

TRADE, CONTACT, AND THE MOV'T OF PEOPLES IN THE
EASTERN MEDITERRANEAN

30 P. Seaton

STUDIES IN HONOUR OF J. BASIL HENNESSY

would have been supplied by reed vegetation from the marshy environment around the now Dead Sea. Many perforated pottery and stone disks have been found at Ghassul,²³ which could well be loom weights or related tools, adding further evidence for the existence of a textile industry.

S. Bourke and J.-P. Descaendres (eds)

Mediterranean Archaeology Supplement 3.

Sydney 1995: Meditarch

KISSONERGA IN CYPRUS AND THE APPEARANCE OF FAIENCE
IN THE EAST MEDITERRANEAN*

Edgar Peltenburg

INTRODUCTION

Basil Hennessy has long been concerned with placing the Early Bronze Age of Cyprus in its historical and chronological perspective. With this in mind he examined the foreign relations of the island during that period in a paper in 1974, and in spite of further excavations and discoveries, it remains an unsurpassed study.¹ The recovery of faience beads at LChal Kissonerga provides an opportunity once more to assess Cypriot foreign relations in the 3rd millennium BC. This short note is offered to Basil as a token of esteem for the significant contributions that he has made to this and other fields of Cypriot prehistory.

In contrast to its later role, Cyprus before the Bronze Age is characterized by its insular evolution. Attempts to identify exotica on the island or exports from the island have either collapsed in the face of more rigorous analysis, or their paucity has only served to emphasize the island's isolation. Thus, even if Aceramic-period obsidian and carnelian are proved to be imports over an extended time range, rather than colonizers' possessions, such exchange had little effect on the Khirokitia culture.² Scientific examination has disposed of Cypriot pottery exports which C. Schaeffer and W. Ward used as evidence that Cyprus played an active and vital role as intermediary in a far-reaching pre-Bronze Age trade network between the Near East and the Aegean.³ Analysis is also required for some EChal stones which are claimed as

* I am grateful to C. Davaras, S. Mazzoni, and F. Pinnock for helpful advice and information.

The map of Figure 1 was drawn by S. Stevenson. It is based on J. Stone and L. Thomas, PPS 22 (1956) 37-84 and K. Foster, Aegean Faience in the Bronze Age (1979), with the following additions (see also n. 32):

Arad:	R. Amiran <i>et al.</i> , Early Arad: The Chalcolithic Settlement and Early Bronze Age City I (1978) pl. 69: 9, 10, 16, 18;
Beycesultan:	S. Lloyd and J. Mellaart, Beycesultan I (1962) 275 fig. 4: 4-5;
Byblos:	M. Dunand, Fouilles de Byblos V (1973) 252, 254, 317;
Ebla/Tell Mardikh:	F. Pinnock, pers. com.;
Jericho:	K. Kenyon, Excavations at Jericho II (1965) Tombs B54, P3, P15, P16, P26, P30;
Kalavassos:	I. A. Todd (ed.), Vasilikos Valley Project 1: The Bronze Age cemetery in Kalavassos village, SIMA 71 Pt. 1 (1986) Tombs 40, 46;
Kissonerga-Mosphilia:	this paper;
Megiddo:	G. Loud, Megiddo 2 (1948) pl. 207: 1, 5;
Qal'at el-Mudiq:	D. Collon <i>et al.</i> , Sondages au flanc sud de Qal'at el-Mudiq (1975) 122-3

fig. 47: 6-7;

Qadesh:	M. Tadmor, IEJ 28 (1978) 28;
Selenkahiya:	M. van Loon, 'New sites in the Euphrates Valley', Archaeology 22 (1969) 67 top;
Troy:	H. Schmidt, Heinrich Schliemann's Sammlung trojanischer Altertümer (1902) 224: 6124; 243: 6107; 244: 6121.

The photograph on Plate 2: 1 is reproduced courtesy The Lemba Archaeological Project, Cyprus.

There are a number of systems currently employed for the division of pre-Bronze Age Cyprus. For details of the following arrangement of the Chalcolithic period into EChal (Early Chalcolithic), MChal (Middle Chalcolithic), and LChal (Late Chalcolithic), see E. Peltenburg, 'Chalcolithic Cyprus', in: V. Karageorghis *et al.*, Cyprus before the Bronze Age. Art of the Chalcolithic Period (1990) 5-22. Kissonerga here refers to the large site of Kissonerga-Mosphilia, Lemba to Lemba-Lakkous.

¹ J. B. Hennessy, 'Cyprus in the Early Bronze Age', in: Australian Studies in Archaeology No. 1 (1974) 1-9.

² For some of these, see I. A. Todd in: V. Karageorghis (ed.), Acts of the international archaeological symposium 'Cyprus between the Orient and the Occident' (1986) 12-28.

³ Petrographic, typological, and chronological analyses have disposed of alleged Cypriot imports in Ras Shamra: see

²³ Hennessy loc. cit. (n. 19).

foreign.⁴ Further uncertainty attaches to the earliest copper objects on the island, ever since tin was recorded in a MChal chisel from Erimi.⁵ This proved to be an atypical result, since tin is lacking in EChal and LChal metal artefacts. However, the problem is even more complex, and N. Gale and colleagues have asserted that these Chalcolithic metals do not correspond with Cypriot native coppers from which they were supposed to have been made.⁶ The matter has been further complicated by the discovery of small copper sources outside the famous copper belt of Cyprus, and by the existence of ore at LChal Kissonerga.⁷ While it seems inherently likely that most Chalcolithic copper objects come from local sources, it is only in the Late EC with its deep mines and plentiful metal that we might assume sustained metal exports from the island.⁸

In spite of these interpretational difficulties, there are a growing number of indications that the island's isolation was slowly beginning to break down from c.3000 BC. The Cypriot Red-on-White and perhaps Black Slip and Combed pottery imports in EB II Tarsus are well known; less so are the Syrian (?) chlorite, Anatolian obsidian, and Syro-Palestinian flint from Kissonerga.⁹ Locally produced stamp seals of Cilician type in Cyprus should also be mentioned here.¹⁰ To this meagre inventory may now be added several faience beads from LChal Kissonerga. It will be argued here that they are Eastern imports or, less likely, local copies, and that in either case they provide additional evidence for the growing susceptibility of the Late Erimi culture to foreign influence.

KISSONERGA AND EARLY FAIENCE IN CYPRUS

Kissonerga, a site which covers about twelve hectares, lies near the south-west corner of Cyprus. Its enormous size, larger than Jericho or Mycenae, is deceptive since it is a result of settlement drift.¹¹ Even if only part was built up at any one time however, it remains by far the largest prehistoric site in western Cyprus and one of the largest on the island. Founded in the late (?) 8th millennium BC, it expanded into a major settlement in the late 4th and was then abandoned in the second half of the 3rd millennium. Current excavations by the Lemba Archaeological Project, Cyprus, have detected five periods of occupation, and all the faience comes from LChal Period 4. It was during this period that a clear distinction arose between buildings, with a single large circular structure, the Pithos House, located at the head of rows

E. Peltenburg in: T. Papadopoulos and S. Xatsistelli (eds.), *Acts of the Second International Congress of Cypriot Studies* (1985) 27-41. H. Klengel, 'Near Eastern Trade and the Emergence of Interaction with Crete in the Third Millennium B.C.', *SMEA* 24 (1984) 7-20, erroneously still refers to these as Cypriot imports, while noting that Eblaite references to Crete (*am-né ki* = Amnisos) and Cyprus (*kaparum*; *urudu*) cannot be sustained.

⁴ See Todd loc. cit. Also to be considered is the possibility that stones like carnelian were collected as 'antiques' from Aceramic sites in Cyprus.

⁵ P. Dikaios, *RDAC* (1936) 50.

⁶ *RDAC* (1986) 135-7.

⁷ U. Zwicker in: V. Karageorghis and M. Demas (eds.), *Excavations at Maa-Palaeokastro 1979-1986* (1988) 427-8. The weight of the ore as reported by Zwicker, 500 g, does not tally with Kissonerga excavation records.

⁸ R. S. Merrillees, 'Ambelikou-Aletti: A Preliminary Report', *RDAC* (1984) 1-13.

⁹ H. Goldman, *Excavations at Gözlü Kule, Tarsus II: From the Neolithic through the Bronze Age* (1956) 112-3, 130. The latter is referred to as Red and Black Streak Burnished in Goldman's report, but having handled some examples retained at Bryn Mawr, I am increasingly convinced of its identity with the Cypriot pottery. Analysis of this important material is warranted. The stones from Kissonerga will be published in E. Peltenburg *et al.*, *The Lemba Archaeological Project, Cyprus, II 1: Excavations at Kissonerga-Mosphilia 1983-92* (in preparation).

¹⁰ See Peltenburg *et al.* op. cit. and E. Peltenburg, *The Lemba Archaeological Project, I: Excavations at Lemba-Lakkous 1976-1983* (1985) 289 pl. 47: 11.

¹¹ For a summary of discoveries at this site see E. Peltenburg, *BASOR* 282/3 (1991) 17-36; for comparative sizes, see for convenience C. Renfrew, *The Emergence of Civilisation* (1972) 243 fig. 14: 8.

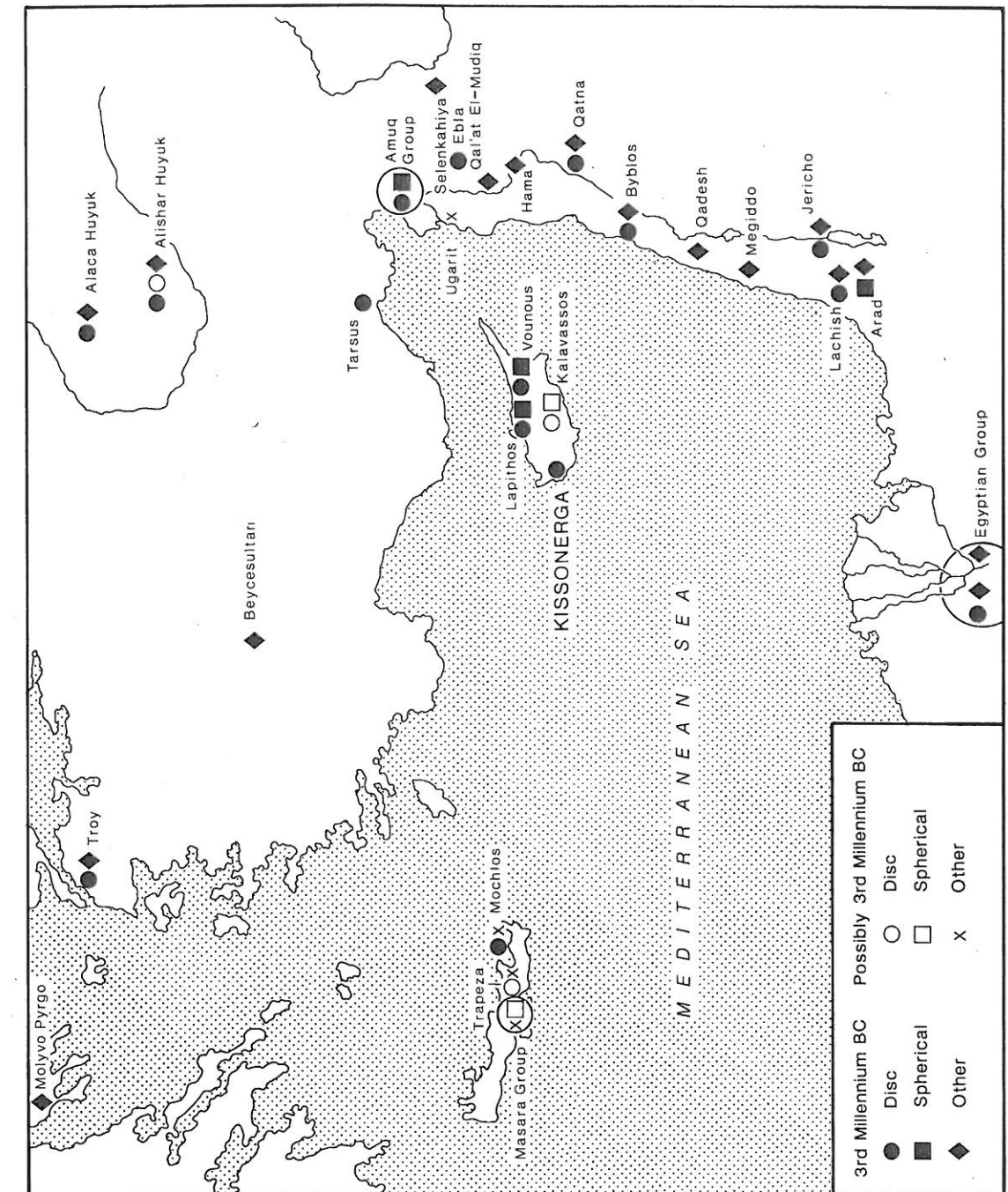


Figure 1. Distribution of 3rd-millennium BC faience in the East Mediterranean basin (based on J. Stone and L. Thomas, *PPS* 22 [1956] 37-84 and K. Foster, *Aegean Faience in the Bronze Age* [1979], with additions; see n. * and, for further Palestinian EB examples from Tell el-Ajul, Bâb edh-Dhrâ, Farah N., Kinnereth, and Tiwal esh-Sharqi, n. 32).

of subsidiary units in our principal exposure of 1025 m².¹² Some of these were refurbished, others entirely rebuilt, so the period lasted for some time.

Radiocarbon dates for Period 4 (Table 1) are susceptible to a number of interpretations, but here it should be stressed that they form a consistent series for the period, and that the Pithos House dates probably derive from structural timbers which provide a *terminus post quem*. They will be considered together with forthcoming determinations in detail in the final report of the excavations.¹³ Making an allowance for the earlier timbers and averaging these dates at two sigma, Period 4 with its faiences may be dated to c.2700–2400 BC, partly synchronous with the Old Kingdom in Egypt, EB III in Syro-Palestine, and EM II in Crete.

Code	Context	Years BP	Years BC
GU-2157	Pithos House Unit 384	3900±50	2208–2565
BM-2279	Pithos House	4030±110	2280–2900
BM-2279R	Pithos House	4180±130	2460–3094
GU-2155	Pithos House Found Trench	4250±170	2460–3360
BM-2529	Pithos House Unit 461	4160±50	2590–2910
BM-2530	Pithos House Unit 384	3960±80	2208–2860
BM-2527	Building 493 Unit 478	4130±50	2509–2889

Table 1. Radiocarbon dates from Kissonerga Period 4. Calibration from G. Pearson and M. Stuiver, Radiocarbon 28 (1986) 839–62. Minimum and maximum age ranges at 2 sigma.

The beads in question come from pit and chamber graves, as well as houses located in different parts of the site. At least one is safely stratified in early levels of Period 4. Contexts will be described in detail in the final report of the excavations. Some 21 examples are recorded, but the final tally is likely to be greater. They are all disc beads (pl. 2: 1) varying from small oblate rings to wider discs with diameters of up to 8 mm. Wear and post-depositional attrition has probably reduced many from true discs with flat parallel sides and edges. In several instances, where leaching has only moderately affected surface condition, the original blue glaze is still lustrous. Cores are either white or white with a greenish tint throughout under a microscope. The latter nuance is indicative of extensive interstitial glass, a characteristic of the self-glazing efflorescence technique in which a copper-based colourant in the sand/quartz body partly migrated to the surface during firing. This requires analytical corroboration. It is a glaze formation manufacturing process well known in Predynastic and Old Kingdom Egypt.¹⁴ Its origins and early distribution sorely need further investigation.

On most chronological systems, these faiences antedate the hitherto earliest known examples in Cyprus by as much as 500 years.¹⁵ Although most often referred to as 'paste' in

excavation reports, the latter equate with what here is termed faience. They were used as funerary goods in Lapithos EC III/MC I Tombs 806A, with its EM III/MM IA bridge-spouted jar, 306A, 313, 319, and 322; and perhaps somewhat earlier in the Vounous cemetery Tombs 2, 15, 19, 20, 23A, and 33.¹⁶ Some examples from the south of the island in Kalavassos Tombs 40 and 46 may be contemporary with the latest of these.¹⁷ There are virtually only two types, spherical and disc. The former preponderates, and discs are known only from Lapithos T. 806A, Vounous T. 15, and Kalavassos T. 46. Most of these later discs have diameters of about 3 mm and hence they can be differentiated from the larger Kissonerga ones.¹⁸

Believing that the faiences were of Egyptian inspiration if not manufacture, E. Gjerstad, V. Grace, and others followed J. Myres and dated them and the associated objects to the Middle Kingdom, and not before the XIth Dynasty.¹⁹ This is a weak argument since the premise is faulty. Egyptian occurrences of these types are common before the XIth Dynasty.²⁰ We still lack secure, independent chronometric dates for the Cypriot Early/Middle Bronze Age and temporal divisions within the period need adjustment. An upper date of c.2300 BC for these Bronze Age faiences may be posited by a number of cross-dates including the association of the Minoan bridge-spouted jar in Lapithos EC III/MC I Tomb 806A: a date closer to 2000 BC is to be preferred.²¹

To be discounted from this discussion are blue discs allegedly from MChal Souskiou. L. Vagnetti considered them to be of faience or similar material and she concluded that a Chalcolithic context was unlikely because such material was not imported into Cyprus before EC III.²² While the Kissonerga evidence now means that this argument is redundant, the beads may be rejected as faience for typological reasons. Faience is a friable material and thus perforations in disc beads are never more than half their diameter, usually much less. The Souskiou 'discs' have very wide perforations, over half their diameter, and so they should be classed as miniature rings. Although analysis, especially of the blue colour, is desirable, they are so unlikely as faience that they are excluded from consideration here.

The Kissonerga beads are thus important because they place the inception of faience in Cyprus in the context of the still poorly known Late Erimi culture. Even if it is partly synchronous with the first stages of the EC, the beads are earlier than extant EC/MC examples and can be dissociated from them on typological grounds. Quantities and the character of assemblages are different. The fact that the Bronze Age occurrences have predecessors on the island raises the important question of whether we are dealing with continuous local production through the upheavals at the start of the Bronze Age, renewed local manufacture, or a series of importations. In the absence of analysis, which ideally should be carried out on faiences from Cyprus and other contemporary locations to be of value, and in the absence of substantial exposures of other LChal/EC settlements, it is not possible to treat this issue satisfactorily. Nonetheless, early faience industries elsewhere possess certain characteristics which, when applied to the Cypriot case, allow us to make specific assumptions.

¹² The Pithos House is referred to as Building 3 in preliminary accounts: e.g., E. Peltenburg and Project Members, RDAC (1986) 28–39.

¹³ See Peltenburg *et al.* op. cit. (n. 9).

¹⁴ Described in P. Vandiver, 'Egyptian Faience Technology', in: A. Kaczmarczyk and R. Hedges (eds.), *Ancient Egyptian Faience* (1983) A-31-3, A-78-90, it is not always possible to be certain if this or another technique was employed: see M.

Tite, 'Characterization of Early Vitreous Materials', *Archaeometry* 29 (1987) 21–34.

¹⁵ The chronology of Early Bronze Age Cyprus is a vexed problem. For a recent review, see A. Knapp, CA 31 (1990) 147–76. It should be noted that not all dates in Knapp's Table 4 on p. 153 are relevant to this period, least of all the Kissonerga date. The revised determination of this assay is given here in Table 1, BM-2279R, and can be seen to be slightly earlier.

¹⁶ See the relevant tomb inventories in V. Grace, AJA 44 (1940) 10–52; E. Gjerstad *et al.*, SCE I (1934); and P. Dikaos, *Archaeologia* 83 (1940) 1–168.

¹⁷ Tombs 40 and 46 contain faience beads, and these are amongst the earliest in the cemetery, MC I: I. A. Todd (ed.), *Vasilikos Valley Project 1: The Bronze Age cemetery in Kalavassos village*, SIMA 71 Pt. 1 (1986).

¹⁸ The details of the Lapithos T 806A examples are given in V. Grace's catalogue which is more conveniently reproduced by R. Merrillees in: V. Karageorghis (ed.), *Acts of the*

International Archaeological Symposium: The relations between Cyprus and Crete ca. 2000–500 B.C. (1979) 41–51.

¹⁹ See J. Myres, *Handbook of the Cesnola Collection of Antiquities from Cyprus* (1914) xxix, 272; Grace art. cit. (n. 16) 30.

²⁰ See bead types in n. 32, below.

²¹ See Knapp art. cit. (n. 15) and P. Warren and V. Hankey, *Aegean Bronze Age Chronology* (1989) 115.

²² SMEA 21 (1980) 64 pl. XIX: 14a–e.

Technological innovation in society normally operates in a climate of adaptation and change which may be visible in other aspects of the archaeological record. It rarely takes place as independent invention, and is usually explained in terms of the transfer of techniques unchanged, imposition, or adaptation.²³ Autonomous early faience industries are characterized by one or more recurrent archaeological circumstances. These include (1) product uniqueness, (2) frequency of examples, (3) technological idiosyncracies, and (4) contemporary metalworking.²⁴ Examples of such industries are evident in prehistoric Mesopotamia and Bronze Age Italy, Central Europe, and Britain.

When faience is first clearly attested in Mesopotamia, in the 4th millennium BC, beads, pendants, and seals of local character in this medium are widely dispersed, and even if inadequate data exists to assess the metal industry, there can be no doubt that its products were widespread.²⁵

In Britain, distinctive quoit and star-shaped beads at many sites during the mid-2nd millennium, when metal was common, satisfy criteria (1) and (2).²⁶ In Central Europe, the cobalt-rich annular and four-pointed beads occur in localized groups, often in association with metal-rich Aunjetitz material.²⁷ Although Italian evidence for (3) and (4) is lacking, L. Barfield has convincingly shown that the unusual buttons and possibly some other beads in northern Italy were probably made in the Po Plain.²⁸ In all these regions therefore, two or more of our criteria pertain.

Turning now to the situation in LChal Cyprus, we can see that it fails to satisfy criteria for local production, for a variety of reasons. Thus, it fails to meet standards required of criterion (2), frequency of product. Faience is scarce at Kissonerga, absent from Lemba, Ambelikou-Ayios Georghios, Philia-Vasiliko, and early tombs at Nicosia-Ayia Paraskevi, suggesting that it was rare in the mid/late-3rd millennium.²⁹ Indeed, at Nicosia-Ayia Paraskevi ring beads are made of varied stones rather than faience, and it may be remarked that had blue discs been desired, local picrolite of the correct colour was readily available.³⁰ The number of sites with adequate data, however, remains small.

With respect to criterion (3), there is nothing obviously distinctive about the Kissonerga beads, but scientific examination is needed.

We are confronted by chronological issues in an assessment of (4), concurrent metalwork. Philia with its mould-cast copper knives, axes, pins, and ear-rings could well be contemporary with part of Kissonerga 4 which has little metal.³¹ This means that there may have been a link between the appearance of faience and a much-expanded range of metalwork in certain parts of the island. While there are clear advances in pyrotechnological skills during the Late Erimi and Philia cultures, it remains difficult to correlate these with the advent of faience. A

²³ There is an extensive literature on this subject. See, e.g., McGovern in: P. McGovern and M. Notis, *Ceramics and Civilization IV* (1989) 1–11.

²⁴ Harding gives further criteria for faience production in Bronze Age Europe, but these are inapplicable in our case: A. Harding, 'The Earliest Glass in Europe', *ARozhl* 23 (1972) 190.

²⁵ P. Moorey, *Materials and Manufacture in Ancient Mesopotamia*, *BAR Int. Ser.* 237 (1985) 23, 143.

²⁶ The typological distinction is well pointed out in R. Newton and C. Renfrew, 'British Faience Beads Reconsidered', *Antiquity* 44 (1970) 203.

²⁷ See Harding loc. cit. (n. 24); A. Harding and S. Warren, *Antiquity* 47 (1973) 64–6.

²⁸ L. Barfield, *Antiquity* 52 (1987) 150–3.

²⁹ For these sites, see Peltenburg op. cit. (n. 10); P. Dikaos, 'The Stone Age', in: *SCE IV/1A* (1962) 141–9, 160–76; J. B. Hennessy et al., *Ayia Paraskevi and Vasilika. Excavations by J. R. B. Stewart* (1988), respectively.

³⁰ 'Greenstone' beads in J. R. B. Stewart, 'The Early Cypriote Bronze Age', in: *SCE IV/1A* (1962) 262 fig. 105, are made from picrolite.

³¹ Dikaos art. cit. (n. 29) 175 fig. 84. Direct evidence that the Late Erimi and Philia cultures were contemporaneous is still wanting, even though many assume this to be the case (e.g., Knapp art. cit. [n. 15]). For possible indications of contemporaneity, see Peltenburg art. cit. (n. 11) and 'The prehistory of west Cyprus: Ktima Lowlands investigations 1976–1978', *RDAC* (1979) 94–7.

securely stratified bead from early Period 4 moreover probably antedates the relevant Philia metalwork, and hence the necessary temperatures for faience production. We clearly need greater chronological precision and information on local pyrotechnological achievements to evaluate this criterion.

If the current situation in Cyprus is mainly negative with respect to criterion (2) and ambiguous for (3) and (4), no such uncertainty attaches to (1). Identical small discs occur at earlier and contemporary EB sites on the adjacent mainland (fig. 1). They were especially common in Egypt, starting at the latest in Protodynastic times and becoming very frequent during the Old Kingdom.³² There is thus no typological detail by which we can isolate a Cypriot industry, and we have seen that typological idiosyncrasy usually existed in independent production centres. On balance therefore, these beads are likely to have been imported, but whether inspired from abroad or imported, they may be added to the evidence for a breakdown of Cypriot isolation by the mid-3rd millennium BC.

The advent of faience in Cyprus corresponds with innovations both in the settlement and with regard to funerary practices. At the LChal sites of Lemba Period 3 and Kissonerga Period 4, there are major structures which contain centralized storage facilities. The Kissonerga Pithos House alone contained some 50 pithoi together with standard-sized ladles, a stamp seal, and other equipment indicative of the administration and control of consumables.³³ Differential burial rites are also a feature of this period, with the long-lived chamber tomb making its first appearance in Cyprus.³⁴ And yet, if trade was the trigger for the observed changes, whether by the emergence of certain families in advantageous positions, or by some other mechanism, then one would expect more than these beads. That Cyprus was being influenced from abroad cannot be in doubt, but in the west of the island at least such influences seem to have been adjusted to the continuing dictates of small-scale society.

THE WIDER CONTEXT

The inception of the derived Cypriot faiences is likely to have taken place in the context of increased maritime activity. Of especial concern here therefore is the profound reorientation of foreign naval enterprise that occurred along the adjacent Levantine coast during the mid-3rd millennium. As this involved Egypt, which was already a major production centre of faience discs and other faience objects well before this time, the change may have specific relevance to the earliest appearance of faience in Cyprus and, as will be argued below, further afield.

³² They are already in existence in the Gerzean Period: Vandiver art. cit. (n. 14) A-75-7; C1-3; for well-dated examples from the Abydos Protodynastic tombs, see W. Petrie, *The Royal Tombs of the Earliest Dynasties* (1901) pls 38: 11, 19, 24; 44: 41–2; and W. Petrie et al., *Tarkhan I and Memphis V* (1913) pl. 14: 52, 57, 64; from the Old Kingdom: G. Brunton, *Qau and Badari II* (1928) 19 pl. 102: 86. They are more common on the Levantine mainland than indicated in fig. 1. De Vaux, for example, notes their frequency on Early Bronze Age sites in Palestine: *CAH I 2* (3rd ed.) 226; see also J. R. B. Stewart, *Tell el-'Ajjul, SIMA 38* (1974) Tomb 1546; R. T. Schaub and W. E. Rast, *Bâb edh-Dhrâ: Excavations in the Cemetery Directed by Paul W. Lapp* (1965–67). Reports of the Expedition to the Dead Sea Plain, Jordan, I (1989): 302–9 (for Bâb edh-Dhrâ, Tell el-Fara'h [N], and Kinnereth); J. Tubb, *Excavations at the Early*

Bronze Age Cemetery of Tiwal esh-Sharqi (1990) 30.

³³ For a general survey, see Peltenburg art. cit. (n. 11) and 'Chalcolithic Cyprus', in: V. Karageorghis et al., *Cyprus before the Bronze Age. Art of the Chalcolithic Period* (1990) 5–22. It should be noted that the Kissonerga features of rectangular architecture, organized religious/ceremonial practices, centralized storage, and ceremonial/public structure are mistakenly attributed to the Philia culture by Knapp art. cit. (n. 15) 157 Table 5. They all belong to Kissonerga Periods 3 and 4, while Philia culture traits only appear in Period 5.

³⁴ The Philia-*Drakos* A chamber tomb is sometimes attributed to the LNeo (e.g., K. Nikalsson, *Early Prehistoric Burials in Cyprus, SIMA 96* [1991] 117–8), but it lacks secure dating evidence.

Prior to the Old Kingdom, Egyptian contacts with the Levant were focused on southern Palestine. Textual and archaeological evidence such as the presence of Egyptian domestic pottery and Narmer *serekhs* in a band of sites along the latitude of Tell Arad, attest to the intensity of this overland interaction.³⁵ While more northerly sites were by no means excluded both now and earlier, there is little that measures up to this varied evidence for Egyptian contact in southern Palestine. With the formation of a more clearly defined central state system in the Old Kingdom, Egypt's principal Asiatic trade shifted northwards to Byblos and became sea-borne.³⁶ Some 60 objects bearing Egyptian royal names from the 4th to 6th Dynasties were found at this port site, an unparalleled concentration indicative of a state-to-state trading sphere. The objects are mainly stone vessels, in other words light weight, high-value manufactured gifts, sent to secure heavy raw materials and processed products not naturally available in Egypt. This coastal trade was on a large scale. L. Marfoe has described how, once established, it developed 'in part [as] a product of this spiralling interdependence between timber procurement, ship construction and carrying capacity'.³⁷ Sea-going 'Byblos' (*kbn*) ships are mentioned and perhaps depicted with bulk produce.³⁸ It is generally agreed that in the reign of king Snefru of the 4th Dynasty, reference to forty ships of timber concerns Byblos or its vicinity.³⁹ As the diorite vessel of the 4th-Dynasty king Khefren and an alabaster lid of the 6th-Dynasty king Pepi I at Ebla demonstrate, Old Kingdom royal products also reached beyond Byblos.⁴⁰ There are moreover other Levantine connections with Egypt which suggest that Cyprus may well have been affected by this dramatically enhanced sea-borne activity.

Mid-3rd-millennium links are evident between Egypt and areas to the north and west of Cyprus. These are likely to have been sea-borne and to have entailed stopovers on the island. Thus, a northerly import to Egypt is a Cilician EB II pitcher found in mastaba G 1233 at Giza, to be dated to the reign of Cheops. It contained traces of resin and it emphasizes the importance of coniferous resins for mummification.⁴¹ There is more evidence for contacts with the West.

Within the Aegean, pre-palatial Crete is acknowledged as the only area with sustained and precocious foreign relations during the 3rd millennium. The evidence for contacts, far from having evaporated from the archaeological record as J. Cherry argues, is clear and it remains critical to debates on the formation of disparate centres of wealth and the emergence of Minoan palaces.⁴² In his most recent authoritative assessment of the numerous imported and copied Egyptian stone vessels, P. Warren concludes that certain Egyptian Early Dynastic obsidian and diorite pieces belong to EM II contexts, as does the earliest imitation, a 5th–8th Dynasty sleeve-collar amphora from Mochlos.⁴³ O. Krzyszkowska notes the existence of a

hippopotamus tusk segment from EM II Knossos and suggests that it, too, came from Egypt.⁴⁴ There is also a mid-3rd-millennium silver seal from Mochlos EM II Tomb I which is regarded as Syro-Palestinian and a possibility that some copper from EM II tombs at Ayia Photia and Mesara may have come from Cyprus.⁴⁵ EM II Mochlos has also yielded some of the earliest faience beads in Crete and these have been treated by most as Eastern, by some as Anatolian or local inventions. They merit closer scrutiny in the light of the contemporary Kissonerga faience beads.

The Mochlos beads are from Tomb VI, one of the richest and best dated tombs of the cemetery. They are mainly 'porcelain' (sic) discs; R. Seager rightly attributed the only other beads, gadrooned, to minor EM III–LM I disturbance.⁴⁶ These discs are typologically identical with the Kissonerga beads, whereas later examples on both islands are more varied, with discs either absent or rare. Those from the collective burials on the Mesara for example include spherical, cylindrical, biconical, gadrooned, and barrel types.⁴⁷ Spherical beads predominate in the northern cemeteries of Vounous and Lapithos in Cyprus.⁴⁸ The greater diversity in Crete suggests that a native faience industry was developed there more rapidly than in Cyprus, but the first stage in both islands appears to be similar.

There is little in favour of an Anatolian derivation for the Cretan beads or for the technique.⁴⁹ Not only are potential centres, at Alaca and Alishar, quite distant, but EM II Crete shows few signs of contact with inland Anatolia. There may be a little Anatolian obsidian, but as G. Cadogan notes, the meagre traces of Cretan foreign relations are primarily with Greece, the Cyclades, and the Levant.⁵⁰ The results of lead isotope analyses of metalwork from Crete may mean that the Cycladic islands were more closely involved with Crete than has often been assumed.⁵¹

Since the earliest Cretan faiences fail local production criteria (1) and (2), diversity and frequency of product, it appears most likely that the EM II beads should be considered as further examples of Eastern imports. Imitations of Egyptian stone vases, mentioned above, indicate that Cretans adapted Near Eastern forms, but there are no stylistic attributes to distinguish the faience beads. Mochlos itself is famed for a disproportionately large number of exotica, including Eastern chalcidony, carnelian, and ivory (?), and it may have functioned as a 'gateway' community at this time.⁵² While there are few adherents to A. Evans's theory

³⁵ M. Wright, BA 51 (1988) 143–62; and the series of essays in P. de Miroschedji (ed.), *L'urbanisation de la Palestine à l'âge du Bronze ancien*, BAR Int. Ser. 527 (1989) 355–453.

³⁶ Ward first clearly described this shift and his assessments have been widely followed: W. Ward, 'Egypt and the East Mediterranean from Predynastic Times to the end of the Old Kingdom', JESHO 6 (1963) 1–57. For some of its likely implications north of Palestine, see L. Marfoe, 'Cedar forest to silver mountain: social change and the development of long-distance trade in early Near Eastern societies', in: M. Rowlands *et al.* (eds.), *Centre and periphery in the ancient world* (1987) 25–35.

³⁷ Art. cit. 27.

³⁸ The ships depicted on Sahure's funerary temple at Abusir may not be called 'Byblos ships', but they are shown

returning from Asia with heavy cargo: G. Reisner, *A History of the Giza Necropolis I* (1942) 410 fig. 274.

³⁹ Ward art. cit. (n. 36) 22.

⁴⁰ G. Scandone-Matthiae, AAAS 29/30 (1979–80) 189–99.

⁴¹ G. Reisner and W. S. Smith, *A History of the Giza Necropolis, II* (1955) 73.

⁴² For minimalist views on the significance of Eastern contacts, see Renfrew op. cit. (n. 11) 445–9 and J. Cherry in: O. Krzyszkowska and L. Nixon (eds.), *Minoan Society* (1983) 33–46; maximalist: M. Wiener in: N. Gale (ed.), *Bronze Age Trade in the Mediterranean*, SIMA 90 (1991) 325–7.

⁴³ Warren and Hankey op. cit. (n. 21) 125–7.

⁴⁴ BSA 33 (1988) 228–9.

⁴⁵ Warren & Hankey op. cit. 127 pl. 3. Mazzoni notes that the style of the seal continues through the final part of the 3rd millennium, but she prefers a mid-3rd-millennium date (pers. com.). For another Near Eastern seal from Mochlos, see K. Branigan in: R. Laffineur and L. Basche (eds.), *Thalassa. L'Egée préhistorique et la mer* (1991) 101. For the copper, see Z. Stos-Gale and C. Macdonald, 'Sources of Metals and Trade in the Bronze Age Aegean', in: Gale (ed.) op. cit. (n. 42) 267.

⁴⁶ *Explorations in the Island of Mochlos* (1912) 55 VI.35, and p. 48 for the later beads. Further material from this tomb apparently did not include faience (C. Davaras, *Early Minoan Jewellery from Mochlos*, BSA 70 [1975] 101–14) nor was faience found in the rich and partly contemporary cemetery of Ayia Photia (C. Davaras, pers. com.).

⁴⁷ S. Xanthoudides, *The Vaulted Tombs of the Mesara* (1924) pls. 26: 811; 39: 672; 58: 1169–71; Trapeza seems to be the only other site to have yielded faience disc beads (H. and J. Pendlebury and M. Money-Coutts, BSA 31 [1936] 122–5 pl. 19c) together with Eastern objects (Renfrew op. cit. [n. 11]

447–8), but the material could be as late as MM I.

⁴⁸ e.g. Grace art. cit. (n. 16) fig. 31: 28, 30, 69, 79; Dikaios art. cit. (n. 16) Tombs 15, 19, 23A.

⁴⁹ This was suggested by Renfrew op. cit. (n. 11) 448. Since the Mochlos faience bowl was not preserved, it is not known how similar it was to Anatolian examples, *pace* M. Cosmopoulos in: Laffineur & Basche (eds.) op. cit. (n. 45) 161.

⁵⁰ In: G. Cadogan (ed.), *The End of the Early Bronze Age in the Aegean* (1986) 156–8.

⁵¹ For the general assumption of Cretan self-sufficiency till the Old Palace period, see, e.g., G. Cadogan in: Karageorghis (ed.) op. cit. (n. 18) 63–8; cf. Z. Stos-Gale in: A. Hauptmann *et al.* (eds.), *Old World Archaeometallurgy* (1989) 279–91.

⁵² Most commentators believe that faience at EM II Mochlos was imported, though opinion is divided on an Egyptian (e.g., R. Hutchinson, *Prehistoric Crete* [1962] 181) or Syrian (e.g., K. Foster, *Aegean Faience of the Bronze Age* [1979] 56–9) origin. For the extraordinary status of Mochlos, see Branigan art. cit. (n. 45).

of direct Egyptian-Minoan links, the favoured Syrian-Cretan northern corridor artery for these Oriental imports has always lacked supporting evidence from intermediate stations.⁵³ This led Cadogan to suggest that 'direct contact of Crete with Syria and Lebanon, and possibly Egypt, came before contact with Cyprus', in spite of the inherent likelihood that Cyprus served as an obvious 'way station'.⁵⁴ In the reconstruction presented here, the Kissonerga faïences provide evidence for mid-3rd-millennium Cyprus-Crete contacts for the first time, not in the form of reciprocal exchanges between the islands so much as residues of what A. and S. Sherratt refer to as relay trade initiated in North Syria and Cilicia.⁵⁵ The date of these beads roughly coincides with much-expanded Egyptian maritime enterprise consequent upon the establishment of the Old Kingdom and dynasts' needs for foreign prestige goods for ostentatious use in grandiose ceremonial centres. While much more information is required, it may be suggested as a working hypothesis that, ultimately, the most likely historic and economic background for the appearance of faïence beads in these Mediterranean islands is the maritime reorganization of Egyptian trade with Syro-Palestine, Ward's second phase of Egyptian contacts with the East Mediterranean, and the emergence of major Levantine states in the 3rd millennium BC.⁵⁶

Cyprus itself is unlikely to have played an active role in these mid-3rd-millennium exchanges. There are substantial exposures of sites of that period now, at LChal Kissonerga and Lemba, and nothing like the number of imports or concentrations of wealth as in contemporary Crete. The situation in the north of the island might be different, but even the prestigious Vasilia tombs lack definite exotica such as the gold and silver which is so plentiful at Mochlos. We need much more information to determine how the beads might have arrived at Kissonerga. Although short-haul ships might claw their way round the south coast of Cyprus, and hence close to Kissonerga, a safer passage lies to the north.⁵⁷ Direct contact with coastal traffic therefore is unlikely. Now that we have significant LChal settlement and cemetery evidence, J. Yakar's claim that Cyprus acted as middleman between Anatolia and Egypt, L. Bordaz's that it supplied copper to the West, or Schaeffer's that it assumed the role of transmitter of European influence to the Near East and vice versa, may be seen as retrospective arguments, without the necessary supporting evidence from Cyprus itself.⁵⁸ Even at the end of the next period, EC III, H. Catling and J. MacGillivray are unwilling to adduce an active role for Cyprus for the transit trade between Crete and Syro-Palestine.⁵⁹

⁵³ A. Evans, *The Palace of Minos*, I (1914) 16–17. Helck allows for such a route and sees Egyptian interests in the Aegean inspired by the desire for Trojan silver: W. Helck, *Die Beziehungen Ägyptens und Vorderasiens zur Ägäis bis ins 7. Jahrhundert v. Chr.* (1979) 17. The normal sailing route for Egypt-Crete maritime traffic was via Cyprus or the Cilician-Lycian coast, as emphasized by J. Pryor, *Geography, technology, and war, Studies in the maritime history of the Mediterranean, 649–1571* (1988) 5, 96.

⁵⁴ Cadogan art. cit. (n. 51) 64.

⁵⁵ A. and S. Sherratt, 'From Luxuries to Commodities: the Nature of Mediterranean Bronze Age Trading Systems', in: Gale (ed.) op. cit. (n. 42) 367–8. The evidence discussed here, however, antedates several aspects cited by the Sherratts.

⁵⁶ Ward art. cit. (n. 36) 44. There is no evidence to indicate that this expansion involved Cyprus in regular trade with seafarers on the Byblos-Nile Delta route, as suggested by O. Höckmann, 'Frühbronzezeitliche Kulturbeziehungen im

Mittelmeergebiet unter besonderer Berücksichtigung der Kykladen', in: H.-G. Buchholz (ed.), *Ägäische Bronzezeit* (1987) 53–120.

⁵⁷ See Pryor op. cit. 55, 70 for the southerly route. P. Bikai, *The Phoenician Pottery of Cyprus* (1987) 70 suggests that the atypically early Phoenician pottery at the south-west site of Kouklia may indicate Phoenician stopovers to the West, and hence a southerly route.

⁵⁸ J. Yakar, *The Later Prehistory of Anatolia. The Late Chalcolithic and Early Bronze Age*, BAR Int. Ser. 268 (1985) 217; L. Bordaz, *The Metal Artifacts from the Bronze Age Excavations at Karatas Semayük, Turkey and their Significance in Anatolia, the Near East and the Aegean* (1982); C. Schaeffer, 'Les fondements pré et protohistoriques de Syrie du néolithique précéramique au bronze ancien', *Syria* 41 (1961) 20–1.

⁵⁹ BSA 78 (1983) 7–8; see also H. Catling, *BSA* 86 (1991) 1–7.

What is likely for the turn of the 3rd-2nd millennium is even more probable five hundred years earlier.

One may go further and suggest that, even if they were coastal huggers, large oared sailing ships must have been responsible for this long-haul type of trade. C. Broodbank has shown that the Aegean longboat, thought by many to have been the craft in which Western ventures to the East were conducted, was quite unsuited as a trading vessel.⁶⁰ Since oared sailing ships are well known in the East from at least the time of Sahure and they do not appear on Minoan seal-stones until EM III-MM I, the craft in which these early voyages were made were probably Eastern. It is from EM III-MM I that trade patterns in the East Mediterranean alter and Minoan material appears in Cyprus. This may be correlated with the Minoan adoption of certain features of Eastern ships which led to a new phase of East Mediterranean long-haul shipping, one in which Minoan Crete was to play an increasingly significant role.

SUMMARY AND CONCLUSIONS

Disc beads from securely stratified and well dated contexts at mid-3rd-millennium Kissonerga are the earliest known faïences from Cyprus. Criteria for local faïence production, as deduced from other prehistoric faïence industries, can only be applied in part to the Cypriot evidence, and these suggest that the beads were imported, probably from the Syro-Palestinian mainland, though an ultimate Egyptian origin cannot be ruled out. The faïence provides additional evidence that Cyprus was gradually drawn into the internationalism of the time, during the *floruit* of its Late Erimi culture and perhaps before the establishment of the Philia culture in the North. There are few signs that structural change in LChal society ensued as a result of this and other exchanges, but the situation could be different in the North. The beads are approximately synchronous with, and similar to, the earliest examples in Crete, at Mochlos, and they constitute further evidence for Syro-Cilician directed exchange with pre-palatial Crete in the mid-3rd millennium. Cypriot ships are unlikely to have played a role in this trade. It is suggested that the catalyst for the appearance of faïence and other low bulk/high value luxuries in these Mediterranean islands was the impact on local shipping of a fundamental reorientation of Egyptian trade with Byblos at the beginning of the Old Kingdom and the emergence of major city kingdoms in Syria. Active Cretan involvement in Levantine sea-lanes is unlikely to have occurred before EM III-MM I.

⁶⁰ 'The Longboat and Society in the Cyclades in the Keros-Syros Culture', *AJA* 93 (1989) 319–37. Hutchinson's comments (op. cit. [n. 52] 93–5) on the influence of 'Byblos

ships' in the first representations of sails on Minoan seals remain important.