

E. Bennett: I want to pick up some points raised by M. Lindgren's paper. We have imposed a lot of ideology on the Linear B texts. Some of it comes from Classical history, some from mythology, some from the wonders of new anthropology of the last century, from which we derived the priest-king. We need an awful lot more tablets and information. We cannot yet divide the social classes of king's men and ordinary population. We have some words, which suggest such things, but we haven't separated them properly, because we have only one single sentence in our many tablets and that is a record of a dispute.

W. Niemeier: G. Kopcke's question is one of the most important of this colloquium. Since we have no written records in Minoan Crete, we have to look for the king in the architectural evidence. It was clear from K. Kilian's paper that there is no trouble in locating him in the Mycenaean palaces, but there is a considerable difficulty in pin-pointing the throne room in the Minoan ones.

N. Marinatos: One important type of evidence, in addition to architecture, is iconography and we must not neglect it when we conduct functional analysis. It was evident from M. Cameron's paper that the frescoes in Crete have predominantly religious subjects, but there is no evidence of a king.

Hagg & Marinatos (eds) 1987
The Function of the Minoan Palaces.

H. Waterhouse: A linguistic point. The term "palace" has different connotations in other languages. The English term "palace" has overtones of royalty which are not present in "palais de justice" or "palazzo del Vaticano" or even "bishop's palace".

H. Saléhi: Do non-palatial economies exist?

A. Zois: In my contribution to this symposium, which is published in the form of a first draft or "outline", as, for obvious reasons, it cannot, for the moment, be expanded into a "paper", I am suggesting the existence of a very complex economic system in Minoan Crete (LM I period). For example, I draw attention to the possible status of the Minoan villa, formulating the hypothesis that it was an "independent 'middle range' agricultural producer", obviously an entity between the "palace" or "state" and the "village" or "community", and naturally interacting with those other entities. But there are still many problems related to our material. Regarding the Minoan "villa" or "country house", it is quite clear that some of them are quite wrongly interpreted as such, that is as being isolated in the landscape, like the "megaron" of Nirou Chani, which is but a house in an urban complex (Nirou-Hagioi Theodoroi) or that of Myrtos-Pyrgos (excavation Cadogan) which is a "palace" or "communal house", i.e. the focal point of a settlement (compare with Gournia). I wonder why G. Cadogan calls it a "country house"?

The Genesis of the Minoan Palace

by P.M. Warren

Ἡ μὲν οὖν εἰς πόλιν ἡμέτερον συνεστηκυῖα κοινονία κατὰ φύσιν οὐκ ἔστιν.

Aristotle, *Politics* I 1252b

The soul knows full well (even though it pretends to forget many times) that it must render account to the paternal soil. I do not say "fatherland", I say "paternal soil". The paternal soil is something deeper, more modest, more reserved, and it is composed of age-old pulverized bones.

N. Kazantzakis, *Report to Greece* (trans. P. Bien)

Abstract

Genesis and Minoan palaces are first defined and then discussion is framed within two questions, by what stages the palaces came into being (descriptive analysis) and why this happened (explanatory analysis). For these questions three levels of evidence are used, of ascending complexity, architectural, economic and societal. Architectural and economic evidence relates mainly to question one, societal mainly to question two.

Detailed publications from Phaistos and Mallia enable prepalatial architecture to be much better understood, as also prepalatial at Myrtos. Phournou Korymbi and at Vasilike. Specific similarities and continuities are found. The prepalatial economic evidence also shows both continuity from Early Minoan economic microcosms and much growth in scale and organizational complexity.

Three social trends may be discerned in the prepalatial period, an emerging concept of a territory, an emphasis on communal living and the likely presence within the communal living system of the family unit, nuclear or extended. A strong social development in the following phase is likely to have been the emergence of the family as a more individual, distinct and powerful social unit, living in the substantial, free-standing MM I houses at various sites and erecting monumental buildings by MM IB at Knossos, Phaistos and Mallia. A political dimension, collective acceptance or co-operative effort, may also be discerned behind the social or familial realities.

Explanation of such a successful social evolution, of which the first palaces are the chief visible expression, may be found in two principles of ethology, that in which the development of ranking order limits conflict between members of a society, and that of ritualization constantly working as a major means of redirecting aggressive drives. Both of these factors appear to have been strongly present in Minoan society and therefore to have explanatory value for it.

We begin with two definitions. Genesis, *genèse*, Entstehung, may be defined as coming into being, the stages, processes and creations which, in the present case, resulted in the Minoan palace. By Minoan palace is meant the chief building complex at a site, a building complex with a central court and perhaps other courts, substantial storage facilities, produc-

tion areas, rooms for administrative records, rooms for ritual activity and state or reception rooms, *salles d'apparat*. This definition is of course made from the palaces as known, of Late Minoan I date, and there are inevitably deficiencies in evidence for the buildings before that period. The genesis or coming into being of the palace does however merit investigation, since this is clearly one of the most fundamental stages in all Minoan civilization.

Discussion may be framed within two questions, both difficult. First we consider how, by what stages the palaces came into being in Middle Minoan I, which means an essentially descriptive or historical analysis. Second, we ask why this happened, which requires explanatory hypotheses. For the analyses of these questions we use three levels of evidence, of ascending complexity, the architectural, the economic and the societal. The architectural and economic levels relate mainly to the first question, how the palaces came into being, while the third level, the societal, is chiefly applicable to consideration of why they came into being.

THE ARCHITECTURAL LEVEL

Knowledge of the architecture and form of the first palaces has been much increased over the last thirty years, as a result of the excavations at Phaistos and Mallia. We are enabled to see better how far the MM IB-II constructions (c. 1930-1700 B.C.) were predecessors of the MM III and LM I palaces and thus how far the term palace is appropriate to the initial constructions.

Phaistos began (phase Ia) with the southern block of the west wing, a cellular complex of rooms laid out with an impressive west facade, with recesses and orthostats, against a paved court, *Piazzale LXX* (Fig. 1). Then, phase Ib, the northern block of the west wing was added, again a complex of small interconnected rooms, with a wide entrance corridor III dividing it from the southern block.¹ Levi's plan also indicates the existence of the central court XXXIII in this pretopalatial period, but dating is difficult.² The storage

¹ D. Levi, *Festós e la civiltà minoica* I (= *FCM*), Rome 1976, 31-38 and figs. 16-17, 19-20, 22 and pls. B and C; E. Fiandra, 'I periodi strutturali del primo palazzo di Festós', *Procl. Crete Congr.* I = *KrChron* 15-16, 1961-62, vol. 1, 113-115, 125 and pl. 12.
² L. Pernier, *Festós* I, Rome 1935, pl. II; Levi, *FCM*, 37 and pl. B; Fiandra (supra n. 1), 115-118 and pl. XΘ (caption should read 2° periodo).
³ Indelicato (infra n. 31), 95-99, argues strongly that there was

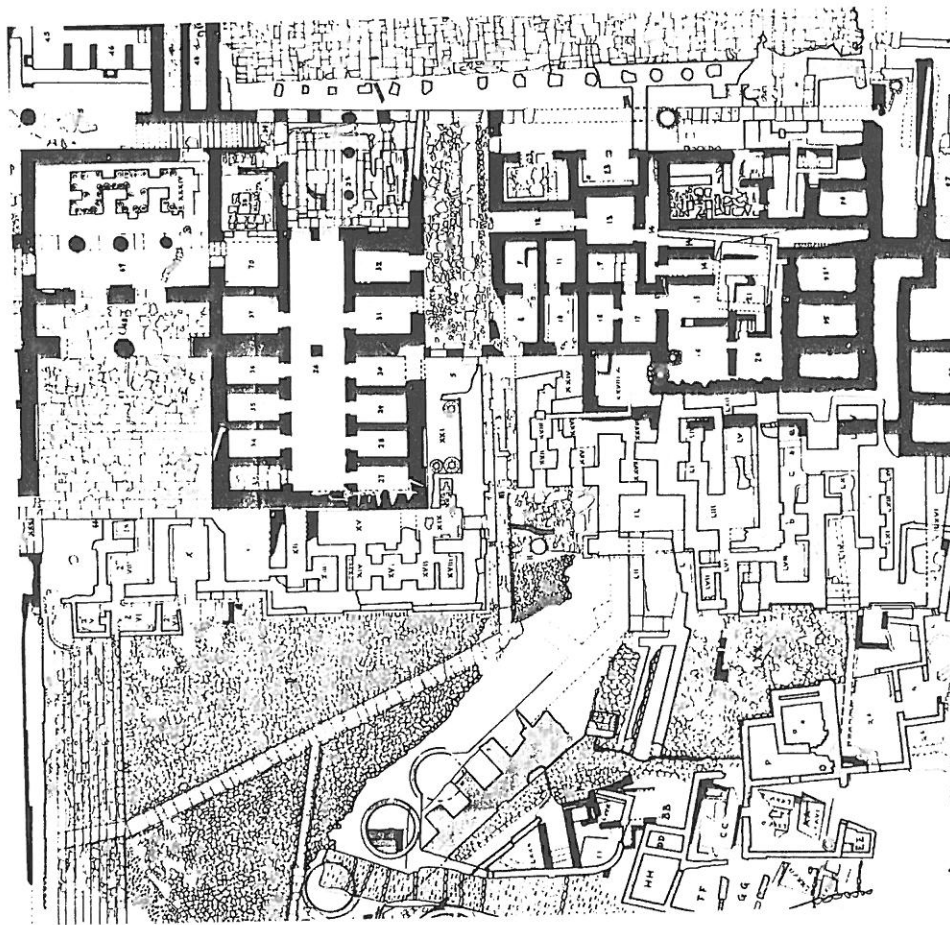


Fig. 1. Phaistos, the first palace; phase Ia, the monumental facade fronting Piazzale LXX; phase Ib, monumental facade fronting rooms XII—XVIII. After Levi, *FCM*, pl. B.

magazines under the neopalatial propylaeum are well known from Pernier's discoveries, as are cult rooms and bench fittings throughout the complex. At Mallia Chapouthier's and Pelon's most interesting discoveries under the later Quarters III and IV, in the re-investigation of the room of the swords and Khamaizi pots, has revealed not only a substantial area and fittings plausibly connected with cult activity, but also monumental architecture, with a main room measuring 9 x 7.20 m. Pelon has also plausibly shown that the central court dates to the first palace period at Mallia.⁴ There are now therefore grounds for suggesting that a true palace ex-

isted by Middle Minoan II, in the sense of our initial definition. At Knossos the architectural plan of the MM IB—II

no central court before phase 3 (MM III), since there is no evidence that the 'north', 'south', or 'east' wings existed before then; the court paving was laid in phase 3 (Levi, *FCM*, 253). There may well have been an open area behind the 'west' wing in MM I—II.

⁴ O. Pelon, 'L'épée à l'acrobate et la chronologie malliote', *BCH* 106, 1982, 165—190; *idem*, 'L'épée à l'acrobate et la chronologie malliote (II)', *BCH* 107, 1983, 679—703; *idem*, 'Palais et palais à Mallia (Crète)', *Revue des archéologues et historiens d'art de Louvain* 15, 1982, 80 f.

palace is largely conjectural, but substantial features, notably the original outer walls and the deep walled pits in the north-west area again indicate a monumental construction late in or at the end of MM IA,⁵ while finds of the highest quality, like the Royal Pottery Stores, illustrate life during the protopalatial period. At Zakros a substantial building complex was uncovered under the north-east part of the LM I palace, and with a different orientation. Platon dates these rooms, and traces under the later west wing, together with an earlier central court, to the protopalatial period.⁶ There may thus have been an MM I/II first palace at Zakros, together with town houses round about.⁷

When J. Walter Graham reviewed again the architectural origins of the palaces, he reasonably concluded that proposed derivation from or imitation of Near Eastern palaces, such as Beycesultan, Alalah or Mari, was at most superficial—we shall return to this—and that "Cretean palaces contain so many features peculiar to themselves that it is clear that they were essentially designed and developed by native architects responding to local needs and conditions".⁸ Graham was thus hypothesizing essentially independent development on the basis of the uniqueness of Minoan palatial features, since it was not then possible to argue strongly for a local architectural evolution. That was in 1968, in *A land called Crete*.⁹ In that same year, the excavation of Myrtos:Phournou Korymbi was completed and two years later, in 1970, Andon Zois began his reinvestigation of Vasilike. These Early Minoan II sites remain the earliest two which yield substantial evidence of settlement plan and architectural detail; each of them

displays features or elements of both plan and architecture important in the subsequent palaces. Myrtos is essentially a cellular building complex of conjoined rooms, areas and passages (Fig. 2). It was suggested in 1972¹⁰ that unit 45, the central summit area, was apparently a small, open court and its does appear to have been the focal point of arterial passages through the site. At Vasilike the paved western court flanking the big EM IIB constructions, at which time the latter had been built over part of it, is a prominent feature (Fig. 3).¹⁰ In points of detail, Vasilike has wooden beams as part of the wall construction, a possible light-well in room XVII of Seager's excavations.¹¹ Myrtos has low benches against room walls, all these being elements in palatial architecture. Intermediate in date between EM II Myrtos and Vasilike and the palaces come the EM III—MM I buildings south of the palace at Mallia (Fig. 4).¹² These constructions seem architecturally to comprise three distinct units or houses, but in their small rooms and passages and in the close-knit structure of the whole complex clearly both continue the cellular form of Myrtos and anticipate that of the palace of Phaistos. The same is true of their internal bench fittings.

⁵ Pelon, 'Palais et palais' (supra n. 3), 80.

⁶ Evans, *PM I* (1921), 127—146; J.D.S. Pendlebury, *The archaeology of Crete*, London 1939, 36 f. and fig. 13.

⁷ N. Platon, Ζάκρος. Το νέο μινωικό ανάκτορον, Athens 1974, 222—226 and figs. 125—126, 140.

⁸ Platon (supra n. 6), 222 f.

⁹ J.W. Graham, 'The Cretan palace: sixty-seven years of ex-



Fig. 2. Myrtos: Phournou Korymbi, with central space 45 reached by roads 64-65-44 and 67. Early Minoan II.

To summarize the architectural level: there are distinct similarities between the architecture of the first palaces and Early Minoan building complexes, chiefly the cellular plan and form of close-knit, small rooms, the paved western court and possibly the concept of a central court, and internal bench fittings. Red painted wall plaster, present already at Myrtos and Vasilike, is also a link. There are also architectural differences, chiefly the First Palaces' monumental aspect, found in the Phaistos facade and the Mallothe rooms and in the dominant position of the large central court, all features so far absent from Early Minoan buildings, as too is the column.¹³ To explain this new monumentality around a large central court in the 20th century B.C. (MM I A/B transition) I think we may retain the theory of a general knowledge in Crete of the form of Near Eastern palaces. Mari remains the best and perhaps only reasonably close parallel (Fig. 5)—Graham details its similarities and clear differences¹⁴—and it is worth recalling that already by circa 1800 B.C. Crete appears to have been receiving tin from Mari, shipped out through Levantine ports after crossing the Syrian desert with initial recording on tablets at Mari.¹⁵

THE ECONOMIC LEVEL

The general continuity and increase of complexity in craft production in metal, clay, stone and in seal carving from Early into Middle Minoan is well enough known. For agricultural production the evidence of Myrtos has some bearing. There in EM II we find storage magazines with several pithoi, in one area apparently organized into a magazine for dry measures and another for liquid measures.¹⁶ These magazines for storage of local agricultural production may



Fig. 3. Vasilike, with paved West Court (in black). After Zois, *Praktika* 1980, pl. 1B.

be seen as the economic microcosm¹⁷ of the storage systems of the first palaces, where Phaistos provides the evidence, just as those of the first palaces are in turn forerunners of the great storage systems of the LM I palaces. The growth in scale is seen more clearly if the MM koulouras (XXIX) of Phaistos¹⁸ functioned as the circular granaries of LM I Mallia. But as with the monumental form of the first palaces, so too the more complex form of economic organization using written documents and seal impressions on containers and doors, may well owe its general idea, though not its detailed application, to Near Eastern practice. Enrica Fiandra has in my view rightly pointed out that the Minoan bureaucratic system of palatial economic organization marks the western end of a large area functioning by essentially the same systems.¹⁹

ploration', in *A land called Crete. A symposium in memory of Harriet Boyd Hower* (Smith College, Studies in history 45), Northampton, Mass. 1968, 17–44, at p. 31.

¹³ P. Warren, *Myrtos. An Early Bronze Age settlement in Crete* (BSA, Suppl. Vol. 7), London 1972, 46, 260.

¹⁴ A. Zois, 'Gibt es Vorläufer der minoischen Paläste auf Kreta? Ergebnisse neuer Untersuchungen', in *Palast und Hütte*, Mainz 1982, 207–215, at p. 212 and fig. 2.

¹⁵ L. Press, 'On the origin of Minoan palatial architecture', *Archaeologia* (Warsaw), 24, 1973, 1–11, at p. 1.

¹⁶ *Mallia, Palais IV*, Paris 1962, 13–17, 41–50 and plan II.

¹⁷ The column was present by MM II at Knossos (Evans, *PM* I, 211–213). Phaistos, in Piazza II in the centre of the West Wing, and at Mallia by the same date (Pelon, 'L'épée' II, supra n. 3, 683, 693 and figs. 8–9 area a). See also J.W. Shaw, *Minoan architecture: Materials and techniques*, Rome 1973 (= *ASA* 49, 1971), 124 f. The architectural argument in the present paper is in agreement with that of Press (supra n. 11), who surveyed the subject architecturally soon after the plan of Myrtos. Phourou Korypiti was available.

¹⁸ Graham, *PoC* (1969), 231 f. and fig. 148 (plan of the Mari palace).

¹⁹ G. Dossin, 'La route de l'élixir en Mésopotamie au temps de Zimri-Lim', *Revue d'assyriologie* 64, 1970, 97–106; A. Malam, 'Siro-Palestinian destinations in a Mari tin inventory', *IEJ* 21, 1971, 31–38.

²⁰ Warren (supra n. 9), 48–50, fig. 20 and pl. 17.

²¹ P. Warren, 'The settlement at Fournou Korifi, Myrtos (Crete) and its place within the evolution of the rural community in Bronze Age Crete', in *Les communautés rurales II: Antiquité* (Recueil de la Société Jean Bodin pour l'histoire comparative des institutions 41), Paris 1983, 239–271 and pl. 3.

²² Levi, *FCM*, pl. B.

²³ E. Fiandra, 'Ancora a proposito delle cretule di Festos: connessione tra i sistemi amministrativi centralizzati e l'uso delle cretule nell'età del bronzo', *BdA* 60, 1975, 1–25, at pp. 17–23; P. Ferioli and E. Fiandra, 'The administrative functions of clay sealings in protohistorical Iran', *Iranica* 1979, 307–312; P. Ferioli, E. Fiandra and S. Tusa, 'Stamp seals and the functional analysis of their sealings at Shahri-Sokhta II—III (2700–2200 B.C.)', in J.E. van Loon (ed.), *South Asian archaeology 1975*, 1979, 7–26, esp. fig. 7.

For the organization and monetary basis of trade at Ugarit, palace-controlled but with semi-independent merchants, see M. Heltzer, *Goods, prices and the organization of trade in Ugarit*, Leiden 1978. For the organization of Minoan trade as analogous to that of the palace-controlled, royal trade of Near Eastern capitals, see S. Alexiou, *ArchEph* 1953–54, 135–145, and in this volume.

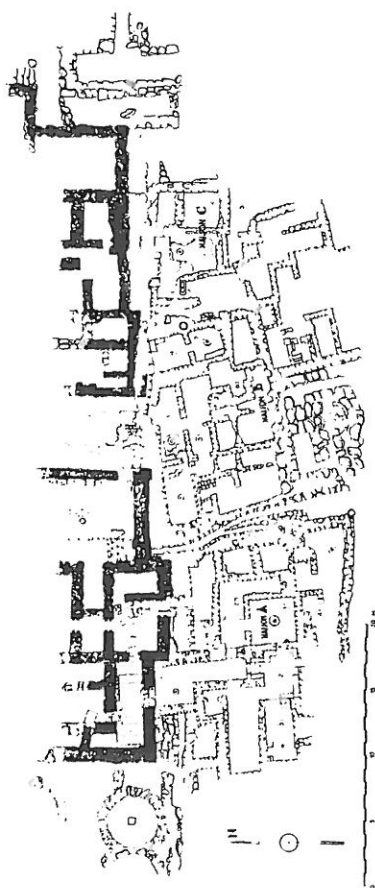


Fig. 4. Mallia, EM III–MM I houses south of the Palace. After Mallia, *Palais IV*, plan II.

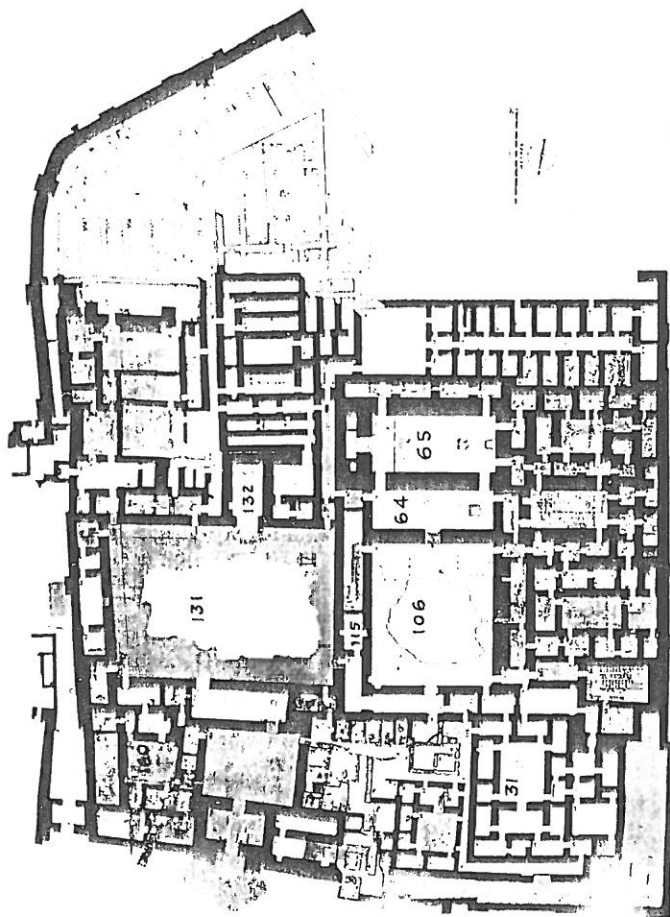


Fig. 5. The palace of Mari. After Graham, *PoC*, fig. 148.



THE SOCIETAL LEVEL

The Minoan palaces, like the prepalatial, Early Minoan building complexes, are the visible expression of social structure and organization.

In the prepalatial period three social trends may be discerned. One is an emerging social geography, the concept of a territory.²⁹ Although we cannot know accurately the boundaries of a community's territory at this early date, we can see the idea of a small region evolving in the intensive use of land adjacent to a settlement for long term agriculture in cereal and olive production, and for water supply. At Myrtos-Phournou Korymbi the physical relief and the location of the next settlement to the west, Myrtos-Pyrgos, suggest an intensively used territory within a radius of about 1.5 km., together with a wider zone of more intermittent exploitation for artefact stones and other natural resources. A territory of this size conforms to a wide general village pattern³¹ and is probably largely influenced by the diurnal work factor, which may be defined as the use of land to a maximum distance convenient for journeys from and back to the village settlement within one day.³² In this way the territory strongly influences the definition of a community. Patterns are established through the constant interaction of the community with its increasingly created territorial environment. Customary practices and modes of living become rooted in each generation's consciousness.³³

A second social aspect is an emphasis on communal living. Pre-palatial, EM burials are collective, not in individual graves.³⁴ The cellular, closely knit form of the settlements, surrounded by a common wall at Myrtos-Phournou Korymbi, likewise suggests a communal emphasis. There is little of any ranking of hierarchical distinction apparent in the buildings or finds discussed from Myrtos, Vasilike or Mallia.³⁵

The third prepalatial social element is the likely presence within the communal living system of the family unit, nuclear or extended. In speculating on the social structure of EM II Myrtos in 1976 (published 1983) the nearest I got to such a bold suggestion was to propose that the interlocking cellular structure of the rooms, open areas, passages and rooftop communications, with no division into freestanding houses, suggested communal living, in the form of kin groups, an extended family or single clan, but suggesting too that occupying equipment in several different areas reflected the activities of individual units or small groups within the close-knit community as a whole.³⁶ These ideas were transformed by the detailed studies and statistical analyses of Dr. Todd Whitelaw into rigorously based proposals for about five or six families living in functionally similar houses on the site.³⁷ I find Whitelaw's arguments convincing, save that I still consider the south-western corner of the site a shrine complex which was the single focus in the settlement of the inhabitants' religious aspirations, and I would still emphasize the close-knit, interdependent, communal character within which small or nuclear families lived. But these reservations in no way diminish the significance of Whitelaw's case for the small or nuclear family or, I would think equally possible, an extended family divided among their own houses, already in

destroyed by fire at the end of EM II and there was burning at Mallia at the same date.³⁸ But there is no trace of newcomers in Crete at this time.³⁹ Earthquakes are certainly possible, though the thorough burning of these sites, the failure to re-inhabit Phournou Korymbi and the immediate continuation and perhaps expansion of nearby Myrtos-Pyrgos are more suggestive of human attacks. Conflict does not, however, appear to have a long lasting effect on the island. Myrtos-Phournou Korymbi appears to be alone in not continuing as a settlement after EM II and major sites like Gournia, Mochlos, Petra, Palaikastro and the three future palace centres do not cease to flourish in EM III and henceforward. Some other social process besides conflict seems to be at work.

Professor Zois, at this point in his recent analysis,⁴⁰ rightly draws attention to the critical social importance of the Middle Minoan I period for the question under discussion. The characterization he offers is the existence now of städtisch-kommunale Verwaltungszentren. This does not seem to me a fully sufficient explanation. How were the Verwaltungszentren organized and who organized them? What is the social process?

What appears to have been happening after EM II is the emergence of the family as a more individual, distinct and powerful social unit than it was during EM II and earlier. Such a process would explain the substantial, free-standing, individual houses of MM I date at Vasilike and Khamazli.⁴¹ It is distinctly possible that the same social process was in operation at Knossos, Mallia and Phaistos, with powerful families determined to set things on a larger territorial scale; they lived in substantial houses in MM I and, by the beginning of MM II, in monumental buildings or first palaces. For the architectural plan of the latter they may very possibly have used some general knowledge of Near Eastern palaces such as Mari.⁴²

Why should this have happened specifically at Knossos, Mallia and Phaistos? They had each been important, long developed EM centres⁴³ (Mallia from EM II), each commanded substantial natural territories and each was readily open to maritime communications. But now, recent work at all three sites enables us to add significant knowledge of the physical context in which and from which palaces emerged. At the first two sites palaces came into being within already strongly developed urban environments.⁴⁴ At Phaistos the position is more curious.

In the immediately prepalatial, MM IA period at Knossos occupation had expanded in form and area. Not only were there substantial constructions like the building block below the north-west corner of the later palace,⁴⁵ which Hood has characterized as already palatial,⁴⁶ the Basement of the Monolithic Pillars and the Hypogeum, at what was to become the southern edge of the palace,⁴⁷ but buildings had spread up to 470 metres north of the palace⁴⁸ and up to 370 metres west of it.⁴⁹ Though the occupation cannot be proved continuous over all this ground, it is likely to have been continuous over at least 125,000 square metres⁵⁰ and the character of the site is already urban by the time the palace was established at the start of MM IB. Moreover at this same date the foundation can be seen as part of a major, new urban pro-

gramme, since then too the fine paved road system was laid out west of the palace, the Royal Road and the Royal Road West.⁵¹ We may well agree with S. Damiani Indelicato, 'l'impianto della rete viaria fu l'atto che sancì la nascita della città'.⁵² At Mallia the EM III-MM IA houses south of the future palace were far from being the only occupation of the site⁵³ and in MM IA-B houses A, I, Δ, the 'agora' and several cemeteries to the north are in use.⁵⁴ From the houses south of the future palace to Quartier I⁵⁵ is about 320 metres,

²⁹ H. van Effenterre, *Le palais de Mallia et la cité minoenne* (abbr.: *Palais et cité*), Rome 1980, 265; S. Damiani Indelicato, *Piazza pubblica e palazzo nella Creta minoica*, Rome 1982, 20 and n. 7, refers less accurately to this destruction horizon as in EM III.

³⁰ P. Warren, 'Crete, 3000-1400 B.C.: immigration and the archaeological evidence', in R.A. Crossland and A. Birchall (eds.), *Bronze Age migrations in the Aegean*, London 1973, 41-47.

³¹ Zois (supra n. 10), 209.

³² For a most useful survey see H. Waterhouse, 'Middle Minoan houses', in *Minoan society*, 311-317, esp. p. 316, 'a trend to the nuclear household'. See also van Effenterre, *Palais et cité*, 253-278. For leading families in large houses in LM I, M.S.F. Hood, 'The "country house" and Minoan society', in *Minoan society*, 129-135, at p. 131.

³³ For Knossos see P. Warren, 'Knossos and its foreign relations in the Early Bronze Age', *Proc.CretCongr.*, Athens 1981, 628-637. For Phaistos, Levi, *FCM*, 292 f., 478 f., figs. 456, 732-733 and pls. 12-14 and IV-V.

³⁴ Cf. F. Schachermeyr, *Die minoische Kultur des alten Kreta*, Stuttgart 1964, 270.

³⁵ Evans, *PM* I, fig. 109.

³⁶ S. Hood and D. Smyth, *Archaeological survey of the Knossos area* (BSA, Suppl. Vol. 14), London 1981, 6, 8 and n. 23.

³⁷ Evans, *PM* I, 103-106, 136, 146 and figs. 74 and 106.

³⁸ Hood and Smyth (supra n. 38), 8 f., 27, site 232.

³⁹ P. Warren, 'Knossos: Stratigraphical Museum excavations, 1978-80, Part I', *ArchRep* 1980-81, 74; *The British School at Athens. Annual report of the Managing Committee*, 1981-82, 17-21, at p. 20; Hood and Smyth (supra n. 38), 49, site 188.

⁴⁰ MM I occupation is well attested in the area from the east edge of the palace westwards to the Stratigraphical Museum site (above, n. 41) and from the north side of the Royal Road south to the Vlykhia stream. See Hood and Smyth (supra n. 38), sites 219, 188, 196, 213, 282 and map.

⁴¹ P. Warren, 'Knossos. Royal Road South excavations', *Delion* 27, 1972, Chronika, 627-629 and pl. 588b and c.

⁴² Indelicato (supra n. 31), 25 f.

⁴³ *Mallia, Palais* IV, 41 for references; Pelon, 'Palais et palais' (supra n. 3), 80.

⁴⁴ H. van Effenterre, 'Notes et places publiques au nord-ouest du palais de Mallia', *BCH* 87, 1963, 229-231; H. and M. van Effenterre, *Mallia, Centre politique I*, Paris 1969; van Effenterre, *Palais et cité*, 155-174, 181-184, 189-194, 259-261, 265-267 and fig. 376.

⁴⁵ I find much to agree with in S. Alexiou's modified acceptance of van Effenterre's demotic interpretation of the 'agora' and associated buildings north-west of the palace at Mallia, namely that the combination of 'agora' (which Alexiou accepts) and palace implies a successful mixed economy ('free' and palace-controlled) and an implied successful society (S. Alexiou, *Epoches* 9, 1964, 3-6; see also *idem*, supra n. 19). The addition of the Quartier Mu buildings to the city plan is further evidence for social complexity and, since palace (with Pelon), town and Mu flourished at the same time, MM IB-II, of successful social mixing. On social organization in Quartier Mu, religious administration with dependent, family-operated craft workshops, see J.-C. Poursat, 'Ateliers et sanctuaires à Mallia: nouvelles données sur l'organisation sociale à l'époque des premiers palais', in *Minoan society*, 277-281.

³⁸ Warren (supra n. 17), 252.

³⁹ M. Chisholm, *Rural settlement and land use*, 1968, 66, 130 f.

⁴⁰ Cf. Warren (supra n. 17), 261, 264.

⁴¹ For the development of the identity of a community at the symbolic level, as 'a structural complex of symbols' articulated through regular cult practices, see J. Ryckwert, *The idea of a town*, 1976, 189. For social attitudes and relationships within societies comprising constituents of growth quite as much as population or carrying capacity increase have done see C. Renfrew, 'Socio-economic change in ranked societies', in C. Renfrew and S. Shennan (eds.), *Ranking, resource and exchange. Aspects of the archaeology of early European society*, 1982, 1-8, at p. 5.

⁴² K. Branigan, *The tombs of Mesara*, London 1970, 128-130; Warren (supra n. 9), 267.

⁴³ Warren (supra n. 9), 266 f.; *idem* (supra n. 17), 254. I thus agree with Zois (supra n. 10), 211-215 (Gemeinde-Organisation).

⁴⁴ K. Branigan, *The foundations of palatial Crete*, London 1970, 43 f. and fig. 6, has drawn attention to a large EM II building at Palaikastro, but its relationship to others there is not yet known. The same is true of the EM II constructions at Aghia Triada (C. Laviosa, 'L'abitato prepalaziale di Aghia Triada', *ASAtene* 50-51, 1972-73, 503-513) and Knossos (J.D. Evans, 'The Early Minoan occupation of Knossos', *AnnSt* 22, 1972, 115-128, esp. fig. 2).

⁴⁵ Warren (supra n. 17), 253 f. and n. 6.

⁴⁶ T.M. Whitelaw, 'The settlement at Fournou Korifi Myrtos and aspects of Early Minoan social organization', in *Minoan society*, 323-345.

⁴⁷ A. Zois, *Praktika* 1980, pl. 1B; *idem* (supra n. 10), fig. 2.

⁴⁸ Warren (supra n. 17), 255.

⁴⁹ J. Cherry, 'Evolution, revolution and the origins of complex society in Minoan Crete', in *Minoan society*, 33-45. Despite the arguments in this paper for discontinuous leaps, punctuated equilibria or relatively speedy periods of change, a diametrically opposite use of the same data base is made when it is wished to contrast palaces with EM settlements. 'There is, moreover, a gap of as much as 300 years between them and the palaces proper', *ibid.*, 39. Certainly the immediately prepalatial period merits detailed study for explanatory, causative mechanisms. But it does not help to dismiss (ibid., 40 f.) as non-existent long-range, high value exchanges before EM III-MM I. For evidence of such see below, reference at n. 35. For a development of Cherry's views, not incontrovertible, see *idem*, 'The emergence of the state in the prehistoric Aegean', *Proc.CambPhilSoc* 210, 1984, 18-48.

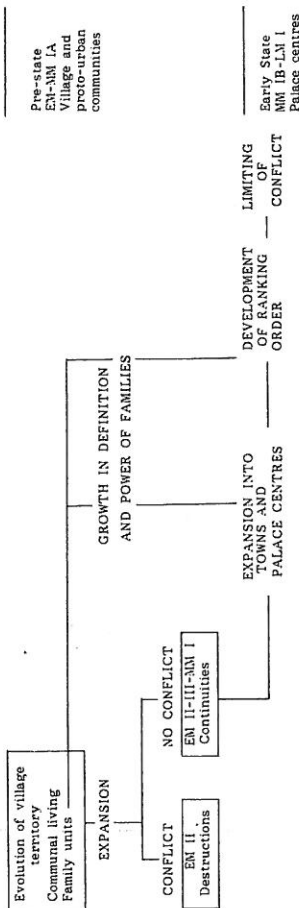


Fig. 6. Early to Middle Minoan social process. A construct for the genesis of the Minoan palatial system.

expression, as has already been noticed, but none appears to have had a chief building dominating the rest of the settlement. This may suggest pre-state settlement with communities of differentiated but independent status. What then of the change at the end of MM IA? The archaeological correlates of the postulated change or of the beginning of the new stage do not in fact appear to differ greatly from those of the prepalatial stage: everywhere towns and cemeteries continue, while at three known sites a larger, more complex building joins the pre-existing buildings.

And the social correlates of this emergence of monumental? While the latter strongly suggests that a significant social threshold is here being crossed, the precise form of structural reordering of the organizational attributes of the system, which Cherry rightly requires,³⁷ remain uncertain. It has been proposed in this paper that a more powerful family unit than heretofore took charge at major centres. But the social change for the population as a whole at this point could not appear to have been large. Yet over the next two

hundred years there is a clear growth of the palatial buildings at Phaistos, and an implied expansion of the central palace system, creating an early state formation, with administrative centres and written records at Mallia and Phaistos certainly, by the end of the protopalatial period around 1700 B.C. The more appropriate hypothesis is therefore that of an incremental social trajectory rather than one of punctuated equilibria.³⁸

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³⁷ Cherry (supra n. 30), 33–35.

³⁸ Cherry (supra n. 30), 37 f. and references at his notes 25–26.

ranking order. Secondly, it is a commonplace that ritual or ritualized behaviour was also highly developed among the Minoans, all the more so because their civilization was able to grow in complexity and to consolidate itself for so long without external human interruption. Apart from religion *sensu stricto* ritualization is seen in sports and in the deeply traditional ways of settled peasant behaviour and work, embedded in people's consciousness by centuries of customary usage. The Minoans' apparent lack of emphasis on aggression—not, of course, its complete absence—could therefore have been proportional to this high degree of ritualization.

CONCLUSION

First, analysis of architectural, economic and territorial developments over the three hundred years from the end of EM I onwards enables us to see a little more clearly how and by what stages palaces and their living systems came into being. Economically we are looking at expanding systems, both of site territories and their implied production, of craft specialization, and of overseas exchange; expansion in the latter is clearly demonstrated by the well known addition to the EM Aegean (and Egyptian) spheres of exchange of the rich Cypriote and Near Eastern spheres from MM I. Second, analysis, admittedly hypothetical, of societal processes over the same three hundred years enables us to suggest, through principles and mechanisms of ethology, not just how but something of why palaces and palatial economic and social systems came into being in Crete (Fig. 6). These were a visible climax as much of social as of economic developments.

In general terms the genesis of the Minoan palace might seem a good instance of a change from a pre-state, ranked society³⁹ to an early state society. Moreover a data base as rich as that of Bronze Age Crete might allow detailed study of such a significant social change and thus yield insights of wider value than for the local scene alone. One means by course define as carefully as possible what one means by ranking and state (see n. 56) in the Minoan case. Communities down to MM IA clearly varied in size and material

and the MM I town does not appear to have been exceeded in size by the Late Minoan.⁴¹

At Phaistos there had been extensive Final Neolithic⁴² and EM I–II occupation over the site. Fragments of EM II buildings occur over about 3,400 square metres.⁴³ Further, MM IB (phase Ia of the palace) is well documented with buildings south of the palace, west of Piazzale LXX and Corridor I (that is, a situation like that in EM I–II), as well as much further out on the northern hill slopes at Aghia Photine and on the southern at Khalaras.⁴⁴ So the town was being well established during the first phase of the palace, when the southern block of the west wing was in use. But the intervening, immediately prepalatial, EM III–MM IA period is scarcely represented, despite the extent of the excavations. For this period the Phaistian excavators present the material from Paritikes,⁴⁵ which documents the period's chronological reality, and confirms its almost complete absence from the Phaistos site. It may therefore have been that there was little or no occupation of the site at this time, and a virtual or substantial refoundation at the start of MM IB, with a powerful family or families establishing the first palace and others erecting buildings in the town.

May the social, familial realities, which we have suggested lie behind the physical, architectural realities, be seen also as political? Indelicato has rightly pointed out that definition of a site as urban must reside not so much in its extent or the size of its population, or in an enceinte wall, as in some form of civic organization.⁴⁶ Thucydides had said much the same, "Men make a city, not walls or ships empty of men".⁴⁷ The details of any such civic or political system, which included the palace from MM IB, are unknown, whether a powerful, dominating family or a collective, co-operative effort, but it is hard to believe that an open, unfortified central building would have been possible without collective acceptance of it by the leading members of the society.

With these suggested territorial and familial developments there would have developed in the island a more ranked, hierarchical social structure than in the socially more undifferentiated villages of EM II, namely some families more powerful than others, able to command larger territories and greater economic resources than others. Moreover, at the three or four regional capitals their hypothetical powerful families (and greater social ranking) appear to have established themselves with, as noted, relatively little conflict, there being little evidence for major breaks or destruction horizons in EM III and MM IA. How might such a form of successful social evolution, with the characteristics just stated, be explained?

Konrad Lorenz showed both how the development of ranking order limits conflict between members of a society,⁴⁸ and how ritualization is constantly at work as a major means of redirecting aggressive drives.⁴⁹ Now the material remains of the palace civilization of Crete, with its evidence of a highly craft-specialized, diversified and organized economy (clearest in LM I with several Linear A archives, but clear too in the multivarious artefacts and written or impressed documents of MM IB–II), strongly suggest that ranking order was well developed. The organizing of such a complex system might indeed be thought to imply

Discussion

P. Warren: What do you think the first palaces of MM IB looked like?

P. Warren: On the evidence of Mallia and Phaistos, the central court existed already then; there was also a block to the west and that unit gradually expanded.

J. Shaw: If we have a central court and rooms for storage, do you imagine also a residential quarter?

P. Warren: Certainly there are houses and buildings around these units, but I am not sure the excavators would like to call them residential.

K. Branigan: I don't think these afore-mentioned buildings were residential, as I shall show in my paper. I agree with P. Warren that we are dealing with evolution rather than revolution in Crete. Here are some additional points. Do you have any thoughts about the enormous EM II building at Palaikastro? or the EM II structure at Knossos which S. Hood has identified? As regards societal evolution, I have recently rethought the position of the Mesara tholoi. I believe that one can see some signs of ranking there.

On the emergence of the family: there is clear evidence that you have a gradual breakdown of the clan system in EM III/MM I and individual families becoming more important, but I see the importance of this for the palace as facilitating

⁴¹ H. van Effenterre, *Palais et cité*, 39, 41 and figs. 52 and 55; Indelicato (supra n. 31), 23.

⁴² L. Yaguet, 'L'insediamento neolitico di Festos', *ASAteene* 30–31, 1972–73, 7–138.

⁴³ Levi, *FCM*, pls. B, X, AA, DD and EE, colour orange.

⁴⁴ Levi, *FCM*, 422–428, figs. 647–649, 651, 654 and pls. B and AA (rooms XLVI, LXVII–LXXIX south of the palace); pp. 462–464 and pls. B and AA (rooms LXXXV, LXXXVIII west of Piazzale LXX); pp. 526, 538–544, 547–555 and pls. B, X, DD and EE (rooms LXXXI–LXXXV, XCIV–XCV, IC a–b, C–CI and CII west of Corridor I); pp. 631–651, esp. p. 633 (Aghia Photine); p. 656 and pls. LL and NN (Khalaras, earliest rooms).

⁴⁵ N. Bonacasa, 'Paritikes. Una stazione medio-minoica fra H. Triada e Festos', *ASAteene* 45–46, 1967–68, 7–54 and pls. I–III; Levi, *FCM*, 747–756 and pls. V–VI.

⁴⁶ Indelicato (supra n. 31), 23 f.

⁴⁷ Thucydides VII, 77: ἀνθρώποι πόλιν, καὶ οὐ τείχη οὐδὲν ὀφείλουσιν κείναι.

⁴⁸ K. Lorenz, *On aggression*, 1967 (paperback ed.), 35 f.

⁴⁹ Lorenz (supra n. 54), 72, 222–228.

⁵⁰ Settlement ranking, not individual ranking is meant here. For the need to specify forms of ranking see Renfrew (supra n. 23), 2–4.

social and economic change. I see not so much the emergence of strong families, but rather of individual families which could be manipulated by the state system.

M. Cameron: Can we say that the upper storeys of the first palaces were like those of the later ones, because in the latter they were used for religious purposes?

V. Watrous: P. Warren outlines separate territories with a village in the centre. My problem is this: the pottery styles at Lasithi are very close to those in the coastal region to the south. In the Mesara, the tholos tombs show that there are

people in the EM II period living very close to each other, and that the settlement there is very dense. Both these facts suggest that EM settlements cannot be understood simply as isolated village units.

P. Warren: I tried to define the concept of village territory and exemplify it with Myrtos, where the territorial boundaries are fairly clear. I have tried to show that there are two zones: one is that which you work closely from the village, returning to the village daily; the other is an outer zone for intermittent exploitation. Variations of this pattern naturally exist.

Palast und Tempel im Alten Orient und im minoischen Kreta von Stefan Hiller

Abstract

Palace and temple in the ancient Near East and in Minoan Crete. In the Near East, there are two main and often rivaling institutions: the palace and the temple. Even when the Oriental king had sacred powers and functioned as a high priest, the temple remained an autonomous institution with its own economic and administrative spheres. The situation was slightly different in Old Kingdom Egypt where the temple was under stronger control from the pharaoh.

In Crete there are no architecturally definable temples. There are "palaces" but this designation is more conventional than functional. It is suggested here that a more appropriate designation for "palace" would be "palace-temple" or "temple-palace", since the Minoan "palace" incorporates the functions of both the palaces and the temples of the Oriental type. There is some support for this hypothesis in the Linear B tablets of Knossos which suggest that the "palaces" were not only administrative and economic centres but cult centres as well.

Durch Schriftgebrauch und Buchhaltung, ebenso durch ihre auf die Paläste als administrative Zentren bezogene politische und wirtschaftliche Struktur kann die mittel- und die frühe spätminoische Kultur als eine Randprovinz des altorientalischen Kulturkreises betrachtet werden. Zweifellos sind wesentliche Impulse der minoischen Kulturentwicklung nahöstlicher Anregung zu verdanken. Auf sie wird weiter unten noch kurz eingegangen sein.

Im Unterschied zum Nahen Osten, dessen frühe Staatsgebilde im wesentlichen von den beiden Institutionen, die gegenseitig als „Palast“ resp. „Tempel“ apostrophiert werden, geprägt erscheinen, finden sich jedoch auf Kreta keine im engeren Wortsinn als „Tempel“ zu bezeichnenden architektonischen Anlagen. Abgesehen von einzelnen kleineren Kultbauten, die sich als selbständige architektonische Einheiten zu erkennen geben und deren rechtliche und kommunale Stellung nicht eindeutig präzisiert werden kann, finden sich im minoischen Kreta keine in sich geschlossenen architektonischen Komplexe, die sich mit der Bezeichnung „Tempel“ bezeichnen ließen. Dieser Sachverhalt tritt umso deutlicher in Erscheinung, wenn er vor dem Hintergrund der altorientalischen „Tempel“ gesehen wird.² Hier liegen nicht nur entsprechende architektonische Einheiten vor, vielmehr nimmt der altorientalische Tempel auch wesentliche kommunale Aufgaben im sozialen, wirtschaftlichen und administrativen

Bereich wahr. So konnte der altorientalische Tempel nicht nur gelegentlich zur bestimmenden politischen Kraft aufrücken, — er besaß auch in Zeiten unangefochtener politischer Dominanz seitens des Palastes eine weitgehende interne Autonomie hinsichtlich seiner Verwaltung, seines Besitzstandes und seiner wirtschaftlichen Aktivitäten.

Diese Dualität primärer Komponenten der öko-soziologischen und politisch-kommunalen Struktur dürfte in die Anfänge der altorientalischen Gesellschaftsentwicklung zurückreichen.³ Ein generelles Entwicklungsbild des Verhältnisses beider Institutionen zueinander ist allerdings schwer zu entwerfen. Jedenfalls hat es regional und zeitlich bedingte Schwankungen gegeben. Im allgemeinen scheint jedoch die Entwicklung zugunsten der Machtstellung der palatialen Seite verlaufen zu sein. Symptomatisch dafür sind u.a. Reformbestrebungen wie sie etwa Urukagina von Lagash im späteren 3. Jahrtausend v. Chr. anstrebte, um dem Tempel im Lauf der Zeit verlorengegangene Positionen zurückzugewinnen und dessen frühere Stellung im Sinne restaurativer Politik wiederherzustellen. Dabei ist freilich nicht zu übersehen,

¹ Cf. S. Hood, „Minoan town-shrines?“, in *Greece and the Eastern Mediterranean*, Berlin & New York 1977, 138—172; B. Rutkowski, „Temple and cult statue in the Aegean world“, in *Proc.CretCongr.* Athen 1973, 290—294.

² Zur altorientalischen Tempelarchitektur vgl. H. Lenzen, „Mesopotamische Tempelanlagen von der Frühzeit bis zum 2. Jahrtausend“, *Z.A.Syriol.* 17, 1955, 1—36; E. Heinrich, *Die Tempel und Heiligtümer im alten Mesopotamien*, Berlin 1982. — Zur politischen Stellung cf. J.N. Postgate, „The rôle of the temple in the Mesopotamian secular community“, in *Man, settlement and urbanism*, hrsg. von D.J. Ucko, R. Tringham und G.W. Dimbley, London 1972, 811—825; F.R. Kraus, „Le rôle des temples depuis la troisième dynastie de Babylone“, *Cahiers d'histoire mondiale* 1, 1954, 518—545; vgl. daneben auch R. Bogaert, „Synthèse finale“, in E. Lipinski (Hrsg.), *State and temple economy in the ancient Near East*, Leuven 1979, 745 ff.

³ Cf. A. Falkenstein, „La cité-temple sumérienne“, *Cahiers d'histoire mondiale* 1, 1954, 784—814; J.G. Gelb, „On the alleged temple and state economies in ancient Mesopotamia“, in *Studi in onore di E. Volterra*, Rom 1969, 137—154; B. Foster, „A new look at the Sumerian temple state“, *JESHO* 24, 1981, 225—241. Ich bin Prof. B. Foster, der mich auf seine wichtige Studie aufmerksam machte, zu Dank verpflichtet.