

WORK IN PROGRESS

In the Lecture Program of the Societies of the Archaeological Institute of America in 1977-1978, the following are scheduled:

- Leslie Preston Day, "Kavousi, Crete," at Western Massachusetts/Amherst, Albany Area; "Settlement patterns: Terapetra, Crete," at Worcester.
 Guenter Kopcke, "Minoan & Mycenaean artifacts," at Detroit, East Lansing.
 John Younger, "Which Mycenaean at Knossos," at Princeton.
 Lanny Bell, "Secret of the Hieroglyphs," at Walla Walla, Vancouver.

Papers delivered during a series of international seminars arranged by the Canadian and Swedish Archaeological Institutes in Athens during the academic year of 1976-77: Hector W. Catling and Richard Jones: "Late Minoan II Bronzes from the Unexplored Mansion at Knossos"; Ioannis A. Sakellarakis: "Cycladic Elements at Arkhanes"; Erik Hallager: "The Palace of Knossos in the Late Minoan Period."

Master's Thesis completed: Marguerite C. Schaeffer, "An attribute analysis and formal typology of the ornaments from Franchthi Cave, Greece," Indiana University, 1977.

CORRESPONDENCE

To the Editor: - I would like to add a word on a Minoan standard unit.

In Nestor 939 van Leuven proposed water, seawater or wine as a calculation agent, while (olive) oil has been proposed as well. I will try to consider the relationship of these materials to the Minoan foot.

If Graham's calculation of the Minoan foot (30,36 cm) is correct, and if a cubic Minoan foot (cmf) was a standard value, a cmf of fresh water is most likely to be the standard, containing then: 27.983,71 cm³, or 27,98371 kg/litres at 4° Centigrade. (As a matter of fact, this is a temperature quite unthinkable in Cretan regions, but up to 10°—theoretically acceptable for water drawn from wells—a loss in weight in kg/l is negligible. The progressive loss of 1 gramm/litre per 5 degrees Centigrade becomes effective from 15° Centigrade upwards.) The difference between this calculated value and an "ideal" weight of 28,000 kg is negligible, hardly traceable in the smaller units more frequently used in daily life, and only 16,29 gr. or 0,06 percent for the master unit.

The Zakros pithos could contain 556 l + 11 percent, or 617,16 l as a maximum. If containing 22 cmf, we find a difference between this calculation and the calculated value of 617,16 l i.e. 22 times 27,98371 l = 1,51838 litres only.

But of course, Graham might be mistaken. If the

Minoan foot were 30,366 cm instead of 30,36, the cmf would be 28.000,304 cm³, thus almost exactly the "ideal" weight. But, as I think, it is rather unlikely that in these remote days measuring and calculation were of such a high standard.

The specific weight of wine is unknown to me, but I guess it varies to some extent, depending on region and year. Wine as a candidate should be omitted.

Seawater as a standard unit should be rejected as well. In the eastern Mediterranean its present specific weight is 1,039 kg/l at 4° Centigrade, or 29,075074 kg/cmf. Even when boiling—obviously very impractical for a standard unit—the seawater exceeds the desired 28,000 kg by 0,571362 kg.

Chadwick's standard of 28,8 kg/l is even more problematic. Fresh water is not heavy enough, seawater still too heavy. To approach the margin, it had to be heated to somewhere between 55 and 60 degrees Centigrade (1 cmf seawater at this temperature: 28,795244 kg), a temperature even harder to achieve exactly than that of boiling water. And, above all, still very hot, still very impracticable.

Oil, with its specific weight around 0,92-0,94 kg/l, complicates the matter still more. It would change the Minoan foot considerably. If 28 kg/cmf is the weight, the foot had to be 30,99859 cm long, and for the 28,8 kg/cmf weight as much as 31,2908 cm.

If however, the Minoan standard weight were 28,8 kg and Graham's foot were correct, the substance sought for should have a weight of 1,0291701 gr/cm³. The only substance I could find, with 1,030 gr/cm³ at 20 degrees Centigrade almost matching the mark, is hydrochloric (muriatic) acid of 6,433 percent concentration, the manufacturing of which will perhaps have surpassed the technical possibilities of the Minoans and Mycenaeans.

Problem after problem, question after question arising from material readily available to everyone. "No values can be proven with the data available from the tablets" (Thorne, in Nestor 857). "The probable moral is that the conclusions of all scholars, whether in the Field or in the Museum, are like those of the Critics, hypothetical" (Kenna—though on another purpose—in Nestor 756).
Wesendorfer Strasse 6 Yours, &c.
D - 1000 Berlin 26 Anton Boskamp
30 September 1977

To the Editor: - D. A. Was' interesting extension of my comment on Minoan measures (Nestor 1139, 1116) leaves a few doubts. The khoenix vessel

dimensions which I proposed are exterior, and do yield the interior volume ratio of 1/36 if the vessel wall and bottom are about 1 mm thick (cf. fine Kamares ware made when such units arose). His own explanation for the factor of 36 presupposes that of 120, and some research opposes his cubit in size and relation to the foot: D. Preziosi, *AJA* 71 (1967) 193. The Pylian foot is based on frescoes and was surely imported—if at all—to, not from, the mainland, since Hagia Triada is earlier and could well have used a foot unequal to Graham's (which is based chiefly on architecture at other sites, and is not 'larger' than the Pylian). The rule of '5/6' does not quite agree with the metretres of 28.8 and 32.4 liters; its relevance depends on regarding the Zakros unit as a 'khlareus,' and on stating the khlareus of PY Fr 1184 in terms of Linear A khoenikes (another import?). I might add (at the risk of libel: cf. Nestor 1148) that unless these people wore truly heroic shoes, what we call a foot may have been a cubit anyway.

11 Parklands Yours, &c.
Blandford Forum, Dorset Jon van Leuven
9 October 1977

BIBLIODITTOGRAPHY

- Memoirs of Heinrich Schliemann. A documentary portrait drawn from his autobiographical writings, letters and excavation reports / Leo Deuel. - New York: Harper & Row, 1977. - 304 p. - ISBN 0-06-011106-2: \$20.00; £16.85. - LCC 74-15820. □ 70818
- Greece and the Eastern Mediterranean in Ancient History and Prehistory. Studies presented to Fritz Schachermeyr on the occasion of his Eightieth Birthday / edited by K. H. Kinzl. - Berlin: de Gruyter, 1977. - 297 p. : ill. - ISBN 3-11-006637: DM 98.-, \$42.70. - LCC 77-849. □ 70888
- Mycenaean decline—some problems and thoughts / Per Ålin. - Greece and the Eastern Mediterranean (1977) 31-39. □ 71125
- The Ionian name / John Chadwick. - Greece and the Eastern Mediterranean (1977) 106-109. □ 71126
- Bathrooms and Lustral Chambers / J. Walter Graham. - Greece and the Eastern Mediterranean (1977) 110-125. □ 71127
- A Cypro-Mycenaean III C:1 amphora from Kition / Vassos Karageorghis. - Greece and the Eastern Mediterranean (1977) 192-198, pls. A-E. □ 70891

BIBLIOGRAPHY

- Dictionnaire Etymologique de la Langue Grecque. Histoire des Mots / Pierre Chantraine. - Paris: Klincksieck, 1968-. - Tome IV-1: P-Y. - 1977. - pp. 963-1164. - ISBN 2-252-01838-0: £17.30. □ 71128

- Preservation and reproduction of clay tablets and the conservation of wall paintings / by C. A. Bateman, Vaughn E. Crawford, George F. Dales, L. J. Majewski. - London: Bernard Quaritch, 1966. - 36 p., 24 pls. - (Colt Archaeological Institute Monograph Series; 3). □ 71129
- Mysteries of Troy / I. G. Edwards. - London: Nelson; New York: Pinnacle Books, 1976. - ISBN 0-8407-6533-9: \$6.95. □ 71130
- Pleasures of Deception / Norman Moss. - London: Chatto & Windus; New York: Readers Digest Press (Crowell), 1977. - 208 p. - ISBN 0-88349-131-1: £4.95; \$7.95. LCC 77-131. □ 71131
- The emergence of Greece / Alan Johnston. - Oxford: Elsevier-Phaidon, 1976. - 151 p. - (Making of the Past Series). - ISBN 0-7290-0043-5: £3.95. - LCC 76-375144. □ 71132
- The bull and the double axe / Berenice O'Crotty. - Tucson: Desoblado Press, 1977. - 75 p. : ill. - \$2.95. □ 71133
- Mysteries of the past / Lionel Casson & al. - New York: American Heritage Publishing, 1977. - ISBN 0-671-27982-6: \$34.95. □ 71134
P. 91: "Who can read the Phaistos Disk?"
- Ecriture et civilisation / Collette Sirat, avec la collab. de Michel Dukan. - Paris: C.N.R.S., Institut de Recherche et d'Histoire des Textes, 1976. - 120 p. : ill. - (Etudes de Paléographie Hébraïque). - ISBN 2-222-01944-3: 32 F. - [R BCLF 32[:379 Jul.] (1977) 1259. - [R Gabrielle Sed-Rajna. - BBF 22[:6 Jun.] (1977) *489. □ 71135-37
- An annotated bibliography of cryptography / David Shulman. - New York: Garland Publishing, 1976. - ca. 390 p. - (Garland Reference Library of the Humanities; 37). - ISBN 0-8240-9974-5: \$35.00. - [R Xavier Lavagne. - BBF 22[:2 Feb.] (1977) *112. □ 71138-39
- Parthenon and the Mycenaean city on the heights / J. A. Bundgaard. - Copenhagen: The National Museum of Denmark, 1976. - 194 p., 50 pls. - (Publications of the National Museum, Archaeological Historical Series; 17). - ISBN 87-480-6701-6: £19.55. □ 71140
- The transition to Mycenaean: A stratified Middle Helladic II to Late Helladic IIA pottery sequence from Ayios Stephanos in Lakonia / by Sarah H. and Jeremy B. Rutter. - Los Angeles: The Institute of Archaeology, UCLA, 1976. - x, 71 p., 17 pls. - (Monumenta Archaeologica; 4). - ISBN 0-917956-03-6: \$10.50. - LCC 76-18610. □ 71141
- Problems concerning Copper Age chronology in the Carpathian Basin. Copper Age gold pendants and gold discs in Central and South-East Europe / J. Makkay. - Acta Archaeologica Academiae Scientiarum Hungaricae 28 (1976) 251-300. □ 71142
- "An unreliable guide." Bemerkungen zur Rolle von Athen im homerischen Schiffskatalog / János Sarkady. - Acta Classica Universitatis Scientiarum Debreceniensis 12 (1976) 3-7. □ 71143
- Lavoro e razioni nelle iscrizioni micenee delle serie Aa Ab Ad di Pilo / Celestina Milani. - Aevum 51[:1-2] (1977) 91-111. □ 71144
- Pandaros, a Lycian at Troy / T. R. Bryce. - American Journal of Philology 98[:3 Fall] (1977) 213-218. □ 71145

- Одредбе позитивног законодавства и обичајног права о сезонским кретањима сточара у југоисточној Европи кроз векове [Regulations of positive legislation and customary law regarding seasonal migrations of shepherds in South Eastern Europe through the ages]. – Beograd, 1976. – (Посебна Издања Балканолошког Института, књ. 4 [Special Publication of the Balkanological Institute; Book 4]). □ 71146
- Sheep records from the Mycenaean archives / Petar Ilievski. – Odredbe o Sezonskim Kretanjima Stochara (1976) 213-222. □ 71147
- "Your back precious doe" / Joseph W. Shaw. – Archaeological Newsletter (Royal Ontario Museum) 126 (Nov. 1975). □ 71148
- Kommos, antecedent to □ 60854.
- Ein mykenischer Kieselmosaikfussboden aus Tiryns / Christian Podzuweit, Dieter Saltzmann. – Archäologischer Anzeiger 1977:2, 123-137. □ 71149
- Eine prähistorische Siedlung am Hymettos / Ursula Knigge. – AA 1977:2, 137-141. □ 71150
- Zwei minoisch-griechische bilinguistische Siegel / Paul Yule. – AA 1977:2, 141-149. □ 71151
- Labirinti? / Elisa Lissi Caronna. – Atti e Memorie della Società Magna Grecia 12-13 (1970-1971[1972]) 91-98, pl. 26. □ 71152
- Chronique de fouilles et découvertes archéologiques en Grèce en 1975 / Pierre Amiet. – Bulletin de Correspondance Hellénique 100 (1976) 591-745. □ 71153
- Rapports sur les travaux de l'Ecole Française en 1975: Mallia / Jean-Paul Rudant, Jean-Paul Thalmann. – BCH 100 (1976) 833-837. □ 71154
- Chronique de fouilles et découvertes archéologiques à Chypre en 1975 / Vassos Karageorghis. – BCH 100 (1976) 839-906. □ 71155
- Un cinquième fragment de tablette en linéaire B de Tyrinthe / Ute Naumann, Louis Godart et Jean-Pierre Olivier. – BCH 101 (1977) 229-234. □ 71156
- Nichtalphabetische Schriften der antiken Welt / ... Rosenkranz. – 1975. – □ 50693. – R Pierre Amiet. – BBF 21[:9-10 Sep.-Oct.] (1976) *757. □ 71157
- La creación de los dialectos griegos del primer milenio / Francisco R. Adrados. – Emerita 44[:2] (1976) 245-278. □ 71158
- El testimonio del micénico a propósito de los nombres de las distintas fuerzas en Homero / José L. Melena. – Emerita 44[:2] (1976) 421-436. □ 71159
- Excavations at Kommos (Crete) during 1976 / Joseph W. Shaw. – Hesperia 46[:3 Jul.-Sep.] (1977) 199-240, pls. 49-55. □ 71160
- Osservazioni su lat. lectisternium / Celestina Milani. – Rendiconti dell'Istituto Lombardo, Classe di Lettere 110 (1976) 231-242. □ 71161
- Homer and Ariadne / Kathryn J. Gutzwiller. – Classical Journal 73[:1 Oct.-Nov.] (1977) 32-36. □ 71162
- The genre of the Atlantis story / Christopher Gill. – Classical Philology 72[:4 Oct.] (1977) 287-304. □ 71163

CLIPPINGS

- Ein Palast [Archanes] – wie der von Knossos. Neue Rätsel an der Wiege europäischer Kulturen / Gerhard Prause. – Die Zeit 38 (9 Sep. 1977) 54. □ 71164