Alashiya, Caphtor/Keftiu, and Eastern Mediterranean Trade: Recent Studies in Cypriote Archaeology and History

A Review Article

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This article is a review of three recent monographs concerned with the later Middle Cypriote and Late Cypriote periods on Cyprus (ca. 1700–1200 B.C.). Each study focuses narrowly on archaeological, philological, or historical problems associated specifically with Cyprus or more generally with interrelations among Aegean, Cypriote, and eastern Mediterranean cultures. Oblivious to common interests, the authors reflect their own particularistic concerns: philology, toponymy, stone anchors. The three publications reviewed serve both as a framework and as a vehicle for presentation of a balanced discussion of archaeological, historical, and theoretical problems associated with Middle/Late Bronze Age Cyprus and its role in eastern Mediterranean maritime trade. In conclusion, and as an alternative, a concise synthesis of cultural and socio-historical patterns on Cyprus ca. 1700–1200 B.C. is presented.

The three volumes under review are: L. Hellbing, Alasia Problems. StudMedArch *57 (P. Åström's Förlag: Göteborg 1979); D. E. McCaslin,* Stone Anchors in Antiquity: Coastal Settlements and Maritime Trade Routes in the Eastern Mediterranean. StudMedArch *61 (P. Åström's Förlag: Göteborg 1980); J. Strange,* Caphtor/Keftiu, A New Investigation. Acta Theologica Danica *14 (E. J. Brill: Leiden 1980).*

I have seen old ships sail like swans asleep
Beyond the village which men still call Tyre,
With leaden age o'er cargoed, dipping deep
For Famagusta and the hidden sun
That rings black Cyprus with a lake of fire;
And all those ships were certainly so old . . .
(from "The Old Ships" by James Elroy Flecker)

Introduction

The island of Cyprus (FIG. 1) occupies a prominent place in Mediterranean culture, history, and prehistory. Prehistoric archaeologists, historians, and philologists working in the Aegean, the Near East, and elsewhere, unfamiliar with archaeological research trends on Cyprus, may find—at first glance—a field of study dominated by a traditional, object-oriented approach.

The three publications (actually doctoral dissertations) here reviewed will do nothing to dispel that impression; they reflect solely the particularistic and parochial concerns—stone anchors, philology, toponymic identification—of their authors. Hellbing's and Strange's theses have already received justified criticism from historians and philologists alike;[1] yet Robert Merrillees, an archaeologist closely involved with the study of Cypriote prehistory, feels that Strange has rendered us a "significant service."[2] I disagree strongly with Merrillees and have argued elsewhere that Strange does indeed ". . . manipulate data by distortion or omission to give his case more credibility than it deserves. . ." and that he does not, as Merrillees opines, present his conclusions ". . . with due caution and care."[3] McCaslin's typology of stone anchors, at least, represents a contribution to Cypriote prehistory and to archaeological typology.

1. M. C. Astour, *JAOS* 102 (1982) 395–396; M. Görg, *Bibliotheca Orientalis* 39 (1982) 533–537; K. A. Kitchen, *Palestine Exploration Quarterly* (1982) 555–556; W. Moran, *Orientalia* 51 (1982) 143–145.

2. R. Merrillees, "John Strange, *Caphtor/Keftiu, A New Investigation* (Leiden 1980). A Review Article," *RDAC* (1982) 251 (244–253).

3. Ibid. 251; A. Bernard Knapp, *Orientalia* 52 (1983) 284–289.

Prehistorians studying the Neolithic, Chalcolithic, and Bronze Age periods on Cyprus have a unique opportunity to consider problems of cultural change and historical process. Within the Neolithic and Chalcolithic, for example, it is instructive to examine the initial colonization of the island,[4] the gap in occupation between the Aceramic and Ceramic Neolithic,[5] the duration and extent of the Ceramic Neolithic ("Sotira" culture),[6] the possible contemporaneity (and thus regionalization) of Chalcolithic cultures,[7] and the transition from the Chalcolithic to the Cypriote Early Bronze Age with the concomitant problems of the origins and temporal position of the "Philia" culture, the implications of intensified use of copper, etc.[8]

Some of the same issues, especially those of chronology and regionalism, arise in the study of the Cypriote Middle and Late Bronze Ages.[9] Cultural and socio-economic phenomena characteristic of these periods, however, pose problems quite different from those of earlier times. Included among them are questions related to the mining, production, and distribution of copper, and to the overall role of Cyprus in the exchange networks of the eastern Mediterranean Bronze Age.[10] Two basic

4. J. F. Cherry, "Islands Out of the Stream: Isolation and Interaction in Early East Mediterranean Insular Prehistory," *PPE* (1985) 12–29; idem, "Pattern and Process in the Earliest Colonisation of the Mediterranean Islands," *ProcPS* 47 (1981) 41–68; N. P. Stanley Price, *Early Prehistoric Settlement in Cyprus. A Review and Gazetteer of Sites. BAR Supp* 65 (Oxford 1979); idem, "Khirokitia and the Initial Settlement of Cyprus," *Levant* 9 (1977) 66–89.

5. Cherry, 1981 op. cit. (in note 4) 60–62; N. P. Stanley Price, "Colonization and Continuity in the Early Prehistory of Cyprus," *WA* 9 (1977) 27–41.

6. P. Dikaios, *Sotira. University of Pennsylvania, Univ. Museum Monographs* (University of Pennsylvania: Philadelphia 1961); E. J. Peltenberg, *Vrysi: A Subterranean Settlement in Cyprus* (Aris and Phillips: Warminster 1983); idem, "The Sotira Culture: Regional Diversity and Cultural Unity in Late Neolithic Cyprus," *Levant* 10 (1978) 55–74; N. P. Stanley Price, "The Structure of Settlement at Sotira in Cyprus," *Levant* 11 (1979) 46–83.

7. E. J. Peltenberg, "Some Implications of Recent Lemba Radiocarbon Dates for the Later Prehistory of Cyprus," in J. Reade, ed., *Chalcolithic Cyprus and Western Asia* (hereafter *CCWA*) (British Museum: London 1981) 23–40; I. A. Todd, "Current Research in the Vasilikos Valley," *CCWA* (1981) 57–74; T. Watkins, "The Chalcolithic Period in Cyprus: the Background to Current Research," *CCWA* (1981) 9–20.

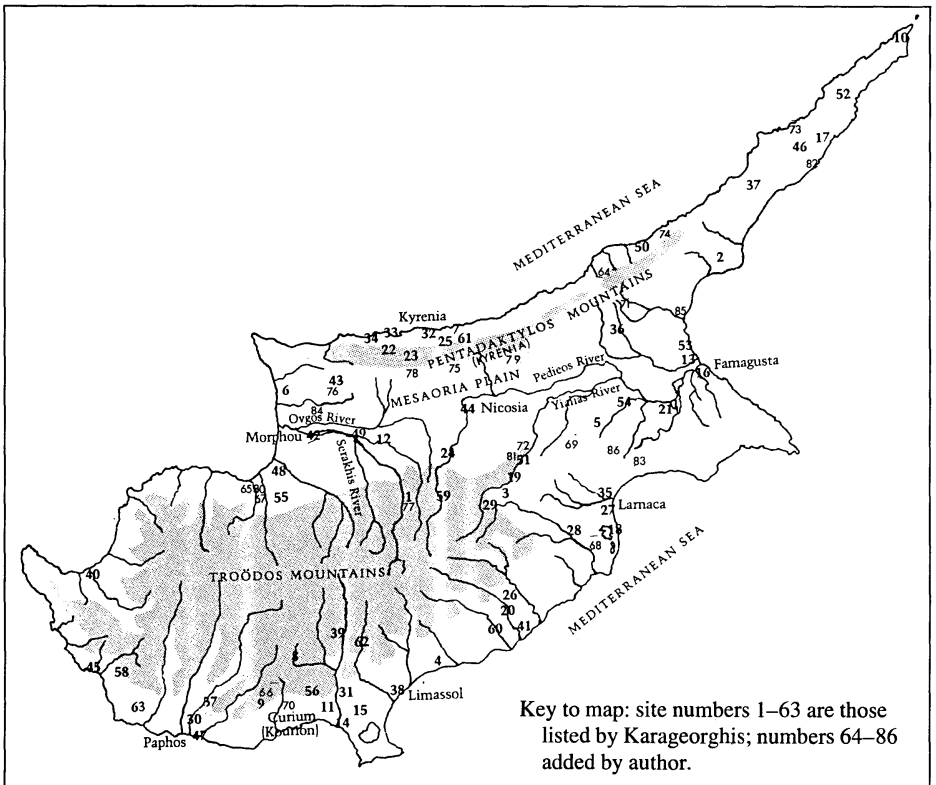
8. P. Dikaios, *The Stone Age. SCE* IV: 1A (Lund 1962); E. Gjerstad, "The Origin and Chronology of the Early Bronze Age in Cyprus," *RDAC* (1980) 1–16 (reviewed critically by R. S. Merrillees, *Bibliotheca Orientalis* 40 [1983] 193–195); E. Herscher, "Southern Cyprus and the Disappearing Early Bronze Age," *RDAC* (1980) 17–21; E. J. Peltenberg, *Recent Developments in the Later Prehistory of Cyprus. StudMedArch, Pocketbook* 16 (P. Åström's Förlag: Göteborg 1982); J. R. Stewart, *The Early Bronze Age. SCE* IV:1A (Lund 1962); Watkins, op. cit. (in note 7).

9. On chronology: I. Kehrberg, "Early and Middle Cypriote Chronology Again," *Levant* 14 (1982) 59–72; R. S. Merrillees, "The Absolute Chronology of the Bronze Age in Cyprus," *RDAC* (1977) 33–50; D. L. Saltz, "The Chronology of the Middle Cypriote Period," *RDAC* (1977) 51–70. On regionalism: P. Åström, *The Middle Cypriote Bronze Age. SCE* IV:1B (Klassika Institutionen: Lund 1957); D. Frankel, "Intersite Relationships in the Middle Bronze Age of Cyprus," *WA* 6 (1974) 190–208; E. Herscher, "South Coast Ceramic Styles at the End of Middle Cypriote," *RDAC* (1976) 11–19; R. S. Merrillees, "Reflections on the Late Bronze Age in Cyprus," *OAth* 6 (1965) 139–148.

10. H. W. Catling, "Copper in Cyprus, Bronze in Crete: Some Economic Problems," *Acts: Cyprus and Crete* (1979) 69–75; J. D. Muhly, "The Bronze Age Setting," in T. A. Wertime and J. D. Muhly, eds., *The Coming of the Age of Iron* (Yale University Press: New Haven 1980) 40–46 (25–67); J. D. Muhly, R. Maddin, and T. S. Wheeler, "The Oxhide Ingots from Enkomi and Mathiati and Late Bronze Age Copper Smelting on Cyprus," *RDAC* (1980) 84–99; J. D. Muhly, T. S. Wheeler, and R. Maddin, "The Cape Gelidonya Shipwreck and the Bronze Age Metals Trade in the Eastern Mediterranean," *JFA* 4 (1977) 353–362; Y. Portugali and A. Bernard Knapp, "Cyprus and the Aegean: A Spatial Analysis of Interaction in the 17th–14th Centuries B.C.," *PPE* (1985) 44–78.

Additional Abbreviations

Acts: Cyprus and Crete	*Acts of the International Archaeological Symposium: The Relations between Cyprus and Crete, ca. 2000–500 B.C.*, V. Karageorghis, ed. (Department of Antiquities: Nicosia 1979).
Acts: MEM	*Acts of the International Archaeological Symposium: The Mycenaeans in the Eastern Mediterranean*, V. Karageorghis, ed. (Department of Antiquities: Nicosia 1973).
CCWA	*Chalcolithic Cyprus and Western Asia*, J. Reade, ed. (British Museum: London 1981).
KBo	*Keilschrifttexte aus Boğazköy* (Wissenschaftliche Veröffentlichungen der deutschen Orient-Gesellschaft: Berlin).
KTU	M. Dietrich, O. Loretz, and J. Sanmartín, *Die Keilalphabetischen Texte aus Ugarit. Alter Orient und Altes Testament* 24.1 (Verlag Butzon and Bercker: Neukirchen-Vluyn).
KUB	*Keilschrifturkunden aus Boğazköy* (Institut für Orientforschungen: Berlin).
PPE	*Prehistoric Production and Exchange in the Aegean and East Mediterranean. UCLA Institute of Archaeology, Monograph* 25, A. Bernard Knapp and T. Stech, eds. (UCLA Institute of Archaeology: Los Angeles 1985.
RDAC	*Report of the Department of Antiquities, Cyprus* (Nicosia).
RS,RSL	Ras Shamra. Prefix for field numbers of tablets and finds registered by the French archaeological excavations.
SCE	Swedish Cyprus Expedition. Lund.



Key to map: site numbers 1–63 are those listed by Karageorghis; numbers 64–86 added by author.

1. Akhera
2. Alaas
3. Alambra
4. Amathus
5. Arsos
6. Ayia Irini
7. Ayios Epiktitos
8. Ayios Therapon
9. Ayios Thomas
10. Cape Andreas
11. Kourion
12. Dhenia
13. Enkomi
14. Episkopi-Phaneromeni
15. Erimi
16. Famagusta
17. Galinoporni
18. Hala Sultan Tekke
19. Idalion
20. Kalavasos
21. Kalopsidha
22. Karavas
23. Karmi
24. Kato Dheftera
25. Kazaphani
26. Khirokitia
27. Kition
28. Klavdhia
29. Kochati (Mathiati)
30. Kouklia (Palaepaphos)
31. Kourion
32. Kyrenia
33. Lambousa
34. Lapithos
35. Larnaca
36. Lefkoniko
37. Leonarisso
38. Limassol
39. Limnatis
40. Marion
41. Maroni
42. Morphou
43. Myrtou
44. Nicosia (also Ayia Paraskevi)
45. Palaeokastro/Maa
46. Paleaoskoutella
47. Paphos
48. Pendayia
49. Philia
50. Phlamoudhi
51. Potamia
52. Rizokarpasso
53. Salamis
54. Sinda
55. Skouriotissa
56. Sotira
57. Souskiou
58. Tala
59. Tamassos (Politiko)
60. Tenta
61. Vounous
62. Yerasa
63. Yeroskipou

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64. Akanthou
65. Ambelikou
66. Anoyira
67. Apliki
68. Arpera
69. Athienou
70. Avdhimou
(44) Ayia Paraskevi (Nicosia)
71. Ayios Iakovos
72. Ayios Sozomenos
73. Ayios Thyrsos
74. Dhavlos
75. Dhikomo
(81) Kafkallia (near Nikolidhes)
76. Karpasha
77. Kata Moni
78. Krini
79. Kythrea
80. Lefka
(45) Maa (see Palaeokastro/Maa)
(29) Mathiati (Kochati)
81. Nikolidhes
82. Nitovikla
(59) Politiko (near Tamassos)
83. Pyla
84. Toumba tou Skourou
85. Trikomo
86. Troulli

Figure 1. Cypriote site map, based on the map in V. Karageorghis, *Treasures of Cyprus* (Smithsonian Institute: Washington, D.C. 1976) 3.

problems are only now being considered. Given developments in the surrounding Aegean and Eastern Mediterranean realms, why was Cyprus so late (about 2000 B.C.) in perfecting a bronze technology? And what factors were instrumental in the rise of complex society on Cyprus in the first half of the 2nd millennium B.C.?[11]

The books under review evaluate, from both archaeological and philological stances, problems associated with the later Middle Cypriote (MC) and the Late Cypriote (LC) Periods (ca. 1700–1050 B.C.):

1) the identification of Alashiya and Caphtor/Keftiu;[12]

2) Cyprus' role in Eastern Mediterranean maritime trade;[13] and

3) the "history" of Cyprus as revealed in documentary sources.[14]

Focusing narrowly on a single archaeological or philological aspect of Cypriote or eastern Mediterranean studies, the three works give the impression that they were written in a temporal and spatial vacuum, with their selected sources usually unrelated to one another and their authors oblivious to mutual concerns. One must look long and hard to realize that these studies deal with a single topic—the cultural and economic history of Cyprus in the Late Bronze Age.

The present paper attempts to give a *balanced* historical and archaeological synthesis of the period and of the problems in question while highlighting some of the major archaeological and philological deficiencies in the publications under review. The focus is archaeological. Yet all evidence bearing upon a broader socio-historical reconstruction—textual, historical, archaeological, theoretical—is integrated in order to present a comprehensive overview of Cyprus' semi-literate Bronze Age society.

With the superabundance of Cypriote and eastern Mediterranean archaeological data available for study and analysis, the limited aims of an object-oriented approach must be discarded.[15] In its place, we need to develop appropriate analytical frameworks for evaluating the data, and to generate hypotheses that may be tested further as additional data accumulate. These hypotheses will help, *inter alia*, to understand how production and exchange affect social stratification and organization; how and by whom potential resources were exploited; how goods-in-demand were (re-)distributed; who actually conducted such exchange and distribution as existed; and exactly what sorts of local products might be exchanged for luxury or "surplus" goods, including metals. Additionally, by employing the results of intensive surveys, and the spatial and contextual analysis of local and/or imported goods in situ, in "off-site" contexts, or in mortuary associations, archaeologists can increase understanding of production and exchange processes, and gain insight into attendant socio-economic developments.[16] This study attempts to realize some of the above aims by placing the study of Cypriote archaeology and pre-/protohistory on a more theoretical level, and by utilizing cross-disciplinary humanistic and social scientific methodology.

The Identification of *Alashiya*

Textual Evidence

In order to evaluate fully the socio-economic and historical role played by Cyprus in the eastern Mediterranean during the MC and LC periods, it is essential to consider not only the archaeological record but also any relevant contemporary written records from the surrounding literate cultures. To employ the textual evidence, however, it is necessary first to establish the name of Bronze Age Cyprus. While most cuneiformists have long since accepted the Cyprus-*Alashiya* equation (*Chicago Assyrian Dictionary* A/1 [1977] 377, s.v. *alašu*), and most ancient Near Eastern history is currently written on the same basis, Strange has proposed to equate the elusive *Caphtor/Keftiu* (C/K) with the island of Cyprus. While attempts have been made to identify C/K with various parts of Anatolia, Syria, and Phoenicia (Strange, pp. 113–146), not since 1910 has anybody suggested its identification with Cyprus.

Strange presents 58 different texts (dating from the 3rd millennium B.C. to the 4th century A.C.) that refer to C/K; included are documents in Egyptian (the largest number), Akkadian, Hebrew, Ugaritic, Greek, and Latin. Strange provides loose, but reasonably accurate translations of each text, and proceeds to summarize

11. A. Bernard Knapp and Tamara Stech, "Copper Production and International Exchange: The Rise of Complex Society on Cyprus," paper presented at the 48th Annual Meeting of the Society for American Archaeology, Pittsburgh, 28 April 1983.

12. J. Strange, *Caphtor/Keftiu. A New Investigation. Acta Theologica Danica* 14 (E. J. Brill: Leiden 1980).

13. D. E. McCaslin, *Stone Anchors in Antiquity: Coastal Settlements and Maritime Trade Routes in the Eastern Mediterranean ca. 1600–1050 B.C. StudMedArch* 61 (P. Åström's Förlag: Göteborg 1980).

14. L. Hellbing, *Alasia Problems. StudMedArch* 57 (P. Åström's Förlag: Göteborg 1979).

15. K. A. Kamp and N. Yoffee, "Ethnicity in Ancient Western Asia during the Early Second Millennium B.C.," *BASOR* 237 (1980) 85–104.

16. For fuller discussion on these points, see A. Bernard Knapp, "Production and Exchange in the Aegean and Eastern Mediterranean: An Overview," *PPE* (1985) 1–11.

briefly and discuss how each text pertains to the identification of C/K.

Strange's most serious shortcoming is his tendency to transform assumption into historical fact without intervening demonstration of logical possibility. *Isy* (place-name in Egyptian texts, see below) is said to be ". . . best identified with *Aššuwa* of the Hittite texts" (p. 19); Strange makes no reference to the Hittite place name *Ishuwa* or to *Alashiya* with which *Isy* is usually identified. By the end of the same page, both *Isy* and *Keftiu* (another Egyptian term) are said to be accessible only by boat and situated west of Egypt. Strange (p. 35) finds it "tempting" to equate *Kaptara* (place-name found in Akkadian cuneiform geographical treatises) with Cyprus; in the second paragraph, he writes: ". . . the scribe, when he made this equation of Cyprus and *Kaptara* . . . ." Since Kothar-wa-Hasis (Canaanite craftsman-god) lived on *Kptr* (Ugaritic cuneiform equivalent of *Caphtor*), Strange argues (pp. 85, 91–92, 115–116) that *Kptr* must have been a center of metallurgy or of ore-smelting (by implication *Kptr* would have to be Cyprus, but this line of reasoning is invalidated by recent research indicating a "common copper smelting technology on both Cyprus and Crete").[17]

Strange also tends to manipulate his data in an unacceptable manner. Determined to eliminate Crete as a possible identification for C/K, Strange offers arguments (pp. 124–26) that are either illogical (the "time" in which C/K is documented), irrelevant (Crete belonged to the "islands in the midst of the sea"), or purely subjective if not erroneous (the "migrations" of the Philistines and their presumed association with Cyprus). Strange's attempt to equate C/K with Cyprus is likewise marred by the use of the following unproven and unverifiable assumptions.

1) That an agent from *Kaptaru* receiving tin in the Syrian port of Ugarit (Mari text A 1270) would more likely be from Cyprus than from the Aegean, given the quantities of Cypriote pottery found at Ugarit. Both Minoan/Mycenaean and Cypriote wares abound at Ugarit and its port Minet el-Beidha.

2) That the similarity between "Philistine" pottery and Late Helladic (LH) IIIC1b (Mycenaean) wares on Cyprus can be used to support the equation of the Biblical place-name *Caphtor* (home of Philistines according to Gen. 10:13–14, I Chron. 1:11–12, Amos 10:7, Jer. 47:4, Deut. 2:23, respectively Strange's text nos. 9, 10, 23–25) with Cyprus.

Strange is unreasonable in his attempt to eradicate any association between *Alashiya* and Cyprus. Traditional epistolary salutations in Akkadian letters ("my father", "my son") are questioned as reliable indicators of rank (pp. 174, 177); *Alashiya* is denied a role as a copper-producing and exporting country and is compared instead to Ugarit as a middleman in the copper trade (pp. 179–180). Strange attempts to locate *Alashiya* anywhere but Cyprus: along the south Anatolian coast, in northern Syria, or even in eastern Anatolia (pp. 172, 179–180).

In Chapters III–V, Strange presents his arguments against the C/K-Crete and for the C/K-Cyprus identification. With a preconceived conviction that C/K is Cyprus, and with an overreliance on textual rather than archaeological data, Strange makes unwarranted assumptions and errors in judgment. He harbors a negative bias against the "mute" archaeological record (p. 14) and consistently fails to cite current archaeological studies.[18] Thus while Kamares Ware may indicate connections between Crete and the eastern Mediterranean, it is questionable whether or not all "Cretan" pottery found in the SE Aegean or the eastern Mediterranean derives from Crete.[19]

When Strange turns to the archaeology of Cyprus, he makes many spurious observations. Selected examples include the following.

1) The pre-Bronze Age contacts of Cyprus are said to be northern (i.e., presumably Anatolian—p. 148); an alternative, well-reasoned, and well-documented view looks eastward for those contacts.[20]

2) Cypro-Cretan contact was not firmly established in the Early Cypriote (EC), as Strange argues (p. 149), but rather in the MC period.[21]

3) Strange fails to emphasize the extremely limited evidence for "ox-hide" ingots on Cyprus (p. 152). Aside from miniature ("votive") ingots, there exist only one fragmentary and three complete ingots from

17. J. D. Muhly, "Cypriote Copper: Some Geological and Metallurgical Problems," *Acts: Cyprus and Crete* (1979) 94–95 (87–100).

18. Discussions of Cretan Kamares Wares (Strange, p. 125, note 113) should include G. Walberg, *The Kamares Style. Acta Universitatis Upsaliensis, Boreas* 10 (Almqvist and Wiksell: Uppsala 1978); idem, *Kamares, A Study of the Character of Painted Middle Minoan Pottery. Acta Univ. Upsaliensis, Boreas* 8 (Almqvist and Wiksell: Uppsala 1976). Considerations of Aegean Settlement in Cilicia (Strange, p. 127, note 145) should include references to E. French, "A Reassessment of Mycenaean Pottery in Tarsus," *AnatSt* 25 (1975) 53–75. References to iron metallurgy (Strange, pp. 136–137) should incorporate studies by J. Waldbaum, *From Bronze to Iron. StudMedArch* 54 (P. Åström's Förlag: Göteborg 1978), and now also Wertime and Muhly, op. cit. (in note 10).

19. J. L. Davis, "The Earliest Minoans in the Southeast Aegean: A Reconsideration of the Evidence," *AnatSt* 32 (1982) 33–41.

20. Stanley Price, 1977 op. cit. (in note 4).

21. E. Herscher, "Cretan and Cypriote Ceramic Techniques in the Late Third Millennium B.C.," *Acts: Cyprus and Crete* (1979) 1–7.

Enkomi, and ingot fragments from Mathiati.[22]

Let it be acknowledged immediately that some Cypriote archaeologists still question or even deny the equation of *Alashiya* with Cyprus.[23] Their lack of familiarity with Near Eastern textual data, however, is understandable and the full complement of evidence has never been published in readily accessible form.[24] Yet various scholars have treated the textual evidence to some degree and there is no reason to duplicate their efforts here.[25] What follows are some general observations on the textual evidence pertaining to *Alashiya*, and some specific points that have, for various reasons, been omitted from other studies.

The flourishing Middle and Late Bronze Age kingdom of *Alashiya* is mentioned in textual material from various city-states and kingdoms of ancient Western Asia and the eastern Mediterranean. As early as 1895, soon after clay tablets inscribed in Akkadian cuneiform were discovered at Amarna in Egypt, *Alashiya* was equated with Cyprus.[26] Northern Syria and Cilicia were thereafter proposed as other possible locations,[27] and the debate has continued, with decreasing fervor, to the present day. Both Muhly and Holmes have satisfactorily demonstrated, in my view, that northern Syria and Cilicia, with their numerous, well-attested Late Bronze Age city-states and kingdoms, leave no room for a state as significant as *Alashiya*.[28] During the century 1350–1250 B.C., when Egypt and Hittite Anatolia struggled for political and economic pre-eminence in Syria, *Alashiya* evidently remained neutral, an unlikely stance for any political power in north Syria to assume. Had *Alaṣhiya* been situated in Cilicia or north Syria, it seems inconceivable that it would not have been mentioned in the contemporary (especially Hittite cuneiform) textual evidence. *Alashiya* is conspicuous by its absence from the exhaustive list of Hittite allies who fought the Egyptians at Qadesh early in the 13th century B.C.[29]

Conversely, the well-populated and prosperous Late Bronze Age sites of Ayios Dhimitrios, Enkomi, Kition, Hala Sultan Tekke, Kouklia, Maroni, and Toumba tou Skourou (see FIG. 1 for site locations) make Cyprus the logical candidate for the claim of a "great power," a status suggested by the content of the Amarna letters sent from *Alashiya* to Egypt.[30] As our geopolitical and topographical knowledge of ancient Syria and the eastern Mediterranean continues to grow, there is absolutely no indication of a Syrian or Cilician location for *Alashiya*. *Alashiya* was a "naval station" that played an important role in the widespread disruptions at the end of the Late Bronze Age.[31] Cyprus was a prosperous island in the Late Bronze Age, enjoying literacy (however limited), producing and exporting copper, and conducting an extensive exchange with the Aegean and the Levant. These factors underscore the cultural and historical significance of Middle-Late Bronze Age Cyprus and further corroborate its identification with the high-ranking state of *Alashiya*.

Onomastic and topographic evidence linked to *Alashiya* is meager but widespread in place and time. Alashiyan onomastica preserved on various Akkadian, Ugaritic, and Egyptian documents depict a population of differing social status, from princess to farmer.[32] The

22. Muhly, Maddin and Wheeler, op. cit. (in note 10); Wertime and Muhly, op. cit. (in note 10) 42.

23. H. W. Catling, "Cyprus and the West 1600–1050 B.C.," *Ian Sanders Memorial Lecture* (Department of Prehistory and Archaeology, Sheffield University: Sheffield 1980) 9–10; idem, "Cyprus in the Late Bronze Age," *CAH* II, part 2, chap. 22b (Cambridge University Press: Cambridge 1975) 201–205; R. S. Merrillees, op. cit. (in note 2); idem, "Alasia," in V. Karageorghis, ed., *Acts of the First International Cyprological Congress* (Department of Antiquities: Nicosia 1972) 111–119.

24. Cf., however, A. Bernard Knapp, "A Re-Examination of the Interpretation of Cypriote Material Culture in the MC III–LC I Period in the Light of Textual Data," unpublished Ph.D. dissertation, University of California, Berkeley (Berkeley 1979) 151–286.

25. Among others, see O. Carruba, "Contributo alla Storia di Cipro nel II Millennio," *Studi Classici et Orientali* 17 (1968) 5–29; A. Bernard Knapp, "The Onomastica of Alashiya," *New Journal of Cyprian Studies* 1 (1982) 1–30; I. Vincentelli, "Alasia. Per una Storia di Cipro nell'Età del Bronzo," *Biblioteca di Antichità Cipriote* 3 (1976) 9–49.

26. W. M. Mueller, "Das Land Alasia," *ZAssyr* 10 (1895) 257–264.

27. H. R. Hall, "The Land of Alashiya and the Relations of Egypt and Cyprus under the Empire (1500–1100 B.C.)," *Journal of the Manchester Egyptian and Oriental Society* 2 (1913) 33–45; G. A. Wainwright, "Alashia=Alasa; and Asy," *Klio* 14 (1914–1915) 1–36.

28. Y. L. Holmes, "The Location of Alashiya," *JAOS* 91 (1971) 426–429; J. D. Muhly, "The Land of Alashiya: References to Alashiya in the Texts of the Second Millennium B.C., and the History of Cyprus in the Late Bronze Age," in Karageorghis, ed., op. cit. (in note 23) 201–219; see now also the most recent study on this topic by Muhly, "The Nature of Trade in the LBA Eastern Mediterranean: The Organization of the Metals Trade and the Role of Cyprus," in J. D. Muhly, R. Maddin, and V. Karageorghis, eds., *Acta of the International Archaeological Symposium: Early Metallurgy in Cyprus, 4000–500BC* (Pierides Foundation: Larnaca 1982) 258–261 esp. (251–269).

29. H. Goedicke, "Considerations on the Battle of Kadesh," *JEA* 52 (1966) 71–80; A. Goetze, "The Hittites and Syria (1300–1200 B.C.)," *CAH* II, part 2, chap. 24 (Cambridge University Press: Cambridge 1975) 252–273; Muhly, op. cit. (in note 28) 212–213.

30. J. A. Knudtzon, *Die El-Amarna Tafeln*, 2 vols. (J. Hinrichs: Leipzig 1910, 1915) 278–299.

31. M. J. Mellink, review of H. W. Catling, "Cyprus in the Neolithic and Bronze Age Periods," *CAH* fascicle 43 (Cambridge University Press: Cambridge 1966), in *JAOS* 88 (1968) 539–540.

32. M. C. Astour, "Second Millennium B.C. Cypriote and Cretan

most controversial prosopographic text is a "list" from Ugarit, written in the local alphabetic cuneiform script with the exception of the syllabically written, lateral heading URU *A-la-ši-ia*.[33] The explicit nature of this text (census list? list of prisoners or "deportees" from Cyprus? list of Ugaritic merchants associated with Cyprus? list of Cypriote families settled in Ugarit?) remains in doubt; we cannot even determine—from the text itself—the origin of the people listed: are they from *Alashiya*, or are they people from Ugarit residing in *Alashiya*?

More important for our purposes, however, is the implication of writing the name *Alashiya* with the (Sumerian) cuneiform determinative URU "city" as opposed to the determinative KUR "land, country" with which it is usually written. The writing with URU is not, however, limited to the text under discussion.[34] Cuneiform scribes in areas peripheral to Babylonia occasionally employed KUR and URU as virtual equivalents to the KI "place" determinative. Hittite cuneiform texts often show a writing with the double ideogram KUR. URU.[35] Contrary to Strange (p. 171), KUR. URU hardly means "city-state," at least not to Hittite scribes unfamiliar with post-Bronze Age political concepts. The contention that *Alashiya* cannot be equated with Cyprus because it is written with URU is unfounded and inconclusive.

Even though onomastica provide a tentative ethnic profile of Cyprus in the Bronze Age, such information must be used cautiously. Onomastic evidence suggests that *Alashiya* belonged to the eastern Mediterranean ethnic sphere with its polylingual, poly-ethnic mix of Hurrians, Semites, Anatolians, and Egyptians, much like the contemporary sites of Ugarit or Alalakh.[36]

The Egyptian evidence consists of two terms, *'isy* and *'irs3*,[37] both of which have been equated with *Alashiya*. *'isy* seems generally to have been a term current during the reign of Tuthmosis III (1490–1436 B.C.),[38] but it also appears in some later topographical lists dated to the reigns of Seti I, Ramesses II and III (13th and early 12th centuries B.C.).[39] Given the association of *'isy* with *Keftiu* somewhere in the "west,"[40] and considering its exports, especially copper,[41] *'isy* may tentatively be regarded as an earlier reference to the land termed *'irs3* by Egyptians of the later 18th and 19th Dynasties.[42] Although a thorough, updated linguistic and historical study of the term *'isy* is needed,[43] in a preliminary paper in this vein J. Osing has concluded that a Ptolemaic rendering of *'isy* designates it as an island, and that the island in question must be Cyprus.[44]

'irs3 is equated indisputably with *Alashiya*: it is recorded in an inked hieratic docket on the upper (reverse) half of Amarna letter 39 (EA 39: *sʿ.t n wr n 'irs3*—"letter of the chief of *Alashiya*"). Another Egyptian document, the 11th century B.C. "Tale of Wen Amun," depicts the hero of the story, an emissary from Thebes, driven seaward from the Syrian coast to *'irs3* where he was rescued from hostile inhabitants by a queen with an Egyptian name.[45] Evidence from the Amarna letters also suggests that *Alashiya* was situated in the midst of the sea and that ships were utilized to travel between Alashiya and Egypt (EA 40: 16–20).

The connection with Cyprus becomes even stronger when consideration is given to the continual shipments of copper dispatched from *'irs3* and *Alashiya* to Egypt. In five of the eight extant Amarna letters, the king and *rābiṣu* ("royal advisor, commisar") of *Alashiya* send a

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Onomastica Reconsidered," *JAOS* 84 (1964) 240–254; Knapp, op. cit. (in note 25).

33. The tablet number is RS 11.857(=*KTU* 4.102): C. H. Virolleaud, "Lettres et Documents Administratifs Provenant des Archives d'Ugarit," *Syria* 21 (1940) 267–273 (247–276); A. Herdner, *Corpus des Tablettes en Cuneiformes Alphabetiques. Mission de Ras Shamra* 10 (P. Geuthner: Paris 1963) 168–169, no. 80, fig. 137, pl. LIV.

34. See the Madduwatta text, A. Goetze, *Madduwattaš. MDOG* 32 (1927) 38–39, reverse 88.

35. Ibid. Nor is *Alashiya* the only place-name written with both KUR and URU: for the north Syrian site of Alalakh, see D. J. Wiseman, *The Alalakh Tablets. Occasional Publications of British Institute of Archaeology in Ankara* No. 2 (London 1953) 154.

36. Knapp, op. cit. (in note 25).

37. These two terms have been transliterated from their hieroglyphic forms as *'a-si$_x$-ja* (*'isy*) and *'á-la-šá* (*'irs3*): see W. Helck, *Die Beziehungen Ägyptens und Vorderasiens zur Ägäis bis ins 7 Jahrhundert vor Christ. Erträge zur Forschung* 120 (Wissenschaftliche Buchgesellschaft: Darmstadt 1979) 35–36.

38. K. Sethe, *Urkunden des Ägyptischen Altertums* IV *(18.Dynastie).* (Akademie Verlag: Leipzig 1906) 612:2, 707:16, 719:13, 724:10.

39. Vincentelli, op. cit. (in note 25) 39–41; Wainwright, op. cit. (in note 27) 32–36.

40. Helck, op. cit. (in note 37) 34.

41. W. M. Mueller, *Egyptological Researches. CarnInstPub* 10 (Washington, D.C. 1910) 91–92.

42. E. Edel, "Ein neuer Beleg für 'Nineveh' in Hieroglyphischer Schreibung," *Orientalia* 37 (1968) 419, note 2 (417–420); W. Helck, *Die Beziehungen Ägyptens zu Vorderasien in 3. und 2. Jahrtausend vor Christ. Ägyptische Abhandlungen* 5, 2. Auflage (Harrassowitz: Weisbaden 1971) 283, 385.

43. J. Leclant, "Le Nom du Chypre dans les Textes Hiéroglyphiques," in M. Yon, ed., *Salamine de Chypre: Histoire et Archéologie. Colloques Internationaux du CNRS* 578 (CNRS: Paris 1980) 131–135.

44. J. Osing, "Zum Ägyptischen Namen für Zypern," *Göttinger Miszellen* 40 (1980) 47 (45–51).

45. Sir Alan Gardiner, *Late Egyptian Stories. Bibliotheca Aegyptiaca* 1 (Fondation Egyptologique Reine Elisabeth: Brussels 1932) 61–76a; E. F. Wente, in W. K. Simpson, *The Literature of Ancient Egypt* (Yale University Press: New Haven 1972) 142–155.

minimum total of 897 talents of copper to Pharaoh.[46] 897 talents are equivalent to about 53,820 lbs. of copper, and represent an average shipment of almost 180 lbs. per month.[47] In the Egyptian Papyrus Anastasi IV: 17.7-9, the "children of *'irs3"* bear numerous ingots of raw copper as "gifts" for Pharaoh.[48] The repeated associations of *'irs3* (and *'isy*) with copper and copper shipments, along with an apparent maritime location, further substantiate the identification of *Alashiya* with Cyprus.[49]

The Old Testament place name *Elishah* (Hebrew אלישה) may also be equated with *Alashiya*.[50] Elishah might also underlie the name of an important mythical figure, Pygmalion's sister Elissa. Dido of Carthage in north Africa may thus have been known as Elissa at Tyre in Phoenicia. Now Dido, along with her 80 temple prostitutes, was said to have come to north Africa from Cyprus. Thus we may imagine that the name of Elissa is simply that of Cyprus itself, ". . . that is, *'elîšâ*, which name appears as Alasia in the Amarna letters."[51]

A Phoenician text inscribed on a 7th century B.C. amulet found in north Syria contains the sole reference to *Alashiya* as an island.[52] This rather obscure incantation is directed against a demon identified as the "Alashiyan" (*'lšyy*). More significant is the phrase *'y 'lšyy* "isle of the Alashiyan" (obverse 5–6). Although *'y* ("island") is so far known in the Phoenician script only from toponyms (e.g., *'yksm* [Ikosium], *'ybsm* [Ibiza] and *'yrmn* [Cossyra], it corresponds to Hebrew אי ("island") and to Egyptian *'iw* ("island").[53] Unfortunately, because of the myriad interpretations expressed by Semitic epigraphers, the translation of *'y 'lšyy* as "island of the Alashiyan" may only be regarded as tentative.[54] Were that juxtaposition accepted, the identification of *Alashiya* with Cyprus would be virtually beyond dispute. This Iron Age survival of the Bronze Age place name *Alashiya* is, in any case, analogous to its use in the Hebrew form *Elishah* of the Old Testament.

The Linear B (Mycenaean) word *a-ra-si-jo* appears on three tablets from the Minoan site of Knossos (Df 1229 + 5222 + 5342, Fh 369, × 1463) and has been interpreted as an ethnic adjective or as a personal name homonymous with the ethnic adjective.[55] Bubenik understood *a-ra-si-jo* as the ethnic of an unattested pre-Hellenic place name **alasios* (**alas-*?); the later hellenized name would be *alasiotas* ('Αλασίωτας), an ethnic which actually occurs on a fourth century B.C. bilingual text from Tamassos on Cyprus.[56] This suggests that the place name *Alashiya,* current in Akkadian, Ugaritic, Hittite, and Egyptian texts, was also known to the Greeks at Knossos during the Late Bronze Age.

Both Akkadian cuneiform texts from Ugarit and Hittite cuneiform documents from Boğazköy indicate that *Alashiya* served as a place of banishment for political exiles.[57] Not only would Cyprus be suitably distant from both Anatolia and Syria to satisfy the distance demands for a place of exile, the sea would also present a considerable deterrent to potential escapees. As Holmes observed, for the Hittite king to "banish" someone to either north Syria or Cilicia would simply be tantamount to

46. El Amarna letters 33–36, 40: see Knudtzon, op. cit. (in note 30) 278–299.

47. This figure is based on deliveries being extended over the entire period of the Amarna correspondence, ca. 25 years; see E. F. Campbell, *The Chronology of the Amarna Letters* (Johns Hopkins University Press: Baltimore 1964) 134–141; C. Kühne, *Die Chronologie der Internationalen Korrespondenz von El-Amarna. Alter Orient und Altes Testament* 17 (Verlag Butzon and Bercker: Neukirchen-Vluyn 1973) 86; E. F. Wente, "Tuthmosis III's Accession and the Beginning of the New Kingdom," *JNES* 34 (1975) 265–272.

48. R. A. Caminos, *Late Egyptian Miscellanies. Brown Egyptological Studies* 1 (Oxford University Press: London 1954) 201.

49. See also Osing, op. cit. (in note 44) 49 and note 33.

50. L. R. Fisher, *Ras Shamra Parallels. Analecta Orientalia* 49 (Pontifical Biblical Institute: Rome 1972) 115 section II 46; E. A. Speiser, *The Anchor Bible: Genesis* (Doubleday and Co.: Garden City, N.Y. 1964) 66 note 4.

51. T. T. Duke, review of S. Moscati, *World of the Phoenicians* (New York 1968), in *CJ* 65 (1969) 134–135 (134–137).

52. A. Caquot and R. du Mesnil du Buisson, "La Seconde Tablette ou 'Petit Amulette' d'Arslan Tash," *Syria* 48 (1971) 391–406; O. Masson, "A propos de l'Île d'Alasia," *Kadmos* 12 (1973) 98–99.

53. H. Donner and W. Röllig, *Kanaanäische und Aramäische Inschriften* III (Harrassowitz: Wiesbaden 1966–1969) 60; W. Röllig, "Die Amulette von Arslan Taş, *Neue Ephemeris für Semitische Epigraphik* 2 (1974) 29–31 (17–36).

54. Among others, see T. H. Gaster, "A Hang-up for Hang-ups: The Second Amuletic Plaque from Arslan Tash," *BASOR* 209 (1973) 18–26; E. Lipiński, "From Karatepe to Pyrgi. Middle Phoenician Miscellanea," *Rivista di Studi Fenici* 2 (1974) 45–61. Cf. the studies by Y. Avishur, "The Second Amulet Incantation from Arslan Tash," *Ugarit-Forschungen* 10 (1978) 29–36; and M. Liverani, "Proposte sul Secondo Incantesimo di Arslan Tash," *Rivista di Studi Fenici* 2 (1974) 35–38.

55. V. Bubenik, "Evidence for Alasija in Linear B Texts," *Phoenix* 28 (1974) 248 (245–250); C. J. Ruijgh, *Études sur la Grammaire et le Vocabulaire du Grec Mycénien* (A. W. Hakkert: Amsterdam 1967) 151, no. 125.

56. O. Masson, *Les Inscriptions Chypriotes Syllabiques. Études Chypriotes* I (E. de Boccard: Paris 1961) 226–228, no. 216.

57. Hittite texts include *KUB* XIV 14 obv.20 (see A. Goetze, *Hattušiliš. MDOG* 29 [1925] 24–25), and *KBo* XII 39 (see H. Otten, "Neue Quellung zum Ausklang des Hethitischen Reiches," *MDOG* 94 [1963] 10–13 [1–23]). For Ugaritic text RS 17.352, see J. Nougayrol, *Le Palais Royal d'Ugarit* IV. *Mission de Ras Shamra* 9 (Klincksieck: Paris 1956) 121–122.

relocating them in a vassal state on Hatti's own borders.[58]

Another Hittite cuneiform text alludes to a thrice-fought battle between the victorious Hittites and the ships of *Alashiya*.[59] It is worth stressing that the Hittites had no known previous naval tradition;[60] the fact that they chose to fight *Alashiya* by ship pointedly suggests that *Alashiya* could only be reached by sea.

The presumed exchange of letters between the ruler of *Alashiya* and 'Ammurapi, last ruler of Ugarit before its destruction (ca. 1200 B.C.), shows that their common enemy (presumably the Sea Peoples) had been spotted in the open sea to the "west" of Ugarit and that the king of *Alashiya* had prior knowledge of their movements.[61] Although it is impossible to establish an exact temporal connection between these two texts, their presumed order and contemporaneity allow a logical, parsimonious interpretation. Both the political and the logistic situation require that *Alashiya* be located somewhere to the west of Ugarit, in the Mediterranean Sea.

Archaeological Evidence

In addition to the Amarna letters, documentary evidence from Mari, Alalakh, Ugarit, Babylon, and Hattusha (Anatolia) points to *Alashiya* as a primary producer and exporter of copper.[62] With the exception of Timna in the Wadi Arabah in the Negev,[63] Cyprus is the only land in the eastern Mediterranean with archaeological deposits that clearly demonstrate *extensive* copper working activity.[64] Since numerous studies already document and discuss Cyprus as a primary source of copper,[65] only general observations on archaeological evidence for metallurgical activity will be presented here.

The best evidence for ancient mining on Cyprus dates from the Roman period and that activity, combined with more recent and extensive mining on the island, has obscured most traces of earlier workings.[66] Catling has suggested that socketed picks found at Enkomi and in the Cape Gelidonya shipwreck might be mining tools, but this is hardly decisive evidence.[67]

Copper production during the Bronze Age is attested at a number of sites by the remains of smelting (copper ores) and melting (metallic copper) activity. White Slip I sherds from Ayios Mamas-*Skourka* directly attest to smelting activity in the LC I period.[68] While furnaces, tools, and other equipment are suggestive, the numerous slag heaps on the island render clear and substantive evidence for copper production. Slag heaps, however, especially those lacking archaeological or stratigraphical contexts, offer only the grossest approximate dates.[69] The obvious exception is the site of Enkomi where successive layers of slag (in sector B of Area III) were associated with White Slip II, Base Ring II, and Late Helladic IIIB wares, implying a date in the 13th century B.C.[70] Ore-related materials are rare at most sites where slag has been found (Ambelikou, Kalopsidha, Apliki, Athienou, Hala Sultan Tekke, Kition). Slag heaps, however, are often found in context with furnace fragments, crucibles, and tuyeres. This circumstance suggests that once the ores were smelted at or near the mines, the resulting product was transported to the coastal sites where secondary remelting, refining, production, and transshipment would have been carried out.[71] The fuel

58. Holmes, op. cit. (in note 28) 427–428.

59. Text is *KBo* XII 38, dated ca. 1200 B.C.; see Otten, op. cit. (in note 57) 10–13; G. Steiner, "Neue Alašija-Texte," *Kadmos* 1 (1962) 130–138.

60. Holmes, op. cit. (in note 28) 427–428.

61. These Akkadian cuneiform texts from Ugarit are RSL 1 and RS 20.238; see J. Nougayrol, in C. F. A. Schaeffer, ed., *Ugaritica* 5. *Mission de Ras Shamra* 16 (P. Geuthner: Paris 1968) 85–89; M. C. Astour, "New Evidence on the Last Days of Ugarit," *AJA* 69 (1965) 253–258; P.-R. Berger, "Die Alašia-Briefe Ugaritica 5, Nougayrol Nrn. 22–24," *Ugarit-Forschungen* 1 (1969) 219–220 (217–222).

62. Knapp, op. cit. (in note 24) 179–286; Vincentelli, op. cit. (in note 25).

63. P. T. Craddock, "The Composition of the Copper Produced at the Ancient Smelting Camps in the Wadi Timna, Israel," in P. T. Craddock, ed., *Scientific Studies in Early Mining and Extractive Metallurgy. British Museum Occasional Paper* 20 (British Museum: London 1981) 165–173; B. Rothenberg, *Timna: Valley of the Biblical Copper Mines* (Thames and Hudson: London 1972).

64. For Anatolia, See P. S. de Jesus, "A Survey of some Ancient Mines and Smelting Sites in Turkey," *Archäologie und Naturwissenschaften* 2 (1981) 95–105; idem, *The Development of Prehistoric Mining and Metallurgy in Anatolia, BAR Supp* 74: (Oxford 1980).

65. Among others, see Catling, op. cit. (in note 10); Muhly, op. cit. (in note 10); Muhly, Maddin, and Karageorghis, eds., op. cit. (in note 28); Muhly, Maddin, and Wheeler, op. cit. (in note 10).

66. Muhly, Maddin, and Wheeler, op. cit. (in note 10).

67. H. W. Catling, "The Cypriote Copper Industry," *Archeologia Viva* 1.3 (1969) 84 (81–88).

68. Stuart Swiny, personal communication.

69. F. L. Koucky and A. Steinberg, "Ancient Mining and Mineral Dressing on Cyprus," in T. A. and S. F. Wertime, eds., *Early Pyrotechnology* (Smithsonian Institute: Washington, D.C. 1982) 172–178 (149–180) believe most massive slag heaps extant on Cyprus date to the Roman period. See also Muhly, Maddin, and Wheeler, op. cit. (in note 10) 95; cf. R. F. Tylecote, *A History of Metallurgy* (Metals Society: London 1976) 31.

70. P. Dikaios, *Enkomi. Excavations 1948–1958*, 3 vols. (Verlag Philip von Zabern: Mainz-am-Rhein 1969–1971) 61–62, 78.

71. Muhly, Maddin, and Wheeler, op. cit. (in note 10) 89–90; T. Stech, "Copper and Society in Late Bronze Age Cyprus," *PPE* (1985) 100–105; idem, "Urban Metallurgy in Late Bronze Age Cyprus," in Muhly, Maddin, and Karageorghis, eds., op. cit. (in note 28) 105–115.

necessary for complete ore processing was most likely unavailable near the coastal towns.[72]

The earliest evidence for copper working on the island comes from the site of Ambelikou *Aletri* (or *Choma tis Galinis*; site B) where a crucible with encrusted copper, two moulds, and a quantity of slag were uncovered in context with early MC (formerly thought to be EC III) pottery.[73] Slag, scum, and clinker from the site of Kalopsidha, and a forge and possible crucibles from the nearby Koufos district probably represent local metalworking activities in the MC III period.[74] By the LC period, evidence for exploitation of copper resources becomes widespread. Copper slag, whether from primary or secondary smelting (or melting) activity, is present at Enkomi,[75] Hala Sultan Tekke,[76] Apliki,[77] Arpera, Ayios Sozomenos, Lapithos,[78] Nicosia,[79] Kition,[80] Athienou,[81] and Episkopi-*Bamboula*.[82] Copper moulds were uncovered at Klavdhia and Enkomi.[83] Installations that probably served as production areas, characterized by finds of crucibles, furnaces, tools, or slag, existed at Enkomi,[84] Apliki,[85] Kition,[86] Hala Sultan Tekke,[87] Athienou,[88] Episkopi-*Phaneromeni*,[89] and Ayios Dhimitrios.[90] Åström also noted "copper smelting" workshops at Lapithos, Nicosia, Kalopsidha, Kouklia, Klavdhia, and Ephtagonia, although detailed documentation of the finds was not provided.[91] Archaeological data therefore strongly suggest that the abundant copper resources of Cyprus were utilized at least from the beginning of the MC era onward. Copper production apparently reached its Bronze Age peak during LC times.[92]

While problems still remain in dating slag or slag heaps, "workshops" have been uncovered in chronologically significant horizons. Cyprus clearly served as an active center of copper production, and almost certainly of copper mining. The conclusion seems inescapable: Cypriote metalsmiths were working Cypriote copper, and Cyprus was most likely the source of the Alashiyan copper repeatedly mentioned in the textual evidence. Catling argued that the copper listed in the Amarna letters could not be shown to be of Cypriote provenience;[93] lacking ingots with mining or minting marks, how could copper mentioned in any *document* be shown to have a specific provenience?

North Syria and Cilicia show no evidence of copper mining although it must be granted that geological evidence for that area is limited.[94] As Muhly pointed out,

72. F. L. Koucky and A. Steinberg, "Preliminary Metallurgical Research on the Ancient Cypriote Copper Industry," in L. E. Stager, A. Walker, and G. E. Wright, eds., *The American Expedition to Idalion, Cyprus. BASOR Supplement* 18 (ASOR: Cambridge, Massachusetts 1974) 177 (148–178).

73. P. Dikaios, "Recent Archaeological Research in Cyprus," *Atti del Primo Congresso Internazionale di Preistoria e Protoistoria Mediterranea* (Firenze 1952) 312 (309–314); S. Swiny, "The Metal Work of Southern Cyprus Prior to the LC II Period," in J. Carpenter and S. Swiny, eds., *Episkopi-Phaneromeni. StudMedArch* (in preparation).

74. P. Åström, *Excavations at Kalopsidha and Ayios Iakovos in Cyprus. StudMedArch* 2 (Klassika Institutionen: Lund 1966) 113–115; H. G. Bachmann, "Copper Slag: Preliminary Report," in P. Åström, D. M. Bailey, and V. Karageorghis, *Hala Sultan Tekke* 1. *StudMedArch* 45.1 (P. Åström's Förlag: Göteborg 1976) 127–128.

75. Dikaios, op. cit. (in note 70) 61–62, 510; J. Lagarce, "La Cachette du Fondeur aux Épées (Enkomi 1967) et l'Atelier Voisin," in C. F. A. Schaeffer, ed., *Alasia* I, *Mission Archéologique d'Alasia* 4 (Klincksieck: Paris 1971) 381–399.

76. Bachmann, op. cit. (in note 74).

77. J. DuPlat Taylor, "A Late Bronze Age Settlement at Apliki, Cyprus," *AntJ* 32 (1952) 150–153.

78. H. W. Catling, *Cypriote Bronzework in the Mycenaean World* (Oxford University Press: Oxford 1964) 21.

79. V. Karageorghis, "Ten Years of Archaeology in Cyprus," *AA* (1963) 528 (498–601).

80. V. Karageorghis, *Kition. Mycenaean and Phoenician Discoveries in Cyprus* (Thames and Hudson: London 1976) 72–75, 102, pl. XIV.

81. T. Dothan and A. Ben-Tor, *Excavations at Athienou 1971–1972. Israel Museum Catalogue* 116 (Israel Museum: Jerusalem 1974); idem, "Excavations at Athienou, Cyprus," *IsExpJ* 22 (1972) 205 (201–208); R. Maddin, J. D. Muhly, and T. Stech, "Metalworking at Athienou," in T. Dothan, ed., *Qedem* 16 (Department of Museums and Antiquities: Jerusalem 1983).

82. J. L. Benson, *Bamboula at Kourion: the Necropolis and the Finds* (University of Pennsylvania Press: Philadelphia 1972) 128, 138; Swiny, op. cit. (in note 73).

83. Catling, op. cit. (in note 78) 21; Dikaios, op. cit. (in note 70) 24, 231, 508.

84. Dikaios, op. cit. (in note 70) 508, 510; Lagarce, op. cit. (in note 75); C. F. A. Schaeffer, *Enkomi-Alasia* I. *Nouvelles Missions en Chypre, 1946–1950* (Klincksieck: Paris 1952) 27–28.

85. DuPlat Taylor, op. cit. (in note 77) 149–153; Koucky and Steinberg, op. cit. (in note 72) 150 note 4.

86. Karageorghis, op. cit. (in note 80) 79–94, fig. 14, pls. 53–54, XII-XIV.

87. Åström et al., op. cit. (in note 74) 117; Bachmann, op. cit. (in note 74).

88. T. Dothan, "The High Place of Athienou in Cyprus," in A. Biran, ed., *Temples and High Places in Biblical Times* (Jewish School of Religion and Hebrew Union College: Jerusalem 1981) 91–95.

89. Swiny, op. cit. (in note 73).

90. A. K. South, "Kalavasos-Ayios Dhimitrios 1980–1981," *RDAC* (1982) 65–68 (60–68); idem, "Kalavasos-Ayios Dhimitrios 1982," *RDAC* (1983) 103–104 (92–116).

91. P. Åström, "The Economy of Cyprus and Its Development in the Second Millennium," *Archaeologia Viva* 1.3 (1969) 77 (73–80).

92. Muhly, Maddin, and Wheeler, op. cit. (in note 10).

93. Catling, 1975 op. cit. (in note 23) 204.

94. J. D. Muhly, *Copper and Tin. TransConnAAS* 43 (Archon Books:

the best evidence for Syrian metalworking comes from the beginning, not the end of the Bronze Age (ʿAmūq G).[95]

Catling stressed that although *Alashiya* sent ivory (three tusks) to Egypt, no elephants existed on Cyprus.[96] His point is equivocal: the entrepot at Dilmun (modern Bahrein in the Persian Gulf) sent copper to Babylonia, but Bahrein has no copper deposits. The three "elephant teeth" mentioned in one Amarna letter from *Alashiya*[97] have attracted unwarranted attention. Cyprus' role as an entrepot for Aegean and Levantine commerce during the Late Bronze Age certainly heightens the possibility that ivory would have been available on the island, elephants notwithstanding. Åström has provided evidence of an ivory atelier in the vicinity of Kouklia, and ivory workshops may well have existed at other Late Bronze Age sites.[98] In this light, the reference to ivory in Amarna letter 40 would seem to support rather than vitiate the equation of *Alashiya* with Cyprus.

Two of the Amarna letters (now in the British Museum) from *Alashiya* were analyzed for provenience by means of neutron activation analysis.[99] The chemical profile of the clay of both letters was the same, but could not be matched with any of the known eastern Cypriote clays. The clay of the letters resembles, however, a group of Late Helladic III C vessels excavated at Kouklia on the SW coast of Cyprus. Artzy et al., therefore, felt it was "conceivable" that the tablets could have been produced from other local (SW) clay sources in use during the Amarna period. They also stated that "we cannot dismiss the chemical similarities between the two el-Amarna letters and a group of Mycenaean III C1 sherds from Kouklia."[100] Understandably, it would be very difficult to compile a complete clay profile of the entire island of Cyprus. For the present, the identification of *Alashiya* can neither be proven nor disproven by chemical fingerprinting of clays.

Both archaeological and written data, as well as the geopolitical position of *Alashiya* adumbrated by historical evidence (see below), point to its location on an island in the eastern Mediterranean. Archaeological evidence from Cyprus supports the identification of *Alashiya* as Cyprus and at the same time negates Catling's doubts that Bronze Age Cyprus was a land important enough to be equated with *Alashiya* of the Amarna letters.[101] It seems fitting to conclude this section with a quote from Max Mueller who in 1895 already supported the Cyprus-*Alashiya* equation: "Selbstverständlich, werden einige billige Skeptiker meine Darlegung 'nicht überzeugend' finden. Diesen stelle Ich die Aufgabe, in die Amarna-Tafeln ein anderes Land als Alašia für Cypern nachzuweisen."[102]

The Role of Cyprus in Eastern Mediterranean Trade

During the course of the MC period, Cyprus joined the economic chain linking the lands of the eastern Mediterranean basin (FIG. 2).[103] The island's growing participation in international trade ca. 1700–1400 B.C. paralleled a changing orientation from an earlier, almost exclusive concentration on the Levant and Egypt to a growing awareness of and contact with the Aegean area.[104] Cyprus maintained contact with the Levant and Egypt throughout the Late Bronze Age period;[105] the lack of Cypriote pottery in Egypt after the Amarna period is an exception.[106] On present evidence, Ugarit seems to have been the main importer of Cypriote products in Syria with Alalakh perhaps serving as a center for transit trade to the interior.[107] Tell el-ʿAjjūl near Gaza may have

Hamden, Connecticut 1973) 208 (155–535); H. Seyrig, "Statuettes Trouvées dans les Montagnes du Liban," *Syria* 30 (1953) 48 note 4, 49 (24–50).

95. Muhly, op. cit. (in note 94) 214; M. Levey and J. E. Burke, "A Study of Ancient Mesopotamian Bronzes," *Chymia* 5 (1969) 40 (37–50).

96. Catling, loc. cit. (in note 93).

97. Knudtzon, op. cit. (in note 30) 296–297.

98. Åström, op. cit. (in note 91) 77; V. Karageorghis, *Cyprus. From the Stone Age to the Romans* (Thames and Hudson: London 1982) 67; idem, op. cit. (in note 80) 113; F. G. Maier, "Excavations at Kouklia (Palaepaphos), 1968," *RDAC* (1969) 40–41, pl.V:4 (33-42); A. Pierides, "Observations on some Mycenaean Ivories in Cyprus," *Acts:MEM* (1973) 277 (274–277); E. Vermeule and F. Z. Wolsky, "The Bone and Ivory of Toumba tou Skourou," *RDAC* (1977) 80–96; Vincentelli, op. cit. (in note 25) 25.

99. M. Artzy, I. Perlman, and F. Asaro, "Alashiya of the Amarna Letters," *JNES* 35 (1976) 171–182.

100. Ibid. 178, 181.

101. Catling, op. cit. (in note 23) 205.

102. Mueller, op. cit. (in note 26) 264.

103. Åström, op. cit. (in note 9) 275–277; H. W. Catling, "Cyprus in the Middle Bronze Age," *CAH* II, part 1, chap. 4c (Cambridge University Press: Cambridge 1973) 173–174 (165–175).

104. Portugali and Knapp, op. cit. (in note 10).

105. Y. L. Holmes, "The Foreign Trade of Cyprus during the Late Bronze Age," in N. Robertson, ed., *The Archaeology of Cyprus* (Noyes Press: Park Ridge, N.J. 1975) 90–110.

106. R. S. Merrillees, *The Cypriote Bronze Age Pottery found in Egypt. StudMedArch* 18 (Klassika Institutionen: Lund 1968) 186, 202.

107. V. Hankey, "Mycenaean Trade with the Southeastern Mediterranean," *Mélanges de l'Université Saint-Joseph* (Beirut) 46 (1970–1971) 11–30; idem, "Mycenaean Pottery in the Middle East: Notes on Finds since 1951," *BSA* 62 (1967) 107–147; A. Bernard Knapp, "An Alashiyan Merchant at Ugarit," *Tel Aviv* 10 (1983) 38–45.

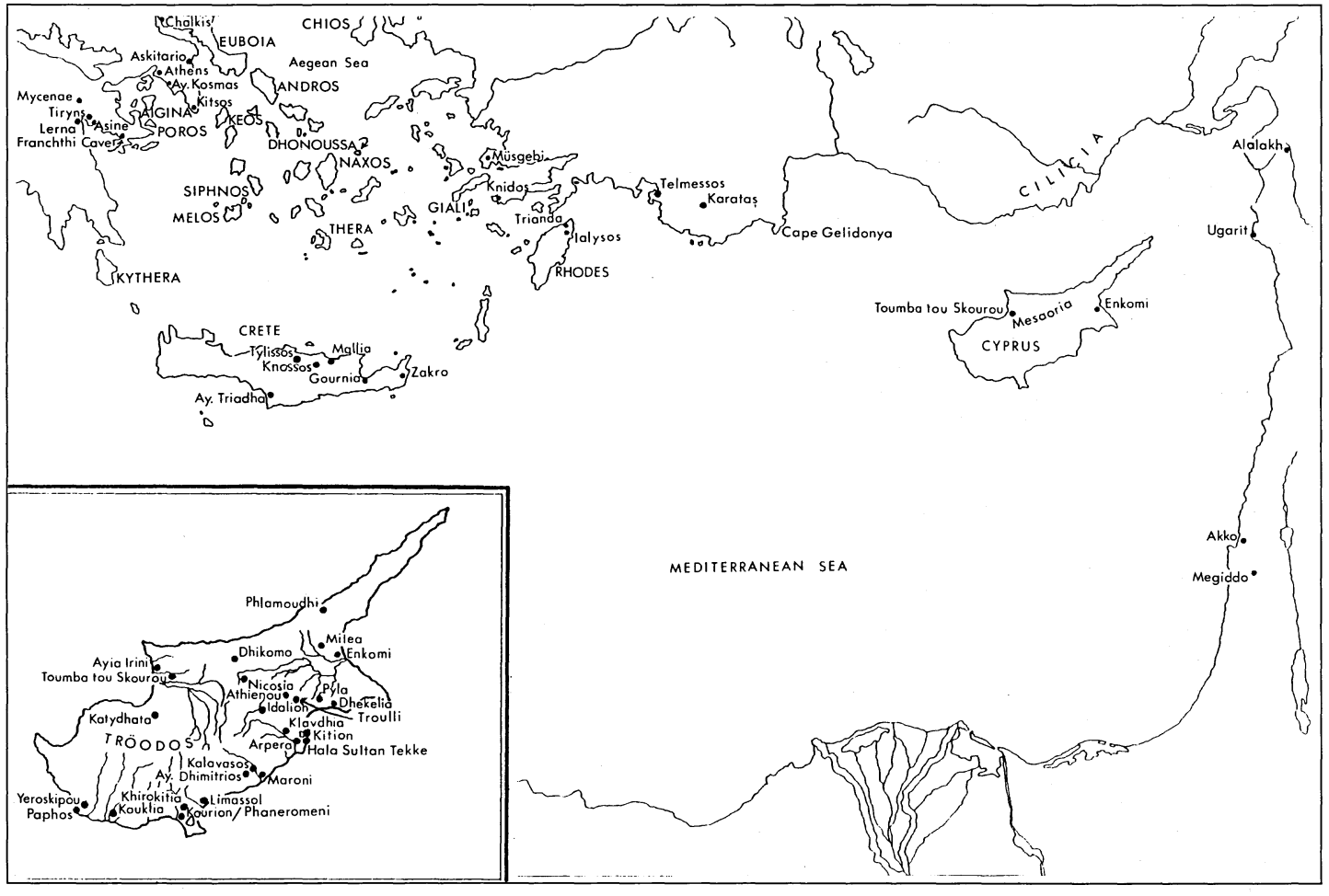

Figure 2. Selected Bronze Age sites in Cyprus, in the Aegean, and in the Levant. Aegean and Levantine sites indicated demonstrate evidence of contact with Cyprus.

been Ugarit's counterpart in the southern Levant, and perhaps served as a transit stop for Cypriote goods travelling to Gerar, Tell el-Farʿah (south), Lachish, etc.[108] More Cypriote pottery appears in Palestine than in any other area beyond Cyprus, and the abundance of Cypriote ceramics may have prompted local potters to imitate the finest wares.[109]

Near Eastern imports into Cyprus present problems of origin and interpretation. "Luxury" items such as jewellery, glass and faience, ivory, alabaster, and ostrich shell fall into the imported category but their source is disputed.[110] Various wheelmade ceramics (Bichrome, Black or Red Lustrous, White Painted Wheelmade) have traditionally been classed as Syrian imports, but the fact that they are wheelmade no longer precludes the possibility of Cypriote manufacture.[111] The one indisputable, and quite numerous, ceramic import to Cyprus is the "Syrian" or "Canaanite" jar.[112]

108. B. M. Gittlen, "The Cultural and Chronological Implications of the Cypro-Palestinian Trade during the Late Bronze Age," *BASOR* 241 (1981) 49–59; idem, "Cypriote White Slip Pottery in its Palestinian Stratigraphic Context," in Robertson, op. cit. (in note 105) 111–120; E. Oren, "Cypriot Imports in the Palestinian Late Bronze I Context," *OAth* 9 (1969) 127–150; J. R. Stewart, *Tell el-ʿAjjūl, The Middle Bronze Age Remains. StudMedArch* 38 (P. Åström's Förlag: Göteborg 1974) 16–26.

109. M. Artzy, "Supply and Demand: A Study of Second Millennium Cypriote Pottery in the Levant," *PPE* (1985) 93–99; M. Artzy, F. Asaro, and I. Perlman, "Consideration of the Tel Nagila Bichrome Krater as a Cypriote Product," *IsExpJ* 25 (1975) 129–134; M. Artzy, I. Perlman, and F. Asaro, "Imported and Local Bichrome Ware in Megiddo," *Levant* 10 (1978) 99–111.

110. L. Åström, *Studies in the Arts and Crafts of the Late Cypriote Bronze Age* (Klassika Institutionen: Lund 1967) 150; Holmes, op. cit. (in note 105) 93, notes 38, 39.

111. M. Artzy, I. Perlman, and F. Asaro, "Wheel-Made Pottery of the MC III and LC I Periods in Cyprus Identified by Neutron Activation Analysis," *RDAC* (1976) 20–28.

112. P. Åström, *The Late Cypriote Bronze Age: Architecture and Pottery. SCE* IV: 1C (SCE: Lund 1972) 259–264; V. Grace, "The

Egypt and the Levant may thus have received the bulk of Cyprus' foreign trade before 1400 B.C., and this exchange was maintained on a significant level between 1400 and 1200. After 1200 B.C., trade between Cyprus and the Levant declined and Near Eastern influences on Cypriote material culture diminished somewhat.[113]

While Aegean imports were not negligible before 1400 B.C., their numbers rose dramatically between 1400 and 1200 B.C.[114] By the 13th century B.C., Mycenaean pottery was being copied locally in White Painted Wheelmade ware and in the Pastoral ("Rude") Style.[115] The lack of a significant return trade to the Aegean during the centuries 1400–1200 B.C. has led to the virtually orthodox theory that Cypriote copper was exchanged for Aegean ceramics and/or their contents. Considering Cyprus' extensive copper resources and the archaeological evidence for Cypriote copper production during the Late Bronze Age (see above), it might be proposed that Aegean demand for copper was more vital than the Cypriote need for exotic ceramics or their contents.[116]

Such a situation may suggest some Aegean control over shipping, but it does not preclude Cypriote, Syrian, or even private enterprise. If one denies the need for two-way exchange, the archaeological evidence would also conform to a model of private entrepreneurs serving as marine intermediaries among the various states of the eastern Mediterranean.[117] At this stage of research into eastern Mediterranean exchange systems, however, we still see only the end product of what was surely a complex commercial transaction with multidimensional stages.[118]

McCaslin's monograph on stone anchors and eastern Mediterranean trade,[119] the second volume under consideration in this review, proposes to assemble, analyze, and provide a tentative typology of stone anchor shapes, and subsequently to evaluate the major trade routes of the eastern Mediterranean during the Bronze Age by evoking the testimony of those anchors. Although the typology was constructed without the aid of theoretical constructs,[120] McCaslin's study and classification of stone anchors may prove useful to archaeologists working in the eastern Mediterranean.

Ideally, a study of stone anchors should consider not only the archaeological data, but also the relevant *contemporary* textual evidence; representations of sea-going ships in contemporary art (e.g., sculpture, ceramics, minor arts, tomb or wall paintings); geographical, nautical, and technological limitations or potential; historical or more recent ethnographic information deriving from seamen who still ply their trade in the eastern Mediterranean; microscopic petrological examination of different types of stone used; and, finally, the symbolic significance or implications of stone anchors found in field (not maritime) excavations. In considering all these factors, it is possible to construct typologies that will allow us to determine the origins of anchors, to trace provisionally the sea trade-routes of the Bronze Age, to determine the extent of trade within a given port during a specific period of time, and to understand better the socio-religious implications of re-used or votive stone anchors. Honor Frost's studies of stone anchors found at Ugarit and Byblos, on Cyprus, and, most recently, in Egypt, are exemplary in this regard; they reveal the potential in following such an approach to stone anchors.[121] The applicability of underwater archaeology and "shipwreck anthropology" to the study of maritime exchange systems, open-sea transportation, nautical history and the like have only just begun to be taken seriously.[122]

In comparison, McCaslin's consideration of maritime trade in the eastern Mediterranean is limited in its chronological, historical, geographical, and theoretical scope. The only original textual sources utilized by

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Canaanite Jar," in S. S. Weinberg, ed., *The Aegean and the Near East: Studies Presented to Hetty Goldman* (Augustin: Locust Valley, N.Y. 1956) 80–109; P. J. Parr, "The Origin of the Canaanite Jar," in D. E. Strong, ed., *Archaeological Theory and Practice: Festschrift W. F. Grimes* (Seminar: London 1973) 173–181.

113. Holmes, op. cit. (in note 105) 99; cf., however, N. K. Sandars, *The Sea Peoples* (Thames and Hudson: London 1978) 151–155.

114. P. Åström, "Comments on the Corpus of Mycenaean Pottery in Cyprus," *Acts: MEM* (1973) 122–127.

115. D. Anson, "Composition and Provenience of Rude Style and Related Wares," *RDAC* (1980) 109–127; idem, "The Rude Style Late Cypriote IIC-III Pottery: An Analytical Typology," *OAth* 13 (1980) 1–18. "Rude" style is now termed "Pastoral" style: see E. Vermeule and V. Karageorghis, *Mycenaean Pictorial Vase Painting* (Harvard University Press: Cambridge, Massachusetts 1982) 59–68.

116. Cf., however, Portugali and Knapp, op. cit. (in note 10).

117. J. F. Cherry and J. L. Davis, "The Cyclades and the Greek Mainland in LC I: The Evidence of the Pottery," *AJA* 86 (1982) 333–341; R. S. Merrillees, *Trade and Transcendence in the Bronze Age Levant. StudMedArch* 39 (P. Åström's Förlag: Göteborg 1974) 8.

118. Knapp, op. cit. (in note 16).

119. McCaslin, op. cit. (in note 13).

120. J. C. Gardin, *Archaeological Constructs, An Aspect of Theoretical Archaeology* (Cambridge University Press: Cambridge 1980); L. S. Klejn, *Archaeological Typology. BAR Supp* 153 (Oxford 1983).

121. H. Frost, "The Birth of the Stocked Anchor and the Maximum Size of Early Ships," *Mariner's Mirror* 68 (1982) 263–273; idem, "Egypt and Stone Anchors: Some Recent Discoveries," *Mariner's Mirror* 65 (1979) 137–161.

122. See especially the papers by G. F. Bass, R. Gould, and P. J. Watson in R. Gould, ed., *Shipwreck Anthropology* (University of New Mexico Press: Albuquerque 1983).

McCaslin are taken from Greek literature: appendices contain passages from Classical authors that mention stone anchors. When citing Near Eastern textual evidence *contemporary* with the stone anchors being classed as types and relevant to Bronze Age trade and methods of exchange, McCaslin relies solely on chapters by Drower, Goetze, and Barnett in the *Cambridge Ancient History* (3rd rev. ed.). This reliance on the secondary literature leads to a number of misinterpretations by McCaslin.[123] Although this sort of Near Eastern textual evidence sheds considerable light on McCaslin's topic—eastern Mediterranean shipping and trade—he discounts it as "quite limited" (p. 4).

Archaeological data cited by McCaslin are bound to the Bronze Age cultures of Cyprus and the Aegean. McCaslin is at his best here, although a few spurious or unproven assumptions are made. Copper slag and smelting, for example, document Bronze Age copper *production*, not Bronze Age copper *mining* (p. 96). With the exception of miniature votive examples, ingots found on Cyprus are made of *copper*, not bronze (p. 96). Although McCaslin cites examples of Cypriote ingots and models of boats to shore up his arguments for Cypriote participation in the eastern Mediterranean metals trade during the Bronze Age (pp. 96, 101, 121 note 8), the best evidence for such participation is still textual.[124] There is as yet no acceptable means to demonstrate that Cyprus supplied the copper ingots recovered from the Cape Gelidonya shipwreck (p. 15) or that Cypriote and Syrian type anchors found far upstream in Egypt confirm the presence there of Cypriote or Syrian ships (p. 68). The complexities of eastern Mediterranean trade preclude the facile assumption that Near Eastern and Cypriote ships transported the ". . . larger share of the exchanged commodities" (p. 104).

McCaslin's study also suffers from a theoretical standpoint. With few exceptions, McCaslin seems unfamiliar with the large body of anthropological studies on prehistoric trade. In order to evaluate systematically the manifold processes of eastern Mediterranean exchange, archaeological excavation (including underwater work, intensive survey, and spatial analysis of object distribution), textual interpretation, and metallurgical analyses must be carried out within a suitable analytical framework that poses questions and generates testable hypotheses. Recent case studies utilizing this approach and concentrating on eastern Mediterranean trade in the Middle and Late Bronze Ages indicate a multi-dimensional, complex network of exchange conducted by both royal and private merchants.[125] Textual evidence comes into play in determining the ethnicity of the merchants and seamen, and ethnicity is essential to understanding the mechanisms of trade: Amarna letter 37 suggests that an international crew served on a state-run ship.[126]

Since detailed analyses of theoretical approaches to the study of trade in the Aegean and east Mediterranean have been presented elsewhere,[127] discussion here will be brief. Any attempt to describe *and to interpret* prehistoric or protohistoric systems of trade must confront the Substantivist, Formalist, and Marxist/Neo-Marxist approaches common in Economic Anthropology. Simply put, Substantivists argue that different societies organize their economic activities, including trade, in different ways, whereas Formalists feel that all societies exhibit certain features in common and that economic activities everywhere center on the behavioral principle of choice. Neo-Marxists view social processes ("social relations of production") as the dominant aspect, indeed the rationale of the entire economic system.[128] The literature on the application of economic theory to archaeology and anthropology is voluminous and continues to expand. The validity and usefulness of these approaches, however, and of the models derived from them depend on their ability to be tested and to explain the archaeological data.

Aegean and east Mediterranean prehistorians have tended to utilize a descriptive, taxonomical approach to their data, and have thus remained outside these schools of economic analysis. Among Aegean scholars, however, Renfrew is not only aware of this "great debate" in Economic Anthropology, he has himself adopted features of both the Substantivist[129] and Formalist[130]

123. The textual misinterpretations are considered more closely in the writer's review of McCaslin in *JAOS* 102 (1982) 543–544.

124. El-Amarna letter 36: see Knudtzon, op. cit. (in note 30) 288–290; Ugaritic letter RS 18.113A+B(=*KTU* 2.42+2.43): see Knapp, op. cit. (in note 107).

125. Portugali and Knapp, op. cit. (in note 10); Knapp, op. cit. (in note 16).

126. H. Georgiou, "Relations between Cyprus and the Near East in the Middle and Late Bronze Age," *Levant* 11 (1979) 97 (84–100).

127. T. K. Earle, "Prehistoric Economics and the Evolution of Social Complexity," *PPE* (1985) 106–111; idem, "Prehistoric Economics and the Archaeology of Exchange," in J. Ericson and T. K. Earle, eds., *Contexts for Prehistoric Exchange* (Academic Press: New York 1982) 1–12; Knapp, op. cit. (in note 16).

128. S. Frankenstein and M. J. Rowlands, "The Internal Structure and Regional Context of Early Iron Age Society in South-western Europe," *Bulletin of the Institute of Archaeology, University of London* 15 (1978) 73–112; P. Kohl, "Materialist Approaches in Prehistory," *AnnRevAnth* 10 (1981) 89–118; see also the papers by Bender, Tilley et al. in A. Sheridan and G. Bailey, eds., *Economic Archaeology: Toward an Integration of Ecological and Social Approaches. BAR Supp* 96 (Oxford 1981).

129. C. Renfrew, *The Emergence of Civilization* (Methuen: London 1972) 465–475.

130. C. Renfrew, "The Decision Nexus and Early Economies," in

schools. It seems unlikely that strict adherence to either school, or to the Neo-Marxist and Structuralist schools, will produce the "absolute truth." As Renfrew has observed, if social constraints are considered alongside the economic, dispute among adherents to these differing viewpoints is likely to diminish. All theoretical interests have an underlying, potentially unifying theme: the explanation of economic formation and organization, and their relationship to broader socio-cultural contexts.[131] Formalism and Substantivism in particular offer complementary approaches: whereas Formalism is concerned with the individual and with choice among alternatives, Substantivism deals with institutions and the goals of the system.[132]

Within the Aegean and east Mediterranean, population growth, the gradual expansion of trade, and the development of the political economy all seem to account for the evolution of social complexity. The initial settlement of many Aegean islands may be explained partially by agricultural intensification and population growth, but a concomitant reliance on trade is also apparent.[133] Ethnographic and archaeological evidence from Mailu in New Guinea portray well the significance of trade to the development of island settlements.[134] The growth of the political economy, geared to increased control over surplus wealth, is nicely illustrated on Bronze Age Cyprus: increased foreign demand for Cypriote copper most likely led to the administrative formalization of internal copper production, and in turn to the economic transformation of a village-based culture into an international, urban-oriented complex society.[135] Production and distribution strategies of the Bronze Age also included the development of seaworthy ships utilized at least to some extent for trade purposes, and the large-scale production and export of comestibles, ceramics, and metals.[136]

The exchange network provided the basic opportunity for investment. These trading systems arose initially as a result of needed diversification in the subsistence economy, but the manipulation of trade by political elites became the basis for developing social complexity and stratification. As the long-distance exchange system became more elaborate, local economies were pressured into transforming individual household production into a basic resource, craft, and food industry designed for a market-exchange system. Thus local subsistence economies became integral to regional political economies, and this dynamic system is illustrated clearly in the contemporary archaeological record. This type of integrative interpretation—archaeological, textual, metallurgical, theoretical—is essential for the study of culture process and change, and for the reconstruction of the modes of production and the networks of exchange operative in the Bronze Age Aegean and east Mediterranean.

The History of Bronze Age Cyprus

Turning now to those sources, archaeological and textual, that lend themselves to a historical overview of Cyprus in the Middle and Late Bronze Ages, we must consider the third volume under review.[137] Philologists should know straightaway that Hellbing apparently cannot read cuneiform, be it Akkadian, Hittite, or Ugaritic.[138] Texts utilized by Hellbing for his historical interpretation are virtually never cited by excavation or museum number, or by their original publication; he quotes instead secondary sources or translations.[139] Reference is made to "Ugaritic texts written both in Akkadian and Hurrian" (p. 55); most cuneiformists would assume that Ugaritic texts are written in Ugaritic. Hellbing cites (p. 55, note 72) an "Ugaritic text" dealing

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C. Renfrew and K. L. Cooke, eds., *Transformations: Mathematical Approaches to Culture Change* (Academic Press: New York 1979) 349–352.

131. Earle, 1982 op. cit. (in note 127) 1.

132. Earle, 1984 op. cit. (in note 127).

133. Cherry, 1984 op. cit. (in note 4); C. N. Runnels, "Trade and Demand for Millstones in Southern Greece in the Neolithic and Early Bronze Age," *PPE* (1985) 30–43.

134. G. J. Irwin, "The Development of Mailu as a Specialized Trading and Manufacturing Centre in Papuan Prehistory: The Causes and the Implications," *Mankind* 11 (1978) 406–415; idem, "Pots and Entrepôts: A Study of Settlement, Trade, and the Development of Economic Specialization in Papuan Prehistory," *WA* 9 (1978) 299–319.

135. Knapp and Stech, op. cit. (in note 11); Stech, 1985 op. cit. (in note 71).

136. Knapp and Stech, *PPE* (1985) passim.

137. Hellbing, op. cit. (in note 14).

138. See his preface, p. ix, and the review of Hellbing by Moran, op. cit. (in note 1).

139. E.g., J. B. Pritchard, ed., *Ancient Near Eastern Texts Relating to the Old Testament* (Princeton University Press: Princeton 1969). He also compares the German translation of Knudtzon, op. cit. (in note 30), with the English translation of S. B. Mercer, *The Tell El-Amarna Tablets* (Macmillan: Toronto 1939), in order to interpret the Akkadian letters sent to El-Amarna from *Alashiya*. The significant point here is that he never seems to work from the Akkadian originals (see pp. 17 notes 11 ff., 18 note 33); such an approach limits the originality and adequacy of the study. Other problems are concerned more with German or English than with Akkadian: (p. 61 note 2) the question is not whether an official was sent "von" or "über" or even *via Alashiya* but instead whether the Akkadian verb *wuššuru* in this case can take two oblique objects, one without a preposition. When Hellbing notes, correctly, that the Hittites had no word for "island" but instead used a Hittite calque on a combinatory Sumero-Akkadian "periphrasis," he does not even refer the reader to the proper phrase (Hittite *aruni anda* = Sumero-Akkadian *ŠA* A.AB.BA).

with the gods of *Alashiya*: the text in question is Hurrian, not Ugaritic.[140] The plates of Akkadian el-Amarna tablets 33, 38, 39, and 40 are printed upside down or backwards (pp. 100–101).

Hellbing's discussion of the Akkadian noun *māru* ("son") serves to highlight his unfamiliarity with Sumerian or Akkadian (p. 17 note 9): *māru* in this case is the ideogram DUMU, which in Sumerian may represent either "Sohn" or "Kind." If, however, the referents were daughters, as Hellbing implies, there would be no ambiguity in either Sumerian (DUMU. MUNUS) or Akkadian (*māratu*). Incidentally, one hopes that the rendering of the plural of *māru* as *marŭ* is some sort of a typographical error (p. 9). In the same vein, it should be noted that the SAL.UŠ in EA 38/39 may be either *ḫirtu* ("wife of equal status") or *marḫītu* ("wife"), but not "mistress" (p. 10).

While Hellbing often makes reasonable assumptions or observations, his inability to deal with the original cuneiform will cause linguists and historians alike to dismiss his interpretations. He notes, for example, that even though the Egyptians had dominated much of Syria and Palestine during the *Late* Bronze Age, Akkadian remained the dominant international language. Citing the *Middle* Bronze Age letters from Mari (written in Akkadian cuneiform) to substantiate this observation simply misses the (chronological) mark; citing the *Early* Bronze Age cuneiform tablets from Ebla for the same purpose is a serious methodological (and linguistic) error (p. 47 note 36): the languages expressed by the Ebla tablets are Sumerian and Eblaite, not Akkadian.

When Hellbing turns to archaeological data (Chapter 8), outdated references and shallow discussions contrast strongly with the detailed presentation of textual data in the first seven chapters. There are a number of tendencies unique to the Cypriote archaeological record of ca. 1800–1200 B.C., the period that Hellbing attempts to analyze historically. Yet his presentation always commences with a textual reference, never from the vantage point of archaeological materials or from the trends apparent in an overall appraisal of those materials. Hellbing only examines the archaeological record to see *if* it can corroborate the textual data—if it does not, he dismisses it. This "search and destroy" approach to historical reconstruction does not engage the archaeological data in meaningful analysis or interpretation; instead, material culture becomes simply a subsidiary adjunct to the potentially very subjective interpretation of the written evidence. The rich archaeological remains of the later Middle Cypriote and the entire Late Cypriote period warrant scrutiny *sui generis*. Once judged ". . . in terms of the strict logic of its own discipline,"[141] the archaeological evidence may profitably be re-examined in the light of the documentary remains.

140. RS 24.274—see Schaeffer, op. cit. (in note 68) 504–507.

Cyprus 1700–1200 B.C.: Archaeological and Textual Evidence

Given the limited scope of the books under review, and the resultant misinterpretation of a considerable amount of archaeological and textual evidence, it seems appropriate to attempt some sort of concise, balanced synthesis. The following overview is primarily concerned with the periods of 1700–1400 B.C. (MC III–LC I) as were the books under review.

The Early and Middle Bronze Age Background

For reasons still obscure, the technological expertise required to produce bronze developed relatively late on Cyprus, ca. 2200–2000 B.C., perhaps with some impetus from Anatolia.[142] Although the EC period is still poorly understood, recent excavations have demonstrated distinct regional ceramic cultures in the northern and SW districts of the island.[143] Despite this intra-island regionalism, the material culture overall suggests an island-wide uniformity of development under peaceful conditions.[144] Contact with the Levant is attested and the first known Aegean imports (from Crete) appear at the very end of the period.[145]

During the MC era (ca. 1900–1600/1550 B.C.), regional trends continued and foreign contacts intensified. Syria, Palestine, and Egypt established trading relations with Cyprus, but until the MC III period (ca. 1700–

141. J. D. Evans, "The Archaeological Evidence and its Interpretation: Some Suggested Approaches to the Problems of the Aegean Bronze Age," in R. A. Crossland and A. Birchall, eds., *Bronze Age Migrations in the Aegean* (Noyes Press: Park Ridge, N.J. 1974) 17 (17–26).

142. C. Baurain, "Chypre et le Mediterranée Orientale à l'Age du Bronze," unpublished Doctorat d'État, Université du Liège (Liège 1978) 52, 61–62, 75 note 1; Baurain proposes to revise this date upward to ca. 2500 B.C.

143. Herscher, op. cit. (in note 8); Stuart Swiny, "Southern Cyprus c. 2000–1500 B.C.," unpublished Ph.D. thesis, Institute of Archaeology, University of London (London 1979).

144. E. Herscher, "The Bronze Age Cemetery at Lapithos, *Vrysi tou Barba*, Cyprus. Results of the University of Pennsylvania Museum Excavations, 1931," unpublished Ph.D. dissertation, University of Pennsylvania (Philadelphia 1978) 802.

145. H. W. Catling, "Cyprus in the Early Bronze Age," *CAH* I, part 2, chap. 26b (Cambridge University Press: Cambridge 1971) 820–823 (808–823); Herscher, op. cit. (in note 144) 801–816.

1600/1550 B.C.), the island remained somewhat isolated from the surrounding world.

Between 1700 and 1400 B.C., Cyprus began to participate more fully in the socioeconomic and cultural developments of the neighboring areas. From the Aegean in the west to Babylonia in the east, from Anatolia in the north to Egypt in the south, Cyprus made its presence felt—in political maneuvers, in commerce, and in diplomatic exchange.

The Middle-Late Cypriote Bronze Age

During the MC III-LC I period, six phenomena become apparent in the archaeological record of Cyprus: (1) regionalism, (2) social instability/militarism, (3) growth of urban centers, (4) rise of literacy, (5) intensive copper production, and (6) participation in an interregional system of exchange. The developments contrast noticeably with earlier trends in material culture that bespeak a more isolated, less militaristic society. The changes resulted from altered socio-economic (especially commercial) and political circumstances on Cyprus and between Cyprus and its neighbors.

Robert Merrillees argued long ago that regionalism was the "keynote" to interpreting the Cypriote Bronze Age.[146] Indications of N-S regionalism exist in the Cypriote archaeological record as early as the ceramic Neolithic (late 5th millennium B.C.).[147] Although pottery styles have traditionally been used on Cyprus to delimit chronological periods *throughout* the island, new distinctions in south coast ceramics of the MC period make it clear that such criteria are only applicable *regionally*.[148] Factor and cluster analyses conducted on decorative patterns of MC White Painted pottery enabled Frankel to postulate a number of overlapping (ceramic) regions that appeared to converge on the copper mining districts of the Troodos mountains.[149] The implication that these mining districts served as foci of economic interest is borne out by diverse strands of evidence (see below). Catling's eloquent portrayal of much later time periods on Cyprus suggests that certain patterns, like regionalism, recur throughout the island's history, a striking example of Braudel's "longue durée."[150]

Separate (political?) regions are likewise suggested by the second feature: social instability and militarism. Coastal and inland fortifications, mass burials, and increased weaponry in all contexts vividly portray hostilities among the island's inhabitants.[151] Several authors have attributed these manifestations of disorder to invading Mycenaeans, Hurrians, or Hyksos/Amorites. Yet the inland location of many fortifications as well as the distinctions in, and actual displacement of, typical eastern Cypriote wares (White Painted, Red on Black) *in the east* by western Cypriote wares (Monochrome, Base Ring, White Slip) must be regarded as indicators of internal troubles. Merrillees interpreted this evidence as a western Cypriote challenge to eastern Cypriote domination of lucrative trade contacts within the east Mediterranean basin.[152] Notwithstanding Frankel's suggestion that some of these fortified compounds may have served other functions (e.g., herding animals) during peaceful times,[153] a comprehensive view suggests that a period of domestic turmoil existed from the 17th to 15th centuries B.C. The reasons behind this strife are surely more manifold and complex than Merrillees imagined. Control over copper production and internal systems of transportation were just as essential as foreign trade to the emergent political elite on the island.

The political units of the earlier phases of the Bronze Age are best described as simple villages, in frequent communication with each other. By the 15th century B.C., this millennia-old demographic pattern began to change. Survey projects past and recent demonstrate that the number of sites increased and, more significantly, that newly founded, larger sites appeared on or near the NW, east, and SE coasts.[154] The choice of settlement sites

146. Merrillees, 1965 op. cit. (in note 9) 140.

147. Peltenberg, op. cit. (in notes 7, 8).

148. Herscher, op. cit. (in notes 8, 9); Swiny, op. cit. (in note 143).

149. D. Frankel, *Middle Cypriote White Painted Pottery: An Analytical Study of the Decoration. StudMedArch* 42 (P. Åström's Förlag: Göteborg 1974) 51.

150. H. W. Catling, "Reflections upon the Interpretation of the Archaeological Evidence for the History of Cyprus," *Studies Presented in Memory of Porphyrios Dikaios* (Zavallis Press: Nicosia 1979) 202–205 (194–205); F. Braudel, *On History* (University of Chicago Press: Chicago 1980) 25–54.

151. P. Åström, "Some Aspects of the Late Cypriote I Period," *RDAC* (1972) 46–57; Catling, op. cit. (in note 103) 166–169; M. Fortin, "The Military Architecture in Cyprus during the Second Millennium B.C.," unpublished Ph.D. thesis, Bedford College, University of London (London 1982).

152. R. S. Merrillees, "The Early History of Late Cypriote I," *Levant* 3 (1971) 56–79.

153. Frankel, op. cit. (in note 149).

154. J. M. Adovasio, G. F. Fry, J. D. Gunn, and R. F. Maslowski, "Prehistoric and Historic Settlement Patterns in Western Cyprus: An Overview," *RDAC* (1978) 39–57; H. W. Catling, "Patterns of Settlement in Bronze Age Cyprus," *OAth* 4 (1963) 129–169; D. R. Keller and D. W. Rupp, *Archaeological Survey in the Mediterranean Area. BAR Supp* 155 (Oxford 1983); R. S. Merrillees, "Settlement, Sanctuary and Cemetery in Bronze Age Cyprus," *Australian Studies in Archaeology* 1 (1973) 44–57; J. J. Johnson and L. Hordynsky, "Vasilikos Valley Field Survey, 1979," *JFA* 9 (1982) 63–66; D. W. Rupp, "Canadian Palaepaphos Survey Project: Preliminary Report of the 1979 Season," *RDAC* (1981) 251–268; David W. Rupp, Lone Wriedt Sørensen, Roger H. King, and William A. Fox, "Canadian Palaipaphos (Cyprus) Survey Project: Preliminary Report, 1980–1982," *JFA*

on Cyprus—ranging from upland plateaux to lowland coastal plains—seems always to have been dictated by criteria quite different from those in operation throughout the Near East or Bronze Age Aegean. The location of settlements changed repeatedly and, while this circumstance obviously affects our ability to locate and identify sites, and thus to gain a diachronic picture of cultural development or to understand in detail certain phases of development (e.g., settlement evidence for the EC period is virtually nonexistent), some periods of Cypriote prehistory are much better represented in the material record than others. The rich material culture uncovered in the LC I coastal or near-coastal settlements (e.g., Enkomi, Hala Sultan Tekke, Toumba tou Skourou; see FIG. 1) is a case in point. Ceramic, metal, and glyptic finds demonstrate vividly economic differentiation among the inhabitants of these new centers and the priority of copper production in their economies. These same data testify to increasing Cypriote participation in Aegean and east Mediterranean trade. Taken together, copper production and international trade must have been instrumental in this "urban initiative" and in the move from foothill zone to coast.[155]

Another notable cultural development that can be traced to this transitional era was the first indisputable attestation of writing on Cyprus. The corpus of "Cypro-Minoan" inscriptions demonstrates that writing served an important function for the Cypriotes of the Late Bronze Age. Although the origin of the script remains an unknown factor, writing, once introduced, was adopted rapidly throughout the island. The paucity of written documents, however, precludes any certainty of decipherment or determination of local variants.[156] Inscribed objects from numerous sites and bone styli from Enkomi, Palaepaphos, Kition, and Maroni suggest that literacy was widespread on the island.[157] Whether writing was restricted to scribal, priestly, or elite classes cannot yet be demonstrated archaeologically. There is little doubt, however, that the continued use and expansion of literacy aided Cypriote participation in economic and social developments in the contemporary eastern Mediterranean world.

Indigenous strife among regional groups, instability within society, demographic disruption and displacement, the beginnings of literacy—all occurred within the relatively short time span between 1700 and 1500 B.C. The archaeological record is clear, albeit imprecise. What factor or factors precipitated such a panoply of events and developments? Are we even justified in seeking sociopolitical and economic explanations from archaeological remains? Although this argument cannot be pursued to any extent here, historians and prehistorians alike must be made aware that political anthropologists and economic archaeologists have, with increasing understanding, analyzed the evolution of complex, urban society within a matrix moulded by interrelated variables such as warfare (center-periphery strife), interregional (i.e., long-distance or external) exchange, and intensified (internal) production.[158] It is proposed here that increased demand for Cypriote copper within the Aegean-eastern Mediterranean exchange network and the correspondent need to formalize the internal and external administrative organization of the copper trade were factors directly related to the internal strife, the rise of urban centers, and other, associated demographic and cultural developments on the island (see above).

Metalworking installations and quantities of copper slag demonstrate the priority of copper production in the economies of the new coastal centers at Enkomi, Kition, and Hala Sultan Tekke. The same probably holds true for Toumba tou Skourou and Ayios Dhimitrios, but the former is very poorly preserved while the latter is still not published in adequate detail.[159] The refining of *metallic* copper would have occurred chiefly in the major coastal cities, perhaps implying the existence of a centralized administration and at the same time the coordi-

11 (1984) 133–154; S. Swiny, "Bronze Age Settlement Patterns in Southwest Cyprus," *Levant* 13 (1981) 51–87.

155. Frankel, op. cit. (in note 149) 10; Knapp and Stech, op. cit. (in note 11); Merrillees, op. cit. (in note 154) 50.

156. A. Bernard Knapp and A. Marchant, "Cyprus, Cypro-Minoan and Hurrians," *RDAC* (1982) 15–30; *contra* E. Masson, "Présence Éventuelle de la Langue Hourrite sur les Tablettes Chypro-Minoennes d'Enkomi," *JRAS* (1975.2) 159–163; J. Faucounau, "Études Chypro-Minoennes I-III," *Syria* 54 (1977) 209–249.

157. P. and L. Åström, *The Late Cypriote Bronze Age: Other Arts and Crafts. SCE* IV:1D (SCE:Lund 1972) 771; G. Cadogan, "The First Season of New Excavations at Maroni in Cyprus," *Minutes of Mycenaean Seminar, University of London Institute of Classical Studies* (15 December 1982); Karageorghis, op. cit. (in note 98) 63–66.

158. Inter alia, see R. Carneiro, "Political Expansion as an Expression of the Principle of Competitive Exclusion," in R. Cohen and E. Service, eds., *Origins of the State* (ISHI: Philadelphia 1978) 205–223; H. J. M. Claessen and P. Skalnik, eds., *The Study of the State. New Babylon Studies in the Social Sciences* 35 (Mouton: The Hague 1981); S. N. Eisenstadt, "Sociological Theory and an Analysis of the Dynamics of Civilizations and of Revolutions," *Daedalus* 106 (1977) 59–78; B. Trigger, "The Archaeology of Government," *WA* 6 (1974) 95–106; M. Webb, "The Flag Follows Trade," in J. A. Sabloff and C. C. Lamberg-Karlovsky, *Ancient Civilization and Trade* (University of New Mexico Press: Albuquerque 1975) 155–209; D. J. Wilson, "The Origins and Development of Complex Prehispanic Society in the Lower Santa Valley, Peru: Implications for Theories of State Origins," *Journal of Anthropological Archaeology* 2 (1983) 209–276.

159. See, however, South, op. cit. (in note 90); idem, "Kalavasos-Ayios-Dhimitrios 1979: A Summary Report," *RDAC* (1980) 22–53, and the three reports in *RDAC* (1983).

nation of production designed for the export market. The finished products, presumably in ingot form, are consequently rarely found on Cyprus itself.[160] Yet the standardized weight of the ingots, their shape, and (presumably) purity again demonstrate a regulating authority as well as production for export. Although a number of scholars have pointed out the close association between copper production and "religious" structures at Kition, Enkomi, and Athienou,[161] we can only speculate on the (political ?) organization and identity of these authorities.

Stech has recently presented a sensible scenario for local as opposed to island-wide control over copper production.[162] The geographical distribution of the urban centers is highly skewed toward the south/SE coasts, and Kition and Hala Sultan Tekke were located within a few kilometers of one another: a more regular pattern might be expected from centralized control. On the other hand, the evidence of the Amarna letters demonstrates that at least some of the merchants dispatched from Cyprus to Egypt in the early 14th century B.C. were under state control.[163] Even though more definitive statements about the nature of political control seem unwarranted, it is reasonable to postulate that the cumulative effect of control over essential copper resources and concomitantly over interregional trade would have been increased centralization, wealth, and social stratification.

Site hierarchy seems evident inasmuch as the new urban centers are significantly larger than the villages that persisted in the hinterland. The main difference between the two polities seems to lie in the intensity of copper production. Catling long ago pointed out the distinction between the industrial port cities and the inland villages to which he assigned either mining or agricultural functions.[164] Although this settlement pattern *seems* apparent, the lack of systematic surveys designed specifically to assess site hierarchy and function precludes more definitive statements. A recent spatial analysis of exchange between Cyprus and the Aegean between 1700 and 1400 B.C. has tentatively identified Enkomi and Toumba tou Skourou as "gateway communities" (specialized trading centers that develop at strategic nodes where the production or flow of raw materials and goods can be controlled and where local exchange systems overlap with interregional systems).[165]

In the Portugali and Knapp study, other coastal sites (e.g., Hala Sultan Tekke, Ayia Irini, Maroni, etc.) showed a significantly lower proportion of imported Aegean materials and were thus defined as local or secondary stations within the internal Cypriote exchange system. The same study also demonstrated that Aegean contacts with Cyprus intensified over the course of time considered, while Cypriote contact with the Aegean declined. The implication is that in the 16th and 15th centuries B.C., local populations had more control of trade than they did in the 14th century B.C., when the impetus seems to have shifted to the Aegean. In this light, it is useful to note that gateway communities are generally found in association with exploitation by external powers, specifically by their exploitation of an area's natural resources. This situation often produces what is known as a "dendritic" or tree-like settlement pattern.[166] A prediction based on this observation could be tested archaeologically on Cyprus by employing intensive survey and by paying special heed to distribution patterns and site hierarchies on the island.

The initial impetus to increased copper production may have been the desire to attract and to enter profitable foreign markets. Copper production and export may thus have thrust Cyprus into the commercial and economic sphere of the eastern Mediterranean. Likewise political events in the Levant and the Near East—notably the disruption of copper and tin supplies coming into Syria and the Levant via Mesopotamia as a result of ethnic movements (Hurrians, Kassites) or outright military expeditions (Hittites)—must have forced the peoples of the Levant into seeking new or augmented supplies of copper.[167] Cuneiform records demonstrate that *Alashiya* had supplied copper to Mari and to Babylonia already during the 18th century B.C., and to Egypt in large quantities during the 15th and 14th centuries B.C. (see above).[168]

160. J. D. Muhly, "The Copper Ox-hide Ingots and the Bronze Age Metals Trade," *Iraq* 39 (1977) 73–82.

161. H. W. Catling, "A Cypriote Bronze Statuette in the Bomford Collection," in Schaeffer, op. cit. (in note 75) 15–32; V. Karageorghis, "Kition: Mycenaean and Phoenician," *ProcBritAc* 59 (1973) 259–281.

162. Stech, op. cit. (*Acta,* in note 71) 112–113.

163. Georgiou, op. cit. (in note 126); Knapp, op. cit. (in note 24) 182–195.

164. Catling, op. cit. (in note 154) 144–145.

165. K. G. Hirth, "Interregional Trade and the Formation of Prehistoric Gateway Communities," *AmAnt* 43 (1978) 35–45; Portugali and Knapp, op. cit. (in note 10).

166. C. A. Smith, "Regional Economic Systems: Linking Geographical Models and Socioeconomic Problems," in C. A. Smith, ed., *Regional Analysis,* Vol. 1: *Economic Systems* (Academic Press: New York, London 1976) 3–63.

167. Muhly, op. cit. (in note 94) 290–302; Stech, 1985 op. cit. (in note 71).

168. G. Dossin, "Les Découvertes Épigraphiques de la XVe Campagne de Fouilles de Mari au Printemps de 1965," *CRAI* (1965) 400–406; idem, "Les Archives Économiques du Palais de Mari," *Syria* 20 (1939) 111 (97–113); A. R. Millard, "Cypriot Copper in Babylonia, c. 1745 B.C.," *JCS* 25 (1973) 211–214; on Egyptian references to Cypriote copper, see C. Lalouette, "Le 'Firmament du Cuivre.' Con-

Increasing amounts of Cypriote ceramics in Syria and the southern Levant after 1600 B.C. provide an archaeological reflection of this documentary evidence.[169] The realization of the political potential inherent in foreign demand for copper perhaps spurred local elites into manipulating trade as the financial base for their activities. The role of trade in the evolution of complex societal systems on Cyprus has already been discussed above.

By the onset of the LC II period (ca. 1400 B.C.), Cyprus' expanding trade relations with the Aegean and Levantine areas may have helped to limit regionalism on the island.[170] Demand from overseas markets may have promoted the Cypriote production of mass-made, easily transportable goods.[171] The desire to share in or control the trade in metals, consumer goods and other products (ceramics, textiles, etc.) may have served in part to unify disparate cultural or political regions. The Amarna letters from *Alashiya* suggest that by the 14th century B.C., a centralized state exercised at least some control over the copper industry.

The exploitation of its copper resources brought Cyprus into a unique new relationship with its neighbors, east and west. The strategic geographical location of Cyprus and its central position between Aegean and Levantine/Egyptian cultures gave Cyprus an advantageous market potential. After about 1400 B.C., the island became intricately involved in the social, economic, and political spheres of the Aegean and east Mediterranean world. The use of writing had spread by this time and, while that spread may also suggest a more unified culture, it does not necessarily imply one ethnic group. The move from provincial to international status brought problems as well as profits to the island. The marked increase in Mycenaean pottery in LC II archaeological deposits implies at the very least a growing presence of Aegean merchants on the island.[172] On present evidence, however, it seems that native Cypriotes continued to be the dominant political, cultural, and economic force on the island until at least 1200 B.C.[173]

Various problems remain to be solved in order to achieve a cultural and historical understanding of Late Bronze Age Cyprus. From a Braudelian perspective, we need to examine the forces responsible for the interruption of those long-term trends ("la longue durée") in Cypriote sociocultural patterns at the end of the MC period (ca. 1700—1600 B.C.) and again at the end of the LC II period (ca. 1200 B.C.). Humanistic and social scientific approaches must be employed to analyze the multifaceted data—archaeological, textual, historical, demographic—at our disposal. An overview of time, place, and social reality demands interdisciplinary attention. Archaeological, metallurgical, and textual data from the eastern Mediterranean, considered in an appropriate theoretical framework, have provided the basis for the type of sociohistorical reconstruction attempted here.

Acknowledgment

I wish to thank Professor James D. Muhly, University of Pennsylvania who read and very helpfully critiqued earlier drafts of this paper.

tribution à l'Étude du mot bi'3," *BIFAO* 79 (1979) 341–342 (333–353).

169. Gittlen, op. cit. (in note 108); Hankey, op. cit. (in note 107); idem, "Crete, Cyprus and the South-eastern Mediterranean 1400–1200 B.C.," *Acts: Cyprus and Crete* (1979) 144–157.

170. Åström, op. cit. (in note 112) 769; Catling, op. cit. (in note 23) 198–201.

171. Artzy, op. cit. (in note 109).

172. H. W. Catling, "The Achaean Settlement of Cyprus," *Acts: MEM* (1973) 34–39; S. Hood, "Mycenaean Settlement in Cyprus and the Coming of the Greeks," *Acts: MEM* (1973) 40–50.

173. V. Karageorghis, "Deux Avant-Postes Militaires de la Fin du XIIIe Siècle av. J.-C. à Chypre," *CRAI* (Nov.–Dec. 1982) 704–721; idem, "Fouilles à l'ancienne Paphos de Chypre: Les Premiers Colons Grecs," *CRAI* (Jan.–Feb. 1980) 122–136; V. Karageorghis and M. Demas, *Pyla-Kokkinokremos: A Late 13th-Century B.C. Fortified Settlement in Cyprus* (Dept. of Antiquities, Cyprus: Nicosia 1984); M. Fortin, "Fondation des Villes Grecques à Chypre: Legendes et Découvertes Archéologiques," in J. Caron, M. Fortin, and G. Maloney, eds., *Mélanges d'Études Anciennes Offert à Maurice Lebel* (Les Éditions du Sphinx: Chysostome, Quebec 1980) 25–44.

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