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The British Association for  
Near Eastern Archaeology

# Forces of Transformation

## The End of the Bronze Age in the Mediterranean



*Edited by*

Christoph Bachhuber and R. Gareth Roberts

*Themes from the Ancient Near East BANEA Publication Series, Vol. 1*

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**FORCES OF TRANSFORMATION**  
**THE END OF THE BRONZE AGE IN THE MEDITERRANEAN**

*Proceedings of an international symposium  
held at St. John's College, University of Oxford  
25–6th March 2006*

*Edited by*  
**CHRISTOPH BACHHUBER AND R. GARETH ROBERTS**

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OXBOW BOOKS  
British Association for Near Eastern Archaeology (BANEA)

Published by  
Oxbow Books, Oxford, UK

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ISBN 978-1-84217-332-9

A CIP record of this book is available from the British Library

*This book is available direct from:*

Oxbow Books, Oxford, UK  
(Phone: 01865-241249; Fax: 01865-794449)

*and*

The David Brown Book Company  
PO Box 511, Oakville, CT 06779, USA  
(Phone: 860-945-9329; Fax: 860-945-9468)

*or from our website*

www.oxbowbooks.com

*Cover design drawn by Katharina Streit*

*Printed and bound in Great Britain by  
The Cromwell Press Group  
Trowbridge, Wiltshire*

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## CONTINUITY AND CHANGE: THE DIVERGENT DESTINIES OF LATE BRONZE AGE PORTS IN SYRIA AND LEBANON ACROSS THE LBA/IRON AGE TRANSITION

*Carol Bell*

Ugarit was a strategic node between land and sea routes at the close of the Late Bronze Age and its entrepreneurial merchants, many of whom we know by name through the administrative documents found in their homes, engaged in transactions for economic gain. Why Ugarit was never meaningfully resettled again after its destruction in the early 12th century BCE is a question of regional importance with respect to gaining a better understanding of how and why the mechanisms of trade evolved at this critical time. That Phoenicia came to dominate maritime trade in the Mediterranean in the succeeding period is widely accepted, but the reasons behind this rise to pre-eminence are poorly understood.

To address these issues, this paper is divided into three parts, each of which concentrates on what evidence exists for specific maritime trading relationships at different ports on the Levantine coast. First, I will briefly summarise the results of the analysis I conducted during my doctoral research on the trade in fine-wares between the Aegean and Cyprus and the Levant during the LBA. I will then characterise the pre-eminent role of Ugarit in the trade of copper and tin and describe the international trading contacts of some of its wealthy merchants. Finally, I will suggest what may have happened to long-distance trade networks after the destruction of Ugarit, and many other Levantine ports, in the early 12th century BCE.

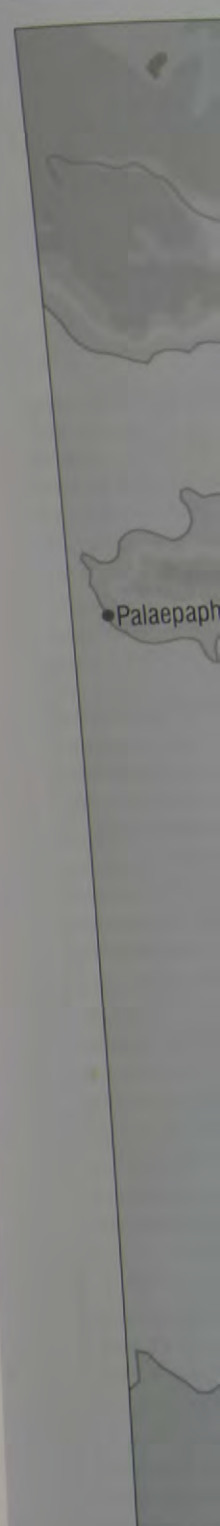
### **The LBA trade in Mycenaean and Cypriot fine- wares in the eastern Mediterranean**

By the end of the LBA, ceramics were moving from the Aegean and Cyprus to the Levantine coast in considerable quantities, not only as containers for trade goods, such as

perfumed oils, but also as attractive dinner-wares. The range of Mycenaean vessel shapes found in domestic contexts in sites such as Ugarit and Sarepta is high, suggesting that they were available to ordinary citizens of these ports, not just the elite (Bell 2005). The ubiquity of Cypriot LBA wares at Levantine coastal sites, in conjunction with the presence of Mycenaean wares, provides a data set that can be used to examine intra-Levantine variation in the ceramic assemblages, and what this might mean for the routes by which these fine-wares arrived at their point of deposition.

The coast of Syro-Palestine varies considerably along its length in topography and in the availability of access routes into the interior. The first step in my analysis is to divide the Levant into four Zones (L1–L4) that reflect the realities of its topography. Splitting the region along topographical lines removes modern political boundaries and takes us closer to the challenges that faced long distance traders in the LBA (see Fig. 4.1).

Zone L1 centres on Ugarit and extends to the Euphrates sites of Emar and Carchemish, with which Ugarit had commercial and administrative links respectively (Lackenbacher 2000; Malbran-Labat 2000). This zone was part of the Hittite sphere at the close of the LBA whereas my other three zones were, to a greater or lesser extent, in the Egyptian sphere following the battle of Qadesh (c. 1278 BCE). The inclusion of Emar on the Euphrates and Ugarit within the Hittite sphere was important for the security of tin supplies that were arriving from the east (Macqueen 1996, 44), as the route between these two cities is the shortest from the Euphrates to the Mediterranean. Zone L2 is, essentially, the area that is understood to be Phoenicia in the Iron Age in which the only extensively excavated and published coastal site is Sarepta. This port is likely to have had important inland links via the Litani River valley to



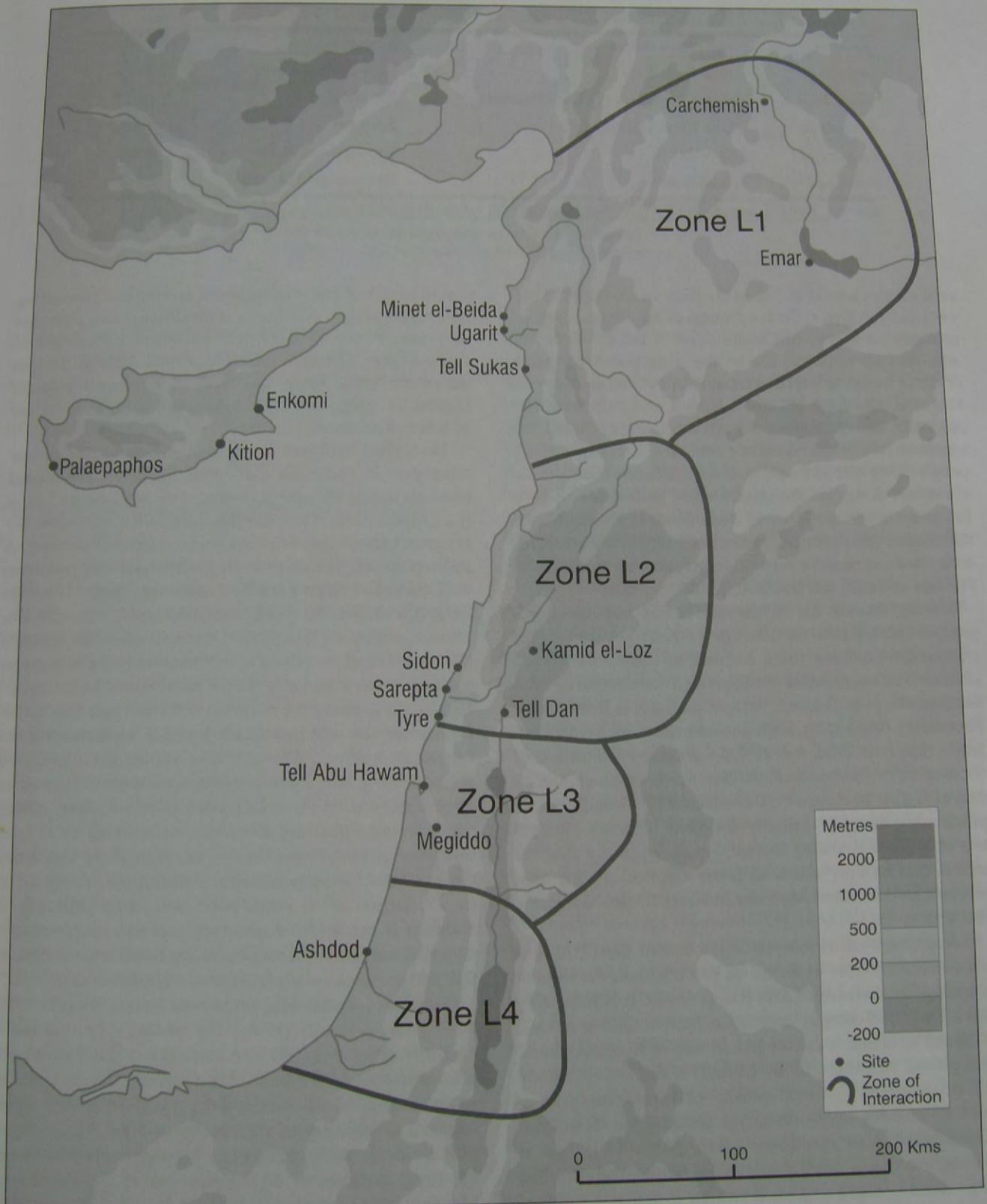


Fig. 4.1: Four Levantine zones of interaction



Ethnonym	Translation	Archive	From
<i>pe-ri-ta</i>	'man from Beirut'	Knossos	Zone L2
<i>tu-ri-jo</i>	'man from Tyre'	Knossos and Pylos	Zone L2
<i>po-ni-ki-jo</i>	'man (?) or spice (?) from Phoenicia'	Knossos	Zone L2
<i>a-ra-da-jo</i>	'man from Arad/Arvad'	Knossos	Zone L2
<i>ku-pi-ri-jo</i>	'Cypriot'	Knossos and Pylos	Cyprus
<i>a-ra-si-jo</i>	'Alashiyan'	Knossos and Mycenae	Cyprus

Source: Yasur-Landau (2002): Chapter 2, Section 2.3.3 (with references)

Table 4.1: Levantine and Cypriot ethnonyms in the Linear B texts

sites such as Kamid el-Loz in the Biqa valley (Koehl 1985, 144) and Tell Dan at the headwaters of the Jordan. Zone L3 contains the important Carmel coast of Israel, where Tell Abu Hawam served as one of the entry points for goods destined for the Jezreel and Jordan Valleys and sites such as Megiddo. The coast of Zone L4, meanwhile, contains Iron Age Philistia, with major ports at Ashkelon and Ashdod. My approach then selects domestic contexts, in which ordinary people lived and worked, at coastal sites in the different zones and compares the quantities of Mycenaean imports found there per unit area of excavation. It also examines the relative quantities of Cypriot and Mycenaean wares and endeavours to observe how this changed with time (where the data allowed; see Bell 2005; 2006, 30–60).

Having divided the Mycenaean wares into functional groups, I calculated the number of finds per 100 m<sup>2</sup> of excavation exposure for a number of coastal Levantine sites as well as Enkomi on Cyprus. Even compared with the assemblage at Enkomi, Sarepta (in the area that became Phoenicia) had a very high concentration of Mycenaean wares (see Bell 2006, fig. 21 for a graphic presentation of these results). Furthermore, the Sarepta assemblage, unlike that of Ugarit or Ashdod, is dominated by closed vessels, presumably acquired initially for their contents. Sarepta was also unusual among the sites included in my analysis in that it is the only site with fewer Cypriot imports than Mycenaean ones, once Mycenaean wares become available (Bell 2006, 58).

Sarepta was not destroyed at the end of the LBA, and nor was nearby Tyre as far as we can tell from the limited soundings made there to date (Bikai 1978). It is intriguing that the site that escapes destruction (perpetrated or at least catalysed by invaders that are linked with an Aegean cultural background elsewhere in the Levant) is the Levantine site that possessed the greatest density of Mycenaean pottery finds when comparable domestic contexts are examined. I have postulated elsewhere (Bell 2006, 110) that if Aegean merchants (and, presumably, Aegean sailors) had no personal contacts at Ugarit (which is discussed further in the context of textual evidence later in this paper) they

would have had few qualms about sacking and plundering its houses, palaces and tombs if conditions were such that they were forced to leave their homeland. Conversely, if these Aegean elements had traded directly with Sarepta during the LBA, surely this would encourage a peaceful request for refuge or assistance and militate against the use of force as an opening gambit?

No textual evidence has been found at Sarepta or any other port in Phoenicia that sheds light on international relations during the LBA. Looking at the Mycenaean Linear B archives, Assaf Yasur-Landau (2002) has examined the extent of knowledge of foreign lands, in terms of ethnonyms and toponyms. The sections of his analysis that pertain to the Levant and Cyprus cite Fernando Aura-Jorro (1985–93, I, 93; II, 112, 139–40, 378), Eric Cline (1994, 124, 129–30), Thomas Palaima (1991, 280–1) and Cynthia Shelmerdine (1998, 295) and the ethnonyms and toponyms in question are summarised in Table 4.1. I am grateful to Dr Yasur-Landau for drawing my attention to the fact that that neither Ugarit nor any site in modern Israel is mentioned in the Linear B archives. Meanwhile, Cypriots are mentioned in more than one archive while four separate names in Phoenicia (coastal Zone L2), namely Beirut, Tyre, Arvad (Arvad) and Phoenicia itself, are represented in at least one archive. Simply the absence of reference to Ugarit and the southern Levantine coastal cities might be argued to be a reflection of the very partial nature of these Linear B archives. However, when taken together with the presence of Cypriots and four separate ethnonyms from Zone L2 therein, this pattern must surely have some significance.

Moreover, it matches the pattern Itamar Singer (1999, 676) has characterised for Ugarit, namely that not a single Aegean merchant is mentioned in the vast written documentation of that port. This contrasts with the situation portrayed the Middle Bronze Age Mari archives, which record a tin delivery to a Cretan (Bell 2006, 27). In terms of individuals at Ugarit that had dealings with the Aegean, the royal archives of Ugarit mention of the ship-owner Sinaranu being granted special privileges with respect to maritime trade with Crete by Ammistamru II, king of Ugarit

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	Rapanu	Yabninu	Rašap-abu	Urtenu
Inland Syria	✓		✓	✓
Anatolia	✓	✓		✓
Upper Mesopotamia	✓			✓
Babylonia				✓
Phoenicia	✓	✓		✓
Coastal Israel		✓		
Egypt		✓		✓
Cyprus	CM	CM	CM	CM✓

CM = Cypro-Minoan document

Table 4.2: Interregional contacts of Ugaritic merchants

(Monroe 2000, 195). Overall, however, both the ceramic and philological evidence are consistent with the idea that Aegeans had more direct knowledge of the area that became Phoenicia than the remainder of the Syro-Palestinian coast during the LBA.

### The pre-eminent role of Ugarit in the LBA trade in copper and tin

Turning to the trade in copper and tin, these metals, and particularly the latter, had a strategic value during the LBA not too dissimilar to that of crude oil today. Tin was absolutely vital for the maintenance of the status quo in LBA society. Bronze tools had become widely used in all manner of trades and the availability of enough tin to produce weapons made of high grade bronze must have exercised the minds of rulers much in the same way as keeping the oil flowing occupies our politicians today. Unlike copper, tin is rare in nature, and the best evidence we have for the source of tin used in the Levant during the LBA is that it came from Uzbekistan or Tajikistan, where mines of the appropriate age have been found by researchers from the Deutsches Bergbau-Museum in Bochum (Weisgerber and Cierny 1999; Cierny *et al.* 2001).

Bringing tin to the foundries of the Levant, Cyprus and beyond required both long-distance trade overland by donkey caravan as well as port facilities for onward maritime shipment. Ugarit was strategically placed to profit from this trade, at the nexus or '*Schnittpunkt*' of these routes (Stockfisch 1999). As already mentioned, a portion of the likely tin route, between the Euphrates at Emar and Ugarit, lay securely within Hittite-controlled territory in the closing years of the LBA. Furthermore, being only 160 km, or one day's sail, from the major copper export centre of Enkomi, no doubt, added to the value of the metal trade passing through Ugarit.

The stone oxhide ingot mould, discovered in 1982 at

Ugarit's subsidiary palatial site of Ras Ibn Hani, supports the notion that this LBA port played an important role in the trade of Cypriot copper as it contained traces of Cypriot copper (based on lead isotope analysis; Lagarce and Lagarce 1997; Bounni *et al.* 1998, 43–4). This unique find suggests that copper was re-melted at Ras Ibn Hani to produce oxhide ingots for shipment to other consumption centres. Surely, if this copper had been destined for the furnaces of bronze smiths of Ugarit, effort and energy would not have been expended to cast the metal into this internationally recognised form?

Recent textual work by Christopher Monroe (2000) draws attention to the entrepreneurial activities of individual merchants in Ugarit. Benjamin Foster (1987) suggests that the palace establishment there extracted the majority of its wealth through taxation rather than direct control over long-distance trade. Buying and selling metals was one of the principal activities of the wealthy merchants of Ugarit. Individual merchants such as Rapanu, Yabninu, Urtenu and Rašap-abu conducted business on their own account on a profit motivated basis, but they did occasionally acquire goods for and provide services to the royal palace of Ugarit (Bell 2006, 65–7). Not one of these merchants is mentioned in the lists of those that were endowed directly by the royal palace, a group contractually obliged to carry out business on behalf of the king (Monroe 2000, 123). All four, however, did periodically engage in transactions with the palace. This calls to mind the activities of merchants in the British East India Company between 1600 and 1834 CE. By the end of the 18th century, company employees were able to conduct trade on their own account as a result of relationships they had established with merchants and ship owners across the region on official company business (Farrington 2002, 79).

Based on the currently available texts, Yabninu seems to have been the largest player in the tin trade of Ugarit. One of his shipments, documented in the text RS 11.799, amounted to 20 talents (approximately 600 kg; Courtois 1990). This is not quite on the scale of the Uluburun shipwreck which

yielded a ton of tin ingots (Pulak 2000), but amounts to well over half of that ill-fated shipment. Yabninu had contacts along the length of the coast of Syro-Palestine, as well as in Cyprus, Egypt and Hittite Anatolia (see Table 4.2). The significance of the presence of four out of the total known corpus of nine Cypro-Minoan tablets in or near the houses of Rapanu, Yabninu, Urtenu and Rašap-abu at Ugarit (Ferrara 2005, 123) cannot be underestimated and must suggest that an important relationship existed between these merchants and Cyprus.

Among Levantine ports, therefore, Ugarit has the strongest claim to be the Eastern Mediterranean's principal LBA tin port as well as being a considerable importer of copper. Entrepreneurial merchants were responsible for some, if not the majority, of this trade at the end of the LBA. They traded tin and copper onwards, both by land and by ship to other Levantine destinations. This prosperous, peaceful world, rich in bronze and imported ceramics, came to an abrupt end in the early 12th century BCE. Different parts of the Levantine coast were affected to different extents: Ugarit in Zone L1 meets its final destruction, Zone L2 (the area that becomes known as Phoenicia) seemingly avoided hostilities, and coastal sites in Zones L3 and L4 (in modern Israel) rose from the ashes of their destruction with little delay.

### Trade networks in the earliest Iron Age

As Colin Renfrew (2004) recently pointed out, one of the most profitable places to look for explanatory models on the nature of the economic restructuring that followed the end of the LBA is in the places where there appears to have been continuity. Consequently, the remainder of this paper will focus on the relationships between Cyprus, particularly the west of the island, and Phoenicia across the LBA/Iron Age transition.

But first, if Aegeans and Canaanites in my Zone L2 had the most direct trading relationships with each other during the LBA, what route might they have taken to achieve this? Sturt Manning and Linda Hulin (2005, 276, fig. 11.1) recently published a map that shows the areas of the Eastern Mediterranean sea from which landmasses are visible. Their analysis shows that a ship leaving Byblos on the coast of modern Lebanon for Cyprus would see its destination landmass before losing sight of its coast of origin. This would not be the case for a ship departing from Ashdod or Ashkelon on the lower relief coastline of the southernmost Levant. Patricia Bikai (1987) suggests that a Phoenician ship heading towards Rhodes or Crete in the Iron Age could well have made landfall on the west coast of Cyprus. As evidence of this, she cites the presence of the earliest Iron Age Phoenician ceramics in this part of Cyprus, and not in any other.

The two LBA shipwrecks at Cape Gelidonya and Uluburun are markers of shipping routes between the Levant and the Aegean (see Bell 2005, pl. lxxviii for a map of the hypothetical route about to be described). A vessel sailing east from the Aegean would probably need to stop somewhere on the west coast of Cyprus to take on fresh water and possibly provisions – perhaps around Palaepaphos, where several hundred Mycenaean ceramic finds have been excavated (Maier and Karageorghis 1984, 55). Such a vessel then might call in at Kition or Hala Sultan Tekke before reaching Enkomi. Alternatively, the Mycenaean goods might be landed at this first Cypriot port and re-loaded on to a Cypriot ship to continue their voyage to other Cypriot or Levantine ports. The lack of reference to Aegean traders in the texts of Ugarit, together with the Cypro-Minoan marks on some Mycenaean vessels found there might argue in favour of a Cypriot ship transporting the Mycenaean trade goods to Ugarit from, say, Enkomi (Hirschfeld 2000). Whereas Ugarit is hidden behind Cyprus from the Aegean perspective, Sarepta, and Phoenicia, lie straight ahead, with the same distance to sail as from Cape Gelidonya to the west coast of Cyprus.

To explore this hypothesis, I will now examine the degree of continuity of trade between Phoenicia and the west coast of Cyprus across the LBA/Iron Age I transition. Relatively few LBA/Iron Age settlements have been excavated on the western coast of Cyprus, the area one might expect LBA shipping from the Aegean to make landfall to pick up water and other supplies on a longer journey to the Levantine coast. The characteristics one would look for in such a way-station would be the availability a sheltered anchorage, fresh water supplies nearby and an easy position to defend. A way-station might begin life as a seasonal stop-off point, but if the level of traffic warranted it, a permanent establishment with a different architectural and material culture signature from that of the surrounding indigenous culture might well develop.

Maa-Palaeokastro (see Fig. 4.2) stands out as a site that matches the characteristics I have outlined. Located 10 km north of modern Paphos, it stands on a rocky peninsula between two natural harbours with fortifications defending it on the landward side. Karageorghis' excavations between 1979 and 1986 demonstrated that the site was occupied during the LC II–LC IIIA periods (or LH IIIB–IIIC:1 in Mycenaean pottery styles; see Karageorghis and Demas 1988, I, 2). The material culture of Maa is interesting on two counts. First, Maa exhibits many Aegean cultural manifestations. Yasur-Landau (2003a) has recently commented on the predominantly Aegean material culture of this site, including hearth rooms, LH IIIB wares, locally made LH IIIC fine-wares, loom weights and cooking jugs. Second, it has also produced an unusually high number of Canaanite amphorae, attesting an intense relationship with the Levant.

The Mycenaean IIIC pottery at Maa-Palaeokastro is



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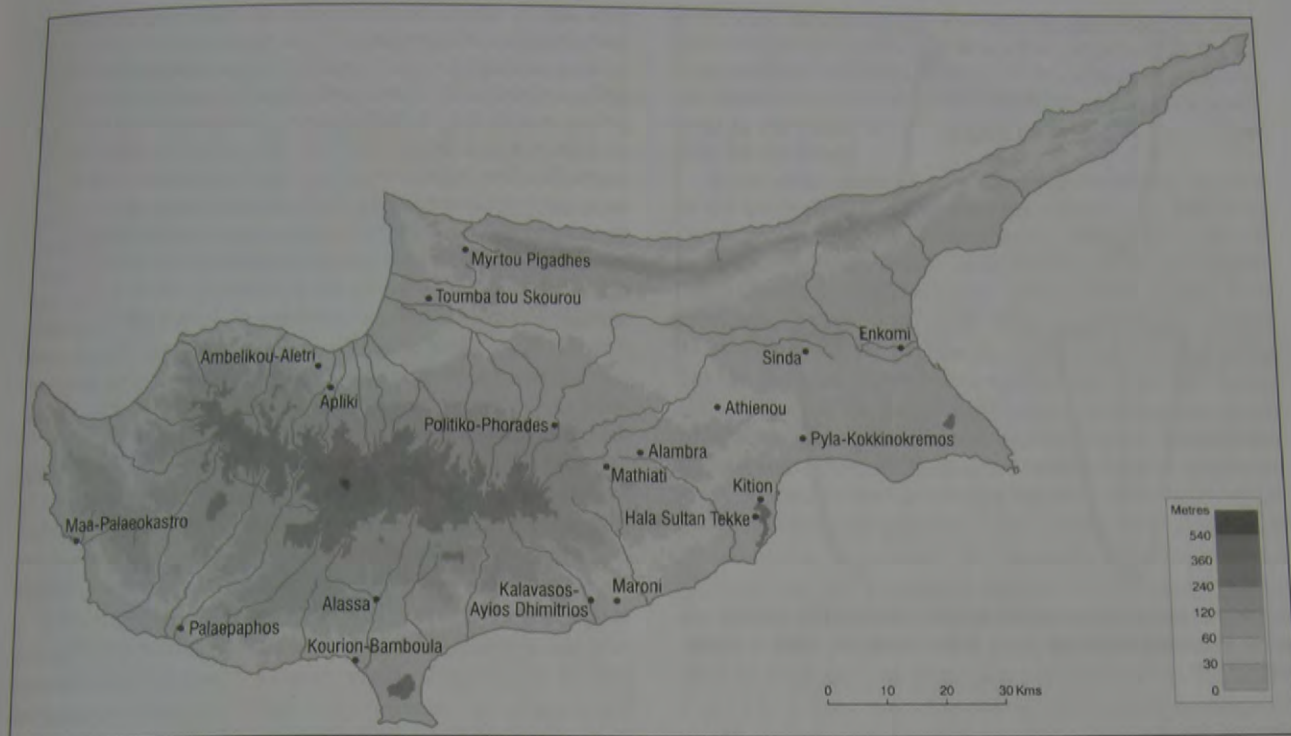


Fig. 4.2: Cypriot LBA sites

probably among the earliest in Cyprus (Karageorghis and Demas 1988, I, 261). One of the features of the Mycenaean III C:1 repertoire at Maa is a large number of skyphoi (drinking cups). Such vessels are also known at Palaepaphos but not in the eastern Cypriot sites, and comparanda also exist at Tarsus in Cilicia (Karageorghis and Demas 1988, I, 326). The presence of locally made versions of these wares at Maa surely suggests that individuals who were, at the very least, highly influenced by Aegean cultural preferences, manufactured them there. Taken together with the other archaeological evidence, including cooking jugs and loom weights, the balance of probability must be in favour of some Aegeans living at this short-lived settlement.

Turning to evidence of strong Levantine contact, it is clear that the large number of Canaanite jars found in LC IIC and LC IIIA contexts at Maa is diagnostic of regular trade with the Levant (Hadjicosti 1988, 360) that continues across the LBA/Iron Age transition. The finds represent at least 84 jars, the majority of which date to LC IIIA. Maria Hadjicosti (1988, 359) states that these do not form a large variety of types, suggesting trade with a limited number of Levantine production centres. This raises the possibility that Maa may have served as a distribution centre for these jars and/or their contents. This hypothesis is based on the

disproportionately large number found there, which suggests a direct link with Levantine ports (Hadjicosti 1988, 361). Chemical and petrographic studies on these jars (Jones and Vaughan 1988) prove that they were predominantly from the central Levant and southern Palestine, rather than being locally made. Tristan Barako (2000) has made the point that the absence of imports from Cyprus in Philistia in the earliest Iron Age, and the relative proximity of, for example, Tyre and Sarepta to Cyprus, makes it likely that the Canaanite imports to Cyprus during the LC IIIA period came from the major Phoenician centres.

Another interesting feature of the material culture of Maa is the corpus of balance weights found there, namely 37 weights dating to the LC IIC period (Courtois 1988). Balance weights are integral to mercantile trade, both within a culture and between individuals from different cultures (Petrucci 1984). Jean-Claude Courtois (1988) noted that the excavations at Maa yielded a good number of weights for a small, fortified site of brief duration. This would support the view that this site was heavily engaged in commerce, as weights may be regarded as the most important tool in a merchant's assemblage (Hafford 2001, 156). The Maa weight repertoire contains a relatively high number of weights (six in total) that have correspondence with Aegean

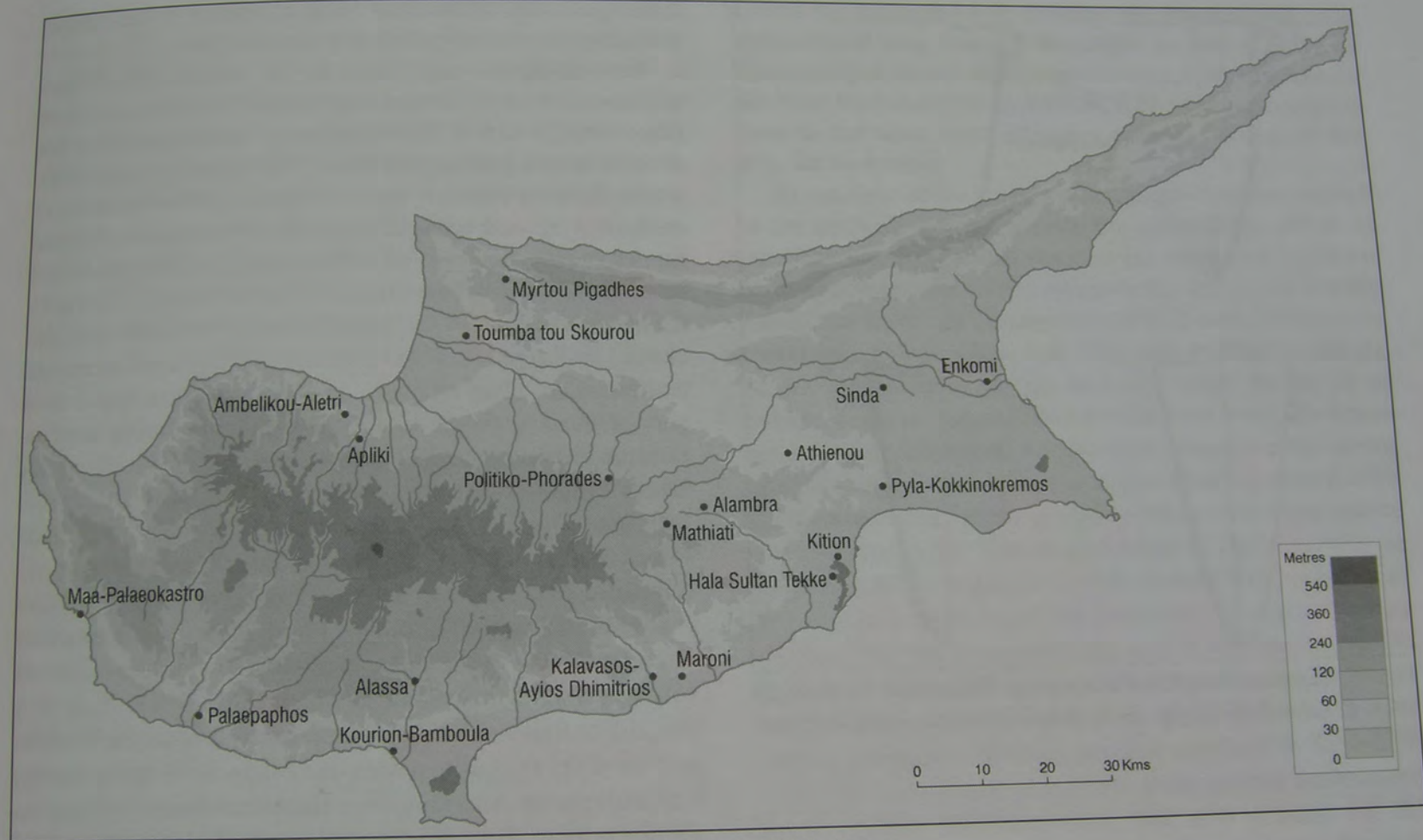


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probably among the earliest in Cyprus (Karageorghis and Demas 1988, I, 261). One of the features of the Mycenaean III C:1 repertoire at Maa is a large number of skyphoi (drinking cups). Such vessels are also known at Palaepaphos

disproportionately large number found there, which suggests a direct link with Levantine ports (Hadjicosti 1988, 361). Chemical and petrographic studies on these jars (Jones and Vaughan 1988) prove that they were predominantly from the central Levant and southern Palestine, rather than being

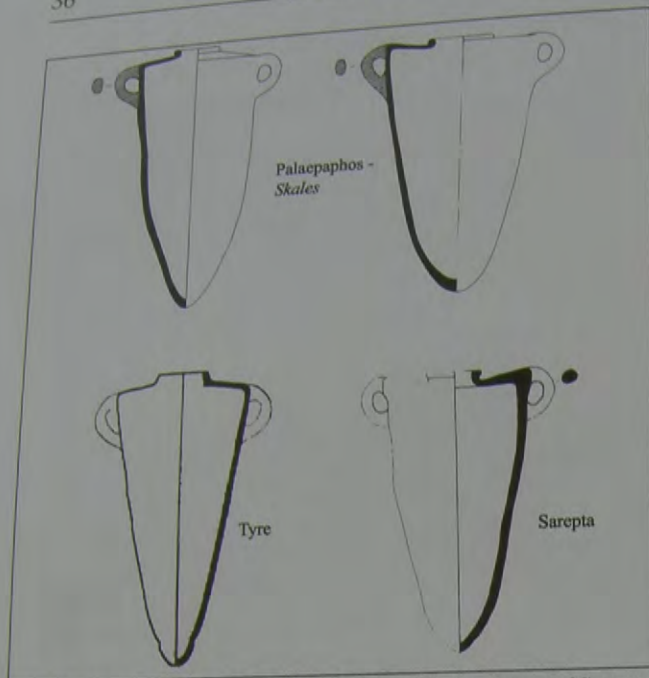


Fig. 4.3: Canaanite jars from Palaepaphos-Skales, Tyre and Sarepta (after Pritchard, 1975, fig. 24.6; Bikai, 1978, pl. XXXV.2; Bikai, 1983, 397)

weight systems, even if the majority (21 weights) correspond with Syro-Egyptian standards.

This contrasts strongly with the situation at Pyla-Kokkinokremos (see Fig. 4.2), another fortified site overlooking the southeast coast of the island, which Vassos Karageorghis excavated at about the same time as Maa (Karageorghis and Demas 1984). At Pyla, the weight system is characterised by a wide range of weight denominations, from half a shekel to a talent, within one standard, namely the Syro-Egyptian one (Courtois 1984). While the weights of Pyla appear to conform to eastern metrology, a significant number at Maa conformed to Aegean standards. One would expect this if the site had functioned as a way-station on the maritime route from the Aegean to the Levant.

Excavations at Palaepaphos-Skales, 26 km south of Maa, revealed tombs of the Iron Age Cypro-Geometric period. Patricia Bikai (1983) wrote the ceramic report for the eastern imports in these tombs. The most easily identified class of ceramic artefact found was the Iron Age version of the Canaanite storage jar (Bikai 1983, 396). Twelve of these were found in the tombs, which represented two types. The first type (of which there were ten examples) is described as being probably from IA I contexts based on comparanda from Bikai's (1978) own sounding at Tyre. They are also known at the Phoenician site of Tel Keisan in northern Israel (Bikai 1983, 396). This type of vessel continues until the 8th century BCE and its ascription here to the early part of the

Iron Age is due to the other items contained in the tombs, including the second group of Canaanite jars.

Two examples were found of the second type, which are more useful in determining specific trade connections (illustrated in Fig. 4.3). This type is characterised by flat shoulders and a triangular body and is heavy with thick walls. Here the parallels are very specific, namely one from each of Tyre and Sarepta. Only two intact examples are known that are comparable to these jars. The first was found in Stratum XIII at Tyre (Bikai 1978, pl. xxxv.2) dating to immediately after 1070/50 BCE (Bikai 1978, 66) and the second at Sarepta (Pritchard 1975, fig. 24.6) from an earlier context. The intact example from Sarepta was found in a part of the site that was a pottery manufacturing area in Stratum V (Pritchard 1978, 120; Khalifeh 1988, 27) which James Pritchard tentatively dated to 1200 BCE.

Bikai (Bikai 1983, 396) stresses the point that these Phoenician parallels from Tyre and Sarepta are so strong '... they must be products of the same workshop.' She concludes that the imports of Palaepaphos-Skales, are important because of the light they shed on Levantine - Cypriot relations in IA I. She adds (Bikai 1983, 404): '...it is a surprise to find such a large group of imports on the Western end of Cyprus; early pieces have appeared sporadically, particularly at Amathus, but there has been nothing to compare with this.' Karageorghis concluded (1983, 371) that the twelve Canaanite amphorae found together with other Levantine ceramics represent an unprecedented find compared with other early Cypro-Geometric sites on the island. He rationalises this as either being the result of Palaepaphos being the most important trading centre on the island in CGI-CGII (and, therefore, it was natural that the Phoenicians should trade there) or that the Phoenicians had started their westward expansion earlier than previously thought and used Palaepaphos as their trading base (as they did at Kition later in the Iron Age).

I would argue in favour of a third alternative. This evidence also supports the notion that contact between Phoenicia and the western part of Cyprus did not stop across the period of the Levantine LBA/Iron Age transition. The nature of the trade may have changed, but sites in both western Cyprus and Phoenicia that were not destroyed at this time and appear to have carried on trading with each other. Maria Iacovou (2006, 35) has pointed out that destructions on Cyprus were not as drastic as those suffered in the Aegean in the early 12th century BCE and both Palaepaphos and Kition saw monumental enhancement in this period. Franz Georg Maier has drawn attention to the unique position of Palaepaphos within the Cypriot archaeological record. This settlement is neither destroyed, abandoned nor transferred to another location in late LC III to early CG I (Maier 1999). He stresses that although the majority of grave goods found there are Cypriot, no Aegean imports occur in the graves that date to 1050-850 BCE (Coldstream 1990; Maier 1999). In contrast,

imports from Phoenicia were conspicuous from the earliest part of this period (Maier 1999). Consequently, this city that had looked west as well as east during the LBA seems to have acquired only Phoenician ceramic imports during this period. More excavation may change this perspective, but until it does I believe this is a valid working hypothesis.

In the rest of the island, evidence for trade with Phoenicia is scarce from this early period. There is no archaeological evidence that the Larnaca area (which includes Kition) was important to the Phoenicians in IA I (Bikai 1987). At Kition, which became a Phoenician colony in the 9th century BCE, Bikai (1981, 29) remarks that the first thing that can be said about imported pottery in Kition Area II is that there is 'surprisingly' little of it. She goes on to say that very few classes of Levantine pottery are found there and, what there is, is much later, corresponding to Tyre Stratum X – c. 850 BCE (Nunez 2004, 286). The evidence, therefore, suggests contact between Phoenicia and the western part of Cyprus did not stop at the close of the LBA. Palaepaphos had looked west, as well as east, during the LBA; but in IA I it seems to only have Phoenician ceramic imports.

Important recent work in Northern Israel has been carried out by Ayelet Gilboa and Ilan Sharon (2003) using recently excavated data from Tel Dor (which came under Phoenician influence during the early Iron Age). This site has produced one of the most plentiful sequences of Cypro-Geometric pottery outside Cyprus (Gilboa 1999), with the possible exception of Bikai's limited sounding at Tyre (Bikai 1978). Gilboa's 2005 paper also examines the close contact between Phoenicia (including sites along the Carmel Coast) and Cyprus and contrasts this with the apparent lack of contact between Cyprus and Philistia (Gilboa 2005). Suffice it to say that this evidence also supports continuity of maritime trade contacts between Cyprus and Phoenicia in the early part of the Iron Age.

If Phoenicia and Western Cyprus continued to trade in the earliest years of the Iron Age, what did they trade? Giorgos Papasavvas (Papasavvas 2003) has recently argued that Cyprus continued to be an active copper producer and exporter after the end of LC IIC. Michal Artzy (2006, 25) has remarked that it is often difficult to distinguish between LBA manufactured bronze objects and those found in the graves at Palaepaphos-Skales, which date to well after 1200 BCE, attesting continuity in the LBA manufacturing traditions. Given the limited amount of provenience work that has been done on bronze artefacts in Iron Age contexts in the Levant, particularly on the coast, it is not currently possible to prove that Cypriot copper continued to be imported. Scientific studies on bronze objects from Pella (Philip *et al.* 2003), inland in my Zone L3, suggests that copper was obtained from more local sources, accessible overland, during the Iron Age, in contrast to the LBA. If Cypriot copper did find its way to the undamaged Phoenician ports what did Tyre and Sarepta's merchants have to trade in return? Albert Leonard

(1995) has suggested that, although dry goods, spices, beer and olive oil have been put forward as possible contents of Canaanite jars, based on widespread availability of grapes in the Near East since before 3000 BCE, they were principally used in the wine trade. Lebanon remains famous, to this day, for its wines.

At the close of the LBA, a much larger container appears in the southern Levant, namely the collared-rim pithos, or jar. Whereas a typical Canaanite jar would be c. 50 cm in height (Leonard 1995) collared-rim pithoi are usually 1.0–1.2 m in height (Wengrow 1996). These vessels were extremely heavy when full. Wengrow cites the weight of one particular empty jar as 32 kg (close to that of an oxhide ingot of copper) and would have been too heavy for a donkey when full. Artzy (1994) connected the advent of collared-rim pithoi in the archaeological record with the domestication of the dromedary and trade in aromatics from Arabia to the Levant and beyond. The discovery of many collared-rim pithoi in 13th century BCE contexts at the coastal emporium of Tel Nami (on the Carmel Coast of Israel) led her to suggest that one of the reasons behind the wealth of this site was its involvement in the supply of incense. She postulated that these pithoi could have been used as containers to bring incense overland to Tel Nami, from which they were shipped to other coastal destinations in the Eastern Mediterranean. She also pointed out the similarities between the Tel Nami pithoi and ones found at Maa-Palaeokastro (*e.g.* Karageorghis and Demas 1988, II, pl. lxxxii, 563). One such pithos (no. 563) was found on Floor II, dating to the LC IIC period.

In terms of locally available goods, the Phoenician ports also had access to timber and manufactured purple dye and olive oil. The merchants at the undamaged ports of Phoenicia were, therefore, able to continue trading amid the destruction that surrounded them. I have already cited Monroe's work on the merchants of Ugarit which suggests that, despite being under Hittite imperial authority, Ugarit's merchants were engaged in entrepreneurial trade on their own account at the close of the LBA. Andrew and Susan Sherratt (2001) referred to this transfer of control of long distance trade from the palace to the merchants as privatisation.

It is difficult to assess how much control the Egyptians had over the Phoenician ports in the closing decades of the LBA. Susan Sherratt (2003) has suggested that the Phoenician coast may well have been independent by the time of Ramesses II's death. Indeed, there is no evidence of an Egyptian military presence in Lebanon after year 10 of Ramesses II's reign, the date on the badly preserved inscription at the Dog River (Nahr el-Kelb) close to the coast north of Beirut (Higginbotham 2000, 34). A lower degree of Egyptian control would have provided the climate of innovation for private enterprise in the Phoenician coastal city states that already had a long tradition of maritime trade. In Cyprus, the case for a decentralised political structure

to the island during the LBA is also strong. Susan Sherratt (1998, 301) has described the 'coastal moguls' of 13th–12th century BCE Cyprus being engaged in decentralised trading activities. Cypriot merchants and their Phoenician counterparts were, therefore, well positioned to capitalise on the opportunities that arose from the catastrophic events at the end of the Bronze Age (Sherratt 1998; 2003).

Phoenicia and the western part of Cyprus were able to seize the day when crisis struck the region. Unencumbered by imperial agendas, and already familiar with operating within a decentralised trading environment, traders and merchants from these two regions used private initiative and resources to continue trading, particularly with each other, in the dark days of the earliest Iron Age. Both Cyprus and Phoenicia had locally produced goods to trade and, unlike the greatest LBA Levantine port, Ugarit, they were not as reliant on goods arriving from long, and now insecure, overland trade routes from Central Asia. We must hope

that further excavation, both in Western Cyprus and in the Phoenician homeland, will begin to fill the major lacunae in our data in the next few years to test this proposition.

### Acknowledgements

Andrew Sherratt examined my PhD, on which much of this paper is based, in May 2005. I was privileged to benefit from his constructive critique and the enormous depth and breadth of his knowledge. I also thank Sue Sherratt for allowing me to consult her often as my doctoral research progressed. While many others were less than positive about the possibilities of looking at the end of the Bronze Age from an economic point of view, Sue was cautiously optimistic that the issues could be tackled in a systematic way. I owe a huge debt of gratitude to them both and any errors and shortcomings remain my own.