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An Assessment of Protogeometric Apsidal Buildings from Greece

Sarah Marie Moore

University of Tennessee - Knoxville

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An Assessment of Protogeometric Period Apsidal Buildings

Senior Honors Thesis: Sarah Moore
Director: Dr. Aleidis Van de Moortel
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Introduction

The period from approximately 1000-900 B.C. in mainland Greece is generally regarded as a time of decline in society and culture. It was thought to have little to offer to our understanding of the development of Greek society. Researchers often believed that this period had little to do with the rise of Archaic society in Greece, mainly because there was little archaeological evidence from the period to suggest otherwise. The outdated name given to the period by previous researchers, the “Greek Dark Age”, refers to our lack of knowledge about the period. However, it is becoming increasingly evident through new research that the period following the collapse of the Mycenaean palaces is important in understanding the social and political development of Greece.

In ceramic terms, the Greek Dark Age is referred to as the Protogeometric and Geometric periods because of pottery styles, which will be discussed later. The present study will focus on a specific building type, the apsidal building, during the Protogeometric period, which is dated to ca. 1000-900 B.C. In light of new evidence it is clear that Protogeometric societies on the Greek mainland did not live in isolation. This is indicated through the widespread use of Protogeometric pottery styles and the use of iron (Lemos 2002: 1). Uniformities of material culture, such as these, are evidence for communication between groups living on the Greek mainland. Common motifs, styles, and inventions are indications of the sharing of information between groups. There is also some indication, most notably at Lefkandi, of exchange with locations outside the Aegean, such as the Near East. Communities of the Protogeometric period were permanent settlements and not nomadic, which is evidenced by their building construction. Buildings were made of stone foundations with waddle and daub walls or
mudbrick walls—nomadic groups would build structures of lighter construction. In addition, several sites give proof for stratified social systems through burial practices and/or architecture (Lemos 2002: 1-2). The most notable case of this occurs at Lefkandi, where a warrior, woman, and four horses are buried in the central room of a monumental apsidal building.

Analysis of the Protogeometric period must be based on archaeological material because there are no written records from the period. The only accounts of the period occurring in literature come from Homer and stem from an oral tradition. These tales were put in writing in the 6th century, according to most scholars, but they contain details that relate them to the Bronze Age and Iron Age. The Iliad, attributed to Homer, includes many Mycenaean features found in the archaeological record—for example the boar’s tusk helmet—but the Iliad contains many stories and was composed in its present form almost 400 years after the collapse of the Mycenaeans. People living in the Protogeometric period probably recounted the glory of the fallen Mycenaeans, who may have been their ancestors. Oral accounts often evolve, especially over the course of a few hundred years; because of this it is difficult to discern which features of these stories are Mycenaean and which are Protogeometric or Geometric in date.

Currently we do not have much archaeological evidence dating to the Protogeometric period. Most of the evidence currently available comes from burials as opposed to settlements. Classical Archaeology previously focused on more elaborate artifacts and architecture. Complete and painted vessels were prized, while incomplete

1 Lemos, The Protogeometric Aegean, Chapter 6.6 (2002).
and undecorated vessels could be thrown away. Methodology for excavating prehistoric settlements was not employed, and Protogeometric sites were often left unexcavated or poorly excavated. However, in general this view has long been discounted and is not the only reason for the scarcity of Protogeometric material. Protogeometric period settlements often lie under later settlements, and many times researchers halted their excavations, due to time or monetary constraints, before reaching the Protogeometric levels. Also, Protogeometric period sites can be difficult to locate. Unless a site was continuously occupied from the Protogeometric period to historical periods, we usually do not have much written evidence for its existence. There are no historical records for many Protogeometric period sites. While monumental architecture does exist from the Protogeometric, most buildings were constructed of wattle and daub or mudbrick on a stone socle. These walls would not withstand centuries of weathering, much less human and natural destructions. The only existing portions of these buildings today are the foundations, which are mostly underground and not easily located unless there exists a reason to suspect a settlement, such as Protogeometric material in a surface survey or written records.

Presently new excavations are taking place at sites with Protogeometric material, which will enhance our knowledge of the period. In order to learn more about Protogeometric society research needs to be carried out concerning specific features of the period. As Vincent Desborough said, “The more we know about the [Protogeometric period], the more we will know how and why the preceding society failed and the succeeding arose” (1972: 12).
Methods and Aims of the Present Study

The purpose of this study is to perform a comprehensive exam of a prominent building type of Protogeometric society—the apsidal building. Currently only a handful of apsidal buildings dating to this time period have been found, but their functions are not clear. Apsidal buildings may have been the homes of rulers, religious buildings, served as community redistribution centers, or served as all of these. The purpose of this study is to provide detailed information regarding this specific building type so that it may be used to assess the function and role of apsidal buildings in Protogeometric society.

I employ the method of cognitive archaeology, defined by Renfrew and Bahn as “the study of past ways of thought as inferred through the surviving material remains” (2005: 41). The purpose is to ascertain using only archaeological evidence how these buildings functioned in Protogeometric society and also why the ancient communities built them in certain ways. This is necessary because no historical documents originate during this period in Greece.

Contextual analysis, a part of holistic archaeology, is also employed throughout this study. Contextual analysis involves learning from an artifact not only by its location within a building or its frequency at a site, but also by its association with other artifacts. This is a way to understand social organization and/or differences in status (Renfrew and Bahn 2005: 143-144).

In order to use contextual analysis as a means to establish the functions and roles of Protogeometric apsidal buildings it is necessary to provide a detailed review of the buildings, their locations, and their artifacts. Section III provides information for the Protogeometric apsidal buildings. They are organized chronologically as far as possible
since the dates of some buildings are not precise. The buildings are organized in this way because some of the conclusions in Section V relate to changes over time.

Inspiration for this research came from the site of Mitrou, a tidal islet in East Lokris, Greece. The first season of excavation at Mitrou was conducted in summer 2004. The project directors are Dr. Aleydis Van de Moortel of the University of Tennessee and Ms. Eleni Zahou of the Greek Archaeological Service. Surface finds date as early as the Neolithic and continue through the Protogeometric, so there is considerable possibility that Mitrou was continually occupied throughout most of Greek prehistory. Mitrou could shed light on important transitional periods, and one of these periods is the Bronze Age-Iron Age transition. During excavation pottery of each phase and subphase of this transitional period was discovered, as well as an Early Iron Age settlement and cemetery above the Bronze Age habitation levels. The most impressive discovery was a large apsidal building, Building A. Unlike most Protogeometric apsidal buildings, Mitrou's Building A contained a rich floor deposit of fallen artifacts. Detailed research on Protogeometric apsidal buildings will help in understanding the information found at Mitrou and in relating it to other Protogeometric sites.

I. Historical Overview: Apsidal Buildings in Prehistoric Greece

Introduction

This chapter provides a historical overview of apsidal buildings throughout the prehistory of Greece. It gives theories as to the origin of the apsidal plan and how it arrived in mainland Greece. The apsidal plan first appears in Greece during the Early
Helladic II-Early Helladic III transition. Before that time it was not seen in mainland Greece, but it becomes a standard building plan during the Middle Helladic.

I.1 Early Helladic II-Early Helladic III Transition

The Early Helladic II-Early Helladic III transition occurred ca. 2400-2000 B.C. This was a period of change rather than continuity on mainland Greece. The reason(s) for the changes that occurred [during this period] are currently being debated; it will be difficult for researchers to come to an agreed upon conclusion without proper publication of the main sites from this transitional period (Rutter 2000).

There seems to be influences from Anatolia during this transitional period. The Lefkandi I culture, which occurred ca. 2450/2400-2200/2150 B.C.—EH II B—is described by Rutter as “Anatolianizing”. Red- and black-burnished pottery types are the most distinctive within this culture. They are also located within the Cyclades, and are thought to have originated in Western Anatolia. This pottery occurs mainly along the eastern coast of central Greece, except Boetia, and is not present in the Peloponnese (Rutter 2000).

Apsidal buildings make their first appearance in central and southern Greece during the end of the Early Helladic period. Although there is not evidence suggesting they occurred previously, they become a typical building type during the Early Helladic III period and the Middle Helladic (Rutter 2000). Apsidal structures were mostly domestic buildings, but the remains of two large apsidal buildings found at Thebes suggest they may have been of some importance (Fig. 1).
Like the pottery, apsidal buildings seem to have originated in Anatolia. According to Rutter, on present evidence it seems that the cultural shift that defines the Early Helladic II period was the result of a population movement from Western Anatolia, which occurred without violence at any known site. Trade with Western Anatolia could account for changes in pottery styles, but it would not explain the standardization of new architectural types in such a short period of time (Rutter 2000).

The Tiryns culture occurred at the beginning of the Early Helladic III period, ca. 2200/2150-2050/2000 B.C. This cultural phase is found at Lerna and at Tiryns directly above the Korakou—EH IIA—culture which had been destroyed by fire. The Lefkandi I culture is absent at these sites. At sites where both cultural phases are located—Thebes, Eutresis, Orchomenos, and Lefkandi—the Tiryns culture occurs later in the stratigraphy. The pottery of this culture includes styles that stem from the Peloponnese—"Patterned ware"—and central Greece—"Ayia Marina ware". The pottery from this period is much different than that of the previous culture, the Early Helladic II A (Rutter 2000).

The best-known architectural remains from the Tiryns culture come from Lerna (Fig. 2). The most important structure during the Early Helladic II A at Lerna was the House of the Tiles. During the Early Helladic III period, a tumulus was raised over this building. The houses built at Lerna within this period—Lerna IV—are usually apsidal, but some rectangular houses do occur. Most of these buildings are constructed of mudbrick on top of a rubble stone socle, and some are as large as 12m x 7m. Several apsidal houses were also built at Olympia during the early phase of this period. The Tiryns cultures seems to suggest that the transition from the Early Helladic II period to the Early Helladic III period spawned a blend of the Korakou and Lefkandi I cultures. It
also may be seen as a transitional period from the Early Helladic II period into the Middle Helladic period (Rutter 2000).

I.2 Middle Helladic

The Middle Helladic period may be up to 500 years long, existing from ca. 2050/2000-1550 B.C. However, because there is not yet an established way of subdividing it Rutter divides the Middle Helladic into MH I, ca. 2050/2000-1900, MH II, ca. 1900-1700, and MH III, ca. 1700-1575/1550 (Rutter 2000). The pottery of the Middle Helladic period is separated into three main categories—“Minyan”, “Matt-painted”, and “Cooking pottery”. Most settlements during the Middle Helladic were situated on hills and seem to have been congregated as opposed to dispersed. Houses during the Middle Helladic period were rectangular or apsidal megara. These were divided into two-three rooms by cross walls and usually had a porch created by the elongation of the two long walls. These houses were built of mudbrick on a stone socle. The buildings at Lema continue to have the same plans, but their construction was improved (Rutter 2000). Apsidal buildings were common in the Middle Helladic period, but became less frequent during the subsequent Mycenaean period (Wardle 1987: 317). However, after the Late Helladic destructions of Mycenaean centers, the apsidal plan became popular again throughout Greece.

I.3 Conclusions

The apsidal building plan seems to be most popular in Greece during times of societal change. Influxes of people are evident through material and cultural remains during the Early Helladic II-Early Helladic III transition and at the beginning of the Middle Helladic period. The apsidal plan thrives subsequent to both of these periods.
However, it is not clear whether the apsidal plan was brought to Greece by migrating or invading peoples, or if it was the building style that native Greeks preferred during these times of upheaval and cultural changes. The Late Helladic IIIC-Protogeometric transition follows the trend set by the earlier transitional phases. The apsidal plan is preferred during the Protogeometric period. The question remains as to the origin of this plan and its function in Protogeometric period society.

II. Final Bronze Age and Early Iron Age Society

This chapter serves to provide a social context for the buildings that will be described and analyzed. It presents information regarding societal changes, including shifts in burial methods and pottery styles and also a brief overview of Protogeometric architecture.

II.1 Introduction: The Late Helladic Decline and Late Helladic IIIC Period

Mycenaean palatial complexes begin to develop in the Late Helladic II period. They are known at Mycenae, Tiryns, probably Midea and Argos, Pylos, the Menelaion near Sparta, Thebes, Gla, probably Athens and Orchomenos, and possibly Iolkos (Rutter 2000). They are mainly fortified and located on hills so that they are highly defensible; they are described as palatial complexes because they contain large structures that can be interpreted as palaces. When fortified, these complexes are defined as citadels because they contained a “palace”, some homes of the elite, workshops for artisans, and in the case of Mycenae, graves; the entire settlement was not located within the fortification walls. Exceptions to this are Gla and Krisa, where a fortification wall enclosed the whole town at each site. The earliest palatial structure is the Menelaion in Laconia, which is
dated to the Late Helladic IIIB-III A1 period. The palaces of Mycenae, Tiryns, and Thebes are dated to the Late Helladic IIIA2 period, and those of Pylos and Gla to the Late Helladic IIIB period. These all were destroyed in the later half of the Late Helladic IIIB phase (Rutter 2000).

During the Late Helladic IIIB phase Mycenae’s fortification walls were enlarged to incorporate the water supply system. The third phase in the construction of the fortification walls at Tiryns also surrounded the water supply, and the East and West Galleries were constructed for extra storage. These are all evidence that toward the end of the 13th century these people were concerned about being attacked, whether it was by foreigners or other Mycenaeans. The gateways into the Mycenaean citadels are located in such a way that attackers would be forced to expose their unshielded side while besieging the structure. The palace at Pylos is the only substantial center that is not fortified (Rutter 2000).

Mycenaean centers may have been at risk because their society was based on a warrior culture or because they had become so powerful. Mycenaean groups may have been more likely to attack each other because they were warlike people. Perhaps foreign attackers may have seen them as prime targets because of their substantial wealth. Whatever the cause, Mycenaeans were right to fortify their palatial centers, but these fortifications could not save them from eventual destruction (Rutter 2000).

Many Mycenaean settlements were abandoned or destroyed at the end of the Late Helladic IIIB Phase, the 13th Century B.C. The House of the Oil Merchant, House of Shields, House of the Sphinxes and West House at Mycenae were deliberately burned down in Late Helladic IIIB1. The palatial structure at Gla was destroyed and the Copaïc
Basin was flooded. During this time period the water supply systems at Mycenae and Tiryns were included within the fortifications, and storage facilities were added at Tiryns. The construction of a wall at the Isthmus of Corinth to seal off the Peloponnese was begun but not completed (Rutter 2000). The Mycenaean seemed to be aware of impending danger.

Numerous theories have been proposed as to the cause(s) of the collapse of Mycenaean civilization. Some suggest internal strife and social unrest; however it is highly unlikely these caused the nearly simultaneous destruction of the Mycenaean palatial centers throughout Greece. The Sea Peoples are a popular reason for the fall of the Mycenaean. Our only direct evidence comes from Egyptian sources during Ramesses III. Perhaps the Sea Peoples whom Ramesses III fought also destroyed the Mycenaean centers, or maybe the Sea Peoples that attacked Egypt were displaced from the destruction in Greece. If the Sea Peoples were the reason for the collapse of the Mycenaean, it could be because they attacked the Mycenaean or because their attacks elsewhere disrupted the trade networks on which the palatial centers depended. Carpenter suggested in 1966 that climatic changes could have affected the agriculture and in turn caused widespread social disruption. This theory would also explain the extra storage galleries built at Tiryns and the inclusion of a water supply within the fortifications at Tiryns and Mycenae (Rutter 2000).

The destructions were widespread and occurred within a short time period, suggesting that invaders caused the fall of the various Mycenaean kingdoms, but it is not clear from where the danger was coming. The attempt to block travel into the Peloponnese overland and the evidence that Gla was destroyed before the palatial centers
of the Argolid both suggest that the attackers were coming from the north, but more information is needed from Northern Greece. On the other hand, tablets from Pylos mention watchers by the sea, implying that the inhabitants there were worried about overseas attacks. Mycenae and Tiryns were both destroyed in the Late Helladic IIIB2 period, but the excavators at Tiryns believe an earthquake caused its destruction by fire. Nearby Midea was also devastated by fire at the same time. Thebes, Krisa, the Menelaion, Ayios Stephanos, Pylos, and Nichoria were all destroyed or abandoned by the Late Helladic IIIC period (Rutter 2000). Mycenaean society came to a final end at the close of the 12th century. The main problem with the theory of invaders is that there is little or no proof of people with a new culture living in Greece after the Mycenaean collapse (Rutter 2000).

After the destruction of the Mycenaean centers, the subsequent Late Helladic IIIC Phase, the 12th Century B.C., was typically a recovery period throughout Greece. The Mycenaean culture never regained its previous status, and its social hierarchy was reduced from a complex administration system to small groups of officials or individual leaders. Cist tombs were placed in several Mycenaean sites, including Athens and the citadel at Mycenae. This suggests that they were no longer heavily populated because areas could be set aside within the settlements as burial grounds. However, the burial grounds are evidence that these sites were not fully abandoned. After the Late Helladic IIIB destruction of the palaces, houses were rebuilt within the citadel at Mycenae and several large megaroid buildings were constructed outside the wall at Tiryns. Other buildings were constructed inside its Lower Citadel along with a shrine that was located against the western fortification wall. LH IIIC settlements were also located at Lefkandi,
Asine, Korakou, and Teichos Dymaion. Some areas of Greece, such as Messenia and Laconia, were lightly occupied during the LH IIIC (Rutter 2000). However, parts of Messenia were reoccupied during the following Protogeometric period, for instance Nichoria.

There was a prosperous Late Helladic IIIC period settlement at Koukounaries on the island of Paros\(^2\). The site was violently destroyed in LH IIIC period, but it was reoccupied to the end of the LH IIIC period and perhaps into the Sub Mycenaean period. The site may have been continuously occupied throughout the transition from the Late Bronze Age to the Early Iron Age. Pottery sherds from the Early Protogeometric period confirm this (Ainian 1997: 82). Like Koukounaries, many LH IIIC period sites suffered more destruction during that time. A large number of LH IIIC levels existed at Lefkandi, suggesting that it was repeatedly destroyed and rebuilt. Mycenae and Tiryns suffered more destruction ca. 1150/1125 B.C., but continued to be occupied during the LH IIIC period (Rutter 2000).

There is evidence for cultural shifts during the Late Helladic IIIC period. However, it is not clear if these societal changes represent a new population or the adoption of new practices by the current population after the collapse of the Mycenaean administrative system. One significant change occurs in burial practices. The most popular Mycenaean burial practices were chamber tombs and tholos tombs, although shaft graves and cist tombs were also used less regularly. Chamber tombs were no longer used in mainland Greece by the end of LH IIIC, and tholoi were only used at a small number of areas, including Thessaly. Two types of burials frequently occur during the

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2 The site of Koukounaries also contained an apsidal building, which is treated in Section III.8.
LH IIIC—cremation and individual burial in a cist tomb. Cremation may have been introduced from Anatolia, where it has been recognized at several sites including Troy VIh and Müskebi, and was also practiced by Hittites. Cist tombs most likely represent a return to Middle Helladic burial practices and do not give evidence for a new population since they were used infrequently during the Mycenaean period (Rutter 2000). New metal items also appeared during the Late Helladic IIIC period. These included the "Naue II" sword, the arched fibula, and bronze long pins. Desborough identified these as evidence for a new population entering mainland Greece (1972: 52). However, his claim is not readily accepted since these shapes could also be explained by cultural interactions and trade.

Architecture also shifted during the Late Helladic IIIC period. Fortified palatial centers were no longer built, although as mentioned earlier some were still in use during this period. We see a return to the apsidal plan during the LH IIIC, which continues into the subsequent Protogeometric period. A monumental apsidal building existed at Thessaloniki Toumba during the LH IIIb or early LH IIIC period, and it continued to be occupied throughout the LH IIIc and Protogeometric periods. The early date of this building suggests that the apsidal plan entered mainland Greece from the north (Ainian 1997: 234).

II.2 Trends in Protogeometric Society

Previous studies, such as those by Desborough, referred to the Protogeometric period as the Greek Dark Ages. While it is true that not much archaeological evidence currently exists from this period, we cannot assume that it did not affect the formation of later Greek societies. It also can no longer be supposed that
people living during the Protogeometric period in Greece were in complete isolation from each other and from areas outside of Greece. Evidence from sites such as Lefkandi suggests that communication with areas beyond the Aegean, such as the Near East, existed as early as the Middle Protogeometric period. These exchanges are seen in the archaeological record through common practices and styles and regional variations of pottery. For example, one common practice introduced during the Protogeometric period is the adoption of iron technology (Lemos 2002: 1-2).

Although these shared styles and practices suggest cultural interactions between groups living on mainland Greece and with areas outside the Aegean, what is prevalent in the Protogeometric period is regionalism. For example some motifs on pottery are similar in Athens and Lefkandi, but they also have a localized character. This is in contrast to uniformity throughout Greece during the Mycenaean period. Regionalism continues until the Hellenistic period—323-331 B.C.—when uniformity across Greece reappears (Rutter 2000).

Present evidence suggests that the people of the Protogeometric period lived in permanent settlements, some of which were established during the early Sub Mycenaean while a few were continuously occupied from the Late Bronze Age. There is evidence for ranked societies through architecture, artifacts, and burials, most obviously with the Toumba Building at Lefkandi, which is dealt with later. Cult activity is seen throughout Protogeometric Greece as well (Lemos 2002: 1-2). For example, the religious site of Kalapodi is used throughout the Protogeometric period and into subsequent periods when temples are constructed there. Cult activity is also seen at Asine, a domestic cult, Poseidi, founded at the end of the LH IIIC period, Isthmia, the Sanctuary
of Poseidon, Athens, the Sanctuary of Zeus on Mt. Hymettus, and Agia Irini on Keos. It is possible that local rulers were responsible for performing certain cult activities after taking over the political and religious position of the Mycenaean wanax.

The term "Protogeometric" was first introduced in 1917 by Schweitzer to describe pottery. Since then, this pottery has been the basis for the relative chronology of the period, and it is also often the only evidence for the Protogeometric period at a site where those levels have been built over. What is problematic is that most of the pottery we have comes from burials and not settlements. There is a lack of Protogeometric pottery used in everyday contexts (Lemos 2002: 27). The Protogeometric period is divided into three phases: the Early Protogeometric, Middle Protogeometric, and Late Protogeometric. These divisions are based on the stylistic development of the pottery (Lemos 2002: 24). However, these phases are not exact because most sites generally developed independently from each other—the aforementioned regionalism. New and evolved styles occurred at slightly different times at various sites throughout Greece (Lemos 2002: 3-5).

The Early Protogeometric phase is characterized as being a transitional stage between the Sub Mycenaean and the Protogeometric periods. Most finds from the EPG phase come from burials, but settlement material does exist from Argos, Tiryns, Asine, and Nea Ionia (Volos). During the EPG phase, the conical foot replaced the ring base for open vases and small closed vases. The conical foot was a standard feature of Protogeometric vases until the LPG phase. A general improvement in modeling appeared during the EPG phase, but the major innovation was the compass combined with a multiple brush. In Euboea, Phokis, Boetia, and Thessaly the compass was not heavily
used. The vases in these areas have a dark ground decoration relieved by unpainted areas with wavy lines (Lemos 2002, 14).

Evidence for the Middle Protogeometric phase is scarce, and most comes from Lefkandi. The pottery at Lefkandi occurs in both domestic and funerary contexts. An Athenian influence is clear in this pottery, and links established earlier with Thessaly, central Greece, and Naxos continue. Little evidence comes from Athens itself. The most important change to occur in the MPG phase was the introduction of the circle skyphos that had a common decoration of 2 or 3 circles between the handles and a zigzag beneath the rim. A non-pottery item introduced during this period was the iron pin with a bronze globe (Lemos 2002: 18).

The Late Protogeometric is the best represented phase of the Protogeometric period. Certain changes make it easily distinguishable from earlier phases. There was a wider use of dark ground decoration and new shapes, such as the kalathos, pyxis, flat-based cup, and kantharos, were introduced. The pottery of Athens has a high technical standard and was widespread. The pottery of Lefkandi was similar to Athens, but had a degree of individuality—the pendent semicircle skyphos became characteristic of Euboean pottery but it did not appear in Athens. Links between Phokis, Thessaly, and Euboea continued during the LPG phase, evidenced by the presence of the pendent semicircle skyphos and Thessalion kantharoi at all three areas. The end of the LPG phase is characterized by the predominant use of dark ground decoration and disappearance of motifs. The high conical foot was also replaced by a flat or ring base. These changes mark the transition into the Sub Protogeometric phase (Lemos 2002: 24).
Other cultural changes also occurred during the Protogeometric period. Alterations in funerary practices and architecture serve as further proof along with the pottery for a cultural shift. The burial practices of the Protogeometric period were established in the Sub Mycenaean period. Burials ceased from being monumental in the Protogeometric period except for a few unusual cases, such as chamber tombs at Argos. Burials were mostly of individuals as opposed to group burials in the shaft graves, tholoi, and chamber tombs of the Mycenaean period. There was a wide variety of burial practices. Single burials in cist tombs or earth cut tombs and cremation were frequently used, but the funeral rites surrounding these practices often varied between sites. Common customs include assigning status to the dead, such as the status of a warrior given to exceptional males, and the use of certain vessels exclusively for burials, for example the lekythos, pyxis, and kalathos.

Most of the artifacts we have from the Protogeometric period are from burials. Rings, arched fibulae, and two styles of dress pins not present in Mycenaean contexts are the most common objects we have from this period. The “Naue II” type sword is popular, as is the iron pin with a bronze globe. These support the idea of a homogeneous culture because they occur at various locations across Greece.

II.3 Architecture

Architectural evidence from the Protogeometric period is sparse, but it appears that the apsidal plan was most popular and the rectangular and oval plans were also used. While some architectural evidence does exist at various sites, we lack a complete settlement plan from which we may learn about organization of space, separation of public and private buildings, location of industrial and cult areas, and social hierarchies.
What is so far evident from settlements is that most were unfortified, but many were placed on hills that provided natural protection.

A few sites in the Argolid provide some evidence of architecture—Asine, Argos, and Tiryns. Of these, Asine is the most informative. The area to the east of the acropolis at Asine was inhabited during the LH IIIC period through the Geometric period. The earliest structure that relates to the Protogeometric period is a rectangular building that was constructed during the Mycenaean period used through the LH IIIC and EPG. Later, apsidal buildings were built nearby, and an apse of one of these buildings is superimposed on the south wall of the rectangular building. At Argos the Protogeometric period settlement lies under later occupation levels. The earliest building published from Argos is an Early Geometric period apsidal house, but the remains of clusters of Protogeometric period houses located in the southwest part of the modern town are unpublished. A structure for refining silver from the Sub Mycenaean period or Early Protogeometric period is also unpublished. The Protogeometric period evidence at Tiryns comes from the area of the Mycenaean citadel and also surrounding the citadel. An EPG house built of mudbricks was located in the Lower Citadel, and it is possible that the building inside the Mycenaean megaron in the Upper Citadel was continuously occupied until its transformation into a temple of Hera or Athena in the Late Geometric period or Early Archaic period. This building’s construction is dated to the LH IIIC (Lemos 2002: 135-136).

Several areas outside the Argolid also provide architectural and settlement remains. The Xeropolis settlement at Lefkandi was occupied from the Early Helladic period through the Geometric period when its residents may have moved to a site further
south. A 10th century B.C. rectangular house was found at Delphi behind the “Pillar of the Rhodians”. It contained a hearth with animal bones and olive stones. Kalapodi in Phokis was continuously occupied from the LH IIIC period onward. The plans of the earliest structures are not known because they lie under the remains of two Archaic temples, but the associated finds relate these buildings to cult activity. At Nea Ionia (Volos) in Thessaly Protogeometric period rectangular structures are found with intramural child burials. Several rooms in these buildings have hearths and are associated with workshops (Lemos 2002: 137-138).

One point clear from the architectural evidence is that the apsidal plan again became popular. It was frequently used in the Middle Helladic, but was seldom used in the Mycenaean period. After the upheaval of the fall of the Mycenaean centers, the apsidal plan came into use again throughout Greece. The apsidal plan appears at almost every site where settlement remains from the Protogeometric period are found. The origin of the plan is disputed. It is possible that the apsidal plan came into central and southern Greece from the north, where it continued to be used in Thessaly. Late Bronze Age apsidal buildings existed at Kastanas, Toumba Thessaloniki, and Poseidi. It is also possible that the people living in mainland Greece used the apsidal plan because of tradition. Whatever the origin of the apsidal plan, it may not be disputed that this building type was popular for new constructions during the Protogeometric period. These structures will be catalogued in the following chapter.
III. Catalog of Published Protogeometric Apsidal Buildings

This chapter provides a systematic description of each published apsidal building from the Protogeometric period. It includes building sizes, orientations, artifacts and their distribution, and architectural features. This information is used to make inferences regarding the roles and functions of these structures. The buildings are organized chronologically because some of the conclusions in Section V are related to changes over time.

III.1 Tiryns, Curved Wall B

The site of Tiryns is located in the Argolid plain, in the northeast Peloponnese. It was a Mycenaean palatial center destroyed in the Late Helladic III B2 phase. The area of the lower acropolis was reoccupied in the subsequent Late Helladic IIIC period, and buildings continued to be constructed within and around the upper and lower citadels of Tiryns into the Protogeometric period. Although there have been several apsidal or oval buildings identified by aerial photographs to the east and the south of the acropolis at Tiryns, none of these have fully been excavated. Presently there is little evidence for the Protogeometric period at Tiryns, but current excavations at the site could give us more information pertaining to this time. A curved wall excavated to the west of the Lower Citadel may belong to an apsidal or oval structure (Fig 3). Although little remains of the building, it is evident that its orientation was probably NW-SE. The doorway of this building faced NW if it was located in the rectangular end. The date of the building is disputed; K. Kilian believes it was built in the late Submycenaean phase, while A. Papadimitriou says the building was built in the EPG and in use throughout the PG period. K. Kilian claimed that the fill above the building was EPG and the pottery inside
the building was SMyc. A. Papadimitriou believed that the structure was built in the EPG and abandoned later within the PG period. The remaining portion of wall of this building was ca. 0.70m wide and constructed of mudbrick (Ainian 1997: 98).

III.2 Thessaloniki Toumba

Thessaloniki Toumba is located in Northern Greece. The settlement was established in the Early Bronze Age and was occupied until the Classical period (Fig 4). The apsidal building at Thessaloniki appeared during phase 5 at the site, which dates to the Late Helladic IIIB or early Late Helladic IIIC period (Fig 5). The southeast wall of this building was connected to a rectangular unit, thus creating a hybrid plan. The apsidal building was oriented SW-NE. It is not clear whether there existed a doorway in the rectangular NE end, but a door (1.10m wide) was present in the middle of the southeast wall within the central room. The building was 17.00m long x 5.00m wide, and constructed with mudbrick on a stone socle. It was built near the summit of the Toumba hill, which suggests that it was of importance. The building was enlarged in the late 12th century B.C., phase 4, and contained five rooms—a central room bordered on the north and south by two smaller rooms and the apse room. Wooden posts were located along the inner face of the walls and in corners. Several small hearths, which did not appear to be permanent, were found in the apsidal compartment. In the northern room finds included bronze knives, axes, pins and a few jewels. Mazarakis Ainian believes the apsidal building was domestic in its purpose because of the artifacts located within it. He also supposes that the rich nature of the finds suggests that the family living here would have been elite.
The rectangular unit was attached to the southeastern side of the apsidal building. Central posts were located within two of its rooms. It also contained several hearths in various rooms, two kilns, a rectangular mudbrick structure, and benches (Fig. 3). Two rooms contained a large amount of pithos fragments, suggesting they were storerooms. Clay spindle whorls, loom weights, and tools of stone and bone were also found in the rectangular unit. Mazarakis Ainian believes that these finds suggest that the rectangular unit was used for storage and possibly for craft production, as opposed to the domestic purpose of the apsidal building. This building continued to be occupied during the late 11th or early 10th century B.C., phase 3, and kept its same basic floor plan. During the later phase, the floor level was higher, and the previously used doorways were blocked. The building underwent some remodeling during this phase. A cross wall between northern room and the central room was removed, creating one larger room. An entrance in the southeastern wall of the central room was blocked and an entrance was created in the southeaster wall of the southern room. A hearth was found in the main room along with a pithos in the south portion of the room. The excavators, S. Andreou and K. Kotsakis, have not suggested a function of this building, but Mazarakis Ainian believes that the archaeological evidence points to the structure being occupied by wealthy and influential inhabitants. He concludes that the location of the building on a summit and near the center of the settlement along with its large size and the finds support his opinion (Ainian 1997: 234-235).
III.3 Thermon, Megaron A

Megaron A is located at Thermon in Northwest Greece. The building is oriented N-S with its door to the south (Fig. 6). It measures 22.00m long by 6.00m wide, and it was divided into three rooms—the porch, the main room, and the apsidal room. The walls of the building measure 0.55m wide and are preserved to heights of 0.60-0.90m. The porch was probably open in a first phase of the building, and then enclosed in a second phase. During the second phase the entrance to the porch was located in the SW corner. Megaron A’s date of construction is disputed. Traditionally researchers believed it was built at the end of the Middle Helladic or early Late Helladic, but no Mycenaean pottery was found in the building. The lack of Mycenaean pottery along with the presence of Early Iron Age pottery supports the idea that Megaron A was built in the EIA (Ainian 1997: pages 44-45). The main excavator, G. Soteriades, believed the building was a heroön because he claimed that two cremation burials were found within the apsidal room. It is not clear if these burials belonged to Megaron A or to a later hut built above the building, but Mazarakis Ainian supports Soteriades’ belief. One of the burials was of a child, and the other was of a woman. The burial of the woman contained ashes, charcoal, human bones, fragments of a bronze obeloi, and a gold ring. Another burial was found in front of Megaron A; it contained burnt bones, five long iron swords, and a fragment from a Geometric vase. Located in the central compartment of the building, next to the apsidal end, were numerous small pithoi and amphorae. These vessels were placed upside down and they contained ashes and animal bones; they could be evidence for chthonian cult activity. One whole kyathos was found inside a grave in the apse. K.

A. Wardle, who has studied the pottery of Thermon, dates this vessel to the EIA (Ainian 1997: 44-45).

### III.4 Tarsus, Building U2

Building U2 is located at Tarsus in Cilicia, Asia Minor (Fig.7). It is the only apsidal building found outside the Aegean which fits the constraints of this study. It is a monumental structure comparable in size to the Toumba building at Lefkandi. Euboean pottery is found at this site, although it is from the Late Geometric. Building U2 is dated between 1100 and 850 B.C., and its orientation is NW-SE with the door at the SE (Ainian 1997: 57-58). The building measures 12.00m long x 9.30m wide—its width is considerable for its length. It is possible that the length of the building continued to 28.00m. The east wall of Unit P, a MIA building, extends the western wall of Building U2 another 14m (Goldman 1963: 3-5). Three floor levels are located within the apse of Building U2. The lowest probably dates to the Late Mycenaean/Hittite period because it was at a level associated with the remains of an outer curved wall dating to that period. This means that there was probably an earlier, LBA, apsidal building in this same location (Building U1), and could be evidence for continuity. This lowest, at 15.70m, floor level contained loom weights and a hearth. The other two floor levels were associated with Building U2. The second floor occurred at 15.48m. Near the rear end of the apse along the centerline of the building this floor contained a rectangular structure, which had a pebble floor. While Building U2 is located in Asia Minor, it does have features in common with apsidal buildings on the Greek mainland. The question remains

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4 See section III.7 below.
5 This feature is reminiscent of the circular paved area in Unit IV-1 at Nichoria (Section III.6)
whether the inspiration to build these apsidal structures came from Asia Minor\(^6\) (Ainian 1997: 57-58).

### III.5 Poseidi, Building ΣΤ

Poseidi is located in Chalkidike in Northern Greece. The apsidal structure here, Building ΣΤ, dates to the Early Protogeometric period (the 11\(^{th}\) Century B.C.). The structure was oriented N-S with the door facing south (Fig.8). The building was 14.00m long x 5.40 m wide; its walls were built with large rounded stones and are preserved to a height of 0.40m. It had a clay floor that contained pits, which held ashes and burnt bones. Approximately in the center of the building there was a large pile of ashes and burnt remains. The ash mound was circular with a diameter of ca. 2.50m and a height of more than 1.00m. Remains from the ash mound included burnt fat earth, calcinated bones of both small and large animals, seashells, and broken vessels. The pits and their contents along with the ash mound suggest that cult activities took place within this building. Also supporting the presence of cult activity are channels cut into the clay floor for libations, which Mazarakis Ainian attributes to a cult of chthonian nature. Building ΣΤ may have been unroofed because the excavator, J. Vocotopoulou, observed that stones were located on top of the ash mound. If these stones were deliberately placed, it may have been to protect the mound from erosion by wind and rain. The entire area within and surrounding Building ΣΤ was blackened by the sacrificial fires because the building was not destroyed by fire (Ainian 1997: 43-44). These apparent sacrifices along

\(^6\) This issue will be treated in Section V, below.
with the presence of later temples to Poseidon nearby support the religious role of Building ΣΤ.

III.6 Asine, Building C and 74M

Asine is located in the Argolid, in the northeast Peloponnese, not far from Tiryns (Fig. 9). The settlement here was situated on a hill and experienced several phases of occupation. Apsidal buildings were found phases 3 and 4, corresponding to the Late Protogeometric period. Two parallel stone socles of apsidal buildings were dated to phase 3 (Fig. 10). They were located on the summit of a hill to the east of the settlement. The excavators called these 74L, the outer foundation, and 74N-IM, the inner foundation. Both buildings were oriented N-S, with the entrance at the south. Building 74L was 11.5-12.00m long x 7.8-8.0m wide, and Building 74N-IM was 11-11.5m long x 6.2 m wide. Both foundations were 0.50m wide. Mudbrick was found in association with the outer foundation. Three dark circles ca. 35cm in diameter at distances of 0.4m and 1.2m N-S from the inner and outer foundations, respectively, were found along the inner face of outer foundation 74L. B. Wells believes that these once contained wooden supports for a pitched roof (1983). There were similar features along the inner face of the inner foundation 74N-IM. Two flat stones were located approximately along the central axis of both buildings; these were bases for an interior colonnade—additional roof supports. In the southeast portion of the buildings was a hearth, which is evinced by

7 Mazarakis Ainian believes that both foundations belonged to the same building, which he calls Building C.
fragments of a mudbrick lining, a red, burnt clayey soil, and charcoal (Ainian 1997: 68-70).

Søren Dietz, one of the main excavators, at one time believed that the outer foundation belonged to an older building of which the floor was removed when the inner foundation 74N-IM was built (Dietz 1983: 51-53). However, Mazarakis Ainian argues for the existence of only one building; he believes that the inner foundation was a bench (Fig. 11). This idea explains a number of important features, such as the presence of one floor level, the fact that mudbrick was associated only with the outer foundation, the exact alignment and same depth of both foundations, and the fact that the inner foundation has only one face. According to Mazarakis Ainian, Dietz also now accepts this theory (1997: 69).

A *terminus post quem* is provided by the inclusion of a one-handled jug in the outer foundation, which was dated to the early 10th century B.C. The pottery from the floor and soil above the structure is contemporary with the Athenian Late Protogeometric phase (Ainian 1997: 70). In addition to pottery fragments, the only remains in the building were two obsidian flakes and one loom weight. The building must have been emptied by the inhabitants or looted by others after it fell into disuse. To the east and north of the building were two child burials dated by their pottery to being contemporary with Building C (Wells 1976:15-16). A miniature skyphos deposited on top of one of the cist tombs is evidence for funerary rites. The area to the east of the building was also cobbled with pebbles (Wells 1983: 88-90). The large size of the building indicates its use as a house for a wealthy family, but because it is located outside the main settlement, it is probably not a ruler’s dwelling.
Building 74M was located within Building C. The dating of the building is difficult because it was not excavated, and finds were sparse. Dietz placed its date sometime after LPG and before LG. Although Building 74M falls outside the time constraints of this study, it is evidence for continuity at Asine (Dietz 1983: 41-42).

III.7 Mitrou, Building A

Mitrou is located on the northern Euboean Gulf in East Lokris, central Greece. Today, the site is flat tidal islet, which rises slightly to the north to approximately 12m above sea level. However, during antiquity the sea level was lower, and Mitrou would have been located on a small hill a short distance from the sea. Mitrou’s estimated surface area is 3.6 hectares, larger than the Mycenaean citadels of Tiryns and Athens, and slightly smaller than Mycenae (O’Neill 2005). The archaeological remains cover this area and continue into the sea to the east and west of the island. Mitrou is located near several important prehistoric sites including Orchomenos, Kynos Livanaton, Kalapodi, and Elateia, and Lefkandi. Mitrou’s location, along a passage by land and sea, and its apparent continual occupation should provide evidence for changes in society during several important phases in Greek prehistory (Van de Moortel 2005).

The first season of excavation at Mitrou took place in summer 2004. During the last two weeks, a Protogeometric apsidal building was unearthed, named Building A. It was located near the highest point of the settlement. Building A is oriented E-W, with the doorway at the east. Building A was exposed to a length of 8 m and a width of 6.9-6.3 m. The stone walls are 60 cm thick, which is thinner than the walls of Building B, a LH IIIC buildingV. The construction date of Building A is not known, but its destruction can be dated by broken vessels to the early-middle 10th century B.C., the Middle Protogeometric
phase. The cause of the destruction of the building is not yet known, but a violent end is suggested by a large amount of crushed objects on the floor level. Traces of fire exist, but the burning probably occurred some time after Building A’s destruction. The apse of the building was partially constructed inside the southern room of a Late Helladic IIIC building, Building B. Building A seems to have reused portions of the earlier building’s walls as support bases. This reuse is remarkable in that it provides evidence for continuity through the Bronze Age-Iron Age transition (Van de Moortel 2005).

Two rows of support bases extended across the apse of Building A, and another support base was set adjacent to the south wall. A dense layer of about 1000 fist-sized stones were found in the apsidal room; these may be related to a second story, which is evident by closely set support bases. These stones may formed small dividing walls in the upper level of Building A. A cross wall was placed east of the support bases, and its entrance was 1.7 m wide. An oval hearth constructed of field stones was located just inside the apsidal room. The room east of the apsidal room was disturbed, but there may have been a small room in its southern portion. Several fragments of burnt clay with reed and wood impressions suggest that Building A had a pitched reed roof (Van de Moortel 2005).

Unlike most Protogeometric apsidal buildings, Mitrou’s Building A contained a rich floor deposit of fallen artifacts. Floor deposits include pedestalled cups, skyphoi, jugs, kraters, and pithoi. Many of these may have been imported from Lefkandi because they share features with pottery from that site. One large krater was bell-shaped and had high-quality painted decoration; comparisons to Lefkandi suggest its elite nature. A stone spindle whorl, stone loomweight, a perforated circular sherd were found near the
hearth. In the center of the apse was a crushed fragmentary animal skull with part of a horn, a blue stone bead, a loomweight, and stone tools. Finds from the sediments above the floor include a large bronze finger ring, spindle whorls, stone tools, a grinding stone, a crucible, a stone plaque, and part of a terracotta figurine. It is thought by Van de Moortel that Building A was elite in nature on account of its impressive size and some of its artifacts, such as the bell-shaped krater (Van de Moortel 2005).

III.8 Nichoria, Unit III, Unit IV-1, and Curved Wall H

The site of Nichoria is located in Messenia, in the southwest Peloponnese (Fig. 12). This site is situated on a hill and was continuously occupied from the Middle Helladic period through the end of the Late Helladic IIIB phase (ca. 1200 B.C.). After a brief gap in habitation, it was occupied again in the 11th century until the middle of the 8th century. The reuse or building on top of Mycenaean structures often occurs at Nichoria.

Area III of Nichoria contained pottery sherds dated to Nichoria Dark Age II, which is the late 10th century B.C. The soil in this area is described as much darker and more compact that other areas of the ridge. One apsidal building was found in this area, Unit III-1 (Fig. 13). It was built partly over a Mycenaean street, and a Late Helladic III period wall lies beneath the east portion of the building. The date of the construction of Unit III-1 was determined by a few Late Protogeometric sherds found in a thin layer under the foundations. There are no associated floor levels in this building, probably because it lies near the surface and has been affected by plowing and erosion. Unit III-1 is oriented E-W, with its door at the east. The interior dimensions of the building are

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8 Unit N-Veves 1 at Nichoria is an example of the reuse of a Mycenaean structure in the Protogeometric period (Coulson 1983: 17-18).
4.00m long x 3.75m wide. One course is preserved of the foundation and it is one row of blocks wide (0.30-0.45m). The blocks comprising the foundation are limestone, fairly large, irregularly shaped, and heavily weathered; smaller stones fill the gaps between the larger blocks. At the east end of the apse a portion of a wall, Wall S, extends south from the apse for 1.20m. Wall S is one course high and two rows wide. Its stones are more irregular than those of the foundation of the building. The function of this wall is unclear. A pit was located within the center of the apse along the long axis of the building. Its diameter was ca. 1.30m at the top and 0.60m at the bottom, and its depth was ca. 0.30m below the base of the apsidal wall. The function of this pit could not be determined. It was filled with sand and clay containing small weathered Late Protogeometric and Late Helladic III A-B sherds, bone and teeth fragments of a pig and small mammals, a few shell fragments, pieces of unworked chert, a bronze pin fragment, and a chert blade fragment. East of the pit and still along the long axis of the building was a posthole ca. 0.15m in diameter and 0.10m deep, probably for a wooden support (Wilkie 1983: 14-16).

A second large Late Protogeometric building may have been located in Area III at Nichoria. All this is preserved is Curved Wall H. Little of the wall remains, and it did not have a floor or associated finds. Late Protogeometric sherds were found near the building (Simpson 1983: 16).

Area IV was the focus of habitation in the Protogeometric period at Nichoria. Whereas Area III was not inhabited until Nichoria DAII, Area IV was first occupied in DA I. There is some indication of Early and Middle Protogeometric houses in this area, but mostly pottery deposits. The Mycenaean houses Unit IV-6 and Unit IV-7 were
reused in the Early Protogeometric period. The largest Protogeometric structure at Nichoria was Unit IV-1 in Area IV, (Fig. 14). This building was oriented E-W, with its door on the east. In some places Unit IV-1 was built directly upon Mycenaean foundations—the north wall, Wall A, was built upon two Mycenaean terrace walls and the south wall, Wall C, was built upon a LH IIIB phase house, which was oriented NW-SE. The remaining portion of the LH IIIB phase house forms a T-joint with Wall C of Unit IV-1. Similar to Mitrou Building A is the way in which the northern portion of the apsidal wall was constructed. A corner of the LH IIIB house meets the apsidal wall, forming a triangle between the two structures. It is not clear whether the LH IIIB phase house was elite, but its size, which cannot be fully ascertained because of Unit IV-1, was probably quite impressive. These Mycenaean buildings provided stable foundations and building material for the construction of Unit IV-1, and could provide evidence for continuity (Coulson 1983: 27).

Coulson believed that Unit IV-1 went through two major building phases. In phase a, Unit IV-1a was rectangular and its dimensions were ca. 10.50m long x 7.0m wide. There were two rooms, the large main room and the porch. In phase b, the apsidal wall was added to Unit IV-1b (Coulson 1983: 33-42). In contrast, Mazarakis Ainian and Fagerström believe that Unit IV-1 was always apsidal; their arguments will be discussed below.

Unit IV-1a was in use in the 10th century B.C. If Coulson is correct, it was rectangular in shape (Fig. 15). The rubble walls were well preserved, some up to four courses high, and horizontal bonding was frequent. Their large width (ca. 0.55m) and solidity suggests that they supported mudbrick walls. The orientation of Unit IV-1a was
E-W, with the door at the east. The main doorway was located a little to the south of the central axis. It was 1.36m wide and was marked by a threshold. The threshold was built out of nine flat blocks of irregular sizes and three smaller stones. The top of the threshold was level with the floor inside the main room (Ainian 1997: 75).

In the porch to the east of the main entryway running N-S along the entire front of the building was a lightly constructed wall, Wall X. It was composed of one course of stones and was not a load-bearing wall. Three fragments of mudbrick were found embedded at regular intervals in the wall. Two of the fragments were located at equal distances on either side of the doorway in Wall F, which runs parallel to Wall X. These mudbrick fragments in Wall X are thought to have held posts to support a wall made of waddle and daub. Coulson believes that Wall X was the foundation for a low fence or balustrade, which would have partially enclosed the porch. The floor of the porch was tightly packed with small stones and was probably partly covered with earth to create a smooth walking surface (Coulson 1983: 24).

There was a small supplementary entrance in the northern wall of the main room, just west of the exterior cross wall. This north wall was preserved up to three courses high; it consisted of rounded limestone blocks of irregular sizes, and was ca. 0.55m wide. Three regularly spaced postholes were found along its inner face, presumably to hold roof supports. A stone base, ca. 0.35m in diameter, for a column supporting the roof was located approximately in the center of the Unit IV-1a. The roof was probably pitched and made of thatch with medium-sized stones to hold down the material. This was determined by the timber frame (a ridge pole, cross beams, and a central interior post)
and by parallels with Late Geometric temple models and modern shepherds' huts (Coulson 1983: 31).

The main room, Room 1, was 8.0m long x 6.0m wide. The floor consisted of red, slightly gravelly, sandy, very compact mud, which became blacker toward the center of the room. Coulson describes it as being pocketed with small holes and scattered with small stones and pebbles. The darker color of the floor in the center of Room 1 is explained as resulting from an accumulation of debris from household activities—pottery sherds, (60% coarse and 40% fine) and animal bones (goat, sheep, pig, and bovid—a horn cone and skull fragments). A high percentage (20%) of astragalus bones were found, which Coulson says suggests they may have been used for gaming during the Protogeometric, which is earlier than previously thought (Coulson 1983: 26).

A roughly circular pit with a diameter of 1.08 m was located in the middle of the main room. Soft black soil and carbonized fragments of wood provide evidence for it being a hearth. A large flat stone was located in the center of the hearth, possibly a platform used during cooking. There was a stone-paved circular structure along the E-W axis of the building near Wall D, which Coulson believes was the original west wall before the apse was added. It was 1.60m in diameter, and the stones used to pave it were small, flat and irregularly shaped. On top of these stones was a layer of carbonized material 0.5m thick. Coulson argues for this structure being an altar (1983: 28-30). Two clay spindle whorls, a bronze open ring, and a bronze finger ring were found near the north wall, which suggests that they had been lost during the lifetime of the building.

The exceptional size of the building, its location, and the circular paved circle suggest Unit IV-1a was important in this period at Nichoria, but the small finds suggest domestic
use. Coulson says that Unit IV-1 may indicate the continuation of combining the religious, political, and domestic aspects of rulers’ lives into one building, which was evident during the Mycenaean period (Coulson 1983: 33).

The succeeding Unit IV-1b was in use during the 9th century B.C. (Fig. 16). During this phase, the length of building IV-1 grew to ca. 15.90m and its width to 8.00m wide. A courtyard was added, the southern wall was replaced, the apse was added, and a veranda surrounded the building (Fig. 17). Part of Wall D, the original west wall, was dismantled to provide an entrance into the apsidal room. Wall E, oriented E-W, was built to connect at a right angle with Wall D north of the paved circle, partially enclosing the circular paving. Coulson also restores a wall enclosing the paved circle to the south. This makes the structure appear significant, and supports the idea that it may have been an altar. During this phase charcoal fragments and sheep and goat bones were found at the western edge of the paved circle. Six clay spindle whorls were also found near the exterior of the structure. The original south wall of Unit IV-1a was partially preserved over a length of 7.50m, and may have been reused as a bench. The floor level of the main room was uneven, hard-packed, and blacker than in phase a. A round flat stone ca. 0.30m in diameter was located in the center of the main room along the long axis of the building. It was cracked. This stone must have served as a base for an interior roof support. Small finds from the main room included a bronze finger ring, a bronze bar, a small iron tool, and four clay spindle whorls (Coulson 1983: 37-38).

Coulson believes that the apse was added in phase b of Unit IV-1 because its northern end does not connect with the north wall of that structure (Coulson 1983: 35-36). Instead there is 0.15m of rubble packed between the two walls to bond them. The
outer face of the apsidal wall was composed of large blocks, and the inner face was composed of small narrow rocks in order to facilitate the curve of the apse. Two storage pits were located in the apsidal room. The larger pit was ca. 0.70m in diameter and 0.53m deep, and it had a row of stones around its rim. The smaller pit was 0.60m in diameter and 0.46m deep, and it was lined at the bottom with flat stones. Two deposits of charred seeds were found in the northwest part of the apsidal room—they consisted of legumes and fragments of olive wood. The olive wood may be the remains of a wooden container. The floor deposit in the apsidal area included a skyphos, a ribbed kylix stem, a coarse lid, pithos body fragments, goat, sheep and bovid bones, part of an iron knife, a stone celt, and lead net sinker, a lead button or wheel, a bronze shield boss, and a fragment of an iron ax head. The pottery finds date to 975-850 B.C. They suggest a domestic use of the building (Coulson 1983: 39).

Contrary to Coulson’s opinion, Mazarakis Ainian believes that building IV-1 was apsidal already in phase a (Fig.18). He argues that the apsidal wall and north wall did not bond during phase b because there was a door in this location during phase a. The rubble was used to fill in the doorway during phase b and the side entrance in the main room was added. He also says that the two remaining portions of Wall D never connected to form one wall because they do not align, therefore Wall D was never the original west wall (Ainian 1997: 77-78). Fagerström also believes the apse was present in phase a of Unit IV-1, because the earlier floor extended 1.00m into the apsidal room (Fagerström 1988: 34-35).

The finds inside Unit IV-1 at Nichoria suggest that it was a multi-purpose building more clearly than those of any other LH IIIC or Protogeometric apsidal building.
The finds, coarse pottery, tools, animal bones and jewelry as well as the presence of a hearth suggest it was a dwelling, while its size and prominent location suggest it was the home of a wealthy family (Fig. 19). The bench, the remnant of the southern wall, and the storage pits indicate that Unit IV-1 was the home of a ruler. Finally, the partially enclosed paved circle suggests a religious purpose for the building, although it may have been used only by the family (Ainian 1997: 79).

III.9 Lefkandi, Toumba Building

The Toumba Building is located at Lefkandi on Euboea in Central Greece (Fig. 20). It was oriented E-W with the doorway at the east, and it was placed on the summit of a low hill. It was monumental in size—47.00m long x 10.00m wide, or 50.00m x 13.80m including the veranda. Illegal bulldozing destroyed the apsidal end of the building, but enough of the apse was preserved to show that it was elliptical. The stone socle was composed of coarse gray marble, and was 0.60m wide at the base and 0.50m wide at the top. Up to four courses of the mudbrick superstructure were preserved to a height of 1.15-1.30m, and in some places there was variation of several colors in the mudbrick. The inner wall face was coated with plaster 0.04-0.06m thick. Rectangular postholes were located along the inner face of the walls at intervals ranging from 0.80-2.15m. These interior supports usually corresponded with exterior posts set on the other side of the wall. The posts of the interior colonnade, which ran along the E-W axis of the building, were circular, 0.18-0.25m in diameter. The building was separated into seven sections—the porch, east room, central room, west corridor, north room, south room, and the apsidal room (Fig. 21). The doorways were framed with wooden jambs (Ainian
1997: 50). The rock beneath the foundations of the Toumba Building was leveled before construction (Popham 1993: 7).

The porch was 2.40m deep and formed by the extension of the two long walls. The north and south walls of the porch were removed by stone robbing in subsequent periods, but we know approximately to what length they extended because of the existing postholes. These were located against the inner face of each of the sidewalls, and had corresponding postholes for the north and south veranda. A posthole along the central axis suggests that the roof extended over the porch. A poorly constructed wall lies just past the central posthole and extends across the width of the building and beyond it approximately 4m to the north and 2m to the south. The wall was constructed of large river pebbles, much earth, and some sherds of large storage jars. It had no inner face, and traces of clay were found on its top, suggesting that unbaked mudbricks had been placed there. Its poor construction and lack of an inner face imply that this wall was built as a retaining wall for the fill that covered the building. Near the northwest corner of the porch was a cup-shaped pit ca. 55cm in diameter, which had a central depression 17cm deep. The function of this pit is not known (Popham 1993: 8-9). J. Coulton believes that this cup-shaped pit held a container that may have been used for the purification of those entering the building. He compares the container to perirrhanteria, which were often near the entrance of later Greek temples (1993: 52).

The east room was nearly square, 8.30m long x 8.80m wide (Fig. 22). The doorway from the porch had a timber threshold. Small pebbles were found on top of this wall, which would have served as bedding for the mudbrick superstructure. Six rectangular postholes were located against the inner faces of the north and south walls at
irregular intervals. Two circular postholes ca. 20cm in diameter were located along the central axis; these would have held roof supports. The floor of the east room consisted of brown, clayey earth, and was not well defined because the building was used for only a short time. Beneath the floor was a burnt surface and 8 small shallow pits that ran across the width of the room. There were structures in three corners of the room. In the southeast corner was a circle of stones 1.75m in diameter. The structure was one course high and composed of large rounded pebbles. The top of the stones was 15cm above the floor. An oval-shaped raised area 1.60m x 1.30m x 15-20cm high was located in the southwest corner of the room. The top of the raised area consisted of a smooth layer of lightly fired greenish clay mottled with patches of red-brown. The next layer was of sea pebbles and shells, and the lowest layers were of alternating red and yellow clay. The northwest corner contained a rectangular box-like structure 1.95m long x 0.95m wide. The structure was made of two courses of unbaked mudbricks. The floor level of the box was a layer of clay with a reddish surface. Two oval pits were located in front of the rectangular structure (Popham 1993: 10-12).

The central room was 22.00 m long (Fig. 23). In the northeast corner of the room were two walls projecting from the north wall. These probably represent internal partitions, and could be remnants of a staircase. In the southeast corner of the room was a box of unbaked clay 1.30m x 1.75m. It was filled with fine gray wood ash and burnt bone. Under the clay floor of the room the rock surface had been burnt and there were thirteen holes. In the northern part of the room there were patches of gray floor over the rock. A circular area just NE of the burial shafts was darker gray; under this area was a cluster of nine small holes cut into the rock. They contained carbonized wood and
blackened soil. A clay weight was found at the edge of this area. Two large round postholes were located along the central axis of the building at 3 m intervals. Wood remains were found within these pits; the posts would have served as supports for a central beam supporting the roof. Fragments of a monumental painted krater were found south of the burial shafts. Along the inner face of the north wall and clustered near wall posts were three vessels, a lekythos, skyphos, and oenochoe. A clay button was also found along the northern wall (Popham 1993: 13-17). The location of these finds suggests that they may have been swept up and lost during everyday use of the building.

Two burial shafts were found within the central room. These were located north and south of the central axis of the building. The northern shaft contained four horses, and the upper pair had iron bits. The southern shaft contained the inhumation of a woman and cremation of a man (Fig. 24). The ashes of the man were contained in a bronze amphora, the mouth of which had been closed with a bronze bowl and cloth. The bronze urn that contained the ashes of the warrior is an heirloom from the 12th century B.C. (Fig. 25). Since the bronze vessel dates to the 12th century, but the Toumba Building itself is dated to the 10th century, this is evidence for continuity at Lefkandi. Near this bronze amphora were a sword, razor, spearhead, and a whetstone. The woman was extended on her back with her head to the west. Her arms were folded over her lower abdomen, and her hands and feet were crossed. An iron knife with an ivory pommel lay beside her head. Two gold coins were at either side of her head. She wore a necklace with a central gold pendant, two large discs of sheet-gold were over her breasts,

9 A more extensive description is provided by Popham 1993: 17-22.
and a lunate sheet of gold lay between and partly below the gold discs. She wore two rings, and nine pins were found just above her left thigh (Popham 1993: 17-22).

The west corridor was wide and ran along the long axis of the building. It provided access to the apsidal room as well as to the north and south rooms on either side of it. Its floor was made of a thin layer of gravel set in clay. Pits were again located in the rock under the floor (Popham 1993: 22).

The north room was nearly square, 3m x 3.30m. This room was affected by illegal bulldozing; its entire west wall and section of the south wall that adjoined with the west wall were destroyed. Its doorway with the west corridor was not preserved, but it was estimated to be ca. 1.0m. Half of the north wall was undamaged—its stone socle was capped by two courses of mudbrick. The mudbricks were 7-8cm in height and were light brown in color with a gritty texture. The floor of the north room was constructed of a layer of sea pebbles covered by soil, which was also covered by a thin layer of greenish-yellow clay with some carbon flecks. In the southwest corner of the room was a circular depression in the floor located under stones, which had fallen from the inner face of the west wall of the doorway. The fill under this depression was dark gray soil that contained five clay buttons, loom weights, a stone button, animal bones, and part of a monochrome cup. This depression is odd, especially since a joining sherd with the monochrome cup was found in the fill of the central room. Two postholes were set against the inner face of the northern wall. The one located in the northwest corner had a diameter of 60 cm and a depth of 50 cm; the other, 2m to the east of the first, had a diameter of 45 cm and a dept of 63 cm. A pit, 45 cm in diameter and 63 cm deep, was located in the northeast corner of the room. Some mudbrick fragments and sherds
(including two parts of crater-bowls) were found in its fill, but it had no clear functional purpose (Popham 1993: 22-23).

The south room had been severely damaged by the illegal bulldozing. The preserved dimensions are 3.2m x 2.6m. The doorway was ca. 1.40m wide, and silvery-gray dust was evidence that it had a timber frame. The floor had been laid directly over the rocks and consisted of a thin layer of clay that fused into ashy earth and gravel. Three postholes were set against the south wall; two of these contained remains of wood. The only find from this room was an almost complete monochrome cup, which was a floor deposit (Popham 1993: 23-24).

The western end of the apsidal room had been completely destroyed by bulldozing (Fig. 26). The initial interior width of the room was 8.7m, and its length is estimated to be ca. 9m. Although the western end of the Toumba building was destroyed, it is apparent that the building was apsidal because of the slight curvature of the north and south walls and by the arching line of the veranda postholes. The doorway into the apsidal room was 1.50m wide, and gray dust on either side of the entrance provided evidence for a wooden doorframe. The preserved part of the floor in the eastern end of the room varied from greenish-yellow clay in the north to a layer of gravel and earth in the south. There were two unmistakable interior wall posts, each about a meter from the corners of the room, and central postholes continued from the east room and central room. A cluster of eleven deep pits closely spaced was located in the southeast corner of the room. They were roughly circular ca. 70 cm in diameter and 60 cm deep, but the width of the pits narrowed at the bottom into cup-shaped depressions. The outer ring of the fill within these pits was compacted sandy soil, while the central area of the fill was
composed of looser brown earth. The fill of the pits and their shapes suggest that they held pithoi, which had a “button” base. The pithoi would have been set in the pits, and earth would have been filled in around them. When the pithoi were removed, the fill above the building would have entered the areas where the pithoi had been located. This explains the differentiation in the soil contained in the pits. Parts of the rim and shoulder of a pithos were scattered near the storage pits, but these may have come from the fill above the building. The floor deposit of the apsidal room consisted of two metal objects, a flanged fragment of bronze and a small S-shaped rod of iron, which may have been a locking device for the door (Popham 1993: 24-27).

Most of the finds in the fill of the Toumba Building date to the Middle Protogeometric period, but there were some Mycenaean sherds and fragments of thirteen Late Helladic IIIC period terracotta figurines in the fill of the apse. The only finds associated with the period of use of the building were a few almost complete vessels along the northern wall of the building, the large krater to the south of the burial shafts, fragments of storage vessels found in the apse, some clay objects, a fragment from a figurine foot, some stone tools, and a few metal items. The large krater was dated to the Middle Protogeometric phase. The latest pottery from the building was dated to the MPG, but ten fragments of skyphoi were decorated with pendant semicircles, which may date them to the early LPG. This supports the idea that the building was in use during the 10th century B.C. After its destruction, the Toumba Building was deliberately filled with successive dumps of stones, earth, and other debris. This was made possible by mudbrick ramps placed against the outer walls of the building (Ainian 1997: 52-53).
There are two leading theories as to the use of the Toumba building. J. Coulton and M.R. Popham suggest that the building may have been constructed strictly to serve as a heroön (Fig. 27). Evidence for this idea is as follows: The traces of burning under the clay floor in the central room could be evidence for the funeral pyre. However, the burned area extended into the east room. The gray layer that was found on top of the floor layer within the entire building extended into the burial shafts, but this could have happened when the wooden lid of the shafts decomposed, causing the earth above it to sink. Lastly, the building is found within a cemetery, and no other residences have been found nearby (Fig. 28). Mazarakis Ainian believes that the building first served as a house. The evidence for this idea includes the fact that the clay floor did not extend over the burials, meaning that the burial shafts were dug after the floor was laid. Also, the plan of the building includes several separate rooms and a loft, which would serve no certain purpose if the building was purely a heroön. The storage pits too are evidence for the use of the building as a house. A large krater in the fill of the human burial shaft was dated to SPG II, the early 9th century B.C.—after the presumed construction and use of the building. Furthermore, the Toumba cemetery located directly in front of the entrance of the building did not appear until after the tumulus was constructed over the building, meaning that the Toumba Building was not constructed within an already existing cemetery (Ainian 1997: 54-55).

In addition to the Toumba Building, a Protogeometric settlement on Xeropolis, a nearby hill, contained several apsidal houses. This settlement is currently being excavated (Fig. 29).
III.10 Koukounaries, Building A

The site of Koukounaries is located in the Cylades, on the island of Paros (Fig. 30). It was inhabited from the Late Bronze Age until at least the 7th century B.C., but the site may have been deserted in the Early Iron Age until the early 10th century B.C. (Fagerström 1988: 75-76). Building A is positioned on the southwest part of the acropolis at Koukounaries (Fig. 31). Only a curved section of a wall, ca. 0.60m thick and 5.5 m long, remains of the building. The walls were composed of stones, but information on the dressing or sizes of the stones is not currently available. Building A was oriented E-W with the doorway at the east, and it was 12.00-15.00m long x 6.50-7.00m wide. The construction of the building is dated to the Late Protogeometric, around 900 B.C., by stratigraphical observations and by associated LPG pottery. Building A was probably inhabited until the mid 8th century B.C. Its substantial dimensions suggest that it may have been the house of a ruler or of a wealthy family (Ainian 1997: 82-83).

III.11 Assiros Toumba, Northern and Southern Buildings

This site is located on the Toumba hill at Assiros, in Central Macedonia, near the junction of two streams. The excavator, K.A. Wardle, argues for continuity as well as change at Assiros during the LBA-EIA transition. Continuous occupation during this time period is quite rare, and is encountered at a small number of sites. The changes that occurred at the site were gradual and did not affect all of the material remains—the settlement plan changed while the pottery remained very much the same (Wardle 1980; 263). Assiros had two contemporary apsidal buildings set parallel to each other, which has not been recognized at any other location (Fig. 32). They probably date to the 9th
century B.C. However, their construction date is uncertain because of an absence of imported wares from southern Greece. The buildings were oriented E-W, with their doorways at the west. The foundations were constructed of rough stones, and were built deeper at the west in order to protect them from erosion resulting from rainwater that would have run down the alley between them. They are separated by a cobbled alley, which varies in width from 0.60-1.00m. The alley opened into a larger paved area at the eastern, apsidal, end of the buildings, and became a path at the western end of the buildings, where their entryways were (Wardle 1987: 315-317). There are some gaps in the stone socles, which could have been spaces for posts to be set against the walls, as was the case at Lefkandi. Clay lumps with reed or branch impressions were found on the floor (Ainian 1997: 43). These clay lumps suggest waddle and daub construction, and the posts would have helped to support the walls. Supporting this idea is the flimsy construction of the stone socles, which probably would not have been able to support mudbrick (Wardle 1987: 317).

The Northern Buildings at Assiros was ca. 14.00m long x 8.50m wide. A cross wall separated the building into two sections—the main room and the apsidal compartment (Ainian 1997: 43). Its floor contained several smashed vessels and an area of hardened, fire reddened clay, which could have been a cooking area. Only the southern wall, a small part of the apse, and a small portion of the western wall were preserved of this building. The preserved interior of the building was scattered with pithos sherds and several small restorable vessels. In one portion of the building the floor was formed by a hard, burnt clay surface, which was separate from the cooking area (Wardle 1987: 315-317).
Where only the southern half of the Northern Building was preserved, only the northern half of the Southern Building was preserved, consisting of the northern wall, a small portion of the apse, and the northwest corner. The length of the building is estimated to have been 15.00m, which is longer than the Northern Building, and the width is unknown. The length was estimated on the basis of the distance between the apse and post settings at the western end of the building, which may be part of the main entryway (Wardle 1987: page). Lines of stones ran south from the northern wall, and probably represent internal partitions. Two pithos bases were found within the Southern Building. At the eastern end of the building in the center of the apse was a horseshoe-shaped structure made of mudbrick and clay that was ca. 30 cm in diameter. Within this structure was a “platter” of clay mixed with chaff; it was fired moderately hard. Beneath this feature was a small clay bowl. The nature and use of this feature is not known (Wardle 1987: 317).

The buildings at Assiros are interpreted as probably domestic in nature. Wardle feels that the presence of pithoi and small vessels support this idea. However, he also believes that these buildings were significant in the settlement because of their large size (Wardle 1987: 317). It seems noteworthy that there is sparse evidence for buildings near these at Assiros. With present evidence the Northern and Southern apsidal buildings seem to lie outside the main settlement, further suggesting that they may have been domestic in nature because they did not occupy an important area of the settlement.
III.12 Antissa: Building III

The site of Antissa is located on the island of Lesbos in the northeast Aegean. Its Building III is apsidal in shape, ca. 17.25m long x 5.60m wide (Fig. 32). The building underwent two architectural phases, but only the earlier structure was apsidal and is relevant to this study because the second phase dates to the Geometric period. The walls of the building were composed of small limestone blocks, ca. 45-50 cm wide, and they were preserved up to a height of 1.85m. This height suggests that the building may have been completely composed of stone, as opposed to a stone socle with mudbrick or waddle and daub walls. This is the only monumental apsidal building occurring during the Protogeometric period which probably had walls composed entirely of stone. The orientation of Building III was E-W with the door facing west (Dietz 1982: 56). It was divided into four rooms separated by four cross walls, but not all the cross walls were contemporary. It is possible that only two of the cross walls, IIIa and IIIb were present in the early phase (Ainian 1997: 84). Lamb dated the construction of the building to the 9th century B.C. according to pottery dating to the first half of the 9th century B.C. that was found in and below the building. Also, the successor, Building IV-1, of the building was built in the 8th century B.C. (Lamb 1933: 44-45). Interestingly, Building IV-1 was constructed with its apse on the western end of the building. The pottery associated with Building III included fine local bucchero ware—fragmentary dinoi, kraters, bowls, amphorae, jugs, cups, kantharoi, some phialai mesomphaloi, and circular platters. Other finds were three bronze fibulae and a decorated bone object (Ainian 1997).

Building III and its successor Building IV-1 are often considered to be temples because of their large size, the hearth of the later building, and the numerous
reconstruction phases they experienced. In addition to this, fine imported pottery, decorated bone objects, bronze fibulae and pins, and an iron spearhead were found within Building IV-1, which are thought to have been votive offerings. However, these finds represent a small percentage of the objects collected from Building III and Building IV-1. Most of the finds were domestic in character, such as unpolished and badly fired coarse pottery, including dinoi, craters, and wide bowls or dishes (Lamb 1933: 52). Mazarakis Ainian believes these special finds were probably personal belongings of wealthy families that lived in the buildings. Therefore, he considers Building III and Building IV-1 to be domestic. His interpretation is supported by the fact that the buildings were not located in a prominent position within the settlement (Ainian 1997: 85).

IV. Discussion

The popularity of the apsidal plan during the Protogeometric period may not be overlooked. However, the explanation of its popularity is not so easy. Snodgrass said that the apsidal plan “reflects poor living conditions and a loss of craft masonry” (1971: 368). He claims that during times of societal change inferior building materials were used, such as wattle and daub, and that an apsidal structure rather than a rectangular structure was easier to build with these materials. This idea is supported by the fact that the apsidal plan is prevalent in periods following cultural shifts, such as the EHII-EHIII transition and the beginning of the MH period. The Protogeometric period also follows a time of internal strife in Greece, the fall of the Mycenaean palatial centers. However, the Protogeometric period apsidal buildings presented in this study fail to provide proof for inferior building methods. On the contrary, structures such as the Toumba Building at
Lefkandi are examples of benchmarks in construction. In addition, most of these buildings seem to have served important functions in the lives of the people at these Protogeometric period sites. Attention and care was taken in their construction; they were not quickly assembled buildings of shoddy construction. The following provides evidence for the importance of apsidal buildings in the lives of the people living during the Protogeometric period.

The monumental sizes of these Protogeometric apsidal buildings are one hint to their importance. The sizes of the fully excavated buildings range from 11.5 m long x 8.0 m wide, the Northern Building at Asine, to 47.0 m long x 10 m wide, the Toumba Building at Lefkandi. Excluding this enormous building, the largest building is 22.0 m x 6.0 m, which is still monumental. We do not have much evidence as to the size of standard buildings during the Protogeometric period, but most were probably substantially smaller than these apsidal buildings.

The orientations of Protogeometric apsidal buildings are also of importance. This is because they follow a pattern. All apsidal buildings occurring in the first half of the Protogeometric period are oriented N-S, NE-SW or NW-SE, while all apsidal buildings occurring in the later half of the Protogeometric period are oriented E-W. The doorways of the earlier buildings vary in placement, while the doorways of all later apsidal buildings are placed in the eastern end of the building with the exception of Assiros.

Artifacts and features from the various apsidal buildings also reveal their importance. The purpose of the buildings at Tiryns and Koukounaries may not be assumed since only portions of walls exist at both of these sites. However, the substantial size of the remaining wall at Koukounaries suggests that it was of importance. The
building at Thessaloniki was connected to a rectangular structure that was most likely used for storage and craft production. While the apsidal building would have served as a residence for an elite family according to the nature of the finds—bronze knives, axes, pins and jewelry—the rectangular structure served an industrial purpose indicated by its associated finds—two kilns, hearths, tools, and pithos fragments. Burials located within the apse of Megaron A at Thermon are evidence for it serving as a heroon. These burials date to some time after the construction of the building, which suggests that it served a domestic purpose before being converted into a heroon. Inverted vases in the central compartment of Megaron A at Thermon are evidence for cult activity. The only feature associated with Building U2 at Tarsus is a rectangular structure with a pebble floor, the purpose of which is unknown. Loomweights and a hearth associated with an earlier building on the same spot suggest a domestic nature. Building ΣΤ at Poseidi is connected with cult activity. An ash mound in the center of the building along with evidence for animal sacrifices and the presence of later temples nearby imply its religious nature. The finds from Building C at Asine, a loomweight, flakes of obsidian and some pottery sherds, suggest that it was a probably a domestic building, but its impressive size indicates that it was the house of people of importance. Its location outside the main settlement suggests members of the elite as opposed to a ruler. The function of Building A at Mitrou is not yet known because excavations are still taking place. Unit IV-1 at Nichoria was most likely the home of a ruler. It occupied a central location within the settlement, which suggests its importance. The finds from the building, pottery sherds, tools, animal bones, jewelry and a hearth, indicate that it was probably a dwelling. However, the possible altar suggests that this building had a religious nature. It is
possible that it was the home of a ruler who took over the religious and political duties of the wanax from the Mycenaean administrative system. The burials in the Toumba Building at Lefkandi indicate its use as a heroön, but in the following conclusions I support that it was first used as a house for a wealthy family. The buildings at Assiros are interpreted as probably domestic in nature because of the presence of pithoi and small vessels. The buildings from Antissa are often considered to be temples. This is because they experienced numerous reconstruction phases and finds that could be interpreted as votive offerings such as fine imported pottery, decorated bone objects, bronze fibulae and pins, and an iron spearhead were found within Building IV-1. However, most of the finds from within the buildings were domestic in nature—unpolished and badly fired coarse pottery, including dinoi, craters, and wide bowls or dishes (Lamb 1933: 52).

V. Conclusions

Although much remains unknown about apsidal buildings during the Protogeometric period in Greece it is possible to make some inferences regarding common traits of these buildings. It is obvious from building practices that the people of the Protogeometric period consciously preferred the apsidal plan. At numerous sites, especially Nichoria, Mycenaean buildings were reused, but when new buildings were constructed they most often were apsidal in plan. At several sites, including Nichoria and Mitrou, the apsidal building reused part of a pre-existing rectangular building showing that the apsidal plan was favored (Van de Moortel 2005).

The uncertainty remains as to the origin of the apsidal plan and its connection to the end of the Late Helladic period. It is not clear whether the apsidal plan was brought
to Greece by migrating or invading peoples, or if it was the building style that native
Greeks preferred during these times of upheaval and cultural changes. The Late Helladic
IIIC-Protogeometric transition follows the trend set by the earlier transitional phases—the
EH II-EH III transition and beginning of MH period—because the apsidal plan is
preferred during the subsequent Protogeometric period. Whatever the origin of the
apsidal plan in the Protogeometric period, the introduction of the pteron is an innovation
during the Protogeometric period in Greece.

The question of tradition or a new culture regarding the reintroduction of the
apsidal building plan during the Protogeometric period may be answered by the function
of the building. For example, if the Protogeometric period apsidal buildings are purely
domestic, the plan is probably based on tradition. Traditionally apsidal plans were used
in domestic contexts. However, if these apsidal buildings represent social status of their
owners, have religious functions, or were important to the community in some other way
it is possible that their reintroduction into Greece happened as a result of new cultural
ideas. Perhaps the use of the apsidal plan is explained simply by the roofing style.
Thatched roofs work very well with the apsidal plan, especially when those buildings
were independent houses scattered throughout a settlement (Lemos 2002: 140).
However, is it safe to assume that the roof style influenced the building plan, and not that
the building plan influenced the roof style?

The massive sizes of Protogeometric period apsidal buildings are evidence for the
deliberate use of this plan for a reason other than convenience. Constructing buildings of
these sizes would have taken much effort, so claiming that the apsidal plan is one of
convenience is not logical. A community effort must have been needed to build these
structures. This implies either that the buildings were for leaders whom the people served or wanted to please or that the buildings were of some community/religious function. The fact that most Protogeometric period apsidal buildings were constructed near the summit of a hill or at the center of a settlement also points to their importance within the community.

The orientations of the various Protogeometric period apsidal buildings are noteworthy. The mere fact that there are common orientations is important. If these buildings were built indiscriminately or only to satisfy settlement plans, they most likely would be oriented randomly. The importance of the buildings seems to increase overtime, as does the continuity of their orientations. Most evident is that the orientations seem to change through time. The earliest buildings are oriented NW-SE/NE-SW. Through time they alter to N-S. Asine is the last apsidal building in this study to be oriented N-S; the next building, at Nichoria, is oriented E-W. The E-W orientation of the building at Nichoria is especially important because it was more difficult to construct the building in this direction. The slope of the landscape would have made it much easier for the building to be constructed N-S.

Finds from the buildings at Thessaloniki, Thermon, Tarsus, Asine, Nichoria, and Assiros suggest that these were domestic in nature, but because of their impressive sizes they were probably inhabited by rulers or elite. The location of the two buildings at Asine outside of the main settlement indicate that they may have been occupied by elite members of the community, while the buildings at Thessaloniki and Nichoria occur near the center of the settlements implying that they were occupied by rulers. However, the religious aspect of Unit IV-1 at Nichoria could account for its location. Also, Toumba
Thessaloniki had features that connected it with community use, which may be the reason for its location. It is possible that a ruler lived in the apsidal portion of the building and controlled the production of crafts and distribution of stored material from within the rectangular structure. The buildings at Assiros were significant in the settlement because of their large size, but since they were located outside the main settlement, they were probably the homes of local elite as opposed to rulers. The exceptional nature of the warrior burial and burial of the horses at Lefkandi suggests that this building held significant meaning in the people of the community. It is debated whether the Toumba Building was constructed to be a house and then converted to a heroon or built to serve as a heroon, but what cannot be debated is the magnitude of its importance. I believe that evidence for pithoi in the apse along with various small finds and pottery sherds indicate that the Toumba Building was used in a domestic context before being converted into a heroon. Since this building was located outside the Xeropolis settlement, it was probably the home of a wealthy family as opposed to a ruler. I agree with Mazarakis Ainian in believing that the buildings at Antissa were domestic in nature as opposed to being temples. He believes that the special finds associated with the buildings were probably personal belongings of wealthy families. The claim that the buildings were domestic is supported by the fact that the buildings were not located in a prominent position within the settlement (Ainian 1997: 85).

While the functions and roles of Proto-geometric period apsidal buildings are often not easily discernable, it is clear that these buildings were significant. I have offered evidence supporting that some of these buildings were purely domestic while others had religious aspects. Some buildings were probably occupied by local elite, whereas others
were inhabited by rulers. The sizes, orientations, and associated finds of these buildings suggest their importance within their communities. Currently there is little evidence about the social structure of Protogeometric period Greece, but through this study I have shown that in some cases these apsidal buildings represent either a social hierarchy or a leadership system. Future studies on other aspects of Protogeometric period Greek society along with further excavations and publications should shed light on the societal circumstances of this period and how they developed into later institutions in Greek history.
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