Angelos G. Galanopoulos

New Light on the Legend of Atlantis and the Mycenaean Decadence

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The copy shows a handwritten dedication by Angelos G. Galanopoulos to Sinclair Hood (1917-2021), a renowned British archaeologist. This copy appears to have come from Hood's library.

About this booklet

The self-published booklet *New Light on the Legend of Atlantis and the Mycenaean Decadence* appears to be quite rare. Extensive searches of online booksellers and library catalogues have not yielded any available copies for purchase or loan.

While the booklet itself is difficult to obtain, its content is frequently referenced in scholarly articles and books discussing the Atlantis legend and the Thera eruption. This indicates that while the physical booklet is scarce, its intellectual contributions have been noted and absorbed into the broader academic discourse on the subject.

A. G. GALANOPOULOS

NEW LIGHT ON THE LEGEND OF ATLANTIS AND THE MYCENAEAN DECADENCE

«There is nothing hidden that time cannot bring to life,
Nothing once known that may not become unknown».

SOPHOCLES (Ajax)

ATHENS, 1981

NOTE

ADD TO:

1. the last line of the second paragraph in page 8 the sentense:
It would be strange the new exquisite marine style pottery to be left behind.

2. the page 13 the missing reference concerning the first paragraph of page 8.

Höckmann O.: Die Katastrophe von Thera: Archaölogische Gesichtspunkte. *Festschrift Hundt. Teil 1. Jahrb. d. Röm.-Germ. Zentralmuseums Mainz, 21. Jahrgang 1974*, pp. 46-92 (11 Tafels).

A. G. GALANOPOULOS

Dr. Sinclair Hood
With the compliments of the author
A. Galanopoulos

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PART ONE: THE LEGEND OF ATLANTIS

ABSTRACT

The author gives a summary of the pros and cons the theory that the Thera eruption was the cause of the collapse of the Minoan civilization and the reason why, regardless of the role the eruption may have played in the collapse of the Minoan power, the "miniature fresco" found in the Acrotiri excavation is the best evidence one could expect to find for identifying the Thera tragedy with the Atlantis tale.

INTRODUCTION

From time to time the discovery of Atlantis' ruins is announced or denounced, without the mentioning of pre-requisites that could make the features of identification generally acceptable. Due to the continuous rise of the sea level after the end of the last Ice Age, about 10.000 years ago, submarine ruins of sea shore human habitations are frequently discovered all over the world. It is rather natural for everybody to be excited by such ruins if they are somewhat extensive and impressive; consequently, theorizing about Atlantis is almost inevitable. This fact might account for the existence of a very great number of publications related to the problem of Atlantis. However, the problem remained unsolved for about 25 centuries due to lack of consensus about the quality of evidence required for proving the truth of the story.

Nevertheless, one might venture to say that there is now convincing evidence at least for the origin of the story. It is now generally accepted that Thera's frescoes reveal the sophistication of a sea-trading people and the source of the legend of Atlantis. Even if Plato made up his story, as Aristotle and his adherents maintain, the story is true. Beyond any doubt there was in the Aegean Archipelago an advanced civilization in the Bronze Age destroyed by "tremendows earthquakes and overwhelming floods" (Galanopoulos, 1960; Galanopoulos and Bacon, 1969).

However, it is hard to believe that Plato was not able to invent a story a little bit credible and self-consistent. It is unfair to assume that Plato did not know that Bronze, writing, agriculture and particularly Athens could not exist 9000 years before Solon. In addition to this, first Plato himself payed attention to the exaggerations of the Solonian story (Kritias, 118c).

If we have to do with a "fable", a "mere fiction" or "philosophical utopia", the elaboration of the story in a second dialogue and the persistent remarks about its truth and exaggeration would appear at least superfluous and not a bit constructive for an assumed imaginary perfect social and political system.

It might be added that Plato's reference to Solon's scripts leaves little room for doubt about the authenticity of the story, and the lack of another independent literary evidence does not put any weight on the balance of the vexquestion "Atlantis: fact of fiction?". On the other hand, considering that similar flood stories exist all over the world, the similarity of Deucalion's flood story to the Noah's version cannot be used to support the assertion that "the Greek flood myth is unquestionably derived from the Mesopotamian exemplar". It is hard to believe that an unprecedented event in the eastern Mediterranean, far more impressive than any other natural or man-made in the whole world, did not give birth to any indigenous legend, reminiscent of the Bronze Age tragedy. Considering that it is hard to get the truth for a haphazard, even from eyewitnesses, especially if they are very many, it is not astonishing that an extraordinary event with far-reaching consequences amalgamated in a legend becomes accepted as a conceptual myth (Ramage and others, 1978).

THE MINOAN ERUPTION

According to the archaeological evidence a wide-spread disaster occurred all over the island of Crete by the end of the period of the second Palace, ca. 1500 B.C. Based on the seismic history of the island Montessus de Ballore (1923) was led to the conclusion that the destruction of the Minoan Crete might have been caused by a series of violent earthquakes and devastating seismic sea waves.

The idea that the Minoan eruption of Thera had effects in Crete appears to have originated with Sir Arthur Evans in 1922. The connection between the eruption of Thera and the Middle Minoan IIIB destruction at Knossos was elaborated in the Rhind lectures the following year by Hall (Hood, 1978).

In 1934 Marinatos put forward the theory that the devastation of Minoan Crete was caused by a huge seismic sea wave set up by the eruption of the volcano of Thera (Santorin). The theory of the destruction of the coastal towns of Crete by a tsunami, much greater than that of Krakatoa, was further developped by Marinatos in 1939 and 1950. But as the late

D. Page declared in a paper published just before his death (1978), "a theory of cause and effect is not easy to reconcile with a discrepancy between the ages of the pottery in the destruction levels in Thera and in Crete".

The discrepancy amounts to about 50 years. This throws some doubt on the validity of Marinatos' theory for the decline of the Minoan civilization due to the Santorin explosion. However, this does not affect "The Truth behind the Legend of Atlantis", i.e. Plato's story about the sinking of an island with a very advanced civilization by earthquakes and volcanic explosion in the Bronze Age.

We know with certainty that "a land mass sank into the sea, greater than any at any time anywhere since the dawn of civilization" (Thorarinsson, 1978). None assumption or extrapolation or other findings are needed to prove that. Quoting S. Thorarinsson (1978) : "It seems very likely, not to say almost certain, that more or less diffuse memories of this tremendous and shocking disaster are woven into Plato's tale of the sinking of Atlantis, regardless of the role the eruption may have played in the collapse of the Minoan power on Crete".

Two others well-known volcanologists, Rein V. Bemmelen (1971) and Haroun Tazieff (1972) identify Santorin with Atlantis. Rhys Carpenter (1966) believes "that in Solon's day there was preserved in Egyptian temple chronicles the mention of an island that had sunk beneath the sea during a tremendous natural upheaval, and that this island — for which Plato invented the name Atlantis — was no other than Santorin"... "the natural catastrophe which overwhelmed the Aegean island of Santorin, in antiquity known as Thera, was of such magnitude as to have altered the entire course of human history in the lands surrounding the Aegean".

According to Sp. Marinatos (1967) : "The only myth that could be interpreted by the Thera explosion is the tradition for Atlantis in Plato"... "It seems that the disaster of the small Thera has been exaggerated in the existence of the huge mythical Atlantis". Two years later Marinatos (1969) declared : "I think it very probable that Pindar, almost a full century earlier, speaks even more clearly than Plato about the same tradition, that is the submersion of a piece of land and, what is most important, in the Cyclades district"... "They (Zeus and Poseidon) once upon a time, with thunderbolt and trident, sent the land and a countless host into the depths of Tartarus".

The impact of the immense Bronze Age eruption throughout the Aegean area must have been tremendous; there is no doubt about that (Hood, 1978). Nevertheless, S. Hood judying from the exceptional state of preser-

vation of the walls of the houses at Pseira (Crete) states that "such a degree of preservation is difficult to reconcile with any theory of destruction by natural causes". But one must not forget that uncontrolled fires subsequent to a major earthquake may cause substantially more damage than the earthquake itself, as occurred in the great 1906 San Francisco earthquake and even more in the 1923 earthquake of Tokyo. In addition to this, outbreaks of epidemic deseases (Sieberg, 1933) that frequently follow destructive earthquakes, particularly in the narrow belt of 35° N ± 5°, due to the formation of swamps and lack of safe supplies of drinking water, had in the ancient times reportedly a far greater death toll than any war - earthquake - or fire destruction. We have yet to remember that medical facilities and Red Cross resources were not available at that time.

It might be added that peoples of the past have sometimes been threatened with extinction by natural disasters, like floods, supposedly imposed by divine before which human strength is usuless. After the ashfall and its inherents issues, the Minoans eventually withdrew their economic support from the King-priests because they had lost faith in the King-priests ability to explain the calamity and/or make life tolerable. According to Arnold Toynbee (1976), "Each time a people has lost faith in its religion, its civilization has succumbed to domestic social disintegration and to foreign military attack". However, the theory of Mycenaean invasion does not explain why should it have bypassed Kythera, so close to the mainland, considering that the people on Kythera were of Cretan stock (Coldstream, 1978).

Six different answers have been given for the discrepancy in the dating of the archaeological findings on Santorin Island and of the advanced pottery found at Knossos. Page (1978) states the reasons for adopting only that was put forward for first time in 1969 (Galanopoulos, 1971) : "The end of the Santorin civilization in LMIA seems to have been the work of a great tectonic earthquake in the neighbourhood of the island. After the seismic devastation of the settlement at Santorin most of the survived population deserted the island, while few who remained stopped making or importing any new pottery. The eruption at the end of LMIB covered with tephra the existing ruins of the settlement on Santorin". Galanopoulos' explanation has been later supported by Money (1973) and Hiller (1975). According to Page (1978) : "The late occupants may very well have been immigrants - pirates, perhaps, or a shipload of refugees or merely shipwrecked or storm - bound sailors - arriving a few years or even a few decades after the earthquake".

Nevertheless, the discrepancy afore mentioned does not seem to be real. The artistic style of the Thera frescoes is generally recognized as more

advanced than that of frescoes found at Knossos. According to H. Höckmann (1978) : "The sense of naturalism and individuality characteristic of the Theran flowers is absent from the Knossos frescoes"... "The Xesté 3 fresco favours the possibility that Thera was not deserted until a time when at Knossos the LMII Palace style already existed". In Brown's words (1978) : "All the prows of the large ships, regardless of other emblems, carry a star (or rosette) with dots in-between the outer points. Both this and the festoons of crocus pendants which form the dress-ship lines of the "flag-ship" are familiar elements of LMIB marine style pottery". M. Cameron (1978) believes that : "The stylistic interrelations of frescoes, pottery and painted plater tripods at Thera encourage the conclusion that past criticisms of 'stylistic dating' of frescoes as invalid are yearly appearing more and more unfounded".

Judging now from the advanced style of the Thera frescoes one is rather forced to accept that the volcanic explosion did not occur in Late Minoan IA, as surmised from the Thera pottery (datable in rough terms ca. 1500 B.C.), but later on, perhaps at the end of Late Minoan IB (ca. 1450 B.C.), as the artistic style of the Thera frescoes clearly shows an advanced stage of civilization at least equivalent to that indicated by the frescoes at Knossos palace.

The older style of the Thera pottery in comparison to the advanced pottery of Knossos could be attributed to the depletion of the clay deposits available on Santorin Island. A lack of potter's clay of local origin could bring the end of the pottery industry on the island. Clay does not outcrop in Santorin today, but the ancient pottery found does contain chips of Thera lava. This indicates that the Santorin clay deposits were of kaolinitic type derived from erosion of the igneous basement complex. Thera is notorious for long consecutive periods of drought (up to 7 years!). Presumably, in the absence of abundant rainwater (average annual rate over a 24-year period ca. 365 mm) and moist soil, the deposits were of very moderate size; the clay was taken almost certainly from the banks of fresh or salt water lakes existing in the pre-Minoan eruption period in the low-lying and fertile plain of Aspronisi, at the southeast side of the present caldera (Reck, 1936).

An early depletion of potter's clay, that seems very probable, might account for the lack of more recent pottery of local origin. The lack of imported Late Minoan IB pottery could be attributed to the awfully bad economical situation of the inhabitants, or whatever kind of occupants (pirates or so), of the island after the seismic destruction, which afflicted the island before the Minoan eruption (Galanopoulos, 1971; Money, 1973; Hiller, 1975; Page, 1978).

The theory of an early depletion of potter's clay is corroborated by an imported vessel found in Thera — presumably in the Balos bay — by Gorceix and Mammet. This vessel is quite similar to that found in Encomi of Cyprus by Dikaios (s. Fig. 5 and 6, p. 63 in Höckmann, 1974). The Cyprian vessel is precisely dated in 1425 B.C. Based on these findings one is rather enforced to assume that the Thera eruption started about that time (Höckmann, 1974).

There is now geological evidence that "an exceptionally long interval of about 15,000 yr without any volcanic activity on Santorin (Stronghyli) island preceded the late-Minoan outburst" (Friedrich and others, 1977). This implies that numerous volcanic shocks of harmless nature in increasing frequency and magnitude from day to day forced the inhabitants to evacuate the island with all their precious things several months before the arrival of the magma from the magmatic chamber to the chimney of the crater. This may account for the lack of a lot of human remains, and why not of Late Minoan IB pottery.

It is not puzzling that no traces or merely tiny traces of Bronze Age Thera tephra or tsunami effects have been found on the islands of Crete and Melos (Vitalianos, 1978; Renfrew, 1978). Considering that a certain amount of contamination of older levels cannot be ruled out and the possibility of preservation of tephra particles in lower layers is fairly greater than in the upper strata, it cannot be documented on basis of sparse tephra particles from LMIA to LMIB levels that the tephra fall occurred before the Late Minoan IB date.

Keller (1978) has not found upper Thera ash in the neighbouring island of Anaphi, although he found a Minoan tephra layer 30 cm thick on the island of Cos, 180 km east - northeast of Thera. It is inconceivable that volcanic ash of Bronze Age has not fallen in considerable quantity on Anaphi island, in a distance of about 35 km from the crater.

There are many agents that could account for washing out and depletion of the Minoan tephra layer. In addition, Cadogan and Harrison (1978) suggest that "argillisation may help to explain the present sparseness of unaltered glass shards in the destruction deposits and may support the pre-existence of a more extensive tephra over eastern Crete, as indicated by off shore cores".

The present sea level is more than two metres higher than that in the Middle Helladic period; so traces of tsunamis in the Mediterranean have been obliterated or are no longer legible. None geologist or archaeologist can nowadays find evidence of the destuctive effects of the 365 or even of the

1956 tsunami in the southern Aegean sea (Galanopoulos, 1960). The tsunami that followed the great disaster of 21 July 365 was the worst in human history (Goodchild, 1966; Galanopoulos, 1971). In the belief that the Mediterranean basin was the whole world writers described the disaster of 365 as "universal" (per universum orbem). Such being the case, it is not surprising that there is no indisputable evidence for the effects of the huge tsunami that presumably followed the Minoan eruption.

It might be added that gravity waves of small amplitude in the open sea build up in catastrophic heights at the head of bays and harbors facing the tsunami source. Consequently, we cannot expect evidence for tsunami damage in every coastal site. On the other hand, one must not forget that the navigation at the Minoan times was coastwise and in the continental shelf the gravity waves run up; henceforth the Minoan fleet was vulnerable to tsunamis of even mediocre size.

THE "MINIATURE FRESCO"

Thera's frescoes are most revealing; a naval expedition and battle of Thera against Africa, most probably against Egypt, depicted in one of the island's elegant Bronze Age frescoes strongly reminds one of a similar event in the Atlantis story. Atlantis just before its tragic end ruled over Libya and in a bold expedition made an attempt to enslavé Egypt and the whole of the territory within the straits.

The frescoes of a house excavated at Akrotiri, Thera, in 1972 show among other themes a sea battle, a long river flowing out into a marshy sea and a magnificent fleet of seven ships, among which a flagship, coming home from a city in a country with subtropical fauna and flora (s. Fig. 1 and col. pl. 9 in Marinatos, 1974).

Marinatos (1974) expressed the opinion that the most appropriate land to localize the story of the miniature fresco found in the "west house" was Libya. He was led to the conclusion, first from some fragments "with horned sheep showing thick - haired chests and crests of raised needle - shaped bristles along their backs" and then from one scene of a shipwreck (s. col. pl. 7, in Marinatos, 1974) which depicts "a wing of an ostrich hanging from the chest of a drowned young man" and the end of the young man's penis "which appears to be round i.e. circumcised" (s. pl. 93, in Marinatos, 1974). However, the long river with two streams in the lower reaches and the ferocious life of a subtropical fauna along the banks of

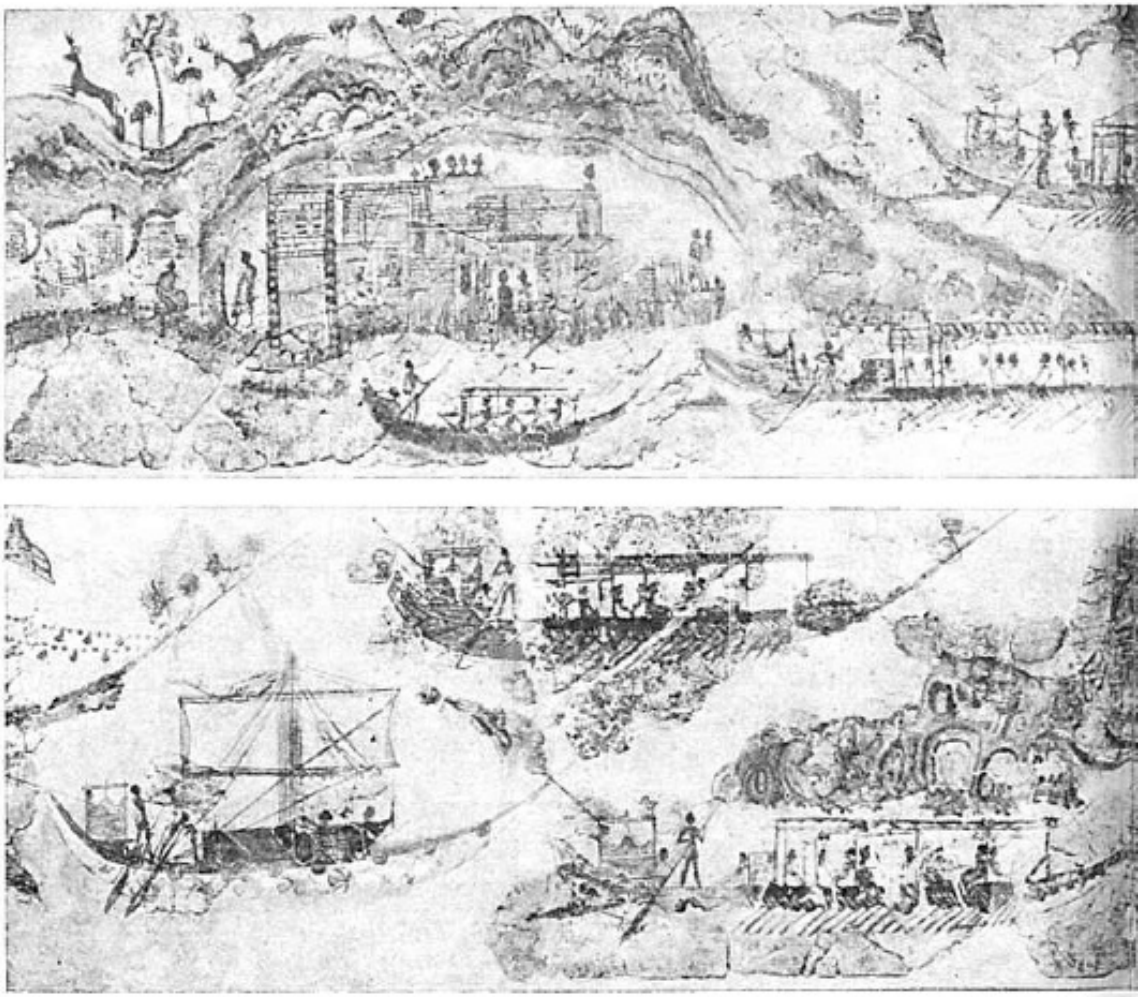
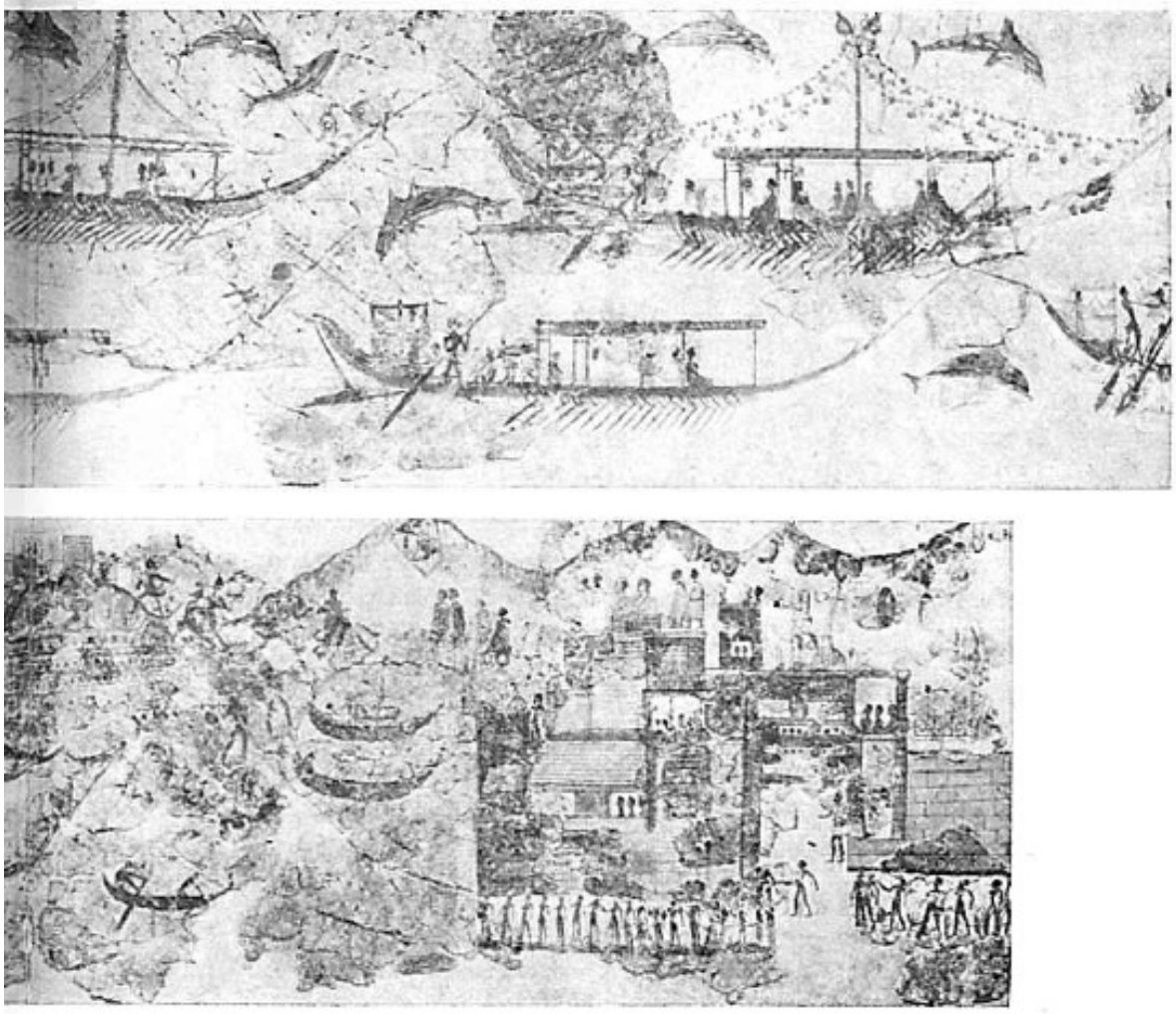


Fig. 1.— The fresco of the "naval expedition" from the south wall of the room 5 of the "west house" found in the Acrotiri excavations on Santorini Island (plate 112, Marinatos, 1974). There are represented : towns, small and large warships, attended by sport-



ing dolphins — a distinctive marine style motif — human figures and subtropical fauna along the banks of a river, about 1500 B.C.

the river shown in the scenery of the "second town" strongly reminds one of Egypt (s. col. pl. 8, in Marinatos, 1974) and not of Libya. Lybia is not known to have such a long river or "stream subdivided into two branches". In the ancient times Sais, the largest city of the saitic province, was in a similar area, and it was known that only the stream of the Nile divides at the apex of the Delta in Egypt (s. Plato's Timaeus).

The "third town", the home city, with two quarters separated by an ancorage, is shown to be in a mountainous country with a volcanic cone in the background (s. Fig. 1). The house in which the fresco was found belonged most likely to the admiral of the fleet; apparently the fresco was made in commemoration of the battle fought against the country with the subtropical landscape. It is generally accepted that these extraordinary scenes, in which three "towns" and a "sea-battle" are involved, represent three successive stages in a naval expedition. According to O. Negbi (1978): "It is reasonable to assume that the fleet, which later departs from the 'second town' to the 'third town', had earlier to leave the 'first town' and sail in the open sea, in order to arrive at the foreign land depicted in the 'Libya fresco' ". Like a film the frescoes show successive scenes of an event occurring not long before the Santorin collapse.

It was traditional for rulers of the time to order artists to portray on the wall the most notable events of their reign. One of the most notable events of Hatshepsut's peaceful reign, a naval expedition to the Land of Punt, in inner Africa, almost contemporaneous to that depicted in Thera's frescoes, is commemorated in carvings in Hatshepsut's mortuary temple in Thebes. The battle of Kadesh of the River Orontes in Syria, between the armies of Egypt and the Hittites is similary commemorated in pictures and verse on the walls of several Egyptian monuments, notably on the temple hewn into the rock face at Abu Simbel, on the orders of the Pharaoh Ramesses II.

The fresco in the admiral house depicts an event easily understood by everybody. A Bronze Age inscription directly related to the Atlantis problem, if ever found, needs deciphering, but deciphering of an ancient script as Linear A and particularly of an ideogram inscribed with hieroglyphs is a matter of personal judgement rarely acceptable to everyone. Consequently, no other data could give a more convincing evidence for the connection between Atlantis and the pre-eruption Thera than the frescoes of the "west house". Now the mystery seems to me to be over. Atlantis is lost no more.

REFERENCES

Ballore, M. de : Ethnographie sismique et volcanique. *Ed. Honor Champion,* pp. 181, 183. Paris, 1923.

Bemmelen, R. W. van : Four Volcanic Outbursts that Influenced Human History, Toba, Sunda, Merapi and Thera. *Acta of the 1st Intern. Sci. Congress on the Volcano of Thera,* pp. 5 - 50, Athens, 1971.

Brown, L. M.: The Ship Procession in the Miniature Fresco. *Thera and the Aegean World,* Vol. 1, pp. 629 - 644. London, 1978.

Cadogan, G. and Harrison, K. R.: Evidence of Tephra in Soil Samples from Pyrgos, Crete. *Thera and the Aegean World,* Vol. 1; pp. 235 - 255, London, 1978.

Cameron, M.: Theoretical Interrelations Among Theran, Cretan and Mainland Frescoes. *Thera and the Aegean World,* Vol. 1, pp. 579 - 592, London, 1978.

Carpenter, R.: Discontinuity in Greek Civilization. *Cambridge Univ. Press,* 1966.

Coldstream, N. J.: Kythera and the Southern Peloponnese in the LMI Period. *Thera and the Aegean World,* Vol. 1, pp. 389 - 401. London, 1978.

Friedrich, L. W., Pichler, H. and Kussmaul, S.: Quaternary Pyroclastics from Santorini, Greece and their Significance for the Mediterranean Palaeoclimate. *Bull. Geol. Soc. Denmark,* Vol. 26, pp. 27 - 39. Copenhagen, 1977.

Galanopoulos, G. A.: Tsunamis Observed on the Coasts of Greece from Antiquity to Present Time. *Annali di Geofisica,* Vol. 18, N. 3 - 4, pp. 369 - 386, Roma, 1960.

Galanopoulos, G. A.: On the Location and the Size of Atlantis. *Prak. Acad. Athens,* Vol. 35, pp. 401 - 418, Athens, 1960.

Galanopoulos, G. A. and Bacon, E.: The Truth behind the Legend. *Ed. Thomas Nelson and Sons,* London, 1969.

Galanopoulos, G. A.: The Eastern Mediterranean Trilogy in the Bronze Age. *Acta for the first Intern. Sci. Congress on the Volcano of Thera,* pp. 184 - 210, Athens, 1971.

Goodchild, G. R.: Earthquakes in Ancient Cyrenaica. *Geology of Cyrenaica,* pp. 41 - 44, London, 1966.

Höckmann, O.: Theran Floral Style in Relation to that of Crete. *Thera and the Aegean World,* Vol. 1, pp. 605 - 616, London, 1978.

Hood, S.: Traces of the Eruption outside Thera. *Thera and the Aegean World,* Vol. 1, pp. 681 - 690. London, 1978.

Hiller, S.: Die Explosion des Vulkans von Thera. *Gymnasium,* Vol. 82, pp. 32 - 74, 1975.

Keller, J.: Prehistoric Pumice Tephra on Aegean Islands. *Thera and the Aegean World,* Vol. 2, pp. 49 - 56, London, 1980.

Marinatos, S.: Amnisos die Hafenstadt des Minos. *Forsch. und Fortschr.,* Vol. 10, n. 28, p. 342, 1934.

Marinatos, S.: The Volcanic Destruction of Minoan Crete. *Antiquity,* Vol. 13, n. 52 p. 426, Gloucester, 1939.

Marinatos, S.: About the Rumour of Atlantis. *Cretan Chronicles,* Vol. 4, Heraklion, 1950.

Marinatos, S.: The Volcano of Thera and the Aegean Civilizations. *Acta of the 2nd Inter. Cret. Congress,* pp. 198 - 216, Athens, 1967.

Marinatos, S.: Some Words about the Legend of Atlantis. Athens, 1969.

Marinatos, S.: Excavations at Thera VI, 1972 Season. Athens, 1974.

Money, J. H.: The Destruction of Acrotiri. *Antiquity,* Vol. 47, pp. 50 - 53, 1973.

Negbi, O.: The "Miniature Fresco" from Thera and the Emergence of Mycenaean Art. *Thera and the Aegean World,* Vol. 1, pp. 645 - 656, London, 1978.

Page, D.: On the Relation between the Thera Eruption and the Desolation of Eastern Crete. *Thera and the Aegean World,* pp. 691 - 698, London, 1978.

Ramage, S. E.: Atlantis, Fact of Fiction? (Contributors : Fears Rufus J., Fredericks Casey S., Luce V. J., Vitaliano B. D., Wright Jr., E. H.). *Indiana University Press,* Bloomington and London, 1978.

Reck, H.: Die Geologie der Ring - Inseln und der Kaldera von Santorin. Bd, I - III. Berlin, 1936.

Renfrew, C. A.: Phylakopi and the Late Bronze I Period in the Cyclades. *Thera and the Aegean World,* Vol. 1, pp. 403 - 421, London, 1978.

Sieberg, A.: Erdbebenforschung and ihre Verwertung für Technik, Bergbau und Geologie. *ed. G. Fisher,* Jena, 1933.

Tazieff, H.: Les Volcans et la Dérive des Continents, pp. 120 - 121. *Presses Univ. de France,* 1972.

Thorarinsson, S.: Some Comments on the Minoan Eruption of Santorini. *Thera and the Aegean World,* Vol. 1, pp. 263 - 275, London, 1978.

Toynbee, A. and Ikeda, D.: Choose Life : A Dialogue. *Oxford Univ. Press, Ely house,* London, 1976.

Vitaliano, B. D. and C. J.: Tephrochronological Evidence for the Time of the Bronze Age Eruption of Thera. *Thera and the Aegean World,* Vol. 1, pp. 217 - 219, London, 1978.

PART TWO: THE MYCENAEAN DECADENCE

ABSTRACT

Minoan and Mycenaean civilizations had the same Fate; after long bloody wars they experienced the race of the same Element. Heavy rains of volcanic ash (about 1450 and 1200 yrs. B.C.) mark the end of both dynasties, predecessors of the revived and new born Greek and Etruscan - Roman civilizations (ca. 800 B.C.).

INTRODUCTION

It is amazing that although Italy is so close to Greece and Minoan - Mycenaean colonies probably flourished in southern Italy, development of

Fig. 2.— Distribution of main volcanic centers of Quaternary age in Mediterranean region and location of deep-sea cores containing volcanic ash layers in eastern Mediterranean, after Keller and others (1978).

the Etruscan - Roman civilizations delayed for about 400 years after the collapse of the Mycenaean empire. It is my belief that this happening is not accidental. Several successive eruptions of twelve principal volcanic centres (s. Fig. 2) in the Roman and Campanian provinces (4 and 5 volcanoes, re-

spectively), as well as in the area of Sicily (3 volcanoes) handicaped for many centuries the development of any traceable civilization in the territory of Italy.

Stratospheric temperature increased by several degrees centigrade after the eruption of Mt. Agung in 1963. At the same time the free air temperature in the tropical troposphere decreased by about 1° C; the decrease lasted about one year. There is evidence that sulphate for two strong eruptions in the tropics (Krakatoa in 1883 and Mt. Agung in 1963) reached the Antarctic. Bryson and Goodman believe that volcanic activity is important for climatic variation on time scales of several years to several millenia. It is assumed that volcanic activity is partly responsible for the Little Ice Age during the period 1300 - 1700 (Newell and Walker, 1980). This did not happen with the Plinian eruption that destroyed Pompei in 79 A.D. All younger volcanic eruptions did not have wide - spread effects.

It is now embarassing that development of Etruscan - Roman civilizations started in the same era with the revival of ancient Greece (about 800 yrs. B.C.). Looking more closely upon the long lost Greek civilizations of Bronze Age one might hazard the theory that the simoultaneous appearance of these two civilizations, very curious indeed, indicates probably the same cause.

CASE ADVANCED

The fresco of the "naval expedition" from the south wall of the room 5 of the "west house" found in the Acrotiri excavations on Santorin Island leaves little room for doubt that the Santorin eruption was contemporaneous with the destruction of the Minoan coastal towns (Galanopoulos, 1978). The fresco (s. Fig. 1) is a unique masterpiece portraying the glory of the Minoan Sea power. Warships attended by sporting dolphins — a distinctive marine style motif — sail in triumph past what is thought to be the north coast of Africa. Passing one city (Sais?) — framed by a river above which a lion pursues a herd of deer (left) — the fleet in all its glory approaches a second (right), where the populace turns out to welcome their arrival in the sacred island of Santorin. Presumably, the former round - shaped island was the metropolis of Atlantis (Galanopoulos, 1960).

It is now rather broadly accepted that before the collapse of the Minoan empire - or Kingdom of Atlantis - by earthquakes ,ash-fall and tsunamis triggered by the ca. 1450 Santorin eruption and the close following exploitation by Mycenaean army, the Minoan dynasty was already weakend in her

bold attempt to enslave Attica and contiguous countries as well as Libya and Egypt.

It is an old experience that more or less similar events recur in the course of the time. It seems now that the Mycenaean dynasty did not escape the rule. Mycenaeans proceeded along broadly similar lines to those of Minoans. After the Trojan war fought for ten years by the Mycenaean Greeks over Troy's hold on the Hellespont that cut the grain route from the Black Sea, the Mycenaean trade was again disrupted by the Sea Peoples ca. 1200 yrs. B.C. At about the same time a Soma - Vesuvius eruption (Keller and others, 1978) may have caused a dropping of the food supply below the critical level for subsistence of the Mycenaean inhabitants of the Peloponnese.

On the authority of R. Carpenter (1966), in 1200 B.C. "Mediterranean man has begun to suffer the most severe cultural recession which history records or archaeology can determine. Great Kingdoms have collapsed without apparent adequate reason; and the eastern sea shores are overrun by fugitives seeking to force their way into lands less smitten by disaster. In Greece the well-fortified Mycenaean palaces are burned and abandoned; but no one seems to know who burned them".

As in the case of the Minoan Santorin tephra, the Soma - Vesuvius ash was carried by westerly high-altitude winds to the Ionian and Libyan seas as far as the 25 meridiam that passes central Crete (s. Fig. 3). This tremendous calamity was followed by the return of the Heraklides and/or a Dorian invasion from the north, with iron swords, which destroyed the fortress-cities Iolkos, Mycenae, Tiryns, Pylos and others and sacked the Mycenaean empire.

Rhys Carpenter (1966) believes that about 1200 B.C. until around 850 B.C. a drastic climatic change associated with a drought phase overwhelmed the eastern Mediterranean lands; thus the Dorians have rather moved into a depopulated land, particularly in Laconia and Messenia. Many sites were abandoned without any trace of destruction or conflagration.

It should be emphasized that while Mycenaeans benefited by the fall of their Minoan trade rivals and Mycenaean trade soon increased all over the Aegean and the Levant, the Greek-speaking invaders, the Dorians, although they probably brought with them the knowledge of iron working, did not manage to advance or at least to retain the traditional way of life. The first characteristically Greek civilization began slowly to emerge in mainland as city life gradually revived after 800 B.C.

We have to recall that Greece's mainland has not been affected by the ca. 1450 B.C. volcanic tephra (s. Fig. 3). The fact that Dorians have not left any worth-while trace of culture seems to favor the hypothesis that vol-

canic activity was partly responsible for the change of the climate between ca. 1200 and 900 B.C. Carpenter (1966), not being aware of the widespread effects of the ca. 1200 B.C. Soma - Vesuvius eruption, in the J. H. Gray lectures for 1965 ascribed the presumed climatic change to a cyclical variation of the atmospheric régime. Nevertheless, irrespective of the agents of the climatic change, a rise in the free air temperature, particularly in the higher

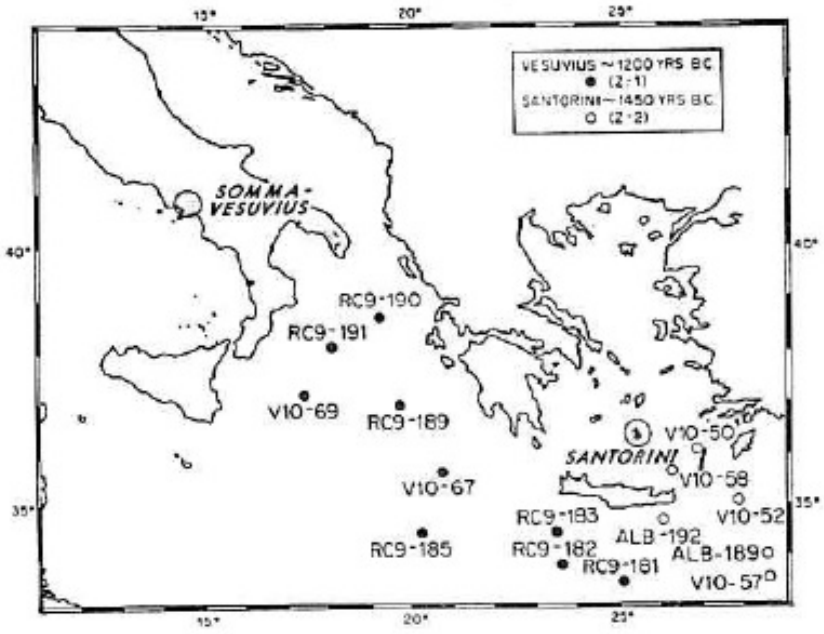


Fig. 3.— Distribution of cores containing ash layers from Soma - Vesuvius and Minoan Santorin eruptions in about 1200 and 1450 yrs. B.C., respectively, after Keller and others (1978).

latitudes, may bring about a period of destructive drought in the regions of lower latitutes in consequence of a northward extension of the trade wind's area of operation (Carpenter, 1966). This combined with a presumable extensive contamination of the Peloponese soil by the Soma - Vesuvius ashfall may account for the belated Etruscan - Roman civilization and Greece's "Dark Age" that followed the collapse of the Mycenaean civilization.

Boatloads of Mycenaeans sailed out of the drought - stricken and contaminated area to found new colonies in the Aegean islands and on the west coast of Asia Minor - later called Ionian colonies - which kept alive the Greek civilization. What was preserved from the Mycenaean glory in Homer's poems — one of the greatest achievements of the human genius — is due to Mycenaean refugees in the Aegean and Asia Minor.

It is worth-while to mention that neighbouring civilizations as those of Phoenicians and Hebrews have survived for about 3 millenia (3000 B.C.-A.D. 135) in spite of Assyrian, Greek (Alexander the great) and Roman conquests. As another evidence might be thought the delayed appearance of the Etruscan - Roman civilizations. Although I am fully aware of the boundless ability of the human being to prove truth from coincidence, it is hard to believe that all these evidences are pure coincindences.

CONCLUSION

In view of the above data and taking into account that identifying coincidences is a legitimate approach in a field where little archaeological evidence exists to guide research, it is tempting to hazard the theory that heavy rains of volcanic ash from Santorini and Soma - Vesuvius mark the end of Minoan and Mycenaean dynasties, predecessors of the revived and new born Greek and Etruscan - Roman civilizations about four centuries later It goes without saying that a thorough analysis of the related data must follow the advanced suggestion.

REFERENCES

Carpenter, R.: Discontinuity in Greek Civilization. *Cambridge Univ. Press,* 1966.

Galanopoulos, G. A.: On the Location and the Size of Atlantis, *Prakt, Akad. Athen.,* Vol. 35, pp. 401 - 418, 1960.

Galanopoulos, G. A.: Concrete Evidence for the Occurrence of Events Described in the Story of Atlantis, *Years book of the Society of Cycladic Studies,* Vol. I (1974 - 1978), pp. 457 - 464, 1978.

Keller, J., Ryan, F. B. W., Nincovich, D., and Altherr, R.: Explosive Volcanic Activity in the Mediterranean over the Past 200,000 yr as Recorded in the Deep-Sea Sediments, *Geol. Soc. Am. Bull.,* Vol. 89, pp. 591 - 604, 1978.

Marinatos, S.: Excavations at Thera VI, 1972 Season, Athens, pp. 1 - 60, plates 1 - 112, 1974.

Newell, E. R. and Walker, L. P. G.: Interdisciplinary Symposium on Volcanism and Climate, Canberra, Australia 6 December 1979. *I.U.G.G. Chronicle,* n. 142, pp. 199 - 201, 1980.