

MITTEILUNGEN

A COLLOQUIUM ON THE THEME 'ARCHIVES BEFORE WRITING' ORIOLO ROMANO, ITALY, 23–25 OCTOBER 1991

Fifteen papers were read on the administrative aspects of seals and sealings and, particularly, their role in the early development of complex state organisations. Proceedings will be published. Of most interest to readers of *Kadmos* were the following contributions.

J. Aruz, 'Seal Imagery and Sealing Practices in the Early Aegean World', considered whether the patterns on EH seals were intended to be purely decorative or to convey information, identification or administrative data. Six main thematic groups of seal-designs were isolated and then related to the varied EH II sealing practices of closing containers and doors and of stamping clay objects (vases, loomweights, hearths); this inquiry demonstrated that the same thematic groups appeared on both closures and on clay objects. Aruz suggested that EH seals were personal symbols which could be used for a number of purposes, from administration to decoration, without necessarily clear distinction between public and private business.

T. G. Palaima, 'Seal-Users and Script-Users: Nodules and Tablets at LM IB Hagia Triada', questioned the assumption that the economy of Hagia Triada was 'domainal' in scale. On conservative calculations, the tablets listed 4,148 units of grain, 337 units of figs, and 424 units of oil. The grain (if equivalent to the Mycenaean unit) equalled rations for 1,728 women workers for a year; its production required ca. 8 km² of arable land; management on this scale must have involved transactions in a three-tiered system of control. Re-examining the inscribed nodules in the light of the tablets, Palaima proposed that their Linear A signs designated transactions in the same way that 'transaction' signs functioned on the tablets, an abbreviated economic vocabulary shared by Minoan administrators at other sites.

J.-C. Poursat, 'Les systèmes primitifs de comptabilité en Crète minoenne', raised the possibility that accounting tokens (such as known from pre- and proto-literate Mesopotamia) continued in use on Crete as late as MM IIB at Mallia. At Quartier Mu, ca. 200 miniature vases were found in artisans' and central storerooms, often in association with archival documents (sealings and tablets); their size, restricted shapes and distribution suggest that they may have served as commodity-tokens for use within a system of economic control.

J. Weingarten, 'Two Sealing Studies in the Middle Bronze Age: Karahöyük and Phaistos', explored the impact of literacy on the sealing-systems of administrative control. At Karahöyük, a site with no evidence for literacy, an ac-



counting system based on sealings was shown to continue in all its particulars. At Phaistos, the development of written records led to the decline of the administrative role of sealings; nonetheless, functionaries with no scribal skills still controlled access to special storerooms by means of seals and sealings. Using a model based on Arslantepe, Weingarten postulated, first, that recorded bureaucratic staff turn-over was rapid — on average, 25–30% per year — and, second, that the Phaistos sealings (and other documents) in Room 25 had accumulated over at least ca. 15 years.




Papers on Near Eastern and Anatolian subjects: A. Alizadeh, 'Social and Economic Complexity and Administrative Technology in a Late Prehistoric Context'; P. Amiet, 'Sceaux et administration à Suse à l'époque d'Uruk'; U. Esin, 'The Functional Evidence of Seals and Sealings of Değirmentepe'; P. Ferioli & E. Fiandra, 'Archival Methods and Techniques in the IV Millennium'; G. G. Fissore, 'Conceptual Development and the Techniques of Organizing Documents and Archives in some Early Civilizations'; M. Frangipane, 'The Record Function of Clay-Sealings in Early Administrative Systems as seen from Arslantepe-Malatya'; H. Pittman, 'Towards an Understanding of the Role of Glyptic Imagery in the Administrative Systems of Protoliterate Greater Mesopotamia'; M. S. Rothman, 'Sealing Use and Changes in Administrative Oversight and Structure at Tepe Gawra during the Fourth Millennium B.C.'; D. Schmandt-Besserat, 'Tokens: a Prehistoric Archive System'.

Medieval and modern periods: D. M. Hallaq, 'Stone Tablets of Jebel el-Aktar in Modern Lybia'; I. Vincentelli Liverani, 'Sealings from Gebel Barkal in Sudan: Traces of an Ancient System'.

JUDITH WEINGARTEN

THE HIEROGLYPHIC 'HIDE' SIGN AND ITS LINEAR EQUIVALENT

In his Notes on the Cretan Hieroglyphic Script (Kadmos 31, 1992, 21–24) William C. Brice interpreted the ideogram  on the clay bars Ma4 and MA6, found in the Minoan palace at Mallia in 1923, as the silhouette of an animal's body. In doing so, Mr. Brice is not very far from the truth, although I prefer to regard this ideogram as an animal's hide (which definitely makes more sense on an accounting clay bar). We may compare the 'hide' sign in the Phaistos Disc , the outstretched hide of an ox, of which the ideogram on MA4 and MA6 forms exactly the right half.

I would propose further to see the sign  of the Linear A script as a simplification of , and to take its syllabic value as *ta* (not *ra* as in Linear B). On the acrophonic principle we may recall the Greek ταυρεῖα ('ox-hide'). Moreover,  (as the syllabic value *ta* in the Aegean syllabic scripts) is frequent in the word-end position, whereas *ra* is quite rare at the word-end and instead prefers the Inlaut.

PAUL J. MUENZER