The Role of Harbour Towns in the Re-Urbanization of the Levant in the Middle Bronze Age (1800-1600 BC). Perspectives from Eastern Cilicia and the Amuq Plain of Hatay

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This paper focuses on route networks and their impact on the development of Middle Bronze Age urbanization in the Levant, concentrating particularly on Cilicia and the Amuq Plain around the Gulf of Iskender in the southeastern corner of Turkey. It looks at socioeconomic developments in coastal and inland settlements that seem to have evolved progressively in such a way as to suggest that their distinctive relationships may have played an important part in the re-urbanization of the Levant in the Middle Bronze Age. This is a phenomenon that manifests itself in the revival of political and economic structures, and in the archaeological evidence for large-scale public buildings and fortification systems as indicators of complex and organized Middle Bronze Age settlements (Akkermans and Schwartz 2003, 223; Dever



FIG. 1: SRTM map of the Northern Levant with major trade routes digitized from *Barrington Atlas of the Roman World*. Courtesy of Murat Akar & Ekin Demirci.

1987, 28; Klengel 1992; Matthiae 1997, 379) (Fig. 1).

Throughout this paper, I will explore the often-neglected role of harbour towns in the development of re-urbanized cities in the interior. The model presented here stresses external relationships different micro- and macro-regional scales, dependent on the successful exploitation of routes for economic and social purposes, which in turn led to the formation of connected, semi-dependent kingdoms. I shall limit myself to the Middle Bronze Age, which is a formative period for connections between Late Bronze polities in the 16th-14th centuries BC, in which the overall nature of the economy can

be seen as a product of collective collaboration between symbiotic micro-zones, characterized by sociopolitical and economic interaction, flows of resources and ideas, and creation of identities. This, I would emphasize, is the final outcome, but its origins must be sought in the social complexity of the Middle Bronze Age.

Re-urbanization is characteristic of almost all Middle Bronze Age sites in the Levant. The factors that provoked the collapse of the Early Bronze Age centres, followed by the revival in the Middle Bronze Age of economically strong city-states, are still debated (Schwartz and Nichols 2006). The collapse is evident in depopulation and abandonment levels at the end of the Early Bronze Age, particularly at major centres in western and inland Syria, as well as in eastern Cilicia (Akkermans and Schwartz 2003, 223).

The regeneration of Middle Bronze Age societies is indicated by large fortified cities and palace complexes in the Middle Bronze II levels of various sites (Kempinski 1992a; Burke 2004). These large-scale constructions undoubtedly indicate highly stratified societies with administrative systems, which required the successful use of resources to support their urban economies (Dever 1987, 152). In this respect, regeneration following disruption and collapse can be seen as part of a regular cycle of social evolution, often discernible in the archaeological evidence. The traces of these cycles can be seen in alternations between contexts rich in luxury materials and characterized by standardized production systems, and strata which lack central organization and are typified by small-scale units of production (Faust 2005). The reasons behind this sort of cycle were varied (Yoffee 1979), reflecting political and economic processes which, particularly in the case of Cilicia and the Amuq, were sensitive to ebbs and flows in external relationships.

The Mediterranean, with an area of 2.5 million square kilometres, is the largest inland sea in the world. As such, it is impossible to regard it as having any sort of homogenous cultural identity, despite the fact that the sea itself expedited the development of close connections that eventually developed into a dynamic set of interlinked systems.

"The sea is also the foundation of our case for the distinctiveness of Mediterranean history: deeply implicated in the unpredictability of conditions of life, it is also of course the principal agent of connectivity." (Horden and Purcell 2000, 133)

In this respect, it is impossible to formulate any sort of progressive stadial pattern of social development that characterizes the development of regional and interregional interaction. Cultural and geographical boundaries were defined or transcended at various times by systems

of maritime and overland networks, which had resulting effects on the rise and fall of political entities and their exploitation of associated territories. In this sea-dominated landscape, Mediterranean economies and their political structures were based on continuity of supplies. The system was never exclusively orientated around production and economic self-sufficiency (Falconer 1994, 122); but instead the circulation and trade of goods and materials on different scales is the key to understanding this Mediterranean economy (Hayden 1994, 198). Exchange systems between and within the micro-regions of the Mediterranean (Horden and Purcell 2000, 123) played an important role in transforming communities in certain places into dynamic and complex economic centres, which at the same time were dependent on the existence of one another.

To start with, the main attributes of an urban centre need to be addressed from the point of view of the economic implications of the development of complex sites. As far as archaeologists are concerned, the commonly accepted criteria for the distinction of urban settlements are mostly physical: the size and estimated population, combined with the excavated evidence - despite the fact that in no region has anyone yet drawn up satisfactory criteria for establishing a threshold (Trigger 1972, 577; Grove 1972, 559). A second attribute, site function, depends on the existence of social institutions distinguishable in material and textual sources, and dealing especially with intra-site social and economic activities. The role of commercial contacts in the formation of urban centres in the Middle Bronze Age, on the other hand, does not yet appear to have been fully explained. Various models have suggested that the increased populations and sizes of urban centres depended upon the agricultural surpluses of their hinterlands, thus emphasizing the centrality of rural-urban relationships to urban survival, but no one has really placed much emphasis on the functional and symbolic roles of exchange systems. As for migration models (Kenyon 1962, 76), these can hardly be regarded as providing answers in themselves to questions concerning the formation of new political powers and identities, in the absence of any consideration of their economic underpinnings.

"Trade implies an organization, a special administration, which regulates human activities both in terms of procurement and social relations. The degree of organization and its evolution may be understood in the light of these exchanges." (Renfrew 1975, 4)

Large quantities of non-local supplies were introduced into their economic and exchange systems to satisfy the material and symbolic requirements of these interactive communities.

We can briefly list some obvious examples. The rise in large-scale construction projects is directly related to the importation of timber supplies, especially when it comes to the extensive



FIG. 2: The ritual refurbishment of the Grand Mosque in Djenné, a modern example of timber use in the framing of mudbrick architecture. Photo by Christien Jaspersan.

use of long wooden planks in the roofing and framing of mudbrick architecture (FIGS. 2-3). This heavy demand for timber in the more treeless regions of the east would have made cities dependent on the acquisition of these raw materials and would have led to the formation of specialized ports, Spezialhafen. These owed their existence to the handling of such special supplies from their

hinterlands (Rühl 1920; Treumann 1997). The dependence on essential metal resources provides another example. These two particularly desired raw materials - timber and metal - were shipped by harbour towns on the Levantine coast, lying between Cilicia and the Amuq Plain in the Hatay, with their access to the rich sources of the mountain ranges of the Amanus and Taurus. Such interactions are well documented in the Egyptian records of the Early and Middle Kingdom, for instance in the case of Byblos (Jidejian 1968, 25). However, it was not only Egypt that witnessed such large-scale projects. Palace and temple complexes in inland Syria,



FIG. 3: Tell Atchana/Alalakh.Wood Impressions. Photo by Murat Akar.

with their massive courts, also testify to the importance of the trade in raw materials.

With regard to the more specifically symbolic and political value of trade, the exchange of luxury goods and materials had special significance for conspicuous consumption among the elite, and acted as an important stimulus to the development of commercial contacts and the exploration of routes (Sherratt and Sherratt 1991). Even though much Bronze Age trade was conducted at palatial level, this in itself can also be seen as being responsible for a rise in individual enterprise, as well as for creating inducements to what would appear to be a 'black market' economy. The appearance of local variations in imported items in residential sectors might well be seen as a result of the acquisition of products not subject to egalitarian distribution. Archival sources from Middle Bronze Age Kültepe indicate the penalties for

trading forbidden materials, such as iron (*amūtu* and *aši'u*) (Larsen 1976). Such laws were, in all probability, introduced to prevent transactions that were already taking place, thus highlighting inequalities resulting from attempts to maintain the exclusivity of certain goods. Inequality, in fact, can be seen as an indirect motivator, a key incentive for the development of alternative strategies to secure supplies to satisfy demands.

In other words, trade was fundamentally linked to the development of social institutions which were oriented around the exclusivist aspirations of the elite classes, but at the same time it was also significant in the rise of individual enterprise, with consequent effects on society as a whole.

Located in close proximity to one another, the urban centres of the Levant were dependent on continuity of supplies through their economic and cultural connections. The rise in the number of harbour towns along the Levantine coast at the beginning of the Middle Bronze Age must have resulted from, or been related to, the meeting of regional and interregional demands (Marcus 2002, 250; Raban 1988, 185). Both the palatial and private sectors were party to this, at a time when technological advances in sailing and shipbuilding would have been exploited in a highly competitive environment. In these circumstances, one can hope that further deepwater research, combined with luck, will eventually lead to the discovery of a well-preserved Middle Bronze Age shipwreck (Bass 1976; Margariti 1998), which can contribute to our understanding of maritime trade in this period (Fig. 4) (Cohen 2002).



FIG. 4: Uluburun II, Replica of the Uluburun LBA shipwreck. http://www.360derece.info/. Photo by Murat Akar.

¹ The Şeytan Deresi shipwreck, found in Gökova Bay near Bodrum, is dated to the late Middle Bronze Age based on ceramics collected from the wreck.

The urban expansion of city-states in the Middle Bronze Age has frequently been linked with the arrival of new ethnic groups.² Somehow, the economic reasons behind these political changes in the Levantine context were neglected, and the arrival of new 'peoples' was seen as a sufficient explanation in itself for the brilliance of the new discoveries associated with this period. The question of ethnicities in this part of the world, of course, plugs into modern political sensitivities. Although from a long historical perspective the eastern Mediterranean has always been a highly interactive and cosmopolitan region, we have tended to interpret this outcome of the routes along which economic and cultural values passed, and were constantly defined and redefined, in terms of our modern preoccupations and preconceptions.

A particularly well-known phenomenon of this Middle Bronze Age period - which must have a bearing, directly or indirectly, on maritime activity in the northern Levant - is the foundation of one of the oldest textually documented trading centres at Kültepe, ancient Kanesh, where a colony of Assyrian merchants was active. Yet the implications of this for contemporary Mediterranean trade are rarely explored.

There is ample evidence that Kültepe had commercial relations with towns in northwest Syria, such as Ebla, whose interest in Anatolian copper is documented in the texts.³ This connection may have been direct or indirect, depending on the choice of routes and intermediate transshipment points. From the written sources, we also know that tin and silver were exchanged along with copper, and the existence of sources of these in the Taurus Mountains would have given an important advantage to Cilician towns situated near the interfaces of coastal and inland routes in this commercial network (Yener 2007, 153, figs. 9-10). This reached its height in the late Middle Bronze Age, when the rise of major powers began to result in the appropriation of such micro-regional trade to the benefit of their own larger economic systems.

The excavations of the Kestel mine and the small Early Bronze Age miners' village at Göltepe in the Taurus Mountains in the 1980s initiated a lively debate concerning Bronze Age tin sources; and the claims of Kestel, versus Afghanistan, to have supplied tin in these early periods is still an ongoing issue (Yener 1989; Muhly 1993). Advances in scientific analysis,

² For a discussion of migration models, see Tubb 1998.

³ The tablet Ktn/K 794 (published in Bilgiç 1992) is a letter sent from Ebla to Kanesh. It indicates that Ebla and Kanesh maintained good economic relations. Cf. also Kienast 1960, no. 342, 17: "Copper is available. Many Eblaites have come here, a huge amount of copper is weighed out for them in the palace...", which clearly indicates travelling Eblaites acquiring raw materials in Anatolia. See also Yener 2007, 153.

however, are now beginning to provide more information on this subject. The analysis of some tin ingots from the Late Bronze Age Uluburun shipwreck points to the source of the tin being in the Taurus Mountains (Pulak 2000). In addition, isotopic analyses of crucibles from the recent excavations in the workshop district of Tell Atchana/Alalakh again indicate a source within the Taurus range, thus emphasizing the importance of connections between the plain of Amuq and Cilicia (Yener 2007). Strikingly, specimens of silver ore from Middle Bronze Age Kültepe and Assur fit into the Taurus range, thus pointing to the exploitation of Taurus metal resources in the Middle as well as Late Bronze Age, and their active role in providing metals for long-distance exchange (Yener 2007). The evidence of distinctive Amuq-Cilician ware (Özgüç 1955, 460, fig. 29) and Cypriot White Painted Pendent Line juglets (Åström 1989, 16, fig. 1, pl. 3:1, from Kültepe IB) in Kültepe contexts reinforces this. Whether it is a question of bulk or luxury commodities, Cilicia and the Amuq Plain seem to have played an important part in this Middle Bronze Age network.

Finds from Late Bronze Age contexts at Palestinian, Syrian, Cypriot, Egyptian, Aegean and Anatolian sites demonstrate a wide range of intensive mercantile interactions, which are visible mainly in pottery but can also be seen in the technologies, weaponry and ornaments that formed the aesthetic fashions of the era. Going back to the Middle Bronze Age, this material evidence, though still evident, is proportionately smaller in quantity. Various factors can account for this. There are still very few excavated Middle Bronze Age sites, and most of the major harbour towns have substantial overlying Late Bronze Age strata, leaving Middle Bronze Age occupational levels still in need of investigation. The recent excavations at sites like Tell el-Dab'a (ancient Avaris) in the Nile delta, Tell Kabri in northern Galilee, Arqa in northern Lebanon, and many others do, however, provide valuable evidence for the international outlook of late Middle Bronze Age levels. The substantial amount of Cypriot White Painted Ware from the southern Levantine coast testifies to regular connections with Cyprus (Maguire 1995, 54), while fragments of Aegean Kamares pottery have also been found at a number of sites along the Levantine coast (Merrillees 2003), indicating that exchange was already taking place on an international scale (Akar 2006). The appearance of late Middle

 $^{^4}$ A crucible found in the eastern part of the tell in the Late Bronze I workshop district was analysed by Seppi Lehner.

Bronze Age wall paintings at Avaris (Bietak et al. 2007) and Tell Kabri (Niemeier and Niemeier 1991) are clear examples of the products of this cultural interaction.

The large body of data acquired from the Southern Levantine coast is growing steadily with new excavations in Syria, the Amuq valley and Cilicia. Recent interest in coastal and trading settlements has provided crucial information for understanding this lively period and the commercial connections that seem to have played a major role in the appearance of the northern Levantine urban centres.

Starting with Cilicia, which is nothing if not seaward-facing, the role of this interface zone has long been associated with commercial centres like Tarsus at the western end of the plain, while the role of the eastern Cilician settlements around the Iskenderun Gulf has rarely been investigated or has simply been ignored.

After 18 years of archaeological investigation under the direction of Marie-Henriette Gates as part of a Bilkent University project, the site of Kinet Höyük on the shores of the Iskenderun Gulf is now providing extremely valuable information about the character and function of the site and region during the Middle Bronze Age. Due to the accumulation of later levels, the Middle Bronze Age remains were excavated only in the eastern terrace of the site. A burnt Middle Bronze Age stratum was excavated directly beneath mediaeval and Hellenistic levels, and its entire assemblage uncovered *in situ* (Fig. 5) (Gates 2000a; see also Gates 1998; 1999a; 2000b; 2002; 2004; 2005).

The exposure of the storage sections of an administrative complex, which is oriented north-south, indicates the mercantile role of the site. This complex was reinforced by a stone tower at its northern extremity; and, through several soundings excavated at 10 m intervals from the outer wall of the complex, we have now confirmed that the building itself was located on the eastern slope of the Middle Bronze Age citadel, and functioned as part of the city's fortification system (Akar 2006).

In the Middle Bronze Age, the palaces of the Levant as well as of Anatolia were embedded in the fortification systems and located in close proximity to the city gates. As embodiments of power, their location was visually strategic, as being the first large-scale monuments one would encounter on entering the city (Ussishkin 1986, 485). They also seem to have a direct relationship with the control of goods going in and out of the city.

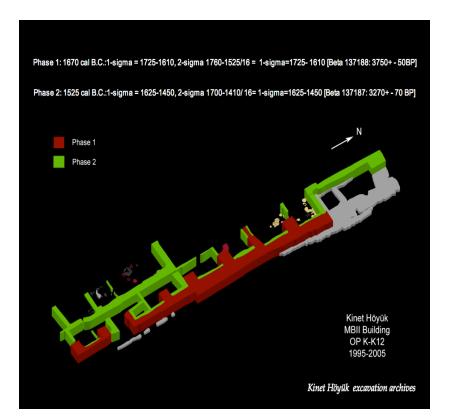


Fig. 5: Kinet Höyük MBII building. Modelled by Akar & Kocabryik.



FIG. 6: Kinet Höyük MBA building and Alalakh Level VII Palace.

This layout is strikingly comparable to those of the well-known palatial complexes at Middle Bronze Age Levantine sites such as Ebla (Matthiae 1997), Alalakh (Woolley 1955) and many others (Fig. 6). To judge by its architectural design and its use of space, the extent of the Kinet building, which is over 50 m in length, exceeds that of some of these well-known palace complexes. Its symbolic significance is evident in its monumentality, and its commercial role in the large-scale storage facilities divided into separate narrow units.

Geographically speaking, the Amanus Mountains create a natural boundary between the Anatolian and Syrian cultural zones, with Kinet, according to its location, lying in the Anatolian zone. This cultural division is still evident today, when one can clearly observe the differences between the two sides of this mountain range. However, based on the variety of pottery and other objects recovered from the building, it is possible to suggest that Levantine fashions were adopted in the Middle Bronze Age culture of Kinet Höyük.⁵ Most of the ceramic assemblage is of local production. However, to take the most common types, the ovoid storage jars, for instance, share elements of style with examples from Tell Mardikh/Ebla IIIA-B and Alalakh level X (Gates 2000a, 84), in much the same way as the architecture does. Even the Cilician Painted, otherwise known as Amuq-Cilician or Syro-Cilician ware, shares similarities with Levantine or Habur wares (Bagh 2003). The close similarities between these regional wares clearly indicate the amount of interaction, even though this is reflected through regional variations. Looking at other objects, the existence at Kinet of a duckbill axe mould (Gates 2005, 172, fig. 10)⁶ and an example of a Syrian style mother-goddess figurine (Gates 2000a, 98-9, pl. 7, fig. 8) may show that interaction between the Syrian and Anatolian zones was not limited only to trade and exchange, but that foreign cultural elements were also integrated into the existing culture of this small harbour town in eastern Cilicia. Pottery and other artefacts can often be misleading in encouraging conclusions of this sort, since these are essentially portable. However, with the architectural evidence we are on a firmer footing in contextualizing this process of acculturation (Gates 1999b).

According to Arab geographers, mediaeval Kinet Höyük (Hisn-al Tinat, on the southeast corner of the Cilician littoral) was used for the shipment of timber from the Amanus

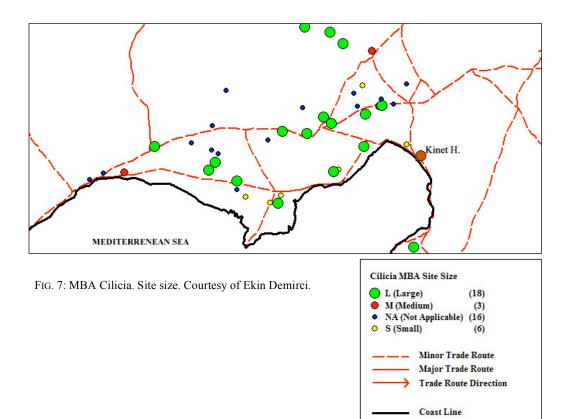
⁵ See Stager 2001, 629, where he defines the role of harbours in socioeconomic terms as places where cultural and ethnic diversity can be minimized: "The effectiveness of the port power accrued from the capability of the economic systems to penetrate diverse ethnic, cultural and political boundaries and to interconnect them with a minimal use of force."

⁶ For the distribution of this axe type, see Philip 1989

Mountains for export to Egypt, southern Syria and Tarsus (Gates 1999b). There is no reason to suppose that the site's strategic importance during the Middle Bronze Age was much different, when the expanding Levantine settlements required large amounts of timber for their largescale construction projects. The Braudelian approach stresses the importance of harbour towns along the Mediterranean coast as transit points along a coastal highway to provide supplies to inland interiors (Braudel 1993[1966], ch. 5). This also explains the small number of imported materials in comparison with local resources at Kinet, since the primary reason for its existence was not trade as such, but the business of shipping goods (Gates 1999b, 309). Expanding cities were demanding raw materials, and this is why ancient builders tried to develop means to establish harbours even in the most inaccessible places, in order to ensure a continuous supply of merchandise (Raban 1988, 185). The increase in harbour towns in the southern Levant in Middle Bronze IIA-B adds weight to this statement, and above all stresses the importance of maritime traffic (Marcus 2002, 250; Broshi and Gophna 1986, 88; Gophna 1984, 24). This pattern of development is particularly clear in the northern Levant and coastal Cilicia, where the geographical boundary – the Amanus Mountains – restricted access between the Syrian plain and Cilicia. The mountain passes are difficult to cross and open to possible attacks, and this made sea trade more practical and less dangerous. In this context, Kinet's architectural evidence (in the form of the administrative building) and its functional attribution (a harbour town) give satisfactory criteria for defining the urban nature of the settlement. Even a small site such as Kinet in the 'marginal' zone of eastern Cilicia can and does demonstrate the urban patterns of Middle Bronze II in the eastern Mediterranean. And I think it owes its urbanization to commercial and predominantly external interactions.

The Cilician Survey carried out by Seton Williams in the 1950s provided a glimpse of the nature of settlement in the region (Seton Williams 1954). More refined surveys in the separate zones of Cilicia are now providing more scientific and accurate information about the settlement distribution patterns.⁷ Although the available data are still problematic, some observations can be made from the accompanying maps (Figs. 7-8). As part of a Master's thesis in the Department of Settlement Archaeology at the Middle East Technical University, Ekin Demirci has studied the changes in settlement pattern from the Middle to Late Bronze

⁷ The improvements in computer-based applications provide a better understanding of the settlement patterns within micro-regions of Cilicia. For a new analysis of the Göksu valley, see Newhard et al. 2008.



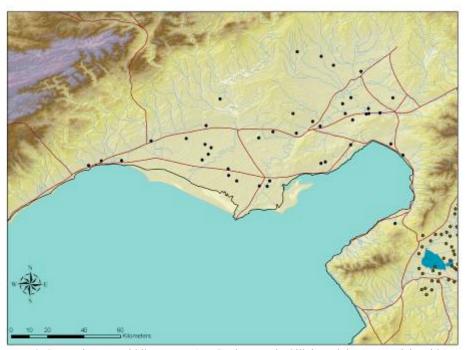


FIG. 8: SRTM image: Middle Bronze Age Settlements in Cilicia and the Amuq Plain with ancient coastline and routes digitized from the *Barrington Atlas of the Roman World*. Courtesy of Ekin Demirci and Murat Akar.

Ages in Cilicia (Demirci 2009).⁸ Based on the results of this work several observations can be made:

- 1. There was clear continuity throughout the Bronze Age in Cilicia. The majority of the settlements were concentrated around the trade routes. There were no major changes in the passage from Early Bronze Age to Middle Bronze Age. The Late Bronze Age centres again followed the main trade route axis, but the settlements increased in number to almost double (from 43 to 80). This settlement pattern seems to underline the mercantile nature of Cilicia throughout the Bronze Age, with roadways following the coastline and passing through the mountain ranges, connecting it with central Anatolia and Syria.
- 2. Unfortunately, the alluvial accumulations of the Seyhan and Ceyhan rivers in the low Çukurova (Cilician plain) have buried a majority of the coastal settlements. The significant change in the coastline is visible in the maps (Figs. 7-8). This points up the necessity of geoarchaeological work in order to clarify the problems of geomorphological changes in this area. With sufficient evidence, as Aviva Taffet (2001, 133) has suggested, the Cilician coastal settlements may well be understood through predictive modelling, using the coastal southern Levant settlement distribution patterns as a model. A majority of the river estuaries will have provided likely locations for ports, linking the sea with inland centres (Blue 1997, 41).

Turning to the Amuq, the settlement patterns and distribution maps presented here (Figs. 9-10) have been created from the Amuq Valley Regional Survey Database, and illustrate a completely different type of organizational system. This difference partly arises from the history of data collection. The pioneering work of Robert Braidwood (1937) has been further advanced by the new Amuq Valley Regional Project team under the directorship of K. Aslıhan Yener (2005). Geoarchaeological research carried out by Tony Wilkinson (Yener et al. 2000) has defined the tremendous impact the environment has had on settlement pattern changes in the valley.

⁸ I am grateful to Ekin Demirci for sharing her database and GIS analyses with me. Her detailed study will be published elsewhere. In these thematic maps, the settlement locations and streams were digitized and embedded into 90m SRTM raster images (Shuttle Radar Topography Mission: http://edcsns17.cr.usgs.gov/EarthExplorer/). The Barrington Atlas of the Roman World (Talbert (ed.) 2000) was used to locate the ancient trade routes and the coastline.

⁹ Geoarchaeological research carried out at such sites as Kinet Höyük (Beach 2006) and Tell Tweini (Al Maqdissi et al. 2007) indicates high aggradation levels along the Cilician and northern Levantine coasts during and after the Bronze Age.

Amuq L (1800-1500 B.C)

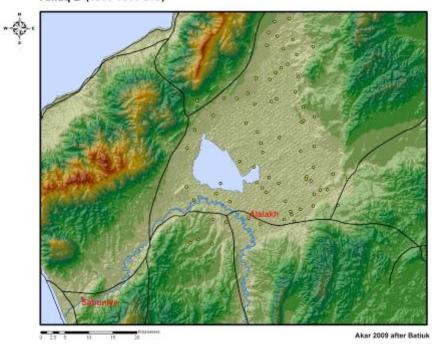
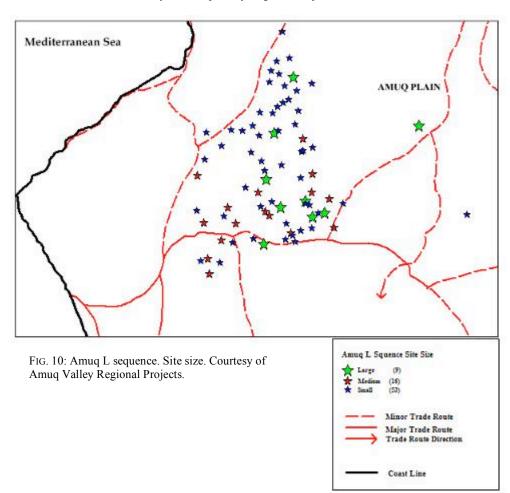


FIG. 9: Amuq L sites. SRTM map with coastline and routes digitized from the *Barrington Atlas of the Roman World*. Image processed by Akar after Batiuk and Casana. Courtesy of Amuq Valley Regional Projects.



The second reason for its difference lies in the Amuq Valley's organization for the purposes of controlling the hinterland, with the valley itself playing a key role as an intermediate trading zone connecting northwest Syria and central Anatolia. Its cosmopolitan and commercial outlook was reinforced by its connection to the sea via the Orontes delta. Today, driving along the main road from Antakya to Reyhanlı, one can see several mounds in quick succession. The density of occupation owes its existence to rapid changes in the riverbed of the Orontes. These geomorphological transformations were responded to by changes in settlement locations. During the Middle and Late Bronze Ages, the valley was under the control of the Mukish kingdom with a territorial organization focused around a number of small agricultural centres nested within a central system (Magness-Gardiner 1994, 37; Zaccagnini 1997, 341). Alalakh, 11 as the capital city of the kingdom, was located at a very advantageous position with access to major land routes from Syria and Anatolia. Its connection with the coastal site of Sabuniye 12 at the mouth of the Orontes gave it the character of an inland harbour (Figs. 9-10).

Already evident from the excavations of Sir Leonard Woolley are the Minoan style wall paintings of the Middle Bronze Age Level VII palace (Woolley 1955), and a cylinder seal impression with a scene of bull leaping (Collon 1994, 81), which indicate the cosmopolitan status of this town. Recent excavations, going down further into Middle Bronze Age contexts, are now providing more evidence about these systems of interaction. The appearance of Cypriot White Painted V vessels in the eastern part of the tell, separate from the palace area, provides evidence for very late Middle Bronze Age connections. Similar material is now turning up at the contemporary settlement of Tell Tweini in the coastal Jebleh plain in Syria, where the commercial role of this harbour town is emphasized by very similar characteristics. Although the Middle Bronze Age levels at Tell Tweini have so far been excavated only on a

¹⁰ The collection and analysis of data from the area has been developed progressively by members of the Amuq Valley Regional Survey team: particularly Jesse Casana and Steve Batiuk. I am grateful to Steve Batiuk for his endless help with the GIS processing of the data. A detailed analysis of the settlement pattern changes in the valley was presented as a PhD dissertation by Jesse Casana at the University of Chicago (Casana 2003). Further refined analysis of the survey pottery on the basis of that from the recent excavations at Tell Atchana, Tell Tayinat and Sabuniye will contribute to our greater understanding of the Amuq sequence.

¹¹ The Alalakh excavations are directed by K.Aslıhan Yener as part of a Koç and Mustafa Kemal University Project.: www.alalakh.org

¹² Excavations at Sabuniye have recently been initiated by Hatice Pamir as part of a Mustafa Kemal University project.

¹³ The analyis of these and the Cypriot pottery as a whole from the new excavations at Alalakh will be published by Ekin Kozal, Çanakkale University.

limited scale, the fortification system surrounding the city reveals its role as a major regional centre (Bretschneider et al. 2004, 226).¹⁴

More excavation and survey in the coastal plains of the northern Levant and Cilicia will expand our knowledge of Middle Bronze Age commercial interactions. Current evidence already indicates the international nature of this period and its impact on the formation of Middle Bronze Age urban centres. This is visible in the intra-site patterns, including the monumental architecture and the variety of imported products. On a regional scale, it is visible in the accumulation of centres in proximity to major commercial routes. The Middle Bronze Age of Anatolia and the Levant seems to have witnessed the extensive exploitation of resources which flowed through connected sea and land routes. This kind of interdependency and the importance of commercial exchange should also be seen as the major reason behind the expansion of the Late Bronze Age empires, in which the control of routes and nodal centres was pivotal to imperial policies.

I would like to conclude with an aerial photo of Kinet Höyük (Fig. 11). The industrial



FIG. 11: Aerial Photo of Kinet Höyük. Courtesy of Marie-Henriette Gates.

establishment around the site - an oil and gas shipment terminal - displays a kind of continuity in the role of the region since the Middle Bronze Age. When this photo was taken, the Iraq war had just begun, affecting the economy of the district dramatically. The parking areas, which used to be filled with hundreds of trucks, were virtually empty, the oil tankers had disappeared from the docks, and the whole place was buried in silence.

The disruption to the oil shipment business had had an impact on the local economy, and many bazaars, restaurants, barbers' shops, and other small traders (not to mention the oil and drug smugglers) who served the needs of the truck drivers had packed up and disappeared. Less than a year of crisis had wrought a drastic change.

¹⁴ The excavations carried out on the eastern flank of the tell, in Field C, have exposed a massive fortification wall, 100 m in length and preserved to a height of 5 metres. Although the date of the wall is not yet clear, the excavators have suggested that it was constructed in the Middle Bronze Age and continued in use during the Late Bronze Age.

Bibliography

- Åström, P. 1989. Early Connections between Anatolia and Cyprus. pp. 15-17 in *Anatolia and Ancient Near East. Studies in Honor of Tahsin Özgü*, ed. by K. Emre, B. Hrouda, M. Mellink and N. Özgüç. Ankara: Türk Tarih Kurumu Basımevi.
- **Akar, M. 2006.** The Kinet Höyük MBII Building and the Levantine Palace Tradition in Eastern Cilicia. Unpublished MSc. thesis, Middle East Technical University.
- **Akkermans, P.M.M.G. and G.M. Schwartz 2003.** The Archaeology of Syria from Complex Hunter-Gatherers to Early Urban Societies (ca. 16,000-300 BC). Cambridge: Cambridge University Press.
- Al-Maqdissi, M., J. Bretschneider, P. Degryse, H. Hameeuw, D. Kaniewski, E. Paulissen and K. Van Lerberghe 2007. Environmental Changes in the Jebleh Plain (Syria), Geophysical, Geomorphological, Palynological, Archaeological and Historical Research. *Res Antiquae* 4: 3-10.
- **Bagh, T. 2003.** The Relationship between Levantine Painted Ware, Syro/Cilician Ware and Khabur Ware and the Chronological Implications. pp. 221-238 in *The Synchronization of Civilizations in the 2nd millennium B.C. Proceedings of the SCIEM 2000 Euroconference, Haindorf, 2-7 May 2001, ed. by M. Bietak. Wien: Verlag der Österreichischen Akademie der Wissenschaften.*
- Bass, G.F. 1976. Seytan Deresi. Preliminary Report. International Journal of Nautical Archaeology 5: 293-303.
- **Beach**, **T.P. 2004.** Geoarchaeology and Environmental Change around Kinet Hoyuk. *Bilkent University, The Department of Archaeology and History of Art, Newsletter* No.3: 5-8.
- **Bietak, M., N. Marinatos and C. Palyvou 2007.** *Taureador Scenes in Tell El-Dab`a (Avaris) and Knossos.* Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- **Bilgiç, E. 1992.** 'Ebla' in Cappadocian Inscriptions. pp. 61-68 in *Hittite and other Anatolian and Near Eastern Studies in Honour of Sedat Alp*, ed. by H. Otten, H. Ertem, E. Akurgal and A. Suel. Ankara: Türk Tarih Kurumu Basımevi.
- **Blue, L.K. 1996.** Cyprus and Cilicia: The Typology and Palaeogeography of Second Millenium Harbors. pp. 31-69 in *Res Maritimae. Cyprus and the Eastern Mediterranean from Prehistory to Late Antiquity. Proceedings of the Second International Symposium 'Cities on the Sea', October 18-22, 1994, ed. by Stuart Swiny, Robert L.Hohlfelder and Helena Wylde Swiny. Nicosia and Atlanta: Scholars Press.*
- Braidwood, R. 1937. Mounds in the Plain of Antioch. An Archaeological Survey. Chicago: University of Chicago Press
- **Braudel, F. 1993.** *II Felippe Döneminde Akdeniz ve Akdeniz Dünyası* (The Mediterranean and the Mediterranean World in the Age of Philip II). Transl. from the French of the 2nd edn (published 1966) by M. A. Kılıçbay. Ankara: İmge Kitabevi.
- **Bretschneider, J., M. Al-Maqdissi, K. Vansteenhuyse, J. Driessen and K. Van Lerberghe 2004.** Tell Tweini, Ancient Gibala, in the Bronze Age. pp 175-214 in *Egypt and Levant XIV. Proceedings of the SCIEM 2000 Late Bronze Age Conference*, ed. by Manfred Bietak. Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- **Broshi, M. and R. Gophna 1986.** Middle Bronze Age II Palestine: its Settlements and Population. *Bulletin of the American Schools of Oriental Research* 261:73-90.
- **Burke**, **A.A. 2004.** The Architecture of Defense: Fortified Settlements of the Levant during the Middle Bronze Age. Unpublished PhD dissertation, University of Chicago.

- **Casana**, **J. 2003.** From Alalakh to Antioch: Settlement, Land Use, and Environmental Change in the Amuq Valley of Southern Turkey. Unpublished PhD dissertation, University of Chicago.
- Cline, E. and A. Yasur-Landau 2007. Poetry in Motion: Canaanite Rulership and Minoan Narrative Art at Tel Kabri. pp. 157-165 in *EPOS. Reconsidering Greek Epic and Aegean Bronze Archaeology. Proceedings of the 11th International Aegean Conference*, ed. by Robert Laffineur and Sarah P. Morris. Aegaeum 28. Liège: Université de Liège.
- **Cohen, S.L. 2002.** International Maritime Trade in the Eastern Mediterranean in the Early Second Millennium B.C.E.: Archaeology, Theory, and a Proposal for Deep Sea Research. Paper presented to the 2nd MIT Conference on Technology, Archaeology, and the Deep Sea, April 26-28, 2002. http://web.mit.edu/deeparch/www/events/2002conference/papers/Cohen.pdf
- Collon, D. 1994. Bull-Leaping in Syria. Egypt and Levant IV:81-88.
- **Demirci, E. 2009.** The Settlement Pattern Changes in Cilicia from Middle Bronze Age to Late Bronze Age. Unpublished MSc thesis, Middle East Technical University.
- **Dever, W.G. 1987.** The Middle Bronze Age, The Zenith of the Urban Canaanite Era. *Biblical Archaeologist* 50:148-77.
- **Falconer**, **S.E. 1994.** Village Economy and Society in the Jordan Valley: A Study of Bronze Age Rural Complexity. pp. 121-142 in *Archaeological Views from the Countryside*, ed. by G.M. Schwartz and S.E Falconer. Washington and London: Smithsonian Institution Press.
- **Faust, A. 2005.** The Canaanite Village: Social Structure of Middle Bronze Age Rural Communities. *Levant* 37:105-25.
- **Gates, M.-H. 1998.** 1997 Archaeological Excavations at Kinet Höyük (Yeşil-Dörtyol, Hatay). *Kazı Sonuçları Toplantısı* 20:259-281.
- 1999a. 1998 Excavations at Kinet Höyük (Yeşil-Dörtyol, Hatay). Kazı Sonuçları Toplantısı 21:193-208.
- 1999b. Kinet Höyük in Eastern Cilicia: A case Study for Acculturation in Ancient Harbors. *Olba* 2(2):303-312.
- 2000a. Kinet Höyük (Hatay, Turkey) and MB Levantine Chronology. Akkadica 119-120:77-101.
- 2000b. 1999 Excavations at Kinet Höyük (Yeşil-Dörtyol, Hatay). Kazı Sonuçları Toplantısı 22:203-222.
- 2002. 2001 Season at Kinet Hövük (Yesil-Dörtvol, Hatay). Kazı Sonucları Toplantısı 24:283-298.
- 2004. 2002 Season at Kinet Höyük (Yeşil-Dörtyol, Hatay). Kazı Sonuçları Toplantısı 25:409-420.
- 2005. 2003 Season at Kinet Höyük (Yeşil-Dörtyol, Hatay). Kazı Sonuçları Toplantısı 26:163-174.
- **Glatz, C. 2009.** Empire as network: Spheres of Material Interaction in Late Bronze Age Anatolia. *Journal of Anthropological Archaeology* 28(2): 127-141.
- **Gophna**, **R. 1984.** The Settlement Landscape of Palestine in the Early Bronze Age II-III and Middle Bronze Age II. *Israel Exploration Journal* 34:20-31.
- **Grove, D. 1972.** Development and Characteristics of Urbanism. pp. 559-574 in *Man, Settlement and Urbanism*, ed. by J.P. Ucko, R. Tringham and G.W Dimbleby. London: Duckworth.
- **Hayden, B. 1994.** Village Approaches to Complex Societies. pp.198-207 in *Archaeological Views from the Countryside*, ed. by M.G. Schwartz and S.E. Falconer. Washington and London: Smithsonian Institution Press.
- **Horden, P. and N. Purcell 2000.** *The Corrupting Sea. A Study of Mediterranean History.* Oxford: Blackwell Publishing.
- **Jidejian, N. 1968.** *Byblos Through the Ages*. Beirut: Dar el-Machreq Publishers.

Kempinski, A. 1992a. Middle and Late Bronze Age Fortifications. pp. 127-142 in *The Architecture of Ancient Israel: from the Prehistoric to the Persian Periods*, ed. by A. Kempinski and R. Reich. Jerusalem: Israel Exploration Society.

— 1992b. Urbanization and Town Plans in the Middle Bronze Age II. pp 121-126 in *The Architecture of Ancient Israel: from the Prehistoric to the Persian Periods*, ed. by A. Kempinski and R. Reich. Jerusalem: Israel Exploration Society.

Kenyon, K.M. 1962. Amorites and Canaanites. Oxford: Oxford University Press.

Kienast, B. 1960. Die Altassyrischen Texte des Orientalischen Seminars der Universität Heidelberg und der Sammlung Erlenmeyer-Basel. Berlin: de Gruyter.

Klengel, H. 1992. Syria 3000 to 300 B.C: A Handbook of Political History. Berlin: Akademie Verlag.

Knapp, A.B. 1992. Bronze Age Mediterranean Island Cultures and the Ancient Near East. *Biblical Archaeologist* 55: 52-72.

Larsen, M.T. 1976. The Old Assyrian City-State and Its Colonies. Copenhagen: Akademisk Forlag.

Magness-Gardiner, B. 1994. Urban-Rural Relations in Bronze Age Syria: Evidence from Alalakh Level VII Palace Archives. pp. 37-47 in *Archaeological Views from the Countryside, Village Communities in Early Complex Socities*, ed. by G.M. Schwartz and S.E. Falconer, Washington and London: Smithsonian Institution Press.

Maguire, L.C. 1995. Tell El-Dab'a: the Cypriot Connection. pp 29-53 in *Egypt, the Aegean and the Levant. Interconnections in the Second Millennium B.C*, ed. by W. Vivian Davies and Louise Schofield. London: British Museum Press.

Marcus, E.S. 2002. The southern Levant and Maritime Trade during the Middle Bronze Age IIA period. pp. 241-264 in *Aharon Kempinski Memorial Volume. Studies in Archaeology and Related Disciplines*, ed.by S. Ahituv. Jerusalem: Ben-Gurion University of the Negev Press.

Margariti, R.E. 1998. The Şeytan Deresi Wreck and the Minoan Connection in the Eastern Aegean. Unpublished MA thesis, Texas A&M University.

Matthiae, **P. 1997.** Ebla and Syria in the Middle Bronze Age. pp. 379-414 in *The Hyksos: New Historical and Archaeological Perspectives*, ed. by E. Oren. Philadelphia: University Museum.

Merrillees, R.S. 2003. The First Appearances of Kamares Ware in the Levant. Egypt and Levant XIII:127-143.

Muhly, J. 1993. Early Bronze Age Tin and the Taurus. American Journal of Archaeology 97(2): 239-253.

Newhard, J.M.L., N. Levine and A. Rutherford 2008. Least-Cost Pathway Analysis and Interregional Interaction in the Göksu Valley, Turkey. *Anatolian Studies* 58: 87-102.

Niemeier, B. and W-D. Niemeier 1991. Minoan Artisans Travelling Overseas: The Alalakh Frescoes and the Painted Plaster Floor at Tel Kabri, Western Galilee. pp. 189-200 in *Thalassa: l'Egée préhistorique et la Mer. Actes de la troisième Rencontre égéenne internationale de l'Université de Liège, Calvi, Corse (23-25 avril 1990), ed. by R. Laffineur and L. Basch. Aegaeum 7. Liège: Université de Liège.*

Özgüç, T. 1995. Excavation at Kültepe Level II finds. *Belleten* 19: 453-461.

Philip, G. 1989. *Metal Weapons of the Early and Middle Bronze Ages in Syria-Palestine*. British Archaeological Reports International Series 526. Oxford: British Archaeological Reports.

Pulak, C. 2000. The Copper and Tin Ingots from the Late Bronze Age Shipwreck at Uluburun. pp 137-157 in *Anatolian Metal I. Anfänge der Metallverwendung in Anatolien*, ed. by Ünsal Yalçin. Bochum: Deutsches Bergbau Museum.

Raban, A. 1988. Coastal Processes and Ancient Harbor Engineering. pp. 185-208 in Archaeology of Coastal Changes. Proceedings of the First International Symposium 'Cities of the Sea - Past and Present', Haifa, Israel, September 22-29 1986, ed. by A. Raban. British Archaeological Reports International Series 404. Oxford: British Archaeological Reports.

Renfrew, C. 1975. Trade as Action at a Distance. pp. 3-59 in *Ancient Civilization and Trade*, ed. by J.A Sabloff and C.C Lamberg-Karlovsky. Albuquerque: University of New Mexico Press.

Rühl, A. 1920. Die Typen der Häfen nach ihrer wirtschaftlichen Stellung. Zeitschrift der Gesellschaft für Erdkunde zu Berlin 1920: 297-302.

Schwartz, G. and Nichols, J. (eds) 2006. *After Collapse. The Regeneration of Complex Societies.* Tucson: University of Arizona Press.

Seton Williams, V. 1954. Cilician Survey. Anatolian Studies 4:121-175.

Sherratt, A. and Sherratt, S. 1991. From Luxuries to Commodities: The Nature of Mediterranean Bronze Age Trading Systems. pp 351-384 in *Bronze Age Trade in the Mediterranean. Papers Presented at the Conference Held at Rewley House, Oxford in December 1989*, ed. by N.H. Gale. Studies in Mediterranean Archaeology 90. Jonsered: Paul Åströms Förlag.

Stager, L.E. 2001. Port Power in the Early and Middle Bronze Age: The Organization of Maritime Trade and Hinterland Production. pp. 625-639 in *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse*, ed. by R.S. Wolff. Studies in Ancient Oriental Civilization Vol. 59. Chicago: The Oriental Institute of The University of Chicago.

Taffet, A. 2001. The Likely Locations of Middle and Late Bronze Age Harbors in Cilicia: an Assessment Based on Levantine Models. pp. 127-133 in *La Cilicie: Espaces et Pouvoirs Locaux (2e millénaire av. J.-C – 4e siècle ap. J.-C.). Actes de la Table Ronde Internationale d'Istanbul, 2-5 novembre 1999, ed. by E. Jean, A.M Dinçol and S. Durugönül. İstanbul: Institut Français d'Etudes Anatoliennes Georges Dumézil.*

Talbert, R.J.A. (ed.) 2000. The Barrington Atlas of the Greek and Roman World. Princeton: Princeton University Press.

Treumann, B.W. 1997. The Role of Wood in the Rise and Decline of the Phoenician Settlements in the Iberian Peninsula. Unpublished PhD dissertation, University of Chicago.

Trigger, B.G. 1972. Determinants of Urban Growth in Pre-Industrial Societies. pp. 575-559 in *Man, Settlement and Urbanism,* ed. by J. P. Ucko, R. Tringham and G.W. Dimbleby. London: Duckworth.

Tubb, J. 1998. Canaanites. Peoples of the Past. London: British Museum Press.

Ussishkin, D. 1989. The Erection of Royal Monuments in City-Gates. pp. 487-496 in *Anatolia and the Ancient Near East. Studies in Honor of Tahsin Özgüç*, ed. by K. Emre, B. Hrouda, M. Mellink and N. Özgüç. Ankara: Türk Tarih Kurumu Basımevi.

Woolley, C. L. 1955. *Alalakh: An Account of the Excavations at Tell Atchana in the Hatay, 1937-49.* Oxford: Oxford University Press.

Yener, K.A. 1989. Kestel: An Early Bronze Age Source of Tin Ore in the Taurus Mountains, Turkey. *Science* 244: 200-203.

— **2005.** The Amuq Valley Regional Projects Volume One. Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995-2002. Chicago: The Oriental Institute of the University of Chicago.

— **2007.** The Anatolian Middle Bronze Age Kingdoms and Alalakh: Mukish, Kanesh, and Trade. *Anatolian Studies* 57: 151-170.

Yener, K.A., C. Edens, T.P. Harrison, J. Verstraete and T.J. Wilkinson 2000. The Amuq Valley Regional Project 1995-1998. *American Journal of Archaeology* 104:163-220.

Yoffee, **N. 1979.** The Decline and Rise of Mesopotamian Civilization: An Ethnoarchaeological Perspective on the Evolution of Social Complexity. *American Antiquity* 44: 5-35.

Zaccagnini, C. 1997. Economic Aspects of Land Ownership and Land Use in Northern Mesopotamia and Syria from the Late 3rd Millennium to the Neo-Assyrian Period. pp. 331-352 in *Urbanization and Land Ownership in the Ancient Near East*, ed. by M. Hudson and B.A. Levine. Cambridge, MA: Peabody Museum of Archaeology and Ethnology.