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The drawing reproduced as cover illustration represents Kristian Jeppesen's proposal for the restoration of the Maussoleion, in particular of the colonnade (PTERON) in which portrait statues of members of the Hecatomnid dynasty said to have been carved by the famous artists Scopas, Bryaxis, Timotheos, and Leochares were exhibited.  
Drawing by the author, see p. 173, Abb. 5, C.

# The Cyclades and the Mainland in the Shaft Grave Period

## – a summary<sup>1</sup>

Søren Dietz

### Abstract

*It is usual to consider the main economic, social and artistic trends in early Mycenaean society as demonstrated in the Shaft Graves of Mycenae to be derived more or less directly from Crete. In this scenario, societies on the Cycladic islands fulfil the role of sailors and ship owners procuring the one-sided delivery of ideas and goods from Crete to the Mainland. It is the claim of the present article that the development of early Mycenaean culture and society can only be explained as a rather long-termed process. It is shown that relations with the Cyclades, both in the Argolid and in Attica, were substantial during the formative phase of the Mycenaean society – during MHIII in Mainland terminology. During this time, when the first rich graves are found in Mycenae, Cretan influence is either non-existent or insignificant, on the Mainland as in the Cycladic islands. The suggested explanation is that Cretan societies had not yet recovered and Minoan foreign relations were not re-established after the destruction of the Old Palaces. Cycladic ships, predominantly from Phylakopi in Melos, ensured the important supply of metals – probably from the lands of the Eastern Mediterranean.*

*Minoan influences are discernible again in full strength during the early part of LMIA and early LCI in the Cyclades. It was not until then that well known Minoan features within the fields of architecture, wall-painting, pottery and communication systems were introduced on the islands. Akrotiri on Thera – as the island under strongest influence from Crete (perhaps even a “colony”) – became the leading Cycladic island in trade relations with the surrounding world. On the Mainland this new trend was felt through import of Thera pottery alongside Minoan – but first of all through an increasing*

*sophistication in metalwork and other fields of handicraft. In the years before the volcanic destruction of Thera, Mainland influences are felt strongly on Thera. It should be emphasized, however, that the new preeminent objects in Mycenae, in a new style, were most probably produced by Mainland craftsmen, inspired from Crete, working in a technology and tradition established 150 to 200 years earlier when Crete, the Cyclades and the Mainland enjoyed a flowering commercial and ideological (?) intercourse. Modes of exchange during the years of the later Shaft Graves and the “international spirit” prevailing the Aegean area during the most flourishing years of the New Palaces in Crete, cannot be explained by simple models. The Cyclades, however, hardly ever regained the political strength they enjoyed during the period of the earlier Shaft Graves.*

### Mainland Chronology and Cycladic Pottery Imports

#### The Grave Circle B at Mycenae

The excavation of the grave circle B at Mycenae in the 1950's established possibilities for a more careful evaluation of Cycladic relations with the Mainland during the shaft grave period. In contrast to the finds from Schliemann's grave circle the new graves contained a considerable amount of imported Cycladic pottery indicating that there might have been more than two actors involved in the history of early Mycenaean development. In addition the epoch-making excavations of the town of Akrotiri on Thera in the sixties and later provided important new information about Cycladic/Mainland relations in the period. In order to give a reliable picture of the character of Cycladic influences at

#### NOTE 1

This contribution is based on a lecture given at the Goulandris Museum of Cycladic Art in Athens, November 7, 1994. I am grateful for comments and reactions especially from Professor Christos Doumas, Dr. Marissa Marthari and Dr. Kathie Demakopoulou.

Mycenae it was, however, necessary to establish a safe local chronological framework for the period in Mycenae and the Northeastern Peloponnese. If Minoan and Cycladic influences were shown to be contemporary it would support the idea of the Cyclades as a transit area probably acting as part of a Minoan Thalassocracy; if not, other explanations had to be found.

It seems generally accepted that the chronology of the Shaft Graves should be based on local pottery sequences.<sup>2</sup> The problem with using sequences from the Shaft Graves mainly derives from the fact that associations in most cases, and certainly the most important ones, are dependant on interpretations. This goes for both grave circles, even if the situation for the Circle A is of course the more difficult. As a control, however, it is possible, to a certain degree, to test the reliability of the chronological reconstructions against chronological unities from other parts of the Argive plain. As for settlement material the situation is even worse as hitherto only one stratified sequence has been published.<sup>3</sup>

It should be emphasized that a three phase division of the transitional period MH/LH has been suggested recently by most scholars occupied with analytical studies of the Shaft Grave chronology.<sup>4</sup> There are, however, significant differences concerning the definitions of the various phases. In this connection I should like to comment on the controversy existing between systems developed by Graziadio (1988) and Dietz (1991) relating to the classification of the graves in the Circle B. First of all it should be pointed out that there is consensus on certain important points. Thus there are not many important differences between the contextual groupings of the pottery (though there are some).<sup>5</sup> There is on the other hand general agreement concerning the suggestion that "Yellow Minyan" goblets with concentric incised rings around the stem and lower body (group 1) belongs to an earlier phase than goblets without this characteristic feature (group 2).<sup>6</sup> In Dietz's terminology (1991) this di-

stinction divides the phases MHIIB and LHIA while it corresponds to the division between Late Phase I and Late Phase II in Graziadio's chronology (1988).

Figure 1 compares the two chronological systems

*Graziadio Early Phase/Dietz MHIIB (early)*: The associations classified by Graziadio fall predominantly within an earlier part of Dietz MHIIB. This phase was not explicitly defined by Dietz (1991). It was suggested however that graves in the Argolid with shallow rounded kantharoi (type AA-1) should probably be arranged in an earlier subphase of MHIIB.<sup>7</sup> The divergences concerning graves Zeta, Iota, Lambda<sup>28</sup> and Xi are not important as they are placed within the general MHIII phase. Divergences derive from different analytical concepts of the local pottery development. It should be emphasized that the development in the local pottery is gradual with several typological overlappings. The definition of phases depends on available associations. The phase MHIIIA is first of all defined on the stratigraphical settlement deposits from Asine Lower Town. Joseph Maran is undoubtedly correct when he suggests that there might not be exact correspondance between the MHIIIA settlement and the MHIIIA phase defined by the grave associations. In my opinion, however, this does not mean that the difference between MHIIIA and MHIIB might depend on social criteria.<sup>9</sup> The task is to divide a continuum, and from this point of view there are no great differences between Dietz and Graziadio as to the dating of the Circle B graves. More primary material is needed in order to settle the details. A major discrepancy, however, is that grave Lambda 1 was attributed to the Late Phase II (=LHIB) by Graziadio. There does not seem to be sufficient information on the stratigraphy for dating this grave later than grave Lambda.<sup>10</sup> The Cycladic jug in "Black and Red" style (Lambda 1, 114) was found with a local kantharos type AA-1 and the context should thus be dated early in MHIIB. We

NOTE 2  
For instance Kilian-Dirlmeier 1986, 177, n. 8 and Graziadio 1988, 344. Dietz 1991, 23-26.

NOTE 3  
Dietz 1991, 252, Fig. 79.

NOTE 4  
Dickinson 1977, Dietz 1980 and 1991, Graziadio 1988 and Kilian-Dirlmeier 1986.

NOTE 5  
Compare Graziadio 1988, 346-350 with Dietz 1991, 106-132 and 243-246. In Dietz 1991 also "non-pottery" groups are defined.

NOTE 6  
Graziadio 1988, 344 following Dietz 1980, 80-81 and 141-144.

NOTE 7  
Dietz 1991, Fig. 77. The painted kantharoi type AA-1 are first of all characteristic for Zerners phase V:7 in Lerna=Dietz phase MHIIIA.

NOTE 8  
Graziadio did not define a phase corresponding to Dietz MHIIIA.

NOTE 9  
Maran in a review of Dietz 1991, PZ 68, 1993, 159.

NOTE 10  
Graziadio 1988, 348.

POTTERY		▲	▲										■		▲					
▲ LDW Argive		*	▲	*		(*)				*	*			*					*	
■ Minoan			●																	
● Cycladic later types																				
* Cycladic early types																				
	A	B	Γ	Δ	E	Z	H	I	K	Λ	Λ1	Λ2	M	N	Ξ	O	Π	P	Υ	Φ
MH IIIA																				
Early Phase																				
MH IIIB (early)																				
Late Phase I																				
MH IIIB (late)																				
LH IA				?																
Late Phase II																				
LH IB																				

Dietz
  Graziadio

Fig. 1. The Chronology of graves in Mycenae, Circle B. A Comparison between systems developed by Graziadio 1988 and Dietz 1991.

should like to add that “Black and Red” style pottery in the Cyclades is found only in the early phase of LCI, not in the mature LCI phase, contemporary with LHIB on the Mainland.<sup>11</sup>

*Late Phase I/MHIIIB (late):* The information concerning grave A is insufficient. For the published pottery, I find no evidence for a date in the latest phase. The discrepancy mainly derives from the fact that Graziadio does not define the LHIA phase, much easier to achieve when material from settlements is available. As for graves Gamma and grave Epsilon, Graziadio himself expresses serious doubt about the attribution to Late Phase I.<sup>12</sup> That there are many older features in the earlier parts of Grave Gamma can be observed on the diagram, Dietz 1991, Fig. 77 (context 14). It should be noted that there is disagreement concerning the attribution of objects from grave Gamma to Late Phase II/LHIB.

Graziadio’s argument is that the Cycladic vases from the epichosis should be dated to the latest phase.<sup>13</sup> The epichosis, however, should in general be considered older than the objects in the grave. The same problem exists in grave Delta where Graziadio considers the Cycladic jar Delta-65 (shape LD-2) (probably) from the epichosis to be dated in the final phase. The disagreement concerning grave Lambda derives from different interpretations of the association in the grave. It is remarkable, however, that Graziadio considers the imported Cycladic jars to be Late Phase in date.<sup>14</sup> Here evidently he follows strictly the division between group 1 and group 2 goblets. In grave N the majority of the imported Cycladic vessels (from the roof) are considered to be Late Phase I/MHIIIB in date. The same date should be assigned to the rest of the grave with the Mainland MH IIIB pottery N-157, 159 and 160. As for this phase we should emphasize that the

NOTE 11  
see below p. 17.

NOTE 12  
Graziadio 1988, 370.

NOTE 13  
Graziadio 1988, 354.

NOTE 14  
in spite of the statements p. 354.

local pottery develops gradually and that even within phase MHIIB (late) earlier and later typological elements are found. It is thus probably correct to say that for instance the rich finds from grave N are found in a rather late MHIIB (late) grave context.

The arguments for defining Graziadio's Late Phase I are found on p. 361.<sup>15</sup> "It is clear, therefore, that pottery groups including Group 1 goblets and vases of LMIA date can be considered earlier than groups containing goblets of the other type (i.e. Dietz Group 2), LMIA pottery, and/or diagnostically LHI specimens. On this basis, an earlier subphase within the circle B Late Phase, corresponding to the very end of the MH period (Late Phase I), can be distinguished from a later subphase coinciding with LHI (Late Phase II)."

The main reason for the discrepancy between the two systems is the statement that the local chronology could be based on the principle expressed in the phrase: "Pottery produced during LMIA. This section includes various mainland and/or Cycladic vases presumably produced during LMIA" (Category A),<sup>16</sup> because this is not a chronological homogeneous group. Graziadio is well aware that Mainland lustrous decorated pottery of LHI type must be produced during a phase contemporary with a later part of LMIA only,<sup>17</sup> but not for instance that Cycladic "Black and Red" and pottery in "Naturalistic Style" is not produced after the early LCI phase contemporary with a later part of LMA in Crete.<sup>18</sup> Graziadio's chronology is thus not entirely based on the development of the local pottery but only on the division between group 1 and group 2 goblets. It seems to be a principle that Cycladic pottery ("Produced during the LMIA period") is early when it is found with group 1 goblets, later if not. The details in the chronological picture derive from the inclusion of all types of local pottery in the chronological estimate, and thus the definition of phase LHIA.

*The definition of LHIA.* The period is defined in the settlement material from the lower town of Asine and is characterized by a series of changes in shapes and decorations from the previous phase and an addition of a number of new shapes and motifs painted according to a new decorative syntax. In addition a number of graves have been attributed to this phase.<sup>19</sup> The period was tentatively defined as phase MHIIB in 1980, but at that time it was not possible to separate it safely from the phase with typical LHI lustrous decoration.<sup>20</sup> Graziadio's chronology is partly derived from this early version and a fair number of the graves from the Circle B dated in LHIA are in fact placed in Graziadio's Late Phase II (fig. 1). LMIA dark on light pottery found in associations in the Circle B includes one jug from grave Gamma and four askoi from grave Mu. From the contexts we consider them to be imports in phase LHIA – i.e. earlier than the beginning of the main production of the LHI type dark on light pottery. Two other LMIA vessels of this type in the A-circle are considered LHIB in dating. Lustrous decorated Argive pottery is found in three graves in the Circle B (Gamma, Delta and Omicron). One straight sided keftiu cup with tortoise shell ripple decoration from the epichosis of grave Gamma (shape EB-2) was dated in the LHIA phase, while the rest, a semi-globular cup, an alabastron shaped jar from grave Delta (shape EC-1), an alabastron shaped jug (shape ED-1) (Gamma-19) and the bridge-spouted hole-mouth jar from grave Omicron are placed in phase LHIB. The discrepancies thus mainly derive from the fact that LMIA pottery has a much longer lifespan than typical LHI lustrous painted pottery. The phase LHIA is represented in a well stratified deposit from Tzoungiza in Corinthia.<sup>21</sup>

Concerning the Theran pottery in the Circle B, period LHIA, we should like to add the following comments to the previous results.<sup>22</sup>

The two jugs decorated with swallows

NOTE 15  
Graziadio 1988.

NOTE 16  
Graziadio 1988, 352.

NOTE 17  
Graziadio 1988, 360.

NOTE 18  
see below p. 17.

NOTE 19  
Summarized in Dietz  
1991, 255-257.

NOTE 20  
Dietz 1980, 143.

NOTE 21  
Rutter 1989.

NOTE 22  
Dietz 1991, 228-235.

NOTE 23  
Marthari 1993, 252. Dietz  
type LB-3.

NOTE 24  
Marthari 1990, 252.

NOTE 25  
One much earlier jug from  
Lerna is from the transi-  
tion EC/MC on Thera.  
Marthari 1993, 252-253.

NOTE 26  
Dietz 1991, no. 124.

NOTE 27  
Dietz 1991, 160.

NOTE 28  
neither from Asine, Dietz  
1980 nor from Korakou,  
Davis 1979.

NOTE 29  
Lauter 1989. Lauter 1996.

NOTE 30  
see below p. 30.

NOTE 31  
Statistical evaluations in  
Maran 1992, p. 218 and  
chronology Tf. 35a.

NOTE 32  
In contrast to the situation  
in Early Mycenaean times.  
See also Maran 1993, 157.

from grave Gamma (-27 and -28) are con-  
sidered to represent an *intermediate type* in  
the evolution of the Theran swallow jug.<sup>23</sup>  
Further two “eyed globular jugs” from the  
filling of the same grave are considered  
Theran imports.<sup>24</sup> No Theran jugs are  
from the earlier phase in the Shaft-Graves.<sup>25</sup>

We should finally comment briefly on the  
presence of “*tortoise shell ripple decoration*”  
from the Mainland in the Shaft Grave pe-  
riod, as this type of decoration is a text  
book example of the way an original  
Minoan pattern is gradually adopted into  
the local pottery tradition: The most ancient  
piece was found in a MHIIIA association  
in Asine – probably deriving from a  
MMIIIB/early LMIA semi-globular cup.<sup>26</sup>  
In phase MHIIIB there is a sherd from a  
rounded or semiglobular cup from the  
same site – in Lustrous decorated ware,  
probably imported from the southern Pel-  
oponnese (no.242). In the Circle B the  
pattern, painted in matt, in two horizontal  
zones are found on a keftiu cup (without  
bulb) in the epichosis of grave Lambda  
(Lambda-122). The cup is produced in the  
Argolid,<sup>27</sup> but clearly imitates Minoan  
cups of MMIIIB/early LMIA type. Finally  
in LHIA the decoration is added to a se-  
miglobular cup produced in the Argolid  
with the pattern in Lustrous paint found in  
Asine (no. 283). From the Circle B in  
Mycenae, a keftiu cup with bulb and rip-  
ple decoration was found in the same wa-  
regroup and with decoration in lustrous  
paint in grave Gamma (-54), a semiglobu-  
lar cup in lustrous painted ware imported  
from the southern Peloponnese was found  
in grave Gamma (-55) and a genuine  
Minoan cup was found among vessels  
without provenance (no. 555). Thus the  
“tortoise shell ripple” decoration is not  
found abundantly, but it is an important  
feature as it is typical for the period MM-  
IIIB/LMIA-early LMIA in Crete from  
where the pattern is derived and from the  
late MC/early LCI in the Cyclades (see  
below). The pattern is not found in the  
mature LMA/LCI and it is not found in  
LHIB on the Mainland<sup>28</sup>.

## Kiapha Thiti

### - a Fortified Site in Attica

Kiapha Thiti is situated on the top of a  
small knoll between Vari and Koropi in At-  
tica, some 5-6 km from the coast at Varkiza  
on the Saronic gulf. The site was excavated  
by a German/Canadian expedition in the  
years 1982-1988. Substantial material of  
Late MH and Early Mycenaean date was  
recovered from the trenches cut in the  
Oberburg, Mittelburg and the Unterburg  
as defined at the site. Of specific impor-  
tance was the excavation of a huge forti-  
fication wall protecting and defining the  
Western and Northern borders of the Un-  
terburg. Towards the East parts of the forti-  
fication were destroyed by landslide in the  
period LHIIA or later.<sup>29</sup> The dating of the  
wall to MHIII attributes an extraordinary  
importance to the site. The geographical  
position opposite Aigina, on the road be-  
tween Athens and Laurion, Thorikos and  
Ayia Irini in Kea, is thus near the terminus  
of the so-called “Western String”, a sup-  
posed main trade route between Crete/the  
Cyclades and the Greek Mainland.<sup>30</sup>

Pottery and small finds from the 2nd Mil-  
lenium at Kiapha Thiti were exhaustively  
published by Joseph Maran in 1992. The  
main deposits covered the timespan  
MHIII-LHI (?) – LHIIA/ IIB/LHIIIA1.  
The majority of the MHIII material deri-  
ves from the stratigraphical unit 7, section  
153 (153,SE7) and stratigraphical unit 5,  
section 154 (154,SE5), both found near  
the wall in the Unterburg, and the strati-  
graphical unit 4, section 59 in the Mittel-  
burg.<sup>31</sup> As in neighbouring Boiotia, Grey  
Minyan and “Dark burnished” dominate  
the local pottery production – estimated to  
make up between 40 and 50 % (“Minde-  
stenindividuenzahl”) of the total amount  
of pottery. Local coarse ware vessels still by  
far outnumber the imported Aigina coarse  
ware.<sup>32</sup> “White on (unburnished) dark” is  
likewise at hand. Matt painted Aigina wa-  
res amount to a considerable percentage  
(8.8/11.3 %) and Cycladic imports are  
considerable (5.9/5.7 %). Neither “Yellow  
Minyan” (NE-Peloponnesian pottery) nor  
Minoan pottery is attested in this phase.

Five smaller deposits are placed stratigraphically higher than the above mentioned but are still dated within the MHIII period (153/SE4/SE5 and 154,SE2/SE3/SE4). Parallels for no. 950 (154/SE3) are found in the Argolid, phase MHIIIB. Two sherds from these deposits were classified as “Bemalte Keramik kykladischen Charakters”, “Black and Red Style” (861 and 942). Finally a series of smaller deposits is placed in MHIII in general – perhaps with earlier (MHI) intrusions (4,SE4/ 6,SE3/ 5,SE4/SE5/ 6,SE4/SE5/SE6/ 59,SE3/ 102,SE4). A few Cycladic sherds are from these levels but also some LHI/II intrusions were found. There is much more material in Kiapha Thiti dated to MHIII but the contextual situation is not safe.

Cycladic pottery of the phase defined by the three deposits (and the smaller deposits) is all of the type “Cycladic White” of Melian origin, including the Cycladic “Black and Red Style” – all dated in Phylakopi II-iii.<sup>33</sup> Even if there is only a little evidence of direct contact, there is no doubt that this phase is approximately contemporary with MHIIIB in the Argolid. In the Argolid the transition between MHIII and LHI was defined by the change of large goblets from group 1 to group 2 (see above). These goblets, however, are not found in Attica. The same type of Cycladic pottery was exported from the town of Phylakopi to the Argolid. The fact that it was never found in settlement contexts in the Argolid – only in the rich graves of the Circle B – might suggest that inhabitants in Attica during the MHIII period were more familiar with Cycladic pottery and imports than people in the Argolid. This statement combined with the fact that communication (as inferred from the pottery) between the NE Peloponnese and Attica was insignificant seems to show that Cycladic goods and communication went directly to the Peloponnese (eventually via Aigina) – not via Attica and “the Western String”.

Section 101, SE3 from the gate in the fortification wall was dated in LHI by

Maran.<sup>34</sup> The dating is based mainly on the presence of Aiginetan red (/black) slipped goblets (6689–693). In Asine these fabrics are already attested in MHIIIB<sup>35</sup> and as a superposed stratum in Kiapha Thiti, section 1,SE2 is probably rather of MHIII date than of LHI date<sup>36</sup> – we might suggest this unit (101,SE3) to be of MHIII date as well.<sup>37</sup> LHIIA/B-LHIIIA1 pottery is abundantly to hand. It was mainly found on the Acropolis/Oberburg.

The succeeding phase in the Argolid, LHIA with Cycladic pottery, probably imported from Akrotiri, Thera is not represented in Kiapha Thiti – neither is the Argive LHIB phase safely attested at the site. For the time being, we are not able to relate the younger phases of Kiapha Thiti with subphases in the Argive sequences.

### **Cycladic and Minoan Pottery on the Mainland from the Shaft Grave Period**

The following conclusions could thus be drawn concerning the relations between Crete, the Cyclades and the Mainland in the Shaft Grave period.<sup>38</sup>

- 1) The majority of Cycladic pottery found in Circle B is imported in the phase MHIIIB. The provenance is probably Melos/Phylakopi. The production of local Argive pottery with polychrome, black and red decoration is probably due to this influence. In contrast, pottery of LMIA manufacture is not found in the earlier Shaft Graves. In the settlement deposits of Asine no Cycladic pottery was found while only extremely small quantities of Minoan pottery were to hand. Cycladic pottery imports are well represented in undisturbed MHIII settlement layers in Kiapha Thiti in Attica. The pottery likewise was probably produced in Phylakopi, Melos and is most abundantly found in the oldest, lower strata. These deposits are contemporary with or at least partly contemporary with MHIIIB in the Argolid. No Minoan pottery was found in the MHIII layers of Kiapha Thiti. This con-

NOTE 33  
Maran 1992, C5 “Bemalte Keramik kykladischen Charakters”.

NOTE 34  
Maran 1992, 79 and 204.

NOTE 35  
Dietz 1991, 223–227.

NOTE 36  
The five sherds from the deposit cannot be dated with great certainty. Maran 1992, 80–81.

NOTE 37  
The problem concerning the presence of LHI in Kiapha Thiti is dealt with in details by Maran 1992 p. 204–207.

NOTE 38  
Following Dietz 1991.



NOTE 39  
Also Maran 1993, 206.

NOTE 40  
Dr. Marissa Marthari informs me that the cup, A-circle VI 953 could not possibly be from Akrotiri, estimated from the clay. Also Marthari 1993, 255, n. 11.

NOTE 41  
Good summaries in Wiener 1990 and Wiener 1991.

NOTE 42  
On the earlier relations see Barber 1984.

NOTE 43  
MacGillivray 1984, 156.

NOTE 44  
Watrous 1993, 81. Betancourt 1984, 92 and Fig. 2.

NOTE 45  
MacGillivray 1984, 156.

firm the thesis that Cycladic relations with Mainland Greece in the Shaft Grave period precedes the Cretan influences,<sup>39</sup> a fact which is of crucial importance for our understanding of the origin of Mycenaean civilization in economic, political, religious as well as in social aspects.

- 2) Minoan pottery was found in the Middle phase of the Shaft Grave period, Dietz's LHIA period, as was Cycladic pottery – now probably imported from Akrotiri on Thera.
- 3) In Circle B Minoan pottery is found in graves from phase LHIB. There is no evidence, however, in the pottery repertoire for relations with the Cyclades during the later Shaft Graves, Dietz's phase LHIB.<sup>40</sup> None were Cycladic imports registered from settlement deposits. The Mainland relations with Akrotiri will be dealt with in some more detail below.

## The Cyclades between Crete and the Mainland

There is a general consensus that Minoan influence in the Cyclades reached its culmination at the transition to the Late Bronze Age or LCI. It has often been noted that the changes to be observed in Cycladic societies are not just a question of an increasing quantity of imports (an intensification of trade relations), but rather a fundamental change in the social, economic, political, cultural/artistic and religious character of Cycladic societies, a “minoanization” of the islands, a change eventually related to the historical events described by Herodotus and Thucydides as the “Thalassocracy of Minos”. In order to put the Cycladic relations with the Mainland into relevant frames we should like to offer a brief summary of the evidence supporting the idea of a “minoanization” and a comment on the question of dating. Or to put it in another way: are the changes related directly to the construction of the New Palaces in Crete or did they rather

take place somewhat later, at the very transition to the LCI period, in the slipstream of the restoration of the palaces after the destruction towards the end of MMIIIB.

The “minoanization” of the Cycladic societies is reflected in several important aspects of life on the islands.<sup>41</sup> Minoan taste, techniques and life style have been traced in Late Cycladic architecture, wall and floor paintings and in pottery production. That Minoan life style permeated common life has been detected by the influence on everyday necessities such as braziers, “firepots”, lamps, loomweights, conical cups and stone cutting and stone vases. That Minoan administration was used on the islands is attested by the presence of linear A on tablets and containers and the introduction of a standardized weightsystem of Minoan standards. Only on the three major sites, Akrotiri, Phylakopi and Ayia Irini do we have enough information for an evaluation of the evidence.

Further support for the view that substantial Minoan influence, a proper “minoanization” of the Cyclades did not take place before the transition to the Late Bronze Age might be inferred from the pattern of Cycladic pottery imports to Crete after the construction of the New Palaces.<sup>42</sup> J.A. MacGillivray counted over forty pottery imports from the Cyclades at Knossos “..... dated by Evans to MMIII before or at the time of the destruction in MMIIIB”.<sup>43</sup> In addition a few contemporary pieces are known from Kommos.<sup>44</sup> It is possible to recognize imports from Melos, Thera and probably from Naxos. Nothing could be attributed to Kea. It is of further significance that “The Cycladic imports to Knossos cease abruptly at the end of MMIIIB or very early in LMIA”.<sup>45</sup> MacGillivray states that “... the Cycladic jars are late Middle Bronze Age types and precede the greatest period of Minoan influence in the Cyclades .....”. We should like furthermore to cite A. Papagiannopoulou for the view that the local imitation of

Minoan pottery in phase II-iii in Phylakopi (=MMIIIB) derives from a reaction to the fact that genuine Minoan pottery was not imported in this period.<sup>46</sup> It should be added, however, that many details in Minoan chronology are still far from safe.

*Thera* is the island closest to Crete and the site of Akrotiri at the same time is by far the largest. The whole site has been estimated to cover some 20 hectares of which just slightly more than 1 hectare has been excavated.<sup>47</sup> The architecture is extraordinarily well preserved and shows more Minoan features in both technique, materials, architectural design and planning than the other two sites. Features such as the use of ashlar masonry for corners and facades<sup>48</sup> and timber reinforcements in the unworked stone walls, wooden doors and windows and the whole concept of room arrangements and lustral basins, pillar rooms, pier and – door partitions for doors and windows (polythra and polyparathra) and the creation of effective sewers and lavatories are all considered to be of Minoan origin.<sup>49</sup>

While the main architectural features at Akrotiri are undoubtedly derived directly from Crete, some adaptations to local style and previous habitation can also be recognized. The town planning for instance is evidently not copied from Cretan prototypes.<sup>50</sup> Local features are likewise clearly recognizable in the famous wall paintings.<sup>51</sup> The technique is derived from Crete and there are many similarities between motives, composition and iconography in Crete and on Thera. It is quite clear, however, that the wall paintings in Akrotiri, Phylakopi and Ayia Irini are executed in a specific Cycladic style depicting specific Cycladic themes and use a characteristic “Island Iconography”.<sup>52</sup> It has been suggested that specific “workshops” could be defined.<sup>53</sup>

The general development in Akrotiri is well known. The town was inhabited in EC and MC. The first serious destruction – by an earthquake – appeared early in the

early LCI period when houses in the recently founded large town suffered great damage.<sup>54</sup> When the town was rebuilt immediately afterwards, the new houses, to a large extent, used the walls of the previous houses, but the rubble from the destruction was scattered in the streets, resulting in a considerable raising of the level. The doorways and windows in the former ground floor were usually blocked with stone and new openings were constructed in a level approximately corresponding to the old 1st floor while the ground floor levels were altered to basements.<sup>55</sup> Even if in general the plan of the town was kept, many new architectural features were introduced in the new town which was finally destroyed by the volcanic eruption – the volcanic destruction level, VDL – slightly before the end of the pottery phase LCI.<sup>56</sup> Wall paintings were used on walls in the pre-SDL town as fragments were found in the destruction layer and among the material reused for the reconstruction of the new houses where frescoes were sometimes found in situ. As traces of wall paintings have not been found in deposits from before the “pre-SDL town”, it is possible to state that the practice and technique of painting the walls in the houses was introduced simultaneously with the

NOTE 46  
Papagianopoulou 1991, 119 ff.

NOTE 47  
Doulas 1983, 45.

NOTE 48  
Especially in Xeste 4 with mason's marks, Palyvou 1990, 55, Hood 1987, 33-37.

NOTE 49  
Shaw 1978, Hood 1990 and Palyvou 1997.

NOTE 50  
Shaw 1978, 432.

NOTE 51  
In general Hood 1978, 47-87, Morgan 1988, Immerwahr 1990 and Doulas 1992.

NOTE 52  
Davis 1990, Morgan 1990, Televantou 1992.

NOTE 53  
For the “The Theran Workshop” see Televantou 1997.

NOTE 54  
This seismic destruction level is abbreviated SDL. More ancient walls were found sporadically below this level, Marthari 1990, 61.

NOTE 55  
Doulas 1978, Palyvou 1984, Marthari 1984 and 1990, Televantou 1992.

NOTE 56  
And slightly before the end of the LMIA phase.

construction and introduction of new architectural features of the new town in mature MC/ early LCI – both in all probability introduced from Crete.<sup>57</sup>

The dating of the construction phases in Akrotiri is mainly dependant on the pottery present in the destruction level partly of the pre-SDL town and partly of the more recent pre-VDL town. There is still one more stratigraphic level consisting of fill from pits cut in the bed rock.<sup>58</sup> Pottery from the pre-SDL levels contained a small number of Minoan wares, “... some shiny LMIA sherds including pieces of Vapheio and semi-globular cups decorated with tortoise-shell ripple pattern and spirals”.<sup>59</sup> Cycladic wares in Naturalistic and Dark and Red styles are found in limited quantities with Red Painted ware, Matt Painted and Polychrome. Among the local imitations of LMIA pottery, sherds with tortoise-shell ripple dominates, followed by circles with in-filled disks in the interior.

In the next and final phase, mature LCI, the old Naturalistic style and Black and Red style were not found any more. The LMIA imported pottery makes up the largest group of imported wares to Akrotiri, followed by imported Cycladic and Mainland groups.<sup>60</sup> The imported LMIA pottery from the West House excavation of 1984 is an extraordinarily rich group<sup>61</sup> with many semi-globular cups, few Vapheio cups, askoi, bridge-spouted jugs and jars, whole-mouth jugs, piriform jars and many different rhyta et al. The most popular motif is the running spiral followed by foliate band. Rosettes and leaf-like tendrils are common as well and “There are just a few examples of tortoise-shell ripple and reed pattern...”.<sup>62</sup> The groups of pottery from the pre-VDL are convincingly compared with mature LMIA pottery from Knossos and East Crete.<sup>63</sup>

It is significant that, in contrast to the situation at Phylakopi and Ayia Irini, neither Mainland pottery nor imitations of Mainland pottery, were found at Akrotiri in the MC period.<sup>64</sup> The character of Mainland pottery from the MC/LC transition was treated by Marissa Marthari.<sup>65</sup> As for the older phase MCIII/early LCI, it has been stated that “Mainland wares are represented by hydrias and jars in MH style”.<sup>66</sup> As for the last phase before the VDL, information is far more abundantly at hand. 10-15 % in general of all Akrotiri pottery from this phase are imported.<sup>67</sup> Of these, 13 % come from the Mainland. 70 % is LHI Mainland lustrous painted pottery, predominantly keftiu cups and semi-globular cups. The majority are considered to derive from Northeast Peloponnese, one could be from the southern Peloponnese (Kythera), one might be from Messenia.<sup>68</sup>

30 % of the imported Mainland pottery groups are defined as “.. wares in the MH tradition..”.<sup>69</sup> The following groups could be distinguished:

- Matt painted monochrome. Hydriae and stamnoi decorated with double circles. Probably Aiginetan<sup>70</sup>

NOTE 57

Palyvou 1984, Marthari 1984, 119, Televantou 1992, 145-147, and Pl. XXXVII, Palyvou 1997, 65, n.3. C. Palyvou in a comment to Hood 1990, 123 suggests that the features appear in Crete and Akrotiri at almost the same time. Doulas 1992, 17 for the opinion that the practice of wall-painting could have been introduced directly from the east.

NOTE 58

Marthari 1984 and 1990. Papagiannopoulou 1990.

NOTE 59

Marthari 1990, 66 for the West House excavations in 1984.

NOTE 60

Marthari 1993, 249.

NOTE 61

Marthari 1990, 61ff.

NOTE 62

Marthari 1990.

NOTE 63

Marthari 1990, 61-63.

NOTE 64

Papagiannopoulou 1990, 61.

NOTE 65

Marthari 1982 (1980) and 1993, 249-50.

NOTE 66

Not depicted, however, Marthari 1990, 66.

NOTE 67

Marthari 1993, 249. 10 % in the West House groups, Marthari 1990, 61.

NOTE 68

Marthari 1993, 249.

NOTE 69

Marthari 1982(1980), 1993, 249 and Dietz 1991, 310-311.

NOTE 70

Dietz 1991, 310, Marthari 1993, 149 and n. 17.

- Polychrome Aigina kraters<sup>71</sup>
- A bridge-spouted jar and two amphorae could likewise be aiginetan<sup>72</sup>
- Polychrome Mainland type. Probably of Central Greek provenance<sup>73</sup>
- One jug could be classified as “fine orange”, likewise a Central Greek production<sup>74</sup>.

“*Mycenaeans in Thera*”: It has been suggested, that Mycenaeans are represented on the miniature friezes from room 5 in the West House of Akrotiri. On the south wall paintings of the “flotilla”, seated persons with boar’s tusk helmets placed above their heads and the landing party of panoplied warriors with boar’s tusk helmet, large rectangular shield, long spear and sword from the coastal town II area are considered to represent Mycenaean warriors.<sup>75</sup> Furthermore a considerable amount of iconographic details can be compared convincingly with iconographic details from the “Art of the Shaft Graves”.<sup>76</sup> It has been claimed, however, that the relevant elements can also ultimately be derived from Crete<sup>77</sup>. To the present author the arguments for the presence of Mycenaeans in the Akrotiri frescoes seem convincing<sup>78</sup>. We should like to point out that the wall paintings were probably painted immediately after the SDL “or a little later”,<sup>79</sup> a period which is probably contemporary with phase LHIA in the Argolid where pottery of Thera origin was found in the Shaft Graves. This should thus be earlier than the Mainland pottery mentioned above from Akrotiri which derives from LHIB Mainland contacts.

The site of *Phylakopi in Melos*, estimated to cover some 2 ha,<sup>80</sup> was much smaller than Akrotiri. The Second City was destroyed, probably by an earthquake.<sup>81</sup> The Third City was built on top of the second. This event, defining the transition to LCI in Melos, took place when Minoan pottery of LMIA type was in use.<sup>82</sup>

The situation in Phylakopi has been clarified and important new interpretation and adjustments of Mackenzie’s results from

the excavations in 1896 to 1899<sup>83</sup> were produced by the new excavations of The British School at Athens and Professor Colin Renfrew in 1974 to 1977.<sup>84</sup> As for the historical interpretation, Renfrew especially emphasizes the importance of the re-dating and re-assessment of the stratigraphic succession of two features : that the fortification system, dated by Mackenzie to the mature second city, is in fact constructed during the LCI phase of the third city and that the famous wall paintings from the pillar crypt should be dated in the same period. During the new excavations numerous fragments of frescoes were found with Renfrew’s phase D pottery (=early third city of Mackenzie), while no traces could be associated with the previous phase C (MC). During the new excavations a large rectangular mansion (12 × 20 m) was found below the later Mycenaean megaron. The mansion was built early in LCI/period III, considerably earlier than the construction of the fortification wall. Fragments of an inscribed tablet in Minoan linear A script (the fact that it is

NOTE 71  
Marthari 1993, 249, Dietz 1991, 310.

NOTE 72  
Dietz 1991, 311.

NOTE 73  
Dietz 1991, 311, Marthari 1993, 149.

NOTE 74  
Dietz 1991, 311 and Marthari 1993, 249, n. 10. The panelled cups mentioned by Dietz 1991, 311 could not be Cycladic. Marissa Marthari personal information and Marthari 1993, 249, n. 11.

NOTE 75  
Doulas 1992, 35-48 and 2-29.  
Immerwahr 1977 and Iakovidis 1979.

NOTE 76  
Laffineur 1984.

NOTE 77  
Niemeier 1990.

NOTE 78  
The use of boar tusks helmets on the Mainland for instance is an old tradition, see Kilian-Dirlmeier 1997, 35-50.

NOTE 79  
Televantou 1992, 146.

NOTE 80  
Wagstaff and Cherry in Renfrew and Wagstaff 1982, 139-140.

NOTE 81  
For human agency as cause see for instance Macgillevray 1983, 157. Useful reflections in Barber 1987, 160.

NOTE 82  
Only very little was found towards the end of the Second City, Barber 1987.

NOTE 83  
Atkinson et al. 1904.

NOTE 84  
Renfrew 1978.

of local clay indicates that it was inscribed at Phylakopi) could be dated in the same phase but it is not directly associated with the mansion. With good reason Renfrew considers it possible that the mansion was the administrative and organising centre for Phylakopi at the time, and that it employed scribes and an archive, much as did contemporary palaces in Crete.<sup>85</sup> Except for the existence of a pillar crypt and the wall paintings, the architectural expression of the LCI town of Phylakopi is by no means as “minoanized” as Akrotiri, even if the many features are in general, unmistakably inspired from Crete.<sup>86</sup>

The documentation for the relative order of events and construction in Phylakopi is based on statistical studies of 30.000 sherds from the 9 trenches excavated in various parts of the town during the campaigns in 1974 to 1977.<sup>87</sup> From these analyses it seems well established that the mansion was erected in the very early part of phase D, corresponding to the very early part of Mackenzie’s town III and well before the construction of the fortification wall. The contextual information did not allow with certainty the precise dating of the wall paintings from the Pillar Crypt within the LCI period.<sup>88</sup> The studies showed that local painted pottery with Black and Red design motifs, together with several other

motifs with MC affinity, were restricted to the period before the construction of the fortification wall. The differences between motifs on sherds from before the erection of the fortification walls and from layers after this construction “... are precisely the characteristics which chiefly differentiate the earlier and later LCI pottery at Akrotiri also”.<sup>89</sup>

The amount of imported Mainland pottery is modest but does appear during the whole period MC/early LCI to mature LCI. There seems to be a considerable increase in imports from the Mainland around the time of the construction of fortification wall.<sup>90</sup> This fact corresponds well with the situation in Akrotiri. From the published information, it is not possible to compare in detail the amount of Mainland pottery from Phylakopi with the amount of pottery from Akrotiri. The total amount of imported Mainland pottery from both before and after the construction of the fortification wall in Phylakopi is 1.1 % (number of sherds), in Akrotiri the imported Mainland pottery during the mature LCI phase is between 1.3 and 1.5 % – there might, however, not be a great difference in the amount of this type of imported pottery from the two sites.<sup>91</sup> In the strata from after the construction of the fortification wall in Phylakopi, imported Mainland pottery in LHI lustrous painted style and Mainland Polychrome ware was found for the first time.<sup>92</sup> In contrast to Akrotiri, Mainland pottery was imported in Phylakopi during the earlier phases of MC (see below).

From *Ayia Irini on Kea* only a smaller part of the relevant strata and material (Kea VI) have been published.<sup>93</sup> The beginning of period VI, or the LCI period in Ayia Irini, is marked by the first appearance of the LMIA style, its end by the first appearance of the LMIB style. Recent studies have elucidated, that period VI should be divided into two sub-phases: an early phase where LMIA pottery is found but without Mainland LHI style and a later sub-phase where mainland LHI style is found with

NOTE 85  
Renfrew 1978, 412 and 1982, 39-40.

NOTE 86  
The “flying fish fresco” was probably painted by a Cycladic artisan (from Thera?). Davis 1990, 222 and Hood 1978, 53-54.

NOTE 87  
Davis and Cherry 1984.

NOTE 88  
Davis and Cherry 1984, 154.

NOTE 89  
Davis and Cherry 1984, 158.

NOTE 90  
Davis and Cherry 1984. Compare Figure 1 with Figure 4.

NOTE 91  
Compare Cherry and Davis 1982, 337 with Marthari 1993, 249.

NOTE 92  
Davis 1979, 258.

NOTE 93  
Cummer and Schofield 1984, Davis 1986. An updated summary and bibliography is found in Davis 1992, 708-712 and n. 39.

LMIA pottery.<sup>94</sup> The later phase is well represented in deposit A from room 18 in house A.<sup>95</sup> The following waregroups should be mentioned: LMIA, LHI, Polychrome Mainland, Grey Minyan, red slipped Aigina (?) (no. 825). All typical of our LHIB in the Argolid. Only very little material, however, has been published from the early phase VI.<sup>96</sup> Two pieces of LMIA pottery were illustrated, one import from Melos, a local panelled cup with spirals,<sup>97</sup> a locally produced keftiu cup<sup>98</sup> and a Grey Minyan goblet of Central Greek shape (MHIII)<sup>99</sup>. Thus the phase “early VI” evidently starts earlier than LCI at Akrotiri and Phylakopi – approximately contemporary with MMIIIB/LMIA at Knossos and MHIIIB in the Argolid. Period V ends, with a destruction, at the transition to period MMIIIB/LMIA at Knossos. It is characteristic that the Mainland connections with Ayia Irini V are few in contrast to many Minoan imports and imports from Melos.<sup>100</sup> Grey Minyan is more usual than matt-and lustrous painted. The relations are rather with Central Greece than with NE Peloponnese.<sup>101</sup> The import of Mainland pottery was much more important during period IV as was the case in Phylakopi (see below p. 22).

As at Phylakopi, the new plan and new architectural features of the period VI town of Ayia Irini do not show much Minoan influence. The ancient (period V) fortification wall was probably reinforced in period VI. Painted plaster is reported from period V and figural frescoes decorated the walls in periods VI and VII. It is not possible, from the information available, to state how early it starts, but at least during the late phase VI wall painting is a well established feature at Ayia Irini.<sup>102</sup> Among other important Minoan features are the large terracotta figurines of clear Minoan inspiration.<sup>103</sup>

## The Shaft Grave from Kolonna IX in Aigina and Mainland/Aegean relations before the Shaft Grave Period

Imma Kilian-Dirlmeier recently expressed the opinion that the Greek Mainland from the beginning of Middle Helladic times was characterized by socially stratified societies with well defined groups of high social rank and power at the head of local societies. The picture is clearest in Messenia but even the development in the town of Kolonna at Aigina and elsewhere seems to support this view.<sup>104</sup> It follows that the introduction of hierarchical social structures with characteristic social, economic and religious orders was probably not the result of contacts with the Aegean area and especially with the Old Palaces in Crete. The considerable communication between the Aegean area and the Mainland visible especially in the middle part of the Middle Helladic phase should rather be considered an expression of exchanges between elite groups. Thus the establishing of early states and Princely Societies in the Shaft Grave period should primarily be the result of a gradual development on the Mainland itself, though this is not to say that the actual presentation, the form of societies in Mycenae and elsewhere on the Mainland is not dependant on communication with the Aegean area and especially with Minoan Crete.

The site of Kolonna in Aigina and especially the recently published “Shaft Grave” from town IX supports the view that elite groups were already at the head of Mainland societies 150 to 200 years before the culmination of affluence and Minoan relations during the period of the later Shaft Graves in Mycenae, and that furthermore many technical skills and features of craftsmanship and social habits later to be seen in the Shaft Graves were already at hand in the middle part of the Middle Bronze Age.

The grave<sup>105</sup> was placed near the fortifica-

NOTE 94  
Davis and Cherry 1990, 193 ff. and Davis 1992, 710.

NOTE 95  
Cummer and Schofield 1984, 82–87, Pls. 61–65.

NOTE 96  
Davis and Cherry 1990, figs. 2–4.

NOTE 97  
Compare the Cycladic jug, Mycenae Circle B, N-166, MHIIIB in the Argolid (Dietz 1991).

NOTE 98  
Probably MHIIIB in argive terminology, type AB-9/10 (with somewhat higher handle) Dietz 1991, no. 138.

NOTE 99  
The outfalling rim is not found in NE Peloponnese.

NOTE 100  
Davis 1986, 81–85.

NOTE 101  
See also Dietz 1991, 311.

NOTE 102  
For the dating of the frescoes see Davis E. 1990, 225–226.

NOTE 103  
Caskey 1986.

NOTE 104  
Kilian-Dirlmeier 1997, 120ff.

NOTE 105  
Kilian-Dirlmeier 1997.

NOTE 106  
Kilian-Dirlmeier 1997,  
123-154.

NOTE 107  
Already G. Welter. Kilian-  
Dirlmeier 1997, 110-111  
and Hiller 1993.

NOTE 108  
Zerner 1990.

NOTE 109  
Nordquist 1987, 62 ff. and  
Rutter & Zerner 1984.

tion wall of town IX in the level of the foundation. The stone built chamber measured 1m × 2.6m and was 0.8m high. A wooden roof, placed on a shelf, probably covered the chamber. The shaft itself extended approximately 0.8m above the roof. The skeleton of a fairly tall younger man between 22 and 26 years old was placed in the Northern part of the grave on its back with the arms on its chest with the legs bent and turned to the right. A broken gold diadem was placed across the skeleton at the collarbones. A long sword (79,2 cm) was placed West of the skeleton. Five silverplated bronze nails were placed on the upper part of the blade, three in the short tang. A rhomboid gold foil was found where the midrib begins and gold foil was placed on the mushroom shaped ivory pommel with a gold nail. With the sword was found boar tusks and an ivory disc from a helmet. Further to the West lay 6 arrow heads of obsidian. In the North-western corner of the grave were found a socketed spearhead, a dagger with three nails, a knife with straight back and three nails in a triangular position, one smaller knife with a nail in the tang, a tongue shaped razor with gold plated boars heads at the shoulders. In the southern part of the grave, the bottoms of five vessels were reported. Kilian-Dirlmeier catalogues the following pieces from the grave itself: an MHII matt painted kantharos with carinated section and high swung band shaped handles (no. 10), an MHII black burnished, carinated bowl with two handles at the shoulder (no. 11), an ovoid beak-spouted jug with white, creamy bands around the neck, on the spout and down the body at the handle; the red silver mica fabric might indicate a Cycladic origin (?) (no. 12), a Cycladic beak-spouted jug with burnished surface and white, creamy painted decoration (no. 13), another, smaller Cycladic jug with carinations on the upper body and white, creamy decoration on a burnished surface (no. 14), a flat Cycladic decorated plate in Cycladic White with two opposed ring handles on the rim (no. 15), a classical Kamares bridge-spouted jar (no. 16), fragments of another Cycladic jug, red silver

mica ware with burnished surface and white, creamy paint (n. 17), a fragment of a Cycladic jug in Cycladic White (Phylakopi II-ii) (no. 18), three Aiginetan amphorae (no. 19). From the grave or the filling derives an Aiginetan kitchen ware cup with pot marks (no. 20). Numerous sherds, predominantly from open shaped vessels, were found in the grave filling. All are safely dated within Town IX or MHII.

It is evident that the Aigina Shaft Grave points forward towards the later Shaft Graves in Mycenae: the construction of the grave itself (but not its situation inside the fortification wall), the position of the skeleton, the burial equipment with a long sword, helmet, spearhead, dagger, knives, razor, arrow heads and gold diadem. In addition there is the locally made pottery, much Cycladic pottery and one Minoan jar, all in an unambiguous MHII entourage. The fact that there are no exact parallels for most of the weapons and implements points to local manufacture in an environment with strong relations with both the Cyclades and Minoan Crete.

In addition Imma Kilian-Dirlmeier published several hundred pieces of pottery imported from the Cyclades and Crete and local pottery imitating Minoan Kamares wares. The pottery derives from the old excavations and there is no information of its contexts.<sup>106</sup> Cycladic pottery evidently derives mainly from Phylakopi, but imports from Kea IV have also been traced. The quantity of local imitation leads to the reasonable proposal that immigrant Minoan potters had established a workshop at Kolonna.<sup>107</sup> On the Mainland both Cycladic and Minoan pottery in MHII contexts was found abundantly at Lerna, both in graves and especially in settlement deposits.<sup>108</sup> In the Argolid both Cycladic and Minoan pottery was found at Asine and Tiryns.<sup>109</sup>

That the communication went the other way as well is demonstrated by the presence of Grey Minyan pottery in the Cyclades. In Phylakopi, Grey Minyan is found quite abundantly in contrast to Matt

Painted.<sup>110</sup> As in Kea the Mainland import during the succeeding period MCIII (Phylakopi II-iii) before the MCIII/early LCI transition is probably insignificant. In Kea, more than 10% of the pottery could have been imported from the Mainland, mainly Grey Minyan; less common are Matt Painted fabrics. In the beginning of period IV, Minoan imports are few, but the situation evidently changes towards the end of the period when there is an increase in imported Minoan waregroups. This tendency continues in period V. The Mainland connections in period IV are mainly with Central Greece/Euboia and with Aigina.<sup>111</sup> In the Cyclades, Grey Minyan pottery is furthermore attested on Thera, Naxos, Paros, Syros, Mykonos, Tenos and Siphnos while it is only exceptionally found on Crete.<sup>112</sup>

## Innovations and Foreign influences in the Shaft Graves – a comment

In a recent article Robert Laffineur discussed and summarized the classical question concerning imports versus local production in the Shaft Graves.<sup>113</sup> In a closely reasoned way Laffineur in his article separated the problems concerning the actual imports from the related questions of “foreign” elements of style etc. in the Shaft Graves. As for the first matter it is obvious to state that early Mycenaean societies, at least in Mycenae itself, were heavily dependant on imports of basic raw materials. Societies and especially the ruling class, the elite of the society buried in the Shaft Graves, however, were not dependant on the imports for exotic objects themselves, as imported “prestige goods”. The obvious conclusion is that early Mycenaean society as reflected in the Shaft Graves employed a staff of skilled craftsmen for the local production of advanced objects of art in techniques which must ultimately have been developed outside the Mycenaean area itself and that, as well as advanced technical innovations, iconography and basic elements in style were introduced to Myce-

nae from abroad. As stated by Laffineur it is necessary in the case of every single group of objects to estimate whether technique, shape, decoration and style is dependant on local know-how, when successive stages in development are attested locally in earlier phases, or initiated by foreign craftsmen, whether travelling or brought by force, when equally or less developed antecedents are missing in the local documentation.<sup>114</sup>

The development of social stratification – as reflected in the grave types and the various groups of gravegoods – in the Shaft Graves of Mycenae has been treated by Kilian-Dirlmeier and Graziadio within the general chronological frames outlined above.<sup>115</sup> In the following we should like to treat some general trends in the pattern of local innovations as opposed to imports – ideological, stylistic as well as material – in the period within the chronological frames outlined (Fig. 2)

### The Early Graves (MHIIB):

*Local tradition and local innovations:* Taking the Shaft Grave in Aigina and the “international spirit” during the MHII as described by Imma Kilian-Dirlmeier (1997) as a point of departure, it appears that the following skills and main cultural features were already practised and existing in the middle part of the Middle Bronze Age – probably at least 2 to 4 generations or 50 to 100 years before the construction of the first Shaft Graves in the Circle B of Mycenae: the skill to forge bronze swords, daggers, knives, spearheads; the art of plating bronze with silver and gold foil; the technique necessary to produce gold foil and the technique of hammering decoration on gold diadems; and the ability to produce boars tusks helmets.

An example is *the gold sheet jewellery* from the Shaft Graves in Mycenae, for instance diadems decorated with bosses and dots in a local style with local predecessors.<sup>116</sup> As pointed out a gold diadem was found in the MHII Shaft Grave in Kolonna, Aigina and a gold diadem from Asine might brid-

NOTE 110  
Scholes 1956, 15-16. Barber 1974, 30, 1978, 377 and 1987, 145. Overbeck 1982, 39. The dating of this import in Minoan terminology is MMB to II.

NOTE 111  
Overbeck 1982, 40 ff. Also Kilian-Dirlmeier 1997, 109.

NOTE 112  
Latest Kilian-Dirlmeier 1997, 157 and Fig. 64.

NOTE 113  
Laffineur 1990-1991.

NOTE 114  
Laffineur’s “models” are fully developed in Laffineur 1990-1991, 247-248.

NOTE 115  
Kilian-Dirlmeier 1986 and Graziadio 1991.

NOTE 116  
Laffineur 1990-1991, 254 ff. Dietz 1991, 262-263.



		Sword	Short Sword/Dagger	Spearhead	Knife	Arrow	Helmet	Tweezer	Razor	Gold/Perl Bracelet	Necklace	Girdle gold/silver	Gold foil	Pin	Earring/Fingerring	"Gamashenhalter"	Mask	Diadem	Gold/Silver Vessel	Bronze Vessel	Alabaster-Faience	Seal	Pottery									
																							Local	Cycladic	S. Peloponnesian	Minoan	Aeginetan	C. Greece	Local-LDW			
H (1)	♂								x														x									
I, 2 (4)																			/x				x									
Λ 1 (33)	♂																						x	x								
P (32)																							x									
Λ 2 (50)	♂																						x									
↓																																
B (11)	♂								x	x	x												x	x								
Δ, 3 (72)																							x	(x)								
Z (10)	♂ x																						x	x								
I, 1 (3)	♂ x							2	(x)	4	2												x		x							
Λ, 2 (8)					x	x												4					x	x			x					
N, 2 (6)	♂ x	x	x	x			x	2										2	x	x			x	x								
N, 1 (5)	♂ x	x	x					x										x		x	x		x	x								
Ξ, 1 (2)												/x	x	x	x			3+1			x		x		x							
Ξ, 2 (2a)																			x				x									
Υ (9)	♀											/x	x	2/3				(x)		x			x	x			x					
↓																																
Δ, 2 (71a)	♂ x																		/x													
E, 2 (18)																							x							x		
Γ, 6 (14)																							x	x	x			x	x			
Γ, 2 (16a)	♂ 3	2							x		x						x	/x	x	x	x		(x)		(x)							
Γ, 5 (15)											x							x	x	/x												
Λ, 1 (7)	♂ x	x	x	x	28			x										2					x	x								
M, 2 (20)														x									x			x						
M, 1 (19)											x											x	x			x						
Ξ, 1 (68)																							x									
O, 2 (22)																							x		(?)		x					
O, 3 (23)												(x)																				
Π, (24)	♂																						x									
↓																																
Δ, 1 (71)	♂	/x	3 (17)					x												(x)	x									x		
E, 1 (17)														x				2+1/2 2+2	4				x						x			
Γ, 1 (16)	♂																						x				x			x		
K, (73)	♂																						x					x				
O, 1 (21)									x	x	x	x	(x)				x			x	x		x		(x)			x	x			

Fig. 2. Equipment in burials in Circle B. Chronological phases according to Dietz 1991 (and above Fig. 1). Ciphers in brackets refer to number of contexts in Dietz 1991, 243-246. Based on Kilian-Dirlmeier 1986, 178, Tabelle 2.

ge the gap between this diadem and the first diadems from the period of the earlier Shaft Graves.<sup>117</sup> In the same group of gold sheet jewellery a development within the Shaft Grave period itself can be attested for the gold stars from early female graves.<sup>118</sup> A very clear development is attested within the group of gold cups from male graves, from simple technique and simple boss and dot decoration to more advanced technique and more advanced arcade patterns in the later phases.<sup>119</sup> Finally the technique of the so-called “Metalmalerei” was introduced in MHIIB, probably from North Syria but developed locally through phases LHIA and LHIB with a decoration in a significant Aegean style (see below).

A long sword was found in the Shaft Grave in Kolonna. The *long swords* from phase MHIIB in the Circle B are all of Karo’s type A<sup>120</sup> (graves Zeta, Iota (context 3) and Nu (contexts 5 and 6)). This type is probably of Minoan origin, and the inspiration probably came from Crete, even though the actual swords might well have been produced in the Mainland. *Daggers and razors* (graves Beta, Iota (context 3) and Nu (contexts 5 and 6)) on the other hand have a long history on the Mainland and a local production is likely.<sup>121</sup> Spearheads (grave Nu (context 6)) of Avila tp. II are only found in the Argolid and are probably produced on the Mainland.<sup>122</sup> *Knives* (graves Lambda,2 (context 8) and Nu,2 (context 6)) show a local development and are probably locally produced.<sup>123</sup> *Tweezers* are found in graves Iota (context 3) and Nu (context 5). Tweezers were already used on the Mainland in the early Bronze Age.

It is important to emphasize that the development of techniques and artistic expressions in the Shaft Graves is a process which took a considerable time. I have myself suggested 125 years for the whole Shaft Grave period.<sup>124</sup>

*Imports:* The dagger Nu-304 with silver nails is the first object in the Shaft Graves showing damascening. The technique is undoubtedly of Near Eastern origin and is

a testimony to the eastern influences in the early Shaft Graves. Besides this technical innovation, imports in the older Shaft Graves (MHIIB) are restricted to raw materials: copper, tin, gold, silver, alabaster, ivory and obsidian for arrow heads. Faience could be produced at the Mainland or in Crete. The existence of one bead of amber (Iota-331) with a somewhat doubtful find spot might not with certainty attest the import of Baltic amber in the period.

### Circle A and the later Shaft Graves:

The chronology of the graves in Circle A is debated. According to the traditional chronology, grave VI followed by grave II are the earliest. This view, however, was based on the presence of Polychrome Mainland pottery in grave VI and Matt painted pottery in grave II. As we know today the polychrome pottery is characteristic of the latest phase of LHI (LHIB) and the Matt Painted beak-spouted jug from grave II could well be from the same phase. From the point of view of the pottery found in the Circle A, burials in grave IV should start earliest. This is supported by the presence of a spearhead of Sesklo type (Avila type I), not found in later contexts than MHIII – but also in the MHII Shaft Grave from Aigina. The lack of information concerning the position of the burials in the Circle A make an estimate of the chronology difficult and we cannot be sure that the published pottery presents the whole truth. It is thus not easy to say which parts of grave IV should be dated to LHIA and which to LHIB, but it is probably correct to say that the other graves more or less totally should be dated to LHIB and that the same could be said about the majority of the grave goods from grave IV. This situation makes it difficult to get a full impression of the LHIA period in the grave circles of Mycenae. We should like to comment on a few of the more elaborate features found in the phase LHIA and LHIB.

The earliest richly ornamented sword in the Circle B is the A-sword Delta-277 with griffins in flying gallop incised on the

NOTE 117  
For instance from Argos and Corinth. Kilian-Dirlmeier 1997, 54 ff.

NOTE 118  
Dietz 1991, 263.

NOTE 119  
Dietz 1991, 262.

NOTE 120  
The word “context” refers to Dietz 1991, 243-246.

NOTE 121  
Kilian-Dirlmeier 1997, 27 and 53 f. Dietz 1971 and Branigan 1974.

NOTE 122  
Avila 1983, Dickinson 1977, 70 (for a Cretan origin).

NOTE 123  
Kilian-Dirlmeier 1997, 50-53.

NOTE 124  
Dietz 1991, 316 ff.

NOTE 125  
Dickinson 1997, 45.

NOTE 126  
On this topic only a few standard works should be cited. Mycenaean origin for instance Vermeule 1975, Immerwahr 1977, Sakellariou 1989 and Laffineur 1984. Minoan origin for instance Davis 1977 and Hood 1978, 178 ff.

NOTE 127  
Davis 1976, 5.

NOTE 128  
For instance Immerwahr 1977 and Morgan 1988.

NOTE 129  
Dickinson 1997, 46.

blade and lion heads on the gold handle with an ivory mushroom pommel. The dating is probably LHIA. As for the swords with elaborate decoration we can agree with Oliver Dickinson that "... a taste for ornate weapons may be considered a typically mainland feature, established in the period of the Shaft Graves".<sup>125</sup>

The famous inlaid daggers from graves IV and V are standard topics for controversy concerning Mycenaean or Minoan.<sup>126</sup> The technique has not yet been found in Crete but was in use in the early horizon of the Shaft Graves. It is thus most reasonable to believe that the technique developed in the Mainland. The interesting thing is that the motives on the lion hunt dagger from grave IV are considered typically Mainland in character – Ellen Davis characteristically considered the dagger produced by "... a Minoan artist as commissioner for the Mycenaeans"<sup>127</sup> and that the motif on the dagger from grave V (765) with wildlife around a stream is best compared with the scenes from the miniature frescoes in the West house of Akrotiri (room 5).<sup>128</sup> Oliver Dickinson considered the inlaid dagger from Thera with axes was produced in Mycenae. I am inclined to agree with Dickinson that "... in the Aegean this technique *was* developed at Mycenae rather than in Crete".<sup>129</sup> It is, however, important to state that the scenes depicted and the iconographic accomplishment is unthinkable without the acceptance of an intensive communication and exchange of ideas in the Aegean area as a whole, the establishment of an Aegean koine, a movement which, on the Mainland, can be traced back to the beginning of LHI, to the period called LHIA and which peaks in the LHIB period.

The intensified communication in the Aegean in the late 17th century B.C. (LHIB) is reflected in the Shaft Graves. Standard equipment in male graves is sword, short sword/dagger, spear, arrows, helmet, knife, tweezer and razor, the face was often covered with a golden mask and goldfoil was used to decorate the cloth.

Diadems were used in male's as in female's graves. Ornaments, often in gold, consist of armring, necklace, fingerring and girdle. Female equipment includes oval diadem and gold stars, armring, necklace, ear rings, pins, various goldfoil ornaments and fingerring.

Besides basic metals such as copper, tin, gold, silver and lead, amber, probably from the Baltic was found abundantly as in the previous phase (LHIA) while ostrich egg shells ultimately deriving from Nubia/ N. Africa were not imported before this time. Objects in faience came from Crete or were locally produced.

Vessels in bronze were found earlier but it is not until the late 17th century that large containers, hydriae, cauldrons, kraters and two-handled basins were deposited in the graves. They are probably made in local workshops and are closely related to Cretan products. Whether the manufacture in Crete is earlier than the production on the Mainland is, however, uncertain and we would rather prefer to consider the large containers as an expression of a joint Aegean taste and productivity.

Within the large category of gold foil ornaments – originally placed on cloth or elsewhere – some clearly reflect cretan taste: dogs, stags, leopards, lions and imaginary sphinxes and griffins – and also octopuses, birds, butterflies and flowers and plaques in the shape of shrines, women, probably goddesses, one with birds on her head and shoulders. The themes and the iconography are Minoan but they are undoubtedly locally produced. In the same category should be classified the inlaid daggers. Similarly comparable with scenes from the miniature wall paintings is the siege scene from the silver rhyton in grave IV. We should like to emphasize that some of the items from the Circle A graves should probably be dated in LHIA. At the present we are however not able to distinguish which and in this study we keep them together in phase LHIB where the main part undoubtedly belongs.

### On the Supply of Raw Materials in the Shaft Graves of Mycenae:

The provenance of *copper* has been treated by means of lead isotope analysis by N.H. Gale and Z.A. Stos-Gale in various studies.<sup>130</sup> Unfortunately no analysis from Mycenae itself is available. Evidence from Crete however, taken on LMI oxhide ingots from Aghia Triada, Kato Zakro (LMIA), Gournia and Tylissos (LMIB) showed that the copper came neither from Cyprus, Lavrion nor Kythnos, but most probably from Syria or Mesopotamia. In the succeeding LMII period results from the Unexplored Mansion at Knossos and Western Crete (LMIA-LMIIIB) showed that by then copper probably came from Lavrion and Cyprus, Lavrion being the major source. Tests on material from Akrotiri on the other hand indicates that copper from Lavrion and Cyprus might have been provided earlier to Thera than to Crete. The same analysis indicate that silver smelting was practised in Ayia Irini, Akrotiri and Phylakopi using Lavrion ores, already exploited during the Early Helladic period

With *tin and gold*, however, the situation was different, as neither of these two metals was available in the Aegean. Tin might have been exported from the Near East. The material is mentioned in the archives from Mari<sup>131</sup> where it was exchanged for gold. Several hundred years later tin was traded from the East to the Aegean as indicated by the tin ingots found in the Ulu Burun ship wreck. Sources might have been Afghanistan (where even gold was found) and/or Elam. Other possible sources for tin are Tuscany and Sardinia. It should be noted that early Mycenaean pottery was found on the aeolian islands and at Vivara in the gulf of Naples.<sup>132</sup> As for gold the theories of provenance are many. Candidates have been Anatolia and Central Rumania, the latter supported by typological affinities between style and execution of Transylvanian gold items and those from Mycenae.<sup>133</sup> Egyptian deliveries might have functioned later.

Laffineur considered the raw materials and craftsmanship of the “non-pottery” objects and reached the conclusion that: “Raw materials such as gold, tin, ivory, amber, some semi-precious stones, ostrich eggs and perhaps glass, were certainly being traded from the Eastern Mediterranean, as is evidenced for later phases, and such a dependence is no doubt a major one, especially for metal supply – which could possibly also originate in the Balkan and Pontic areas” and “Imported objects, however, are remarkably few, since the only sure foreign item to have reached Mycenae during the Shaft Grave period is the alabaster vase 829 ...”.<sup>134</sup>

## Conclusions

### The Chronological Framework

(Fig. 3):

Phase 1 - 1725 to 1675 B.C. This period is approximately contemporary with the transitional MMIIIB/LMIA period in Knossos and the earlier part of early LMIA. At Akrotiri a new town was founded. The walls of the houses were for the first time provided with frescoes probably showing a most direct influence from Crete. Imported Minoan lustrous dark on light pottery was primarily decorated with tortoise shell ripple pattern and spirals corresponding to a very early phase of LMIA or MMIIIB/LMIA. Decoration on local pottery imitated cretan style. The presence of containers decorated in Mainland style indicate Mainland connections for the first time in the history of Akrotiri.

Slightly earlier than the seismic destruction of Akrotiri, another destruction ruined the second city of Phylakopi. It is of significance that Cycladic pottery was imported quite abundantly in Crete, especially in Knossos. The imported pottery was probably mainly of Melian origin. Genuine Minoan pottery on the other hand was not imported to Phylakopi in this period – in contrast to the situation earlier in the history of town II and later in town III. It is tempting to interpret this situation as the

NOTE 130  
For instance Pollard (ed.) 1992, 63-108.

NOTE 131  
Heltzer 1989. This brief summary of the tin and gold import is based on Laffineur 1990-1991.

NOTE 132  
The author has not been able to include the recently published volume by Marazzi M.

NOTE 133  
Davis 1983, 32-38. A more balanced view in Dickinson 1997, 47 ff.

NOTE 134  
Laffineur 1990-1991, 288.

NE Peloponnese	Attica/ Kiapha Th.	Aegina/ Kolonna	Kea/ Ayia Irini	Melos/ Phylakopi	Thera/ Akrotiri	Crete/ Knossos	Years B.C.
MHII Lerna V, 5 Lerna V, 6		IX Shaft Grave	IV	II-ii		MMIIB	1800 (XIII DYN)
			FORT.				1775
MHIIIA Lerna V, 7	FORT.	FORT.	V (((((((?)))))))))			(((((((((((((((())))))))))))))	1750
MHIIIB	MHIII	X		II-iii (((((((((((((((()))))))))))))) Mansion	MCHII/ early LCI	MMIIIA MMIIIB/ LMIA	1725 1700
LHIA			VI early (LMIA)	III-i early LCI	(((((((((((((((()))))))))))))) SDL mature LCI	early LMIA	1675
LHIB Lerna VI	?		VI late House A (LMIA + LHIB style)	FORT. late LCI	(((((((((((((((()))))))))))))) VDL	mature LMIA	1650 1625
LHIIA	LHIIA		VIIa/ VIIb	LCII			1600 1575
						LMIB	1550 (XVIII DYN)

Fig. 3. Relative Chronology in the Aegean Area from the Middle Bronze Age to the beginning of the Late Bronze Age. Sites dealt with in the article. The Absolute Chronology is based on an approximate dating of the Thera volcano to 1625 (Kuniholm 1997).

result of a period of crisis in Crete in the wake of the destruction of the Old Palaces. Mainland pottery was imported to Phylakopi in this period but not abundantly. As phase early VI in Ayia Irini includes the phases MMIIIB/LMIA and early LMIA it is not possible to distinguish a phase contemporary with the period here dealt with. In phase early VI both Minoan and Melian pottery was imported.

Turning to the Mainland it is highly significant that the fortified settlement of Kiapha Thiti imported a relatively substantial amount of small open types of Melian pot-

tery in this period. This group of pottery evidently was used in daily life on the site. On the other hand no Minoan pottery was found in Kiapha Thiti. This fact clearly supports the view, also significant in the Argolid, that as at Phylakopi, trade relations with Minoan Crete were interrupted during the period contemporary with MHIII on the Mainland.

In Mycenae the first rich Shaft Graves are from this period. Male graves might be furnished with A type sword, dagger, spear, knife and arrows, tweezers and razor. Ornaments could be golden bracelet and

necklace. High status was underlined by the presence of gold diadems, gold and silver vessels, bronze cups and faience. The females wore golden girdle, pins and earrings. Gold foil ornaments such as pointed oval and star shaped diadems were found in the female graves with gold and silver vessels and faience objects. Of 10 burial contexts, 7 contained Cycladic pottery probably imported from Melos. No Minoan pottery was found. It should be emphasized that weapons with elaborate ornamentation as in the later Shaft Graves are not yet found, neither are seals. The equipment is much more simple than in the later graves and there does not seem any reason to believe that the objects are not locally produced. One dagger with simple "damascening" indicates Syrian connections.

Phase 2 - 1675 to 1650 B.C. In Akrotiri, the period corresponds to the town rebuilt immediately after the seismic destruction. It might well be the period during which the miniature frescoes were painted on the walls in the West House – depicting (apparently) Mycenaean soldiers. It is not clear which pottery contexts should be ascribed to this last but one phase as the pottery in situ must of course have been deposited just before the final destruction. At Phylakopi in Melos on the other hand this is the phase before the construction of the fortification wall, when the administrative mansion was built and an administration system based on the Minoan Linear A script was introduced. Local pottery with MC affinity was still produced and Mainland pottery was imported – increasingly, however, during the next phase, after the construction of the fortification wall. The situation in Ayia Irini during the early phase VI is not yet clear.

Males in the graves of Mycenae are equipped with sword, short sword, spear, knife, arrows, razor, comb, tweezers and girdle around the waist. Diadems were used in this phase as in the preceding. The earliest face mask (in silver) was found in grave Gamma from this period. Cups in silver,

gold and bronze were also found in male graves from the period – but not containers in bronze. In this phase the first ornate weapons are found – without doubt produced in the Mainland. For the first time in the history of the Shaft Graves, seals were found, one in a male grave, one in a female. It might not be fortuitous that they were both found with Minoan pottery. Some of the burials in the Circle A undoubtedly go back to phase LHIA. This is at least the case with grave IV. The main reason why the picture of the period is rather meager is that we can not at present separate the stages in Circle A from this period from the stages from period LHIB.

During the period both Cycladic pottery, probably from Thera, and Minoan pottery was imported to the Argolid. Basic metals: copper, tin, silver, gold and lead, were imported. Amber, probably of Baltic origin, is now imported in quantities. Faience is either made on the Mainland or is imported from Crete.

Phase 3 - 1650-1600 B.C. At Akrotiri the town rebuilt after the seismic destruction earlier in that century flourished. The Minoan fingerprints were significant in its architecture and wall paintings were produced in local styles strongly dependant on the influences from the New Palaces in Crete. Administration was executed in Cretan linear A script, Cretan measuring units were used, many features in daily life were dependant on Minoan life style and trade with the surrounding world peaked. The pottery shows that relations existed with the Eastern Aegean, the Dodecanese and Eastern Asia Minor corresponding to the founding of Minoan colonies on Northern Rhodes, Miletus et al.. Thera relations with this area are not attested from the period before the seismic destruction of the town. Close connections with Crete are also attested through the substantial import of Minoan dark on light pottery in mature LMIA style. Mainland connections are shown by the import of dark on light LHI style pottery. As has often been emphasized it is in fact difficult

NOTE 135  
Cherry and Davis 1982,  
336.

NOTE 136  
Maran 1995, 71-72.

to distinguish between Minoan and Mainland pottery from this period – if only sherds are at hand<sup>135</sup> a fact which underlines the close relations between the New Palaces of Crete and the Mainland and the existence of an Aegean artistic “koine” during the later part of the 17th century B.C. This pottery probably came from Northeast Peloponnese, but also pottery from Kythera and Messenia has been testified underlining the wide geographical trade connections in the later half of the 17th century B.C. Other Mainland pottery groups from this period had been produced on Aigina and in Central Greece.

At Phylakopi on Melos, the transition to the mature LCI period is marked by the construction of a fortification wall, indicating that the political situation in the phase demanded protection of the town. It might be suggested that the enemy came from Neo Palatial Crete. There is hardly any doubt that wall paintings were used in the houses of Phylakopi and probably that an administration system using the Minoan linear A script was in use as earlier in the century. The minoanization was also felt in daily life as in Akrotiri, but the architecture did not reflect Minoan features to the same degree. Pottery in mature LMIA style was quite abundantly imported as were Mainland pottery groups, as at Akrotiri from Northeast Peloponnese and Central Greece and in approximately the same quantities.

Finally at Ayia Irini in Kea, houses with wall paintings were characteristic for the period as was the use of linear A, lead weights in Minoan standards and utensils of daily use inspired from the New Palaces in Crete. The site was probably fortified even during this period. The architectural features were not in any detail replicas of Minoan architecture but terracotta figures of goddesses clearly show that Minoan influence strongly influenced religious life in Ayia Irini. Mature LMA pottery was abundantly imported as was Mainland pottery in lustrous dark on light style with pottery groups from Central Greece and Aigina.

During the later part of the 17th century B.C. no Cycladic pottery was imported on the Mainland, in contrast to Minoan, mature LMIA products. At the transition to this phase there is a general tendency from Thessaly to the Peloponnese of a local rearrangement of settlements. Typical – former settlement areas are used for cemeteries during this time.<sup>136</sup> Thus in Kiapha Thiti in Attica the period is hardly represented – or at least only to a restricted degree. Sites are, however, found in most landscapes. In Boeotia (Eutresis) and abundantly in Northeast Peloponnese (for instance in Korakou, Zygorouries, Tzoungiza, Mycenae, Asine). In Lerna the settlement was abandoned but two shaft graves were constructed on its site and other graves are found close by to the North in Miloi. It is likely that this pattern, in one way or another, reflects the fact that the artistic koine during the period and “international” spirit is an expression of political activities with Neo Palatial Crete as the dominating actors.

The establishment of a genuine state formation in Mycenaean Greece should thus probably and most likely be the result of rivalry between the Mainland and the rising power in Crete.

It is thus tempting to interpret the last 50 years of the 17th century B.C. in the Aegean as a period of economic and commercial boom. Crete was founding colonies in the Eastern Aegean, in Rhodes, Miletus and elsewhere. A strongly minoanized town (if not a colony) at Akrotiri is an important centre of redistribution between Crete and the islands of the Aegean and Kythera, an ancient Cretan colony of great importance for the distribution of Minoan goods to southern Greece and probably the West, to Messenia and further North. In these areas further important Mainland centres are developing contemporary with the centres in the Argolid and Corinthia. The old town of Phylakopi in Melos is still active but needs protection behind fortification walls and Ayia Irini in Kea flourishes in an intermediate role between Mainland Greece, especially Central

Greece and Aigina and the southern Aegean islands and Crete. The result is the establishment of an artistic *koiné* and stable trade links, but except for raw materials it seems that it is mainly a flow of ideas and information connecting the different areas. The various centres are culturally (and economically) strong enough to develop their own artistic techniques and artistic expressions. It is still not possible to point to one single factor of primary importance for the economy within the regional economies.

Long distance trade in metals has been known for centuries and craftsmen have been developing their crafts, especially casting of bronze objects and hammering in gold/silver. Above all what is the characteristic for the Mainland during the Shaft Grave period is the astonishing amount of gold, in contrast to Crete where gold is a rare metal. If this is not pure chance the Mainland must have had access to markets not accessible for Crete. What is, however, the most remarkable for the last 50 years of the 17th century B.C. is the rapid flow of ideas and information within the Aegean. This movement starts slightly earlier when the New Palaces in Crete recovered from the crisis after the destruction of the Old Palaces. In general we could explain this development by political rivalry and an economic boom.

### Patterns of Exchange:

In 1979, J.L. Davis argued that "there existed a zone in the Western Cyclades (encompassing at least the islands Thera, Melos and Keos) in which there was regular exchange between Cycladic settlements and Crete". The three principal sites were considered three important ports along the "Western String" exchange route between Crete and the Mainland. The idea was further elaborated in 1982.<sup>137</sup> It was argued that "the Central and Eastern Cyclades lay outside the regular routes of traders by whom mainland goods were brought into the Cyclades, and that they may have been relatively isolated from both the mainland and Crete". Furthermore that

"... , the distribution of mainland pottery in the Cyclades in the LCI suggests a pattern of linear attenuation down the "Western String". Mainland pots ("in what has been called the LHI *style*") are most common and varied at Ayia Irini in the northwest, least common at Akrotiri in the southeast" and "The islands on which mainland wares occur in any significant quantity are also those where Minoan pottery is chiefly found; ..." <sup>138</sup>. Cherry and Davis suggest that the pattern might reflect a mode of exchange called "tramping"<sup>139</sup> with freelance traders or middlemen - "but it also seems possible that traders operating under the control, or with the blessing, of the palaces could have engaged in similar activities, either officially or unofficially".

Similarly in 1982 E. Schofield supplements and amplifies Cherry and Davis's view which she in general follows. She emphasized the importance of the Cretan need for metal as the main reason for establishing the "Western String", but, like Cherry and Davis, suggests that this expression of a directional trade network was probably not "... the only route by which Cretan commodities and ideas travelled abroad ..." but "... it was one of the most important routes, and probably the most important as far as the contacts with the Mainland are concerned" and "... Keos figured on a route from Crete to Attica, Euboea and the Saronic Gulf, but not necessarily to the Argolid, for which Melos might be a natural jumping off point".<sup>140</sup> Further "... ,the mainlanders would appear initially to have engaged largely in passive trade, while the Minoan and Cycladic traders took the initiative"<sup>141</sup> and "...it seems likely that trade in the Western Aegean was organized in large part by official agents appointed by the palaces and other administrative centres ..., and that within this general scheme there may well have been room for a good deal of private enterprise among individual traders or family groups ...".<sup>142</sup>

If we compare this with the phases denoted above in the chronological framework it is evident that this scenario only con-

NOTE 137  
Cherry & Davis 1982.

NOTE 138  
Cherry & Davis 1982, 338.

NOTE 139  
The Mainland Pottery included in the argumentation is dealt with in Cherry & Davis 1982, 336-338. This is what we have classified as LHIB.

NOTE 140  
Schofield 1982, 11.

NOTE 141  
Schofield 1982, 18.

NOTE 142  
Schofield 1982, 22.



NOTE 143  
Above p. 28.

NOTE 144  
Davis 1992, 707. Georgiou  
1993, 362.

cerns the situation in our phase 3.<sup>143</sup> As a general comment to the importance of the “Western String” model we should like to point out that – seen from the picture of development we have sketched above – the scenario is not able to explain the “origin of the Shaft Grave culture” as this phenomenon was already well established at this time. The early Mycenaean community in the Argolid was a rich, stratified society which employed a staff of skilled craftsmen able themselves to create valu-

able objects of high status using high technological skill at an advanced artistic level. The Mainland thus probably played a more active role in the pattern of communication than is often believed. In addition, new evidence from the central Cyclades seems to indicate that communication between Crete and the Cyclades in the period of transition from the Middle Bronze Age was not restricted to the three western islands<sup>144</sup>. This seems to point to a less directional mode of exchange.



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