

Looking for the Origins of Greek Temples

In anthropology, archaeology, history and art history there are perhaps more questions than answers. It is always very interesting to dig into our past. It is natural to look for our origins, to trace our genealogy. The desire for discoveries has never abandoned humanity. It is even stronger now in our modern era. With the help of modern techniques and technologies it is possible to discover and to know more about the world's history than ever before. Our desire to discover more, grows with every new discovery. We are always eager to uncover hidden pages of the history of the human race, but these discoveries often bring more questions than answers and even at times great surprises.

Unfortunately we are not always ready to handle this information. Often our stereotypes do not allow us to correctly interpret the artifacts discovered. But our stereotypes are not the main misfortune. Sometimes the nature of the forces holding us back from discovering the truth are mainly political. Just as it is unpleasant to discover and display some facts of personal biography, it is often unpleasant and inconvenient to declare some aspects of archaeological discoveries. Often for political reasons, it is deemed necessary to deny some historic facts or to destroy the artifacts themselves.

Contemporary political powers, who subsidize all the branches of enquiry, are often able to control and direct research work. Often they are powerful enough to alter and falsify some facts and slant the results of archaeology, anthropology, linguistics, history and art history. History is often the most targeted discipline because of its political power.

Very often it becomes easier to fail to pay attention to and to forget about inconvenient discoveries that may not fit into a society's cultural or political agenda. In fact, it is better to try not to make discoveries in areas potentially full of unpleasant surprises. But sometimes discoveries made long ago turn out to be unpleasant or even threatening for contemporary political powers' established order or concepts. In addition, sometimes construction works may unexpectedly uncover undesirable archaeological material. How to deal with these situations? Denying and forgetting are always solutions if you are in power.

The full history of the Near Eastern region is currently neglected because of certain political reasons. In particular, the history of Eastern Turkey and the Western Iranian regions, are often neglected areas of research and investigation. There are many examples. For example, the archaeologists and historians of the world (in fact, of the rich western world) do not recognize that Eastern Turkey and Western Iran are actually historical Armenia. They do not want to remember that only 85 years ago this region was entirely still populated by Armenians, and that the territory became desolate only after the genocide of almost all Armenians of the region during the First World War. On the contrary, the progressive populations of the planet are constantly reminded about the holocaust of the Jews during the Second World War while the Armenian genocide is rarely mentioned. Additionally, Armenian history was and is a target of a political genocide even after the Russian take over of that part of the region. For example, artifacts the Russian archaeologists used to find on the territory of present Armenia (in fact, now only a tenth part of the territory of the historical Great Armenia) were often declared not to be Armenian. Of course, the Paleolithic artifacts could not have affiliation to any

nation, but somehow the artifacts found in the territory of present day Armenia pertaining to the period between the X and VII centuries B.C. were not classified as being from the Armenian culture but from some mysterious culture of the kingdom named Urartu with its mysterious people--the Urartians. This culture (together with the people) seemingly appeared and disappeared in the region in the same mysterious way. According to the Russian scholars, Armenian culture appeared and flourished only in the Middle Ages, that it truly blossomed only after the conquest of Armenia (actually what was left after the genocide of more than two million Armenians on the territory of Ottoman Empire starting from 1915, up to the end of the First World War) by Russian communists in 1920.

It may be true that during the Paleolithic period there were no nations yet. It is also true that during history peoples and kingdoms had disappeared suddenly without leaving a trace, as a result of mass invasions of, as a rule, less civilized and barbaric peoples, or as a result of natural disasters, but it is extremely illogical to believe that peoples and kingdoms, moreover languages may appear suddenly and mysteriously unless the peoples migrate from some place. The most interesting is, that the Russian scholars do not indicate how, when and where from exactly did the Urartians migrate and how and where from did the Armenians appear suddenly in the same place after the collapse of the Urartian kingdom around 590 B.C. The works of Suren Ayvazyan, one of the well known Armenian linguists, showed that the mysterious language of Urartians is not that mysterious, that it is simply archaic Armenian, that the name of the kingdom of Urartu in the Urartian cuneiform texts is supposed to be read "Ararta", meaning "of

Ararat" in Armenian, e.g., meaning the kingdom of Ararat (the mountain of Ararat).¹ The kingdom was initially located around the Mountain Ararat. It was later that it grew in power and size competing with Assyria during the VIII century B.C.

It was of course inconvenient for Russian archaeologists and historians for political reasons to restore all the truth about the history of Armenian culture, because they would have had to admit that the Armenians had a culture and were a civilized people, at a time when Russians did not even exist as a nation. Additionally, Armenians were Christians starting from 301 A.D., while Russians obtained their alphabet together with Christianity (through the Byzantine Empire) and became literate more than six centuries later, in the middle of the X century A.D. Thus, the policy of denying, falsifying and maintaining silence was applied by those who were holding contemporary political power over the region. The rationale was to subdue Armenia by denying it a cultural and historical heritage. For similar political reasons, Armenians were and are denied their cultural and historical heritage by most of the archaeologists and art historians of the Western world. Their main motive is to confirm present day Turkey's right as the lawful inheritor of the culture and the history of its present territories and to support Western political powers' policy to maintain the extremely fragile political balance of the region.

Subsequently, whatever artifact is found in the territory of Turkey somehow appears to have some affiliation with Turkish culture, ethnicity or at least the name of Turkey or the Ottoman Empire, while Armenian associations are always ignored. This is done, by identifying the name of the country with the geography of the region. The

¹ S.M. Ayvazyan, *The Culture of Ancient Armenia*, (Yerevan 1986) p.32. See also Edward Bell, *Early Architecture in Western Asia*, (London 1924) p.109. It may be important to note that most Biblical scholars agree that the Old Testament Urartu is also referred to as the kingdom of Ararat: it is also referred to as such in cuneiform texts. See H. May, *Oxford Bible Atlas* (London 1978) p.142.

geographical borders of Asia Minor and moreover the Anatolian Plateau are identified with the contemporary borders of Turkey.² The terms Turkey, Asia Minor and Anatolia are used as synonyms. It is enough to read only the titles of the following books-Akurgal E., Ancient Civilizations and Ruins of Turkey, (Istanbul, 1970), Mellart J., The Archaeology of Ancient Turkey, (London 1978), Frey D. A. and Pulak C. A., Late Bronze Age Shipwreck at Kas, Turkey, (in IFNA 13, 1984), 271-9. The geographical borders of Anatolian Plateau are somehow stretched up to the political borders of Turkey with the former USSR and Iran, completely overlapping the Armenian Upland. Everything is done by the contemporary political powers of the world not to mention the name of Armenia even though the accepted label by the International Geographic Society for the region is "Armenian Upland". It is astonishing also that the vast majority of Christians of the world (often the most literate, civilized and progressive populations of the planet) do not know where the Biblical mountain Ararat is, the first important mountain of the Biblical cycle on the top of which the Ark of Noah landed and to which the second birth of the humanity is affiliated. Additionally, the archaeologists of the world are somehow bound by the contemporary political borders of present day countries, while at the same time doing their research. For many scholars, the cultures of the region changed suddenly into Assyrian or to Persian as soon as you crossed the borders of contemporary Turkey, Syria and Iran. For some reason they proceed in their studies with this contemporary political map in mind, forgetting to consider the completely different situation of the time period of their research. For example, on the 93rd page of the History of Art, by H.W. Janson and Anthony F. Janson, when speaking

² <http://www.turkishnews.com/DiscoverTurkey/anatolia/history.html>

about an artifact (actually a whole bunch of them) found from the Luristan region of Western Iran pertaining to the X-VII century B.C. period, the authors have difficulties in identifying the origin of the objects.³ Given the time period, it seems strange that they do not look for the origin of the objects in the art of ancient Urartu, the dominant culture of the time period. They even consider it a mystery to ascertain by whom the artifacts were made. Strangely they look for the origins of the artifacts in the art of the Scythians, a culture distant from them in time, geography and style.⁴ At least they were supposed to remember from the history textbooks that Scythians have appeared in the area together with Kimmerians in the end of the VII and the beginning of the VI century B.C. as conquerors. (After crushing the Assyrian kingdom together with Medes and Babylonians in 612 B.C., they facilitated the collapse of the Urartian kingdom about 590 B.C.). It is unlikely that the Scythian conquerors aiming for a plunder would bring their art together with them or would be accompanied by their artists and artisans to create art objects for them during these military campaigns. It is hard to believe, in general, that nomads could have an art of high refinement, moreover applied in bronze. Generally a people need to be at least settled to have time to examine and cultivate ores and to come to the idea of alloys. In fact, the first peoples who could cultivate ores and combine alloys were those who were, first, settled and second, were living close to the mines (as a rule, in geologically young, volcanic uplands). The Armenian Upland is the highest volcanic region in the Near East. For Mesopotamia, it is like Tibet for India. It was always called a "Mountain Island" and was full of useful minerals. It was a veritable museum of ores and stones (obsidian, for example). In the ancient world there were very few centers of copper

³ H.W. Janson and Anthony F. Janson, History of Art, (New York 1997) p.93.

⁴ Ibid., p.93.

mining. In the Near Eastern region there were three centers, one - in the Armenian Upland, the second - in the Iranian Plateau, the third - on the Sinai Peninsula. The Armenian Upland was rich not only in copper. "A great number of metals were exported from here like tin, lead, zinc, manganese, gold, silver, bronze, etc. Starting from the XVII century B.C. Armenian iron was exported to the Hittites, Egyptians and Assyrians in the form of weapons and everyday utilitarian ware. Armenian iron chariots and horses were exported to all adjacent countries. According to the Egyptian priest Maneton, horses were first tamed in Armenia."⁵

But let us try to come closer to our topic. It is important to remember, that the ethnic boundaries during all the periods of Cycladic, Cretan, Mycenaean and Greek civilizations were different and used to change constantly. There was a constant but gradual migration of peoples from East to West. This can be traced by the admixture of languages, arts and habits, tools and techniques that occurred throughout the Mediterranean Region following the end of Neolithic period. It is important to remember that the inhabitants of Asia Minor then were not Turks (every high school history textbook notes that the first migration of Oghuz-Turkmen nomads from Manjurian steppes took place in the middle of the XI century A.D.). It was a couple of centuries later that, growing in number and strength, the Turkic nomads crushed the Byzantine Empire and established in its place an empire of their own. Anciently, the Asia Minor peninsula was inhabited by the Hittites, Phrygians and a multitude of other people like Lycians, Carians, Lidians, even Celts, then come Cappadocians, Cilicians, people of Pontos, etc.

⁵ Op.cit., S.M. Ayvazyan, p.10.

The Cycladic people, Cretans, Mycenaeans and the Greeks themselves have migrated from the East to the area of Balkan Peninsula, either from or through Asia Minor.

It is important to know the history of the migration of ancient peoples not only for our discussion, but for a more correct understanding of history and art. With a clear knowledge of the exact routes, times and the places from which people have migrated, it is possible to trace back and find the origins of the arts and the cultures and eventually the roots of our contemporary civilization. Both the artistic style and the level of artistic refinement are the products of the mindset and the intellect of these peoples. As long as there is ethnicity, individual groups of people are the carriers of their own unique intellect, art style and level of artistic refinement. It is strange then that when speaking about the influences on Cycladic, Cretan, Mycenaean and Greek arts, Reynold Higgins, John Boardman and A.W. Lawrence are satisfied only with very general geographical terms like “East” or “Asia Minor”. It is more than strange that as scientists they do not try to go beyond the general geographical terms and attempt to indicate a particular culture in Asia Minor or in the East. (A concrete example of a culture from Asia Minor could be the culture of the Hittites, for example). There were no people like Asia Minorians by name, after all. Speaking about the influences from the East, Reynold Higgins, John Boardman and A.W. Lawrence could and should be more specific, mentioning certain cultures like Sumerian, Akkadian, Babylonian, Assyrian or Urartian (the Ararat Kingdom). It is hard to tell why exactly they do not mention any of these specific cultures. There can be two main reasons, either they do not know, or they do not want to know. The first reason is less likely. As professional art historians and archaeologists they are supposed to know

very well the history of the cultures of the peoples of the areas they are indicating. The second reason may be more likely.

Considering that every stage or level of culture always has deep roots in previous stages, it is natural to see the roots of the culture of the present civilized world as deeply embedded in the European, Roman and Greek cultures. But how about Early Greek art and the origins of this culture itself? Often art historians and archaeologists tend to stop at this point without a desire to go further in their search for the roots of the Greek society. It is convenient, of course, actually, prestigious to see the roots of the culture of modern civilization originating from the culture of Ancient Greece, particularly, Greece of the Classical period. It is convenient to find the origins of modern culture within the boundaries of Europe, e.g. within the territory of the present day Greece with its multitude of islands, including the island of Samos, the closest to Asia Minor, but never to look further to the cultures on Asia Minor itself or the Near East. Often scholars seem satisfied with geographical definitions only, like East or Asia Minor while speaking about the Eastern influences on Ancient Greek art. By contrast, when speaking about the South-Eastern Asiatic influences however they use a very concrete name association with Egypt. Of course, it is highly prestigious to find the roots of European culture in the Egyptian culture - majestic but extinct, rather than in Near Eastern with its "barbarous" present. This is a painful remnant of European colonialism and ambitions. It is almost impossible for the western world to admit that their present civilization is indebted not only to Greeks and Egyptians but also to Assyrians and Urartians (Armenians). It is painful to see that forgetting about their conscience of a scientist and being led by personal and national ambitions and some political and imperial motives, many

archaeologists and historians are ready to forget, deny or maintain silence about some discoveries and facts.

With these thoughts in mind let us return to the main topic of our discussion, to Ancient Greek art, and to the development of Greek temples in particular. Classical Greek art often stands on a secluded pedestal in the art of the ancient world. But we shouldn't forget that it didn't appear suddenly from nothing. We need to remember that it also progressed through centuries of gradual change and development. First of all, when the Dorian Greeks appeared in the Balkan Peninsula they already had a culture. Unlike the Sumerians, Akkadians, Egyptians, Hittites, Babylonians, Assyrians or Urartians, the Greeks migrated to the Balkan Peninsula from somewhere and brought with them some level of culture and art. Unlike the modern world, the Ancient World had a higher level of integration on many levels. There was free and active trade. The borders between the kingdoms were not as strict as they are now. People spoke similar languages or by common usage shared a language of trade and commerce, particularly with close neighbor states. Their arts were thus also similar due to the trade contacts.

Considering this, it is natural to expect that the art and culture of Greeks was similar to the arts and culture of their former neighbors. The earliest examples of Greek art were found in a burial at Lefkandi on the island of Euboea. The most interesting is the terracotta figurine of a horse-man, probably the prototype of the Greek Centaur (See Plate 1). We meet figures of imaginary creatures in the arts of most of the cultures of the ancient world. The Egyptian sphinxes had a body of a lion with a human head, the Mesopotamian griffins had an eagle's head on the body of a lion, or on the body of a bull with or without wings, lion's head or even a human head on the body of a bull with

wings, etc. But all these imaginary creatures do not have human torsos coming out of the body of an animal, there is only a human head attached to the animal body. So, the Greek Lefkandi Centaur is a product of a completely different mindset. But it would stand secluded if not for the Urtian imaginary creatures, like the ones hosted in the British Museum and in the Hermitage Museum (See Plate 2 and Plate 3).⁶ Even though the Greek Lefkandi creature has somewhat elongated proportions in comparison with the Urtian creatures, the principal resemblance is amazing. Here we see a very similar mindset. "Thus, the strange clay centaur found in the Lefkandi cemetery has Eastern and perhaps mythical associations that can still tax us."⁷ The Greek Lefkandi Centaur does not have any resemblance with the Egyptian sphinxes. It does not remind us of the Assyrian griffins. The resemblance of the Greek and Urtian creatures could be a consequence of either an independent discovery, or a long-term interrelation and interaction. The first is less likely. Being the products of independent developments, both, the Mesopotamian and Egyptian cultures were completely different from each other. Remembering that the Greeks were not the aboriginal people of the Balkan Peninsula, and that they have migrated from somewhere in the East, it is natural to ask if they might have migrated from the adjacent Urtian (Araratian = Armenian) territories and might, at some point in time have shared with them a similar culture. Now, the Lefkandi creature is believed to be from the X century B.C. The Urtian one is believed to be from the VIII century B.C. There is a two century gap between each artifact, but still it may be a legitimate question—to whom does the idea belong? It was only by the V century B.C. the Greeks started to cast hollow bronze figures. Urtians were doing it long before (See

⁶ See also, Henri Frankfort, The Art and Architecture of the Ancient Orient, (Baltimore 1969) plate 174A.

⁷ John Boardman, Greek Art, (London 1996) p.32.

Plate 4). Of course, technical and technological advancement is not a precondition for certain mythological personages, but they prove only that Urartians had passed through a longer history of development and might have come to the idea earlier than the Greeks. There are found other, similar to the Greek centaur, Urartian examples throughout the Urartian territory. With relation to Urartian artifacts, the prominent Russian archaeologist and art historian B. B. Piotrovskii states, "The Turkish archaeologist T. Ozguc, who directed the Altin Tepe excavations, has informed me (Piotrovskii) that he found some bronze belts there also, but unfortunately they are not yet published. On one of them there were figures of helmeted horsemen with spears in their hands, and on the others there were representations of bulls and lions arranged in vertical groups of three, as well as one of a centaur with a bow in his hand."⁸ But the Altin Tepe example of the mythical centaur has parallels on another belt found eastward, in a tomb at the village of Gushchi, by lake Urmia (See the map on the last page). Particularly, "there was found a fragment of a belt decorated with figures of animals arranged in groups of three, one above the other. The animals are goats, bulls and lions, and they are being hunted by mythical creatures in the form of birds with human bodies and legs."⁹

But the most important concept is that during all the phases of the development of Greek culture there was an active cultural interaction between the cultures of the ancient world where the Greeks were not the teachers but the taught. For example, the eminent Greek scholar John Boardman states, "Foreign goods and foreign craftsmen were reaching Greek shores with mounting effect."¹⁰ In the Orientalizing phase the Greeks

⁸ B.B. Piotrovskii, URARTU, The Kingdom of Van and its Art, (London 1967) p.49.

⁹ Ibid., p.50.

¹⁰ Op.cit., J. Boardman, p.42.

were borrowing art objects, art styles, techniques and ideas from Near East.¹¹ Eastern art was flowing to Greece even before 800 B.C. "...there were other arrivals of even greater potential. There were troubled times in the Near East and it seems that it was not only goods but craftsmen that were attracted westward into Greek Lands."¹² "The annals of Sarduri (Uartian king), son of Argishti, who became king in the middle of the VIII century B.C., speak of military successes against Assyria, of a considerable increase in Uartian territory, and of penetration to the Mediterranean, with consequent control of highly important trade-routes. In achieving this, Uartu saved Asia Minor from Assyrian conquest, and Uartian culture started to make itself felt both in Asia Minor and in Mediterranean lands. Uartian bronzes occur in the tombs of Gordius king of Phrygia (mid-eighth century B.C.), and include cauldrons with handle-mounts in the shape of winged human figures and bulls, and small containers in the form of animal heads."¹³ (See the illustration of the Uartian cauldron handle-mount on the Plate 5 and its Greek copy on Plate 6). "Similar examples of Uartian art penetrated not only to the islands and mainland Greece, but also to Italy, and Uartian products began to serve as prototypes for

¹¹ Ibid., p.42.

¹² Ibid., p.49.

¹³ Op.cit., Piotrovskii, p.5-6. See also Edward Bell, Early Architecture in Western Asia, (London 1924) p.64. Here, talking about Assyrian aggressions, the author particularly states that Assyrian "further aggressions, however, were stopped by another power, which now comes upon the historic scene, namely the hardly and warlike race of mountaineers from Uartu (Ararat) and the neighborhood of lake Van, who not only invaded Assyria, but even crossed the Upper Euphrates and for a time held Hittite territories in subjection. The history of this part of Asia for a large part of the ninth and eighth centuries B.C. is obscure. It apparently consisted of a long-continued struggle for north Syria between Assyria and Vannic kings, under whom some of the Hittites served." (In the passage Uartu (Ararat) identification is the author's). With "Vannic kings" he means the Uartian kings, because the kingdom was often known as the kingdom of Van, of the lake Van, because the Uartian capital city was on the Eastern shore of the lake. Uartu was also known as the land of Nairi, from Babylonian and Assyrian cuneiform plates, meaning the land of rivers and lakes. The kingdom of Uartu (Ararat) was known as country of Armenia from Persian text of the Behistun inscription. Owing to the Greeks this Persian version of the name of the country became well known to the world and now is in use among the nations who have accepted the Greek culture as the basis of their cultures. Starting from the beginning of recognition of their identity up-till now Armenians call themselves HAI after the grandson of Japheth son of Noah, and the country HAIK. (Find similarity with HIKSOS).

small objects"¹⁴ "In 1931 Lehmann-Haupt drew up a list of the cauldron-mounts in the form of birds with female (or occasionally male) bodies which were known at that time. The total was forty-three. Ten of these came from Western Asia (Urartu and Assyria), but the majority came from the Mediterranean lands (Greece and Italy). They had been found on the island of Rhodes, at Athens, in Boeotia, at Delphi, at Olympia, and also in Etruscan tombs."¹⁵ "In Greek sanctuaries and in Etruscan tombs there have been found not only the handle-mounts of bronze cauldrons, proving connections with Western Asia, but other objects as well. For example, an ivory figurine of a naked goddess was found at Delphi which bears a great resemblance to a figurine of a goddess from Van, also of ivory."¹⁶

"Possibly it was at this time that there appeared in the Mediterranean area the type of temple with colonnaded front and triangular pediment, built on a stylobate, which, as we know from Assyrian representations and documents, was to be found in Urartu as early as the end of the VIII century B.C."¹⁷ There is a very detailed and accurate description of the capture and plunder of the Urartian city of Musasir (See the map on the last page) and the main temple of its predominate god Haldi in 714 B.C. by the Assyrian army led by the Assyrian king himself. "Sargon's campaign in 714 B.C. is very well known to us, for we have a detailed description of it on a large clay tablet from Ashur, and representations of episodes in the campaign on the reliefs from one of the badly-damaged rooms of Dur Sharrukin, Sargon's palace."¹⁸ The description of the plunder is

¹⁴ Ibid., p.6 and p.22.

¹⁵ Ibid., p.41-42.

¹⁶ Ibid., p.22.

¹⁷ Ibid., p.6.

¹⁸ E. Botta and E. Flandin, Monuments de Nineve, (Paris 1850) plates 139-147.

impressive. The treasures captured from the Urartian king's palace weighed 1040 kilograms of gold and 5060 kilograms of silver. The plunder from the temple of Haldi alone equaled, probably as much gold, 5 tons of silver and more than 109 tons of bronze ingots.¹⁹ But for our topic the most important is the evidence concerning Urartian temple architecture, which comes from the relief from Sargon's palace. "Such is the evidence provided by the text in the Louvre. On a relief from Sargon's palace (which, as it was lost in the Tigris while being transported to France, is only known from a drawing by Flandin) there was a representation of the plundering of the temple at Musasir."²⁰ The drawing of Flandin is a representation of a building with a vivid frontal colonnade over a high stylobate and a triangular pediment over it, apparently with a pitched roof (See Plate 7). "The connection of many ornamental elements in archaic Greek art with Western Asia and with Asia Minor has been pointed out long ago: and the striking similarity between the Urartian temple at Musasir, of the ninth century B.C., and early Greek temples, emphasizes the important part which the cultures of Western Asia played in the formation of classical civilization."²¹

The pitched roof could be only an Armenian creation. The Armenian Upland is the highest in the region. It is considerably higher than the Mesopotamian plains. The average height of the Armenian Upland is 1500 meters=4,500 feet. The highest mountain peak is the mountain Ararat at 5165 meters=16,945 feet. The lowest plains are around 800 meters=2,500 feet high. The climate is mountainous, with long severe winters with much snow, and stormy and rainy springs, hot but sometimes very rainy summers, and

¹⁹ Op.cit., Piotrovskii, p.9.

²⁰ Ibid., p.10.

²¹ Ibid., p.23.

dry and beautiful autumns. It was thus a necessity for the people living in this climate to build pitched roofs. Special care was taken especially for the earthly abodes of the Urartian gods. The temple of Haldi at Musasir was built apparently of stone. While it is impossible to tell what kind of stone (the Armenian Upland is rich in granite, basalt, limestone, marble, tuff, etc.; the only preserved Hellenistic temple in Armenia was built out of basalt), the Assyrian relief indicates a stone Urartian temple. Logically, in the rainy climate, it is not reasonable to build with mud-brick, especially when there is a lot of stone around in abundance. Stone would be the preferred building material especially when clay is scarce. (The Mesopotamians could build with mud-brick because of their mostly dry climate and abundance of clay). The roof of the Urartian temple of Haldi probably was of stone too. People of the Armenian Upland never had thatched roofs and have never used ceramic tiles to cover their roofs. Because the Urartians simply couldn't trust a roof with timber and ceramic tiles to protect the tons of gold, silver and bronze enclosed in this temple, it is natural to believe that the pitched roof was definitely of stone (it, of course, could never be thatched), which could be supported only by a vaulted structure from inside. It is very likely that in the IX century B.C. the people of the Armenian Upland were very familiar with the technique of constructing an arch because their neighbors - Hittites and Assyrians, long before the IX century B.C., were constructing vaulted structures.²²

If one considers that Flandin's drawing is an accurate representation of the Assyrian relief (the archaeologists are usually extremely accurate in their drawings) and that the Urartians had penetrated the Mediterranean and were actively trading with the

²² Edward Bell, Early Architecture in Western Asia, (London 1924) p.73-79, p.134, p.143, p.152-154. (See plates 19, 20 and 21). See also Henri Frankfort, The Art and Architecture of the Ancient Orient, (Baltimore 1969) p.21.

Greeks, and that the Greeks having a lower level of arts were actively borrowing, it is natural to believe that they might have borrowed their temple style from the Urartians. In fact they might have borrowed also the Urartian Pantheon of gods, which unlike the Cycladic, Cretan and Mycenaean, was strongly male oriented with some goddesses like Astarte.²³ After borrowing, the Greeks usually used to lose the initial meaning. In reference to the phenomenon, John Boardman says, "The objects themselves, of course, had lost their meaning since the models did not travel with explanatory labels."²⁴ As long as technological manuals were not traveling together with the borrowed goods also, and the Greeks had to figure out how to recreate them, much was probably lost in this transaction. The temples could not travel, of course, but because of active trade and interaction the Greeks, probably had many opportunities to be around the Urartian temples and to examine them thoroughly. They had a compelling opportunity to recreate similar buildings, (of course, improving and polishing the proportions throughout the centuries). But probably they didn't have an opportunity then to examine the Urartian temples from inside in order to be able to recreate the construction of the roof, particularly the vaulted structure supporting the stone roof. (The Greeks couldn't have that opportunity because as foreigners they wouldn't be allowed to come close to the sacred abodes of Urartian gods, especially since tons of gold, silver and bronze were enclosed inside. They might have only an opportunity to see the temples from a distance. Not even every Urartian was allowed to enter inside the temple. It was the privilege of

²³ Op.cit., J.Boardman, p.69, The author particularly mentions that the new techniques introduced from the East "helped to canonize and stereotype proportions for figures and especially, the features of a facing head. The type is close to that of the Eastern naked goddess (Astarte) plaques, some of which reached the Greek world and were copied there, although the whole figure of the goddess was soon given clothes and identified as Aphrodite."

²⁴ Ibid., p.53.

very few). Throughout all the centuries of development, the Greeks were busy with refining the proportions of their temples, with refining and over-refining its outside decorations, the decoration of the pediment and the entablature - the frieze, the architrave and the cornice, the shafts and the capitals of the columns, etc. Up to the end of their civilization they didn't come to the idea of the arch and were covering their highly refined and extremely beautiful temples with a barn-like triangular roof constructed with timber and covered with ceramic tiles.

On mainland Greece roofing tiles were in common use only by the middle of the VII century.²⁵ There are no earlier evidences. But in order to examine the development of the style of the Greek temples, we need to start with the earliest Greek building, uncovered at Lefkandi dated tentatively to the X century B.C. (See plate 8). In general, the building of temples in Greece was not undertaken before the VIII century B.C.²⁶ The dating of early Greek remains are extremely difficult. The ancient historians supply no reliable chronological data for events prior to the VI century.²⁷ But it is out of the question that in the Bronze Age there were no temples. "On the mainland, several shrines or places of cult have now been discovered. Their architecture is not impressive, and their recognition depends rather on the objects discovered in them, or the decoration of their walls."²⁸ "The culture of the XI century was pre-Hellenic in a degenerate and degenerating form, and this heritage continued to suffer a gradual attenuation till the VIII century, when it had almost ceased to exist: the Hellenic civilization was then beginning to evolve - out of virtual nullity, to judge by material evidence. The literature confirms

²⁵ A.W. Lawrence, Greek Architecture, (New York 1983), p.66.

²⁶ Ibid., p.61.

²⁷ Ibid., p.61.

²⁸ Ibid., p.61.

this view. Hesiod, writing in the eighth or seventh century, stresses the poverty and misery of his times..."²⁹ "When the Hellenic civilization began, about 800 B.C., the shape it took was new in practically every way. Artistically it retained very little from the Bronze Age except the techniques of essential handicrafts..."³⁰ The Lefkandi building can hardly be the prototype of Greek temples. On the other hand, according to Robin Osborne "Its construction has nothing in common with the construction of the Mycenaean palaces, and employs a totally different technique, with walls of mud brick upon a stone socle (foundation), and an exterior peristyle ('colonnade') of wooden posts. The use to which this building was put is no more Mycenaean."³¹ Even though the reconstruction of the Lefkandi building shows a pitched roof with a wooden colonnade all around the building, A. W. Lawrence himself accepts that the exact relationship between this building and the Greek temples requires further analysis and hopefully, fresh discoveries.³² It is hard to find even a distant connection here because, first of all the Lefkandi building was not a temple. It was a burial place. Secondly, it might be simply groundless speculation that the roof was pitched since archaeological remains are inconclusive. Finally, it was unreasonable to trust the remains of the highly ranking nobles (probably a king and a queen), and moreover the treasures buried together with them, under the protection of a thatched roof supported with very light wooden beams (there are no tiles found around).³³ Any strong wind could blow it away easily. Finally,

²⁹ Ibid., p.61.

³⁰ Ibid., p.61.

³¹ Robin Osborne, Greece in the Making 1200-479B.C., (London and New York 1996) p.41.

³² Op.cit., A.W. Lawrence, p.62.

³³ Op.cit., J.Boardman, p.31. "It (the structure) contained two rich, indeed royal burials, equipped with foreign exotica..."). Among the foreign exotica were "metal goods with the like of which native smiths had no familiarity..." See also Robin Osborne, Greece in the Making 1200-479B.C., (London and New York 1996) p.41-47. See also the Plate 9.

left unprotected it could be a subject of robbery. It does not make any sense to leave such a burial standing open. A.W. Lawrence himself accepts that the building had a short life, being deliberately filled in and covered with a mound perhaps as soon as its construction was complete. "Thus this particular structure can itself have had no influence on the architecture of the eighth century..."³⁴ It may be very possible that the structure was built in the ground (the walls not coming out of the ground) and covered with a flat roof consisting of wooden beams, straw, clay and soil as was usually done before and continued to be practiced in Middle Eastern Muslim countries up till now). Finally, it does not make any sense to build a pitched roof if it is supposed to be covered by a mound later. Only the function of the outer colonnade seems a little confusing. But it is very possible that fearing that the mud brick walls might not support the flat roof with the heavy weight of the mound which was to be erected over it later, the builders have used a wooden colonnade around the building to support the beams of the roof. This idea is supported by the inner colonnade (also wooden). If the roof was pitched the inner colonnade wouldn't be necessary.

It is evident that early Greek temples were rectangular and had flat roofs (see the 570 B.C. Francois Vase drawing of the palace of Thetis on Plate 10). The restorations of some pottery models of, presumably, sanctuaries found at Perachora, near Corinth show pitched roof, single room buildings, apparently with a thatched roof (See plate 11). These sanctuaries were maybe common up to the VIII century. But it is still a speculation to consider these buildings as temples. Another speculation is the reconstruction of the VIII century structure in the sanctuary of Apollo Daphnephoros at Eretria (See plate 12). The

³⁴ Op.cit., Lawrence, p.62.

reconstruction of this wooden-framed structure is not convincing. Simply the wooden parts wouldn't be preserved well enough to give clues for an adequate reconstruction. Besides, it looks like a very temporary structure, not properly a temple. Additionally, it doesn't look like another contemporary structure, the first Heraion on the island of Samos (See plate 13). Very little of this temple has actually survived, and its restoration therefore is not completely certain.³⁵ But it seems more likely to be a temple. The cella was built of sun-dried bricks with wooden inner colonnade, which was probably supporting a flat roof.³⁶ Its outer colonnade (also wooden) was added about fifty years later. This could be considered the oldest Greek peripteral temple. The second Heraion which was built on the same site replacing the first one, perhaps early in the VII century, has more developed planning. The cella is without an inner colonnade, but the building still has a flat roof.³⁷ Only by the VI century (200 years after Urartians) did Greek architects on the mainland begin to construct entirely of stone. The roof consisted of wooden beams and rafters and terracotta tiles.³⁸ The forerunner of the temple of Apollo in Corinth had the earliest known tiled roof. This means it could be the earliest pitched roof temple. The other was the temple of Poseidon at his sanctuary by the Isthmus (replaced early in the V century) which had stone walls but wooden columns, which were supporting a wooden entablature. The temple of Hera at Olympia was built in the early VI century. The cella walls were of limestone to a height of 3 feet and were continued in sun-dried brick. The rest of the building was of wood, apart from the tiled roof. Thus, in the VI century the Greeks were still building temples using wood and sun-dried bricks.

³⁵ Ibid., p.63.

³⁶ Ibid., p.63.

³⁷ Ibid., p.64.

³⁸ Ibid., p.67.

The changes were occurring very slowly. "In fact Greek practice had always tended to admit only minor deviations from the forms accepted at each stage of evolution..."³⁹ The characteristic feature of the Greek mindset is reflected in the development of their temple style. Borrowing an idea, a style, and concentrating completely on the appearance, the Greeks refined and over-refined the appearance, throughout all the stages of their civilization, improving the proportions and the decoration to perfection, never coming to an idea to improve the method of the construction of the adopted temple style, or creating a new and different style. They never came to an idea of vaulted structures. In general, the Greeks were avoiding big and sudden changes perhaps fearing to disturb the order of the things. Minor changes, of course, are least obligating.

As we know architecture, in general, is the art of creating useful spaces. The Greek temple architecture is poor not only because of the imperfect roof construction. The whole space of the Greek temple has very little useful space. The interior available space is mainly inside the cella, and if there were two rows of columns inside, the useful space of the cella itself grew even smaller, probably around 10% of the overall space occupied by the building. Only by using vaulted structure, the Greeks could increase the useful space of their temples. But they never came to it.

As a conclusion it may be stated that the art historians and archaeologists of the world are looking in a wrong direction for the origins of Greek temples. They are doing everything to find them either inside the Greek culture itself, or within the Mycenaean or Cretan cultures, e.g. within the same geography--within Europe. In order to reach their aim they are ready to introduce their groundless speculation about the pitched character

³⁹ Ibid., p.67.

of the roof of the Lefkandi building as a fact. In fact, when talking about this same, Lefkandi building, Robin Osborne prefers not to speak about any roof at all.⁴⁰ He is at least trying to keep his honesty as a scientist. On the 44th page he asks many questions, like "Were the Eastern goods found in the Lefkandi building, the products of visits by Greeks from Lefkandi to the East? Or of visitors from East to Euboea? What were the people of Lefkandi giving in exchange for the goods from the East? Was the lack of contact with Athens a product of conscious rivalry, or simply of interests looking in a different direction?" The author himself accepts that all these questions are not easy to answer. What if, the Euboeans were not Greeks. What if they were migrants from Asia Minor or from Middle East. The abundance of Eastern artifacts, particularly the metal goods the like of which the native smiths had no familiarity, the uniqueness of the character of the building, the weakness of the ties with the mainland and many other details, all strongly indicate on the idea of non Greek origin of the Lefkandi burial.

It is impossible to find any affiliation between the architecture of Greek temples and Assyrian temples. Even though the Assyrians were building with mud-brick sometimes utilizing vaulted structures because of the scarcity of timber, they didn't have pitched roofs. Actually they didn't need pitched roofs because of their mainly dry climate. Unlike the Assyrians, the Urartians were building with stone because of its abundance and scarcity of clay in the high volcanic mountains. The scarcity of timber also made them construct vaulted structures out of stone, but because of the mountainous, snowy and rainy climate, they needed to construct pitched roofs over the vaulted structures. So, stone pitched roofs supported by vaulted structures from inside are a creation of people

⁴⁰ Op.cit., R. Osborne, p.42-43.

living in the Armenian Upland. Temples with pitched roofs, triangular pediments and a frontal colonnade on a high stylobate are definitely a product of the mindset of the people of the Armenian Upland. The temple at Musasir predates any known structure of similar character. The Assyrian temples were built with mud-brick and didn't have any colonnade, or moreover, pitched roofs.⁴¹ Changes of style in art and architecture were occurring very slowly in the ancient world. Consequently the Urartians had passed centuries of style development before they reached their IIIIV century temple style, known to us from Flandin's drawing of the famous relief at Sargon's palace. Now, considering the Urartian expansion in Asia Minor in the VIII century, the influence of Eastern art and technology on the Orientalizing period of Ancient Greek art, the overflow of the Urartian culture into Greek islands and the mainland, and that the Greeks were not building temples until the VIII century B.C. (this was discussed above), it is logical to believe that Greeks have borrowed their temple style, (perhaps together with the idea of a temple) from Urartians-Araratians. Consequently, the roots of contemporary art and architecture are to be looked for not only in Greece, but also imbedded deeper, in Urartian-Araratian-Armenian architecture.

Davit Mirzoyan

⁴¹ Op.cit., H.Frankfort, plate 12; 55; 78; and 79. (See also plates 14 –18 here).

BIBLIOGRAPHY

1. Ayvazyan, S.M., The Culture of Ancient Armenia, (Yerevan 1986).
2. Bell, Edward, Early Architecture in Western Asia, (London 1924).
3. Boardman, John, Greek Art, (London 1996).
4. Botta, E. and Flandin, E., Monuments de Nineve, (Paris 1850) plates 139-147.
5. Frankfort, Henri, The Art and Architecture of the Ancient Orient, (Baltimore 1969).
6. Janson, H.W. and Janson, A.F., History of Art, (New York 1997).
7. Lawrence, A.W., Greek Architecture, (New York 1983).
8. Osborne, Robin, Greece in the Making, 1200-479 B.C., (London and New York 1996).
9. Piotrovskii, B.B., URARTU, The Kingdom of Van and its Art (London 1967).
10. <http://www.turkishnews.com/DiscoverTurkey/anatolia/history.html>.

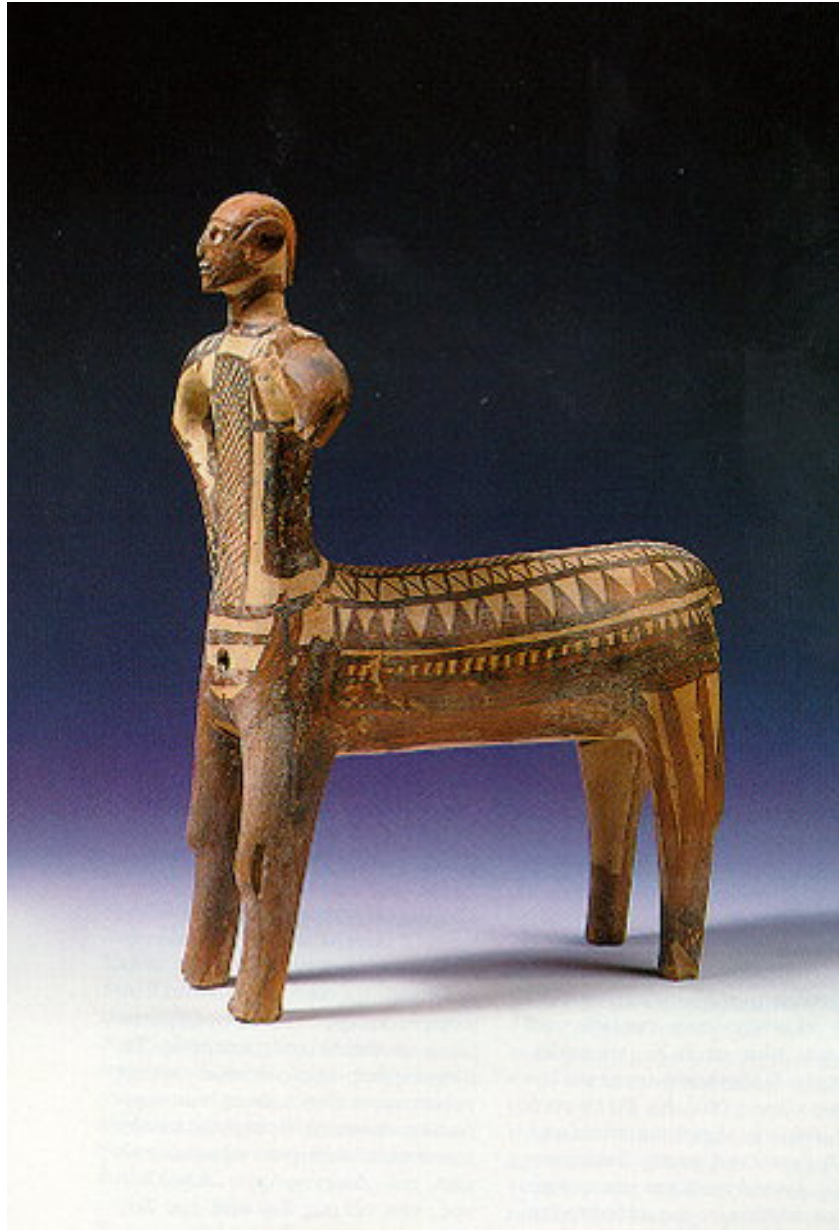


Plate 1

Lefkandi centaur

terracotta

X century B.C.

Lefkandi cemetery/Euboea

From Boardman John, Greek Art, (London 1996) page 33.



Plate 2

Uartian Centauress

Bronze

IX - VII century B.C.

From around Lake Van

From Piotrovskii B.B., URARTU, The Kingdom of Van and its Art, (London 1967) plate II.



Plate 3





Urtian figurine of a winged lion with a human body

Bronze

IX - VII century B.C.

From around Lake Van

From Piotrovskii B.B., URARTU, The Kingdom of Van and its Art, (London 1967) plate 2.

<p>A</p> 	<p>B</p> 
<p>C</p> 	<p>D</p> 
<p>Plate 4 A, B, C) Uartian mythical figurines Bronze IX - VII century B.C. From around Lake Van From Piotrovskii B.B., <u>URARTU, The Kingdom of Van and its Art</u>, (London 1967) plate III, Plate 3 and 4.</p>	
<p>D) Charioteer Bronze 478 or 474 B.C. From near cape Artemisium From Boardman J., <u>Greek Art</u> (London 1996) page 141</p>	

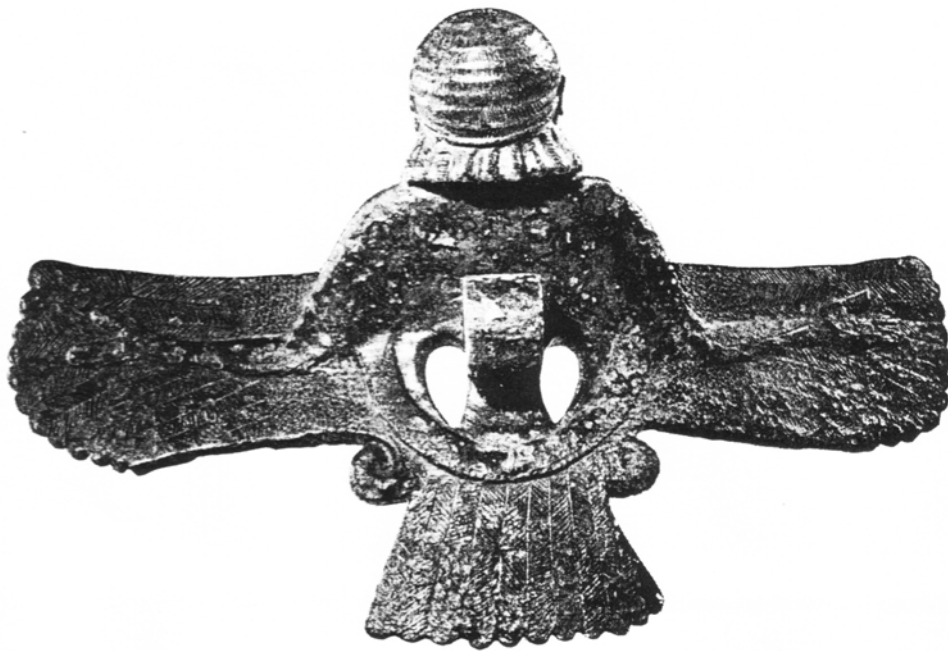


Plate 5

Uartian handle-mount from a cauldron

Bronze

IX - VII century B.C.

From around Lake Van

From Piotrovskii B.B., URARTU, The Kingdom of Van and its Art, (London 1967) plate 13 a and b.



29 Cast-bronze siren attachment for the shoulder of a cauldron, the head facing into the bowl. These were usually fixed in pairs, with an iron ring through the loop at their backs. Early seventh century B.C. Width 15 cm



Plate 6

Greek cast-bronze siren attachment for the shoulder of a cauldron

Bronze

VII century B.C.

Greece

From Boardman J. Greek Art, (London 1996) page 51.

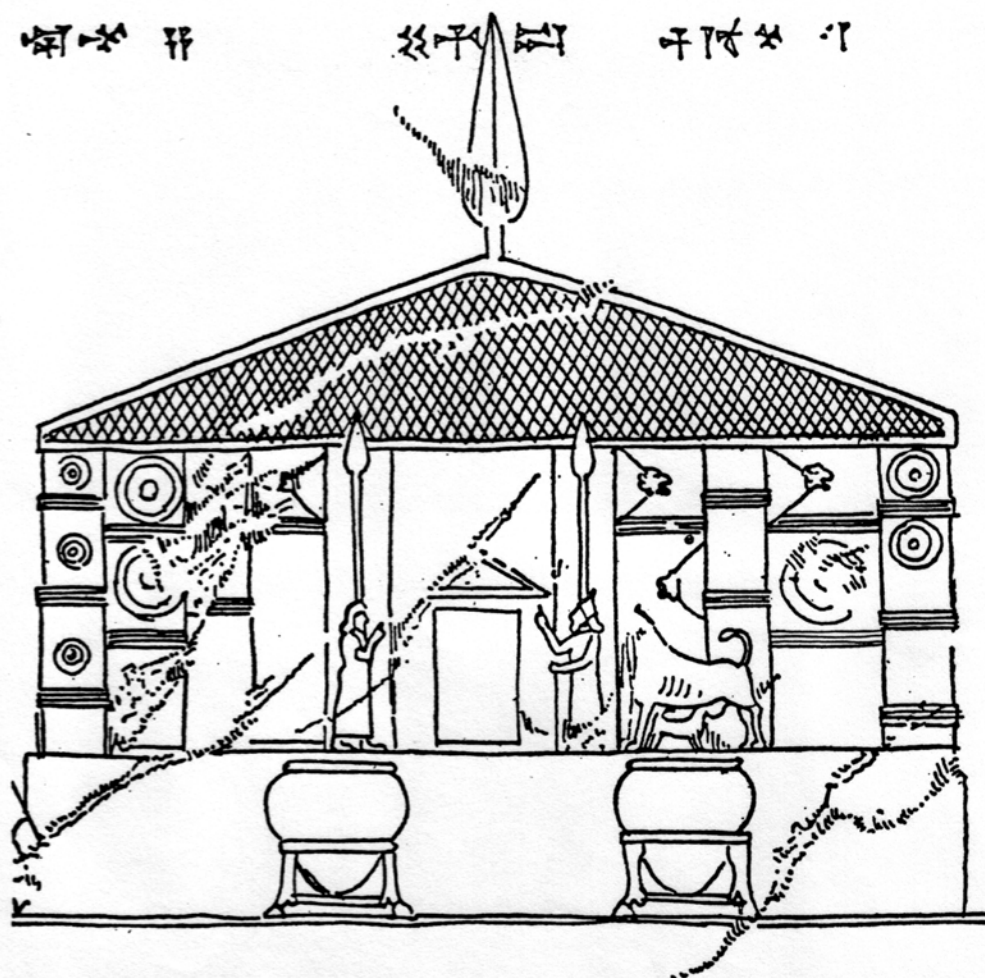


Plate 7

Temple at Musasir

Drawing by Flandin

VIII century B.C.

From Piotrovskii B.B., URARTU, The Kingdom of Van and its Art, (London 1967) page 11.

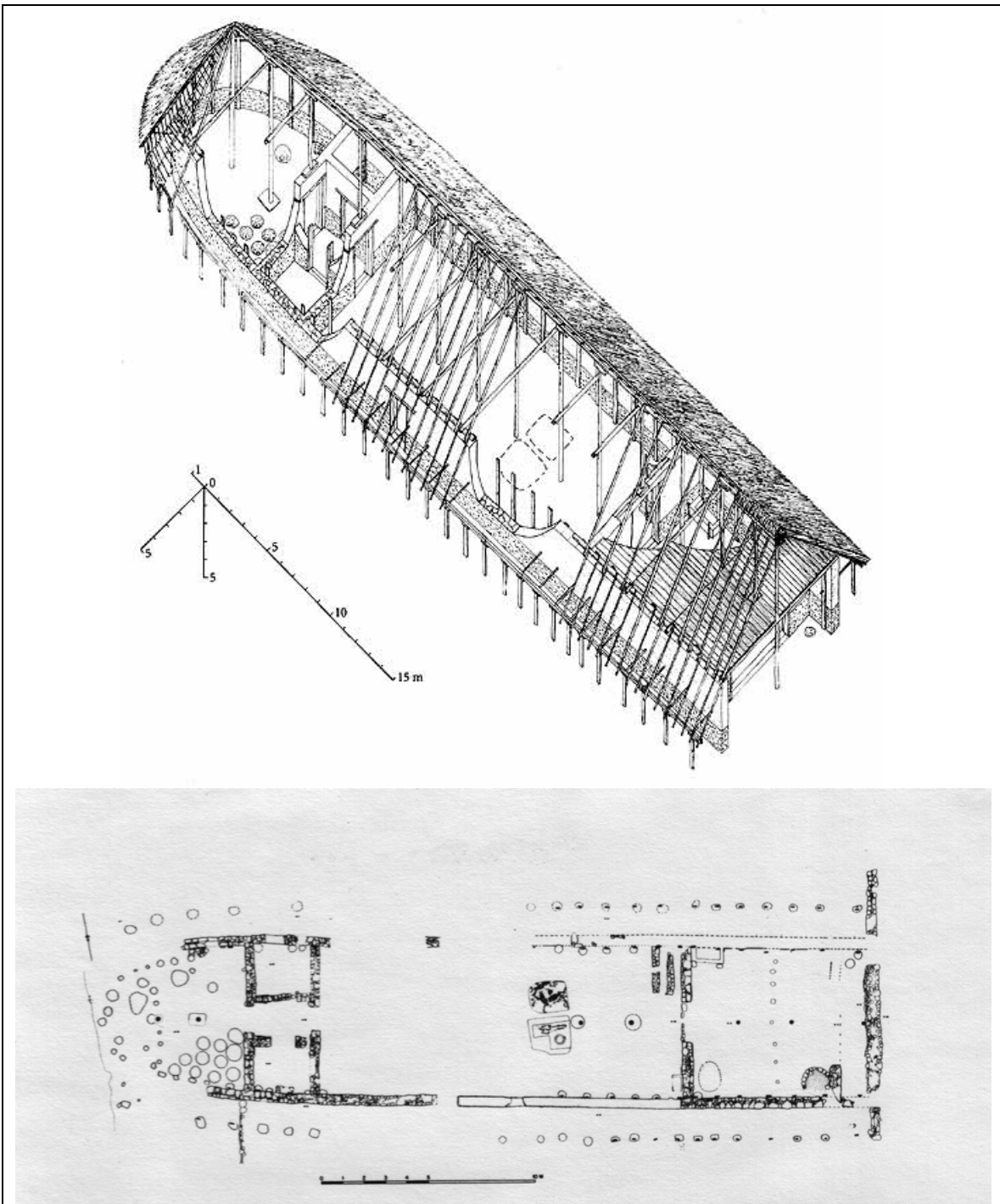


Plate 8

a. The plan of the Lefkandi building
X century B.C.

From Osborne Robin, *Greece in the Making 1200-479 B.C.*, (London and New York 1996) page 42.

b. The reconstruction of the Lefkandi building

From Boardman J. *Greek Art* (London 1996) page 51.

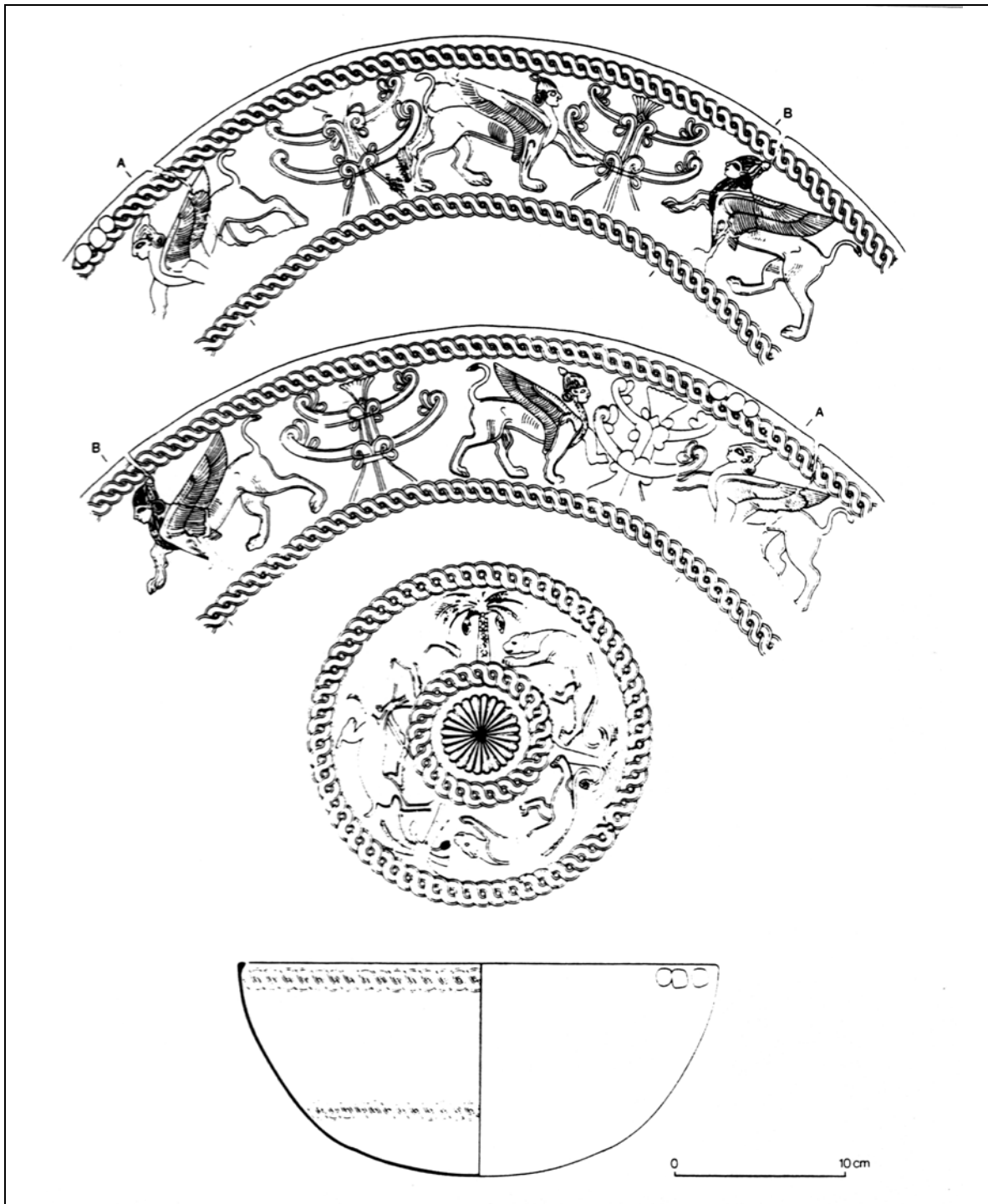


Plate 9

Engraved near-eastern bowl

bronze

900 B.C.

Lefkandi cemetery

From Osborne Robin, Greece in the Making 1200-479 B.C., (London and New York 1996) page 45.

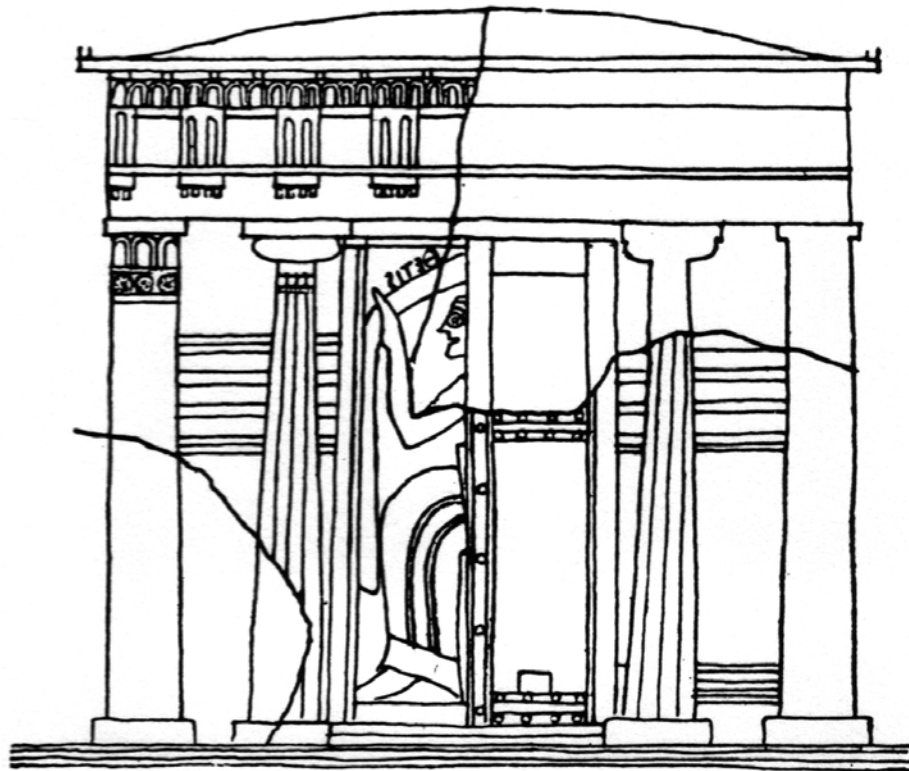
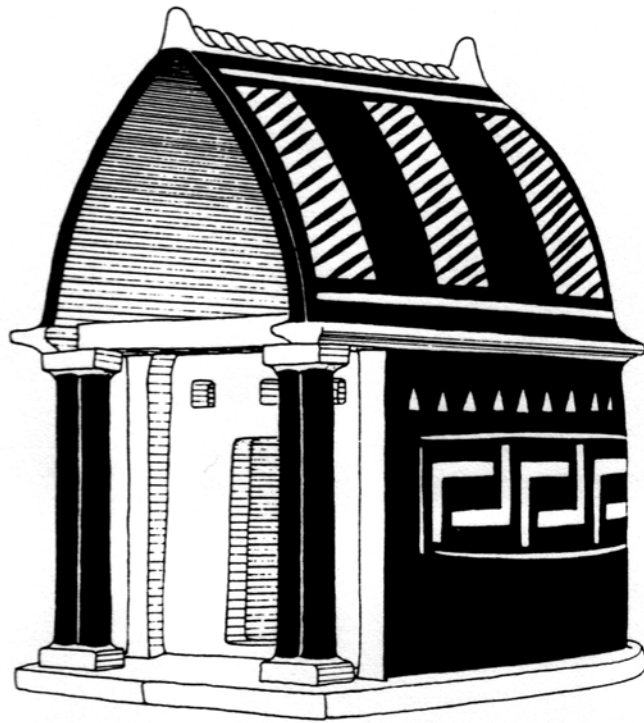


Plate 10

Drawing of the palace of Thetis on the Francois Vase

From A.W. Lawrence, Greek Architecture, (New York 1983) page 67.



31 Restored clay model of an apsidal shrine or house found in the sanctuary at Perachora and probably made in Corinth. The painted decoration suggests thatch, but the meanders may just be borrowed from pot decoration. Late 8th century B.C. Height 33 cm. (Athens)

Plate 11

Model of an apsidal shrine

clay

Late VIII century B.C.

Perachora

From Boardman J. Greek Art, (London 1996) page 47.

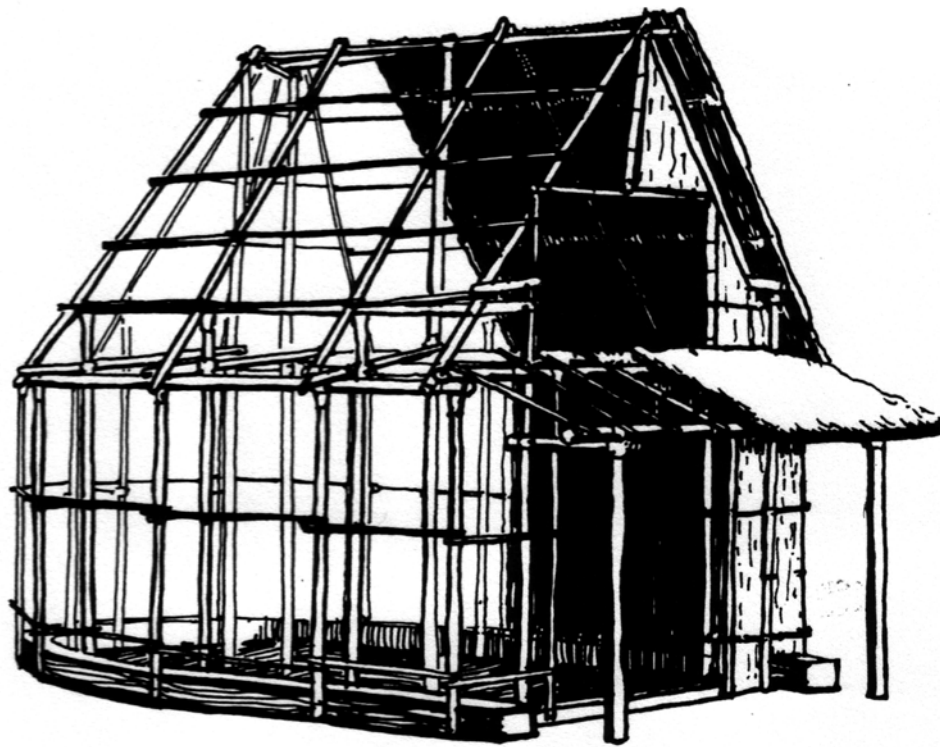


Plate 12

Sanctuary of Apollo Daphnephoros

Wooden framed structure

VIII century B.C.

Eretria

From A.W. Lawrence, Greek Architecture, (New York 1983) page 63.

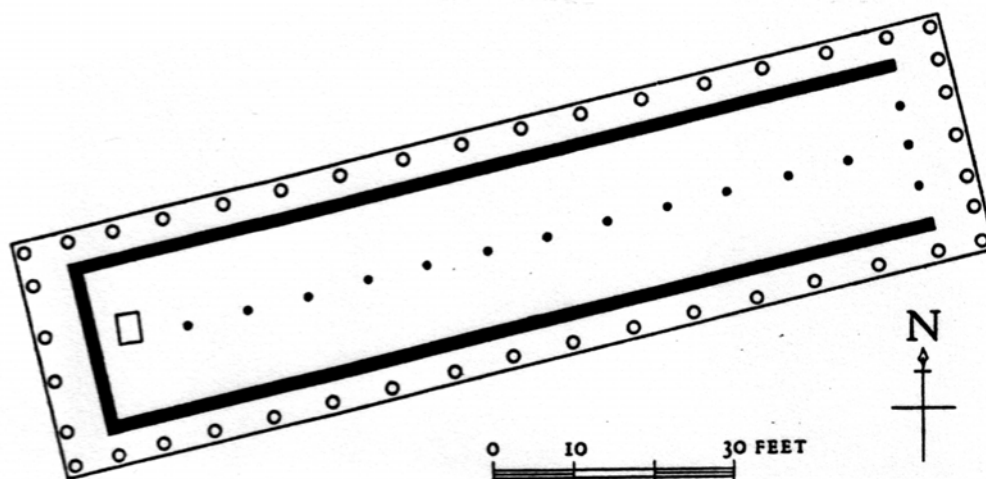


Plate 13

First Heraion

Restored plan

VIII century B.C.

Samos

From A.W. Lawrence, Greek Architecture, (New York 1983) page 63.

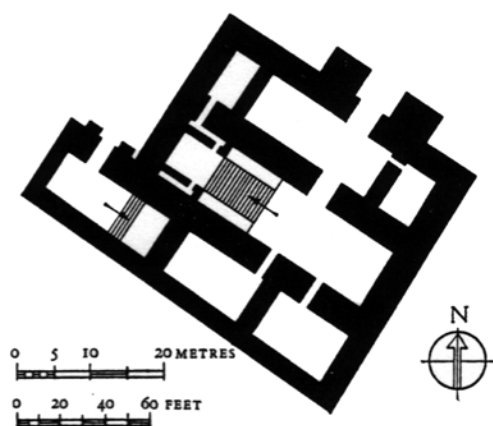
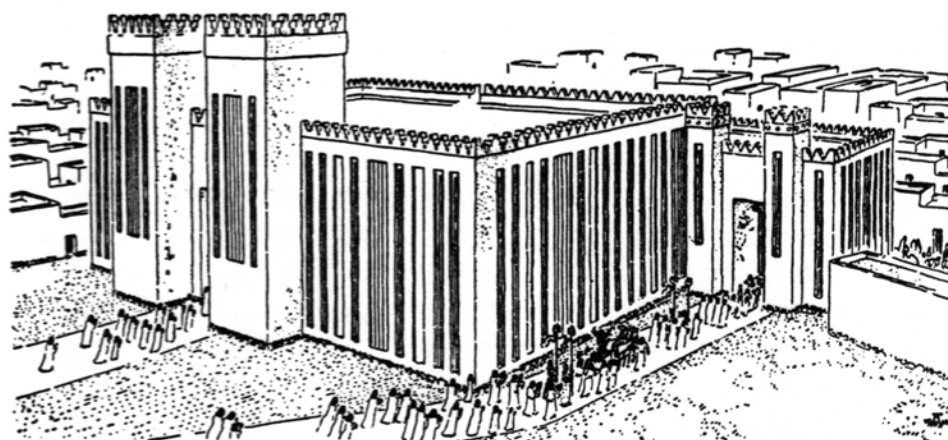


Plate 14

Ishtar temple of Tukulti- Ninurta I

Reconstruction and plan

From Henri Frankfort, The Art and Architecture of the Ancient Orient, (Baltimore 1969) page 69.

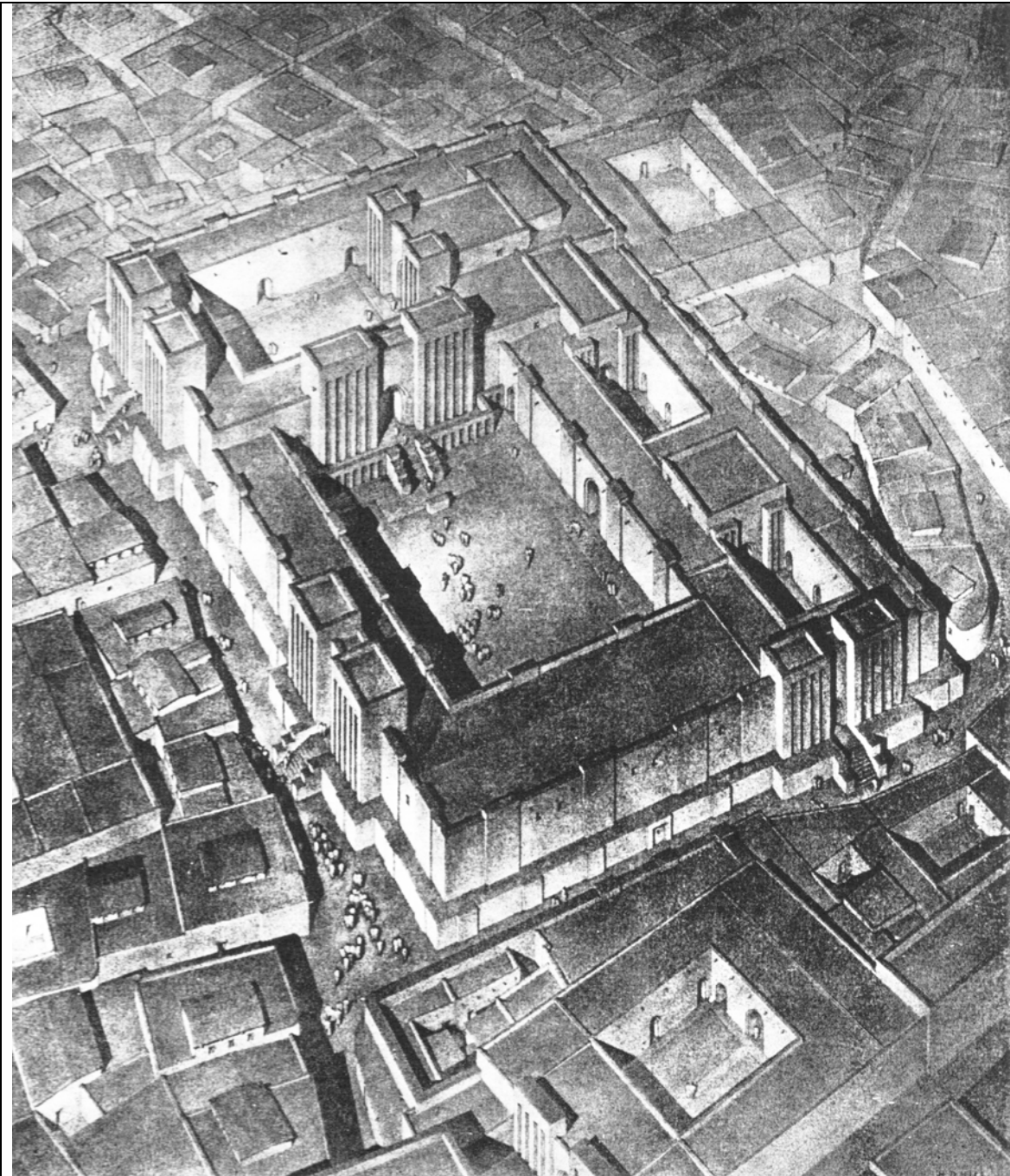


Plate 15

The Temple of Ishtar-Kititum, at Ishchali

Reconstruction by Harold D. Hill

From Henri Frankfort, The Art and Architecture of the Ancient Orient, (Baltimore 1969) plate 55.

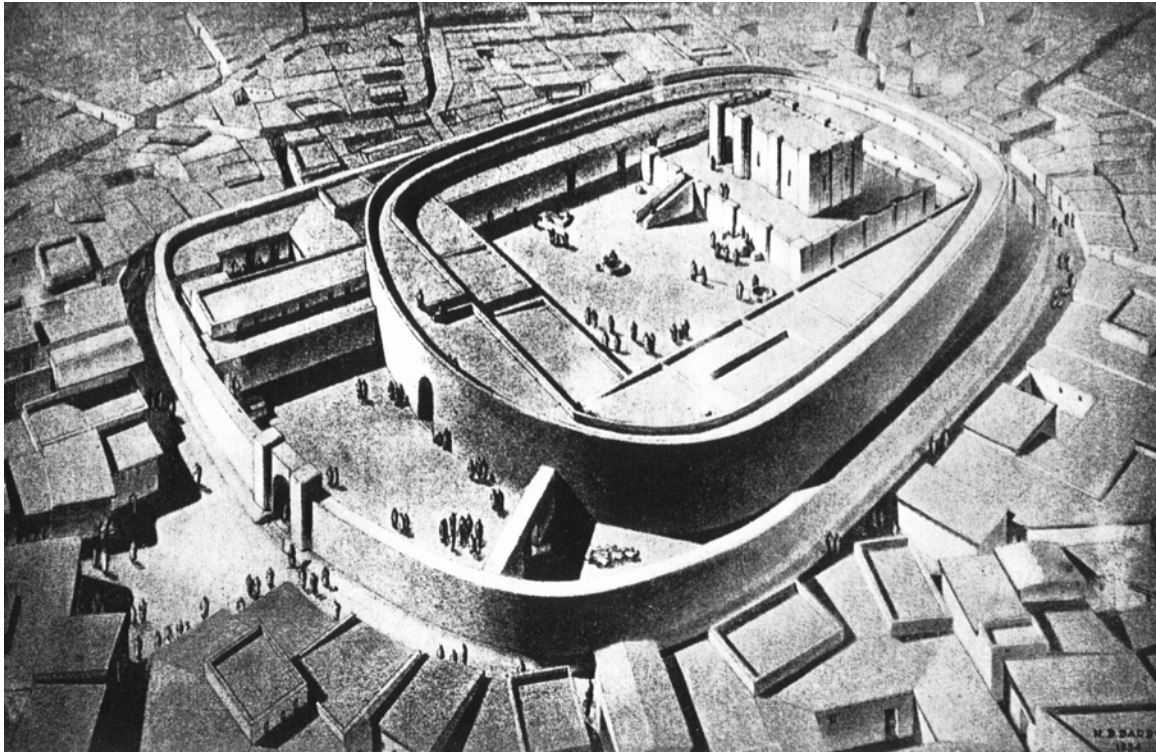


Plate 16

The Temple Oval at Khafaje

Reconstruction by Hamilton D. Darby

From Henri Frankfort, The Art and Architecture of the Ancient Orient, (Baltimore 1969) plate 12.

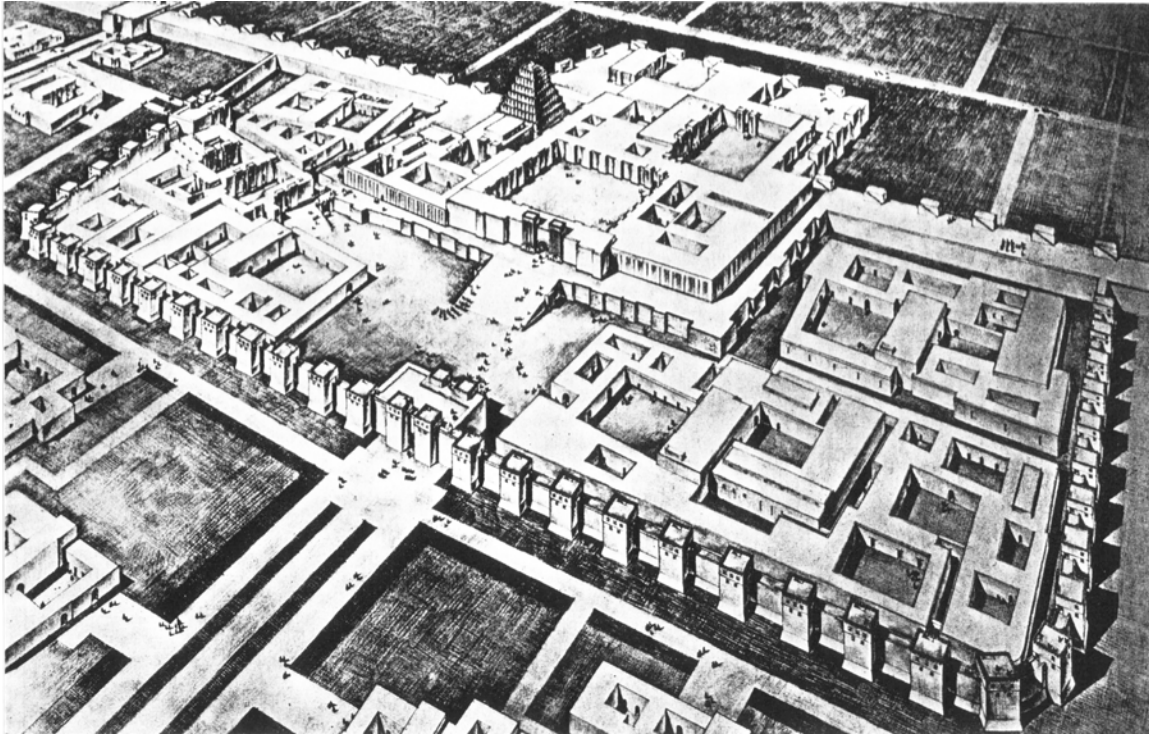


Plate 17

The citadel of Dur Sharrukin (Khorsabad)

Reconstruction by Charles Altman

VIII century B.C.

From Henri Frankfort, The Art and Architecture of the Ancient Orient, (Baltimore 1969) plate 79.

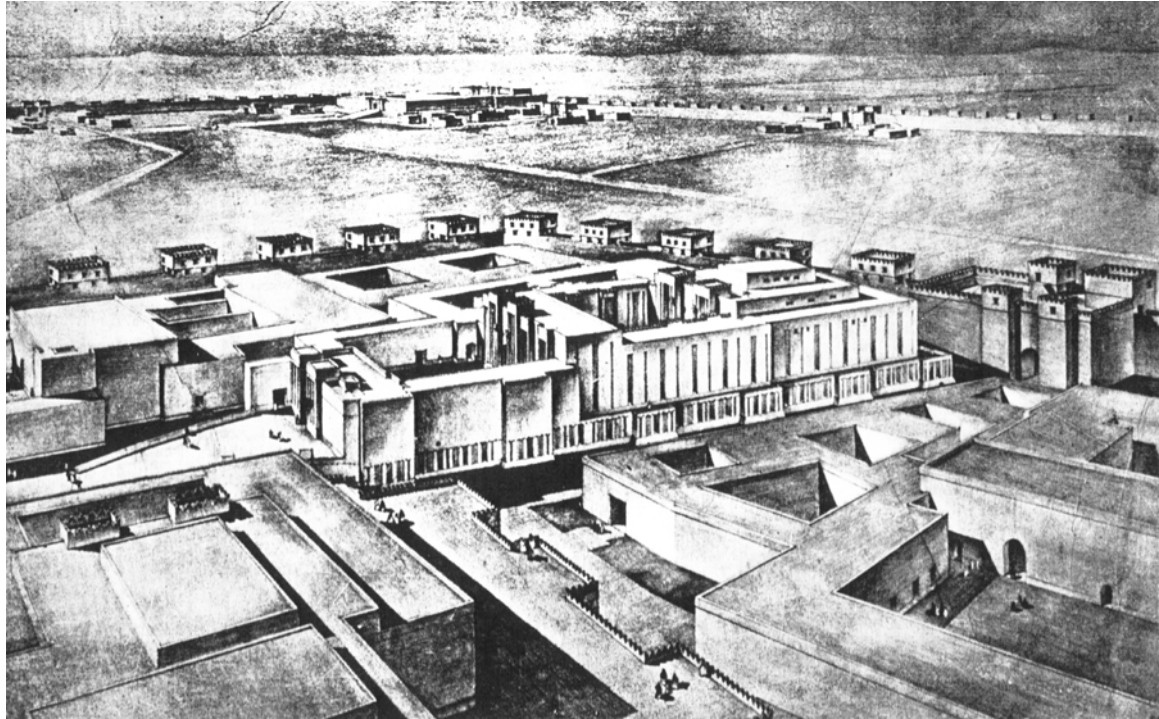


Plate 18

View over Dur Sharrukin (Khorsabad) from the Ziggurat of the palace of Sargon

Reconstruction by Charles Altman

VIII century B.C.

From Henri Frankfort, The Art and Architecture of the Ancient Orient, (Baltimore 1969) plate 78.



THE SO-CALLED KING'S GATE—EXTERIOR
(Puchstein.)



SUGGESTED RECONSTRUCTION OF THE ABOVE BY DR. PUCHSTEIN

Plate 19

So called King's gate of one of the Hittite citadels

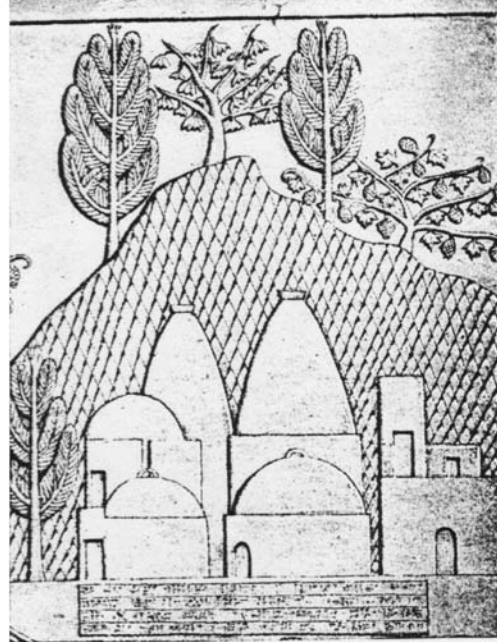
The ruins and the reconstruction by Dr. Puchstein

XIV – XII centuries B.C.

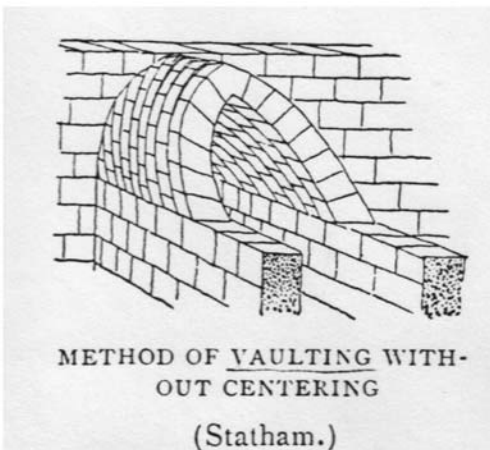
From Edward Bell, Early Architecture in Western Asia, (London 1924), page 78.



VAULTED CHANNEL BENEATH THE PALACE OF
ASHURNAZIRPAL III AT NIMRŪD
(Layard's "Discoveries.")



DOMED BUILDINGS, ON A SLAB FROM
NINEVEH
(Statham, after Layard's "Monuments.")



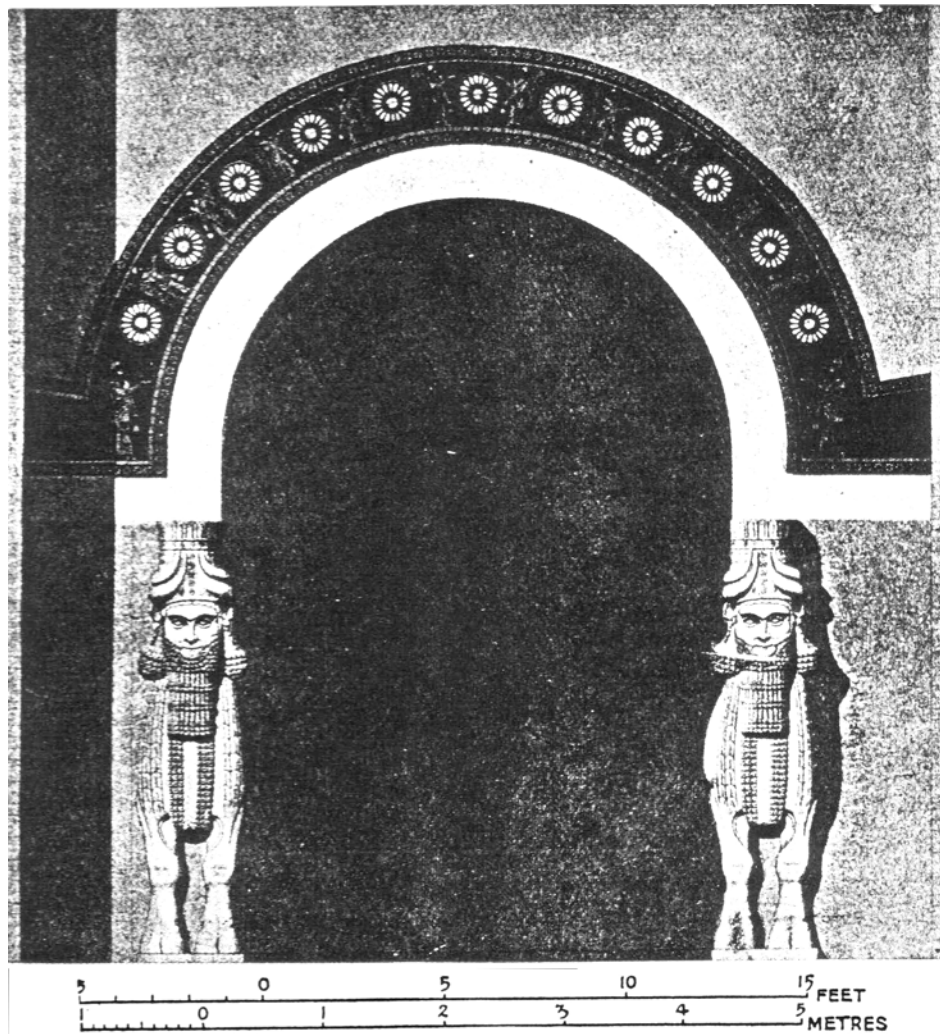
METHOD OF VAULTING WITH-
OUT CENTERING
(Statham.)

Plate 20

Assyrian vaulted and dome structures

X – IX centuries B.C.

From Edward Bell, Early Architecture in Western Asia, (London 1924), page 134, 152 and 155.



ARCHED GATEWAY IN THE CENTRE OF THE SOUTH-EAST TOWN WALL,
KHORSABAD

(Statham's "Short Critical History of Architecture.")

Plate 21

Arched gateway in the center of the South-East town wall, Khorshabad

IX - VIII centuries B.C.

Khorshabad

From Edward Bell, Early Architecture in Western Asia, (London 1924), page 143.