

MITTEILUNGEN

Thera and the Aegean World: The Interdisciplinary Meeting Held at Thera, 18-25 August 1978

Rousseau is sometimes quoted as having said: "There is nothing more tragic than the murder of a beautiful hypothesis by an ugly fact."

Although the theory of Professor Spyridon Marinatos, that the explosion of the Thera volcano about 1500 B. C. destroyed Minoan civilization, may have carried validity in 1939, by the time of the First Thera Congress in 1969 it was clear that a number of conflicting scientific facts required an investigation.

With the Second Thera Congress on the *S. S. Apollo* in August 1978, after the untimely death of Professor Marinatos, a decade of excavation on Thera, Crete and the Cyclades had produced evidence that the theory was seriously flawed.

These basic facts were known:

1. The pottery found under the pumice at Acrotiri was overwhelmingly of the LM IA style, thus securing the 1500 B. C. date for the time of the eruption. The geologists, taking the Krakatau explosion of 1883 for comparison, agreed that the explosion, the ejection of pumice and tephra, and the collapse must have taken place within a short period of time: opinions ranged from a few days to a few years.

2. If the LM IA palaces on Crete were destroyed simultaneously, the resurrection of the LM IB palaces with their distinctive Marine style pottery must have happened within less than a generation. So it was obvious that the Thera explosion did not destroy the viability of Minoan civilization, whatever the fearful products of the cataclysm. The LM IB palaces survived for at least two generations, to around 1450 B. C. One volcanic explosion could not explain the destruction of two palace periods some fifty years apart.

3. Nowhere in the Eastern Mediterranean has there appeared evidence of the widespread devastation which both geologists and archaeologists maintained must have been wrought by the tsunamis generated by the eruption of 1500 B. C. Few were willing to support the suggestion that the volcanic cone might have collapsed hundreds of years later, about 1200 B. C., thus causing extensive chaos in the area at the end of the Bronze Age.

4. The idea proposed by Denys Page in 1969, that the fall-out of tephra dust on eastern Crete destroyed crops, herds and populace and, thus, Minoan civilization, was contradicted not only by the evidence taken from the sea-cores north and south of eastern Crete, but also by the revelation that the soil of Crete and the Cycladic islands contained only microscopic particles of tephra dust and

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these in infinitesimal quantities. The 1978 group of scholars from several disciplines dismissed the tephra fall-out on Crete as a possible cause of the Minoan demise.

5. What then caused the destruction of the LM IB palaces half a century later — a second earthquake preceding the Mycenaean incursion, or a direct military attack that resulted in the end of the palatial period with Greek control centred in Knossos? This problem seems less likely than ever to be solved after four palatial excavations and eighty years of study of the artefacts. The failure to loot the most valuable collection of ivory tusks and copper ingots at Zakro might suggest that the palaces were first destroyed by seismic effects and that the Mycenaeans moved in on a debilitated Crete, thus ending Minoan hegemony.

Possibly the most mystifying feature of both Thera Congresses has been the failure of geologists to account for the lack of tsunami damage along the eastern Mediterranean littoral. Since the Ninkovich and Heezen report of 1965 it has often been remarked that the collapse of the island into the caldera would have resulted in the greatest natural disaster to have overtaken the Mediterranean area in historical times. Archaeologists at Late Bronze Age sites could report no verification of such water-borne disasters. Pumice specimens identifiable as ejected from Thera have been found in substantial quantities on the Cypriot and Palestinian coasts, but the material is not datable.

This problem appears all the more bewildering in the light of the calculation of one geologist (Yokayama) that *four billion* tons of debris must have fallen into the caldera, perhaps 3000 feet deep and equivalent in area to New York City. In the cul de sac of the eastern Mediterranean with hundreds of coastal communities, how could the effects of such a disaster not have left lasting archaeological evidence? The suggestion made by this writer in 1969 that the volcanic cone may have collapsed some three hundred years later, around 1200 B.C., was not acceptable to most geologists; but a few archaeologists, notably Kontoleon and van Effenterre, have thought this speculation to be of value.

Of great interest to the 1978 participants was the immense advance in techniques of scientific investigation. With the extraordinary initiative and cooperation of Dr. Christos Doumas, scientific probing of many archaeological materials has been made possible with neutron activation and chemical trace analysis. Unfortunately, the testing of radiocarbon-14 specimens, both short- and long-lived, at Acrotiri has proved unreliable. For unexplainable reasons, carbon-14 results from the entire Aegean area gave datings that were irreconcilable. Comforting, however, was the statement of Martin Biddle that the results in other areas of many carbon-14 tests at MASCA were reasonably close to the historical datings.

As the group steamed from Thera and passed the ominous volcano on Nea Kameni in the centre of the caldera, an uncomfortable thought passed through the minds of many of the participants. Four times earthquakes and eruptions from this epicentre have seriously damaged Thera in the twentieth century.

What if at the fifth time Acrotiri and the magnificent efforts of Marinatos were reduced to a crumbled chaos of steel, plastic and destroyed excavations? Would or could the excavations be continued?

LEON POMERANCE

THE FIFTEENTH INTERNATIONAL CONFERENCE OF THE 'EIRENE' COMMITTEE

The participants were hospitably received between October 2nd and 6th, 1978 by the Bulgarian Academy of Sciences at the resort of Sunny Beach by the Euxine in the vicinity of Nessebar.

The main interest of the Conference was in late classical contacts with the Pontic and Thracian regions, especially in respect of commerce, cults and language. Fittingly in the setting of Nessebar there were some incisive studies of the economy of the Black Sea colonies: new evidence illuminated the local worship of Apollo, Serapis, Isis, Artemis and Diana: and several speakers investigated the nature and influence of late Latin in Constantinople, Thrace, and the districts of the lower Danube.

Two papers dealt with the early Aegean. W. C. Brice gave an estimate of the significance of new discoveries of Linear A inscriptions, notably those on libation tables: and I. Tegyei inquired into the nature of the landholding records of Pylos, which he regarded as unique in the Mycenaean world, and evidence of hasty organization rather than of an old tradition.

WILLIAM C. BRICE

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EPIGRAPHISCHE MITTEILUNGEN

Seals designs

In his study of The Mycenae-Vapheio Lion Group, *AJA* 82, 1978, 285-299, John G. Younger recognizes in various materials a style peculiar to one workshop.

Cretan Hieroglyphic Script

A) Mallia. The full corpus of hieroglyphic inscriptions from Quarter MU has been published by L. Godart and J.-P. Olivier in *Fouilles exécutées à*

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Mallia I, Ecole française d'Athènes, *Etudes crétoises* 23, 1978. It includes 7 tablets, 12 labels, 3 seals, 11 sealings, 8 inscriptions on pottery, and 271 graffiti.

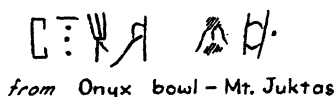
B) Pyrgos. In the SPHS/BSA Archaeological Reports for 1977–78, 83, Gerald Cadogan refers to his recovery from Pyrgos of seals and sealings, mostly unstratified, that range in date from EM II to LM I. One fine bar seal attributable to Pyrgos III is illustrated in Fig. 40. He has found also several Minoan potsherds and graffiti, including one in the hieroglyphic script.

Linear A

A) General. Volume I of *Etudes minoennes*, edited by Yves Duhoux, has been published in 1978 by Peeters of Louvain. It includes two pieces by M. Pope and J. Raison, a review of Linear A scholarship and an alphabetical index in transliteration. Yves Duhoux himself contributes a linguistic analysis of Linear A which, happily, eschews conjecture and is rigorously based on an analysis of the structure of the sign-groups. He concludes that this script seems to have expressed an agglutinating language.

B) Juktas. During her 1977 season on the hilltop sanctuary, Mrs. A. Ioannidou-Karetsou cleared a thick deposit of sacrificial debris by the east wall, which contained ritual vases of clay and stone, often inscribed in Linear A. One is a bowl of onyx with eighteen signs in Linear A, found in the southern sections with a bronze idol of the period of the second palaces. To judge from the published photograph, this inscription incorporates a sign-group which has hitherto only been known from the lower left corner fragment of the Dictaeon Table.

See Ergon 1977, 181–5, Pl. 122; and Gilles Touchais, *Chronique des fouilles . . . en Grèce en 1977*, BCH 102, 1978, 757, Fig. 247.



C) Kato Syme Viannou. According to Ergon 1976, 183–4, and H. W. Catling, SPHS/BSA Archaeological Reports for 1977–78, 64, Miss A. Lembessis recovered in 1976, from a pure MM IIIB/LM IA level of this rural shrine, part of a table of offerings with a Linear A inscription.

A phrase from this inscription is referred to by Paul Faure in BCH 102, 1978, 637, footnote 28.

WILLIAM C. BRICE

Kleinasien

Von dem durch G. Pugliese Carratelli in Pisa vom 23. bis 26. März 1977 veranstalteten ‚Seminario sulle scritture dell' Anatolia Antica' (vgl. die Notiz O. Massons, in: *Kadmos* 16, 1977, 178f.) sind soeben in den *Annali della Scuola Normale Superiore di Pisa, Classe di Lettere e Filosofia*, Serie III, Vol. III, 3, Pisa 1978, 731–915 die Vorträge und die größeren Diskussionsbeiträge veröffentlicht worden. Nach einer ‚Introduzione' von P. Meriggi (733–738) folgen die zehn Vorträge, die den folgenden Themen gelten: „Problèmes de l'écriture cunéiforme hittite“ (E. Laroche, 739–753), „Il sistema grafico del luvio geroglifico“ (A. Morpurgo Davies–J. D. Hawkins, 755–782), „Sur l'alphabet paléophrygien“ (M. Lejeune, 783–790), „Sulla scrittura caria“ (P. Meriggi, 791–803), „Les écritures chyro-minoennes: état présent des recherches“ (E. Masson, 805–816), „Le syllabaire chypriote classique: remarques sur les signes des séries en x, y, z“ (O. Masson, 817–832), „La scrittura lidia“ (R. Gusmani, 833–847), „La scrittura licia“ (O. Carruba, 849–867), „Die sidetische Schrift“ (G. Neumann, 869–886), „La scrittura fenicia a Cipro e in Anatolia“ (G. Garbini, 887–906).

A) Pisidien. Hier verdanken wir Cl. Brixhe, Metz-Nancy, einen Bericht über neue epigraphische Aktivitäten:

„Madame Elsa Gibson a été chargée par Monsieur Rahmi Koç, un industriel turc (Istanbul), de publier les inscriptions présentes dans sa collection (cf. déjà *ZPE* 1978, p. 1–34 et 233–240). Parmi des monuments dont l'origine exacte est souvent inconnue, figurent 24 stèles, qui auraient été trouvées dans un village proche du lac d'Eğridir. Etant donné la ressemblance de certaines d'entre elles avec les documents publiés par Ramsay en 1892 (*Revue des Universités du Midi* I, 1895, p. 352–362) et plus près de nous par Borchhardt, Neumann et Schulz (*Kadmos* 14, 1975, p. 68–72), on peut se demander si ce village ne serait pas Sofular. Mais des recherches minutieuses sur le terrain montreront peut-être un jour que plusieurs sites antiques connaissent ce type de stèle. Sur les 24 pierres en question, 11 au moins sont inscrites. Le texte est bien conservé dans quatre cas seulement: en une ou deux occurrences il a des chances d'être pisidien. Les estampages que Madame Gibson a exécutés en automne 1978 permettront probablement d'améliorer certaines lectures.

Au cours de ce même automne, Madame Gibson a effectué, dans le Sud de l'Anatolie, un voyage qui l'a amenée à Burdur et Isparta. Au musée de Burdur, elle a pu voir 2 pierres susceptibles, par leur style, de provenir de Sofular ou des environs. L'une d'elle est inscrite. Le musée d'Isparta (en construction) conserve au moins 5 stèles identiques, dont, selon le directeur, plusieurs auraient été mises au jour lors du creusement d'un canal aboutissant au (ou partant du) lac d'Eğridir. Mais quel en est le tracé? Passe-t-il près de Sofular? Quelques-unes de ces stèles sont inscrites. Naturellement, dépourvue des autorisations officielles nécessaires, Madame Gibson n'a pu étudier, photographier, ni estamper ces nouveaux textes, dont certains sont peut-être pisidiens.

Ici comme là, des vérifications s'imposent, qui risquent donc d'enrichir notablement une épigraphie épichorique pisidienne encore bien pauvre."

B) Lykien. In ihren Jahresbericht in *AJA* 82, 1978, 337 hat Frau M. J. Mellink eine Mitteilung J.-P. Sodinis aufgenommen, nach der in Xanthos eine neue lyk. Inschrift gefunden worden ist, deren Veröffentlichung E. Laroche übernommen hat.

T. R. Bryce hat einen Aufsatz „Two terms of relationship in the Lycian inscriptions“, in: *JNES* 37, 1978, 217–225 publiziert.

Die „Neufunde lykischer Inschriften seit 1901“ hat G. Neumann in einem Heft zusammengestellt, das als 135. Band der Denkschriften der Österreichischen Akademie der Wissenschaften, Phil.-hist. Klasse, Wien 1979, erschienen ist.

C) Karien. Am Ende des Jahres 1978 ist erschienen: O. Masson, *Carian Inscriptions from North Saqqâra and Buhen, with contributions by G. Th. Martin and R. V. Nicholls*, Egypt Exploration Society, London. Es legt 55 kurze karische Inschriften, meist Grabinschriften und Graffiti, in mustergültiger Weise vor (Photo, Umzeichnung, Umschrift, Kommentar). Es steht zu hoffen, daß dieser Materialzuwachs nun einen entscheidenden Fortschritt in der Bestimmung der noch ungedeuteten Zeichenwerte und ein Eindringen in die karische Sprache erlaubt! – Ferner verdanken wir O. Masson einen Artikel „Karer in Ägypten“, im: *Lexikon der Ägyptologie*, Sp. 335–337.

Zu den neuen Texten von Saqqâra-Buhen hat sich K.-Th. Zauzich in einem hektographierten „Brief zur karischen Frage“ geäußert, den er an Fachkollegen versandt hat. Er sieht seine These bestätigt, die karischen Texte enthielten einen griechischen Dialekt. Die Schrift bestimmt er als Syllabar.

D) Lydien. In *AJA* 82, 1978, 329 und fig. 9 teilt Frau M. J. Mellink mit, daß die amerikanische Sardeis-Expedition einen Stein mit einer lydischen Inschrift von Bauern erwerben konnte. Es handelt sich um eine Grabstele, wohl des 4. vorchristl. Jhs., mit einer fragmentarischen zweizeiligen epichorischen Inschrift. – Weitere Einzelheiten zu diesem Fund gibt C. H. Greenewalt Jr. in: *Anatolian Studies* 28, 1978, 36 bekannt. Die Inschrift hat soeben R. Gusmani, in: *Kadmos* 18, 1979, 76 ff. veröffentlicht. Ibd. S. 71 ff. publiziert er eine weitere kurze lyd. Inschrift aus dem Depot der Sardeis-Grabung.

A. Heubeck hat „Überlegungen zur Entstehung der lydischen Schrift“ in: *Kadmos* 17, 1978, 55–66 publiziert. – Neue Thesen zur Stellung des Lydischen innerhalb der hethitisch-luwischen Sprachgruppe trägt N. Oettinger vor in seinem Aufsatz „Die Gliederung des anatolischen Sprachgebietes“, in: *Zeitschrift für vergleichende Sprachforschung* 92, 1978, 74–92.

GÜNTER NEUMANN