the houses found at Visiliki and Fournou Koriphi (Graham 1962). These buildings also predate Minoan palaces (Graham 1962). Religious shrines excavated at Beycesultan were comparable to religious shrines found in Minoan palaces and showed evidence of the bull horn motif common of Minoan architecture (Palmer 1965). Other evidence of the importation of the palatial form from other areas is the discovery of art found at both Alalakh in Syria and at the Palace of Knossos in Crete (Palmer 1965). A design found on vessels from Alalakh is very similar to art found on vases at the Palace of Knossos in Crete (Palmer 1965). Although this points out a possible connection between Alalakh and Crete, it is not very strong evidence for the importation of the palatial form.

The third explanation for the development of the Minoan palatial form is that it was the creation of a Cretan architectural mastermind (Graham 1962). This hypothesis equates this architectural genius with Imhotep, the architect responsible for the great Step Pyramid at Saqqara (Graham 1962). This third explanation is the one Graham chose to account for the origins of the palatial form (Graham 1962). Part of the reasoning behind Graham’s agreement with this hypothesis is the discovery of several features that seem to be exclusive to the Minoan palaces that are not found in the architecture of other places current with the Minoan civilization (Graham 1962). Features that seemed distinctive of the Minoan architectural form included: the pier
and door partition, the lightwell, the use of alabaster veneering, the “Lustral Basin” or sunken bathroom, downward tapering columns, columns with oval cross-sections, porticoed central courts, porticoes with alternating piers and columns, monumental stairways, major public rooms on upper floors, and the door or gateway with a central column (Graham 1962).

THREE EXAMPLES OF THE MINOAN PALATIAL FORM

In discussing the Minoan palatial form, it is helpful to mention three of the most famous palaces in Crete in order to get an idea of where palaces were constructed and what features were common to most palaces. These three examples include the Palace at Knossos, the Palace at Phaistos, and the Palace at Mallia.

Of these three examples the Palace at Knossos in northern Crete is the most famous. The Palace at Knossos is also the largest, covering nearly 19,000 square meters (Warren 1975). Also known as the Palace of King Minos, Knossos was excavated by Sir Arthur Evans in the early 1900s (Evans 1964). Evans was first led to Crete in 1894 through his curiosity about small sealstones he had found in Athens from and antique dealer (Castleden 1990). Curious about the origin of these small three- and four-sided stones with engraved symbols, Evans asked the dealer where they had originally been found (Castleden 1990). Evans discovered that the stones had come from Crete, and this is what finally led him to the Palace at Knossos (Castleden 1990). It wasn’t until 1900 that Evans finally began excavations at Knossos (Castleden 1990). Excavations at Knossos revealed that it was built around 1700 BC (Evans 1964). The palace, built upon a tel, or a hill made of accumulated habitation debris, was surrounded by a “well-planned system of paved stone roads, the oldest in Europe” (Warren 1975: 84). The palace was constructed of both smoothly dressed stone block and of rougher stone blocks (Warren 1975). Walls were plastered and reinforced with wooden beams to protect against earthquakes (Warren 1975). Knossos is also known for its magnificent frescoes and its wealth of artifacts such as figurines and vases (Pendlebury 1939). The Grand Staircase at Knossos has been called the “greatest marvel of Minoan architectural engineering” (Warren 1975: 86).

A second example of the Minoan palatial form is the Palace at Phaistos (Pendlebury 1939). This palace was constructed around 2000 BC
(Warren 1975). It is situated on Kastri Hill, overlooking the Mesara plain in south-central Crete (Pendlebury 1939). Phaistos was excavated between 1900 and 1909 under the direction of Luigi Pernier (Fitton 1996). The palace at Phaistos is important because of the evidence it provides for Minoan religion. At Phaistos, just inside the west wall, a shrine room was excavated measuring 3.62 by 2.57 meters (Warren 1975). The room had “low, plastered benches around the walls, while set in the floor lay a large clay offering table with a central hollow” (Warren 1975:74). The table had images of cattle impressed on it, which may be symbolic of sacrificial cattle blood (Warren 1975). Also inside the shrine was an inlaid stone offering table along with a triton shell used as ritual trumpet, as evidenced by an engraved seal depicting the use of triton shell trumpets (Warren 1975). The Kamares cave near the palace at Phaistos also gives important clues to Minoan culture (Pendlebury 1939). A distinctive style of pottery, the Kamares style, was discovered in this cave and it was inferred that this style was used by the elites who occupied the palace (Pendlebury 1939). Another famous find from Phaistos is the Ayia Triadha Sarcophagus (Fitton 1996). Evidence for Minoan religion was found on the expertly painted scenes on this sarcophagus depicting funerary rituals (Fitton 1996). Another important find from Phaistos is the Phaistos Disc dating from around 1700 BC (Castleden 1993). This disc depicts a double spiral statement of pictograms imprinted on clay with 45 wooden or metal stamps (Castleden 1993). The script on this disc has yet to be deciphered, thus leading some experts to believe the script was developed especially for a religious purpose because no other examples have been found (Warren 1975 Castleden 1993).

A third specific example of the Minoan palatial form is the Palace at Mallia. This palace was built sometime during the period from 1700 BC to 1450 BC (Warren 1975). Excavated in 1915, Mallia has provided a wealth of important Minoan artifacts. These important findings include a circular libation table “probably for offerings of seeds and fruits” (Warren 1975:101) and many pithos or large storage jars (Branigan 1988). Probably the most striking feature of the palace at Mallia is the amount of space devoted to storage (Graham 1962).

**COMMON FEATURES OF MINOAN PALACES**

The common features of Minoan palaces are extensive and support the idea of a definitive Minoan style. These features are repeated in at least four of the excavated palaces on Crete (devlab.dartmouth.edu). The first,
and perhaps most important, feature is the central court. The central court tends to be a very large area of palaces and it has been argued that the central court was used for the sport of bull-leaping (Graham 1962). A second feature common to Minoan palaces is the west court (Graham 1962). This extensive paved area is characterized by crisscrossed cut limestone causeways (Graham 1962).

Another feature of the Minoan palatial form is magazines (Castleden 1990). Magazines in most cases were large areas on the ground floors reserved for storage (Graham 1962). They were used to store items such as wine, oil, and cereals (Warren 1975). Of the three palace examples discussed, the palace at Mallia has the most space devoted to magazines (Graham 1962). In the west wings of the palaces at Knossos and Mallia, the magazines open to the west off of a north-south oriented passageway (Graham 1962). At Phaistos the magazines are located on either side of a large east-west corridor in the west wing (Graham 1962).

Residential quarters are also a common feature among Minoan palaces (Graham 1962). At the palaces of Knossos, Phaistos, and Mallia, groups of rooms that contain certain features constitute residential quarters (Graham 1962). Features of these residential quarters seem to fit a modern day description of an apartment, or living space that includes necessary spaces such as bathrooms or toilet areas. The components of residential quarters include a hall-forehall-lightwell combination, private room, a lustral basin, and a toilet (Graham 1962). Residential quarters are found in the southeast portion of the palace at the foot of the Grand Staircase at Knossos and at Phaistos and Mallia, are found in the northwest area of the building (Graham 1962).

The next major feature of Minoan palaces as noted by Graham is the banquet hall (1962). Banquet hall areas are isolated on the second floors of palaces and are accessed easily from kitchens and pantries on the ground floor (Graham 1962). At the palaces of Mallia and Phaistos, the banquet hall is located at the north end of the central court (Graham 1962). At Knossos, the banquet hall is situated at the north end of the palace building (Graham 1962). Graham has argued that these banquet areas are isolated from other more public areas of the palaces because the Minoans felt eating was an important social activity (1962). Graham also proposes the banquet hall was separated from the kitchen areas to keep the cooking odors confined to a specific area (1962). In the palaces at Knossos, Phaistos, and
Mallia, the banquet halls have two separate staircases: one leads from the kitchen for easy access, and the other leads from a more public space for guests (Graham 1962). The idea of two separate staircases for one area is an interesting piece of evidence that illustrates the importance of aesthetics in Minoan culture.

_Piano Nobile_, or public apartments, is another common feature of the Minoan palatial form (Graham 1962). These areas were used as reception halls and were located on the second floor of the west wing (Graham 1962). At Knossos, Phaistos, and Mallia, evidence for these second floor apartments includes fallen fragments of decorated plaster, fallen doorjambs and pillar bases into the first floor area (Graham 1962).

Cult rooms are also identified as a common feature of Minoan palaces (Graham 1962). These rooms are found on the west side of the central court in palaces and are called “cult” rooms because of the presence of the double axe, trident, and star symbols incised on pillars (Graham 1962). Some archaeologists have interpreted these symbols as a belief in a divinity responsible for earthquakes (Graham 1962). A common interpretation of these rooms is that they were used for ritual activities designed to appease the destructive divinity (devlab.darmouth.edu).

Also common to Minoan palaces is guest room suites (Graham 1962). At Knossos these suites are found at the most southeast corner of the palace, south of the residential quarters (Graham 1962). Guest room suites at Mallia are located in the southwest corner of the palace near the main south entrance (Graham 1962). At Phaistos, these rooms also appear in the southwest corner (Graham 1962). As indicated by the name, Graham proposes these rooms were used for housing guests (1962).

The theatral area is also a common feature in the Minoan palatial form (Graham 1962). The location of the theatral area varies in each of the three palace examples. At Knossos, it is found in the northwest corner (Graham 1962). The theatral area at the palace at Phaistos is located at the north end of the west court (Graham 1962). There is no direct evidence existing at Mallia for the theatral area, but there are sets of three or four broad steps that have been interpreted as the steps that would have surrounded the theatral area (Graham 1962). Possible functions for the theatral area at these palaces include: political gatherings, religious ceremonies, sacred dancing, bull-leaping, and maybe boxing and wrestling (Graham 1962).
The final component common to the Minoan palaces of Crete is the grain silos or *kouloures* (Graham 1962). These silos were large cylindrical structures that were built partly underground and were constructed of debris (Graham 1962). There are three preserved *kouloures* at the palace at Knossos and they are located in the southern part of the west court (Graham 1962). At Mallia, eight shallow *kouloures* are arranged in two rows of four, with an indication of a raised platform floor, presumably built to keep grain dry (Graham 1962). The *kouloures* at Mallia are located in a walled area between the west court and the west façade of the palace at the southern end (Graham 1962). Graham notes an interesting interpretation of the placement of these grain silos. He suggests that in addition to their practical uses, they probably had a symbolic significance also (Graham 1962). This seems very probably given the fact that at each palace, the silos are located in front of the main façade (Graham 1962).

**CONCLUSION**

As illustrated by the magnificent examples of Minoan palaces, the ancient island of Crete has provided archaeologists and historians a plethora of evidence. These ancient palaces were truly immense feats for the architects who designed them. Given the complexity of the Minoan palatial form, it seems most likely that it was imported from Anatolia or Syria. Not only do the palaces provide clues to architectural styles and methods of the period, but also they give us hints to the life ways of the people of this great civilization. The Minoan palaces of Crete are an important archaeological resource for this reason. They provide a powerful example of advancement from ancient times.
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