

**THE PHOENICIAN TRADE NETWORK:
TRACING A MEDITERRANEAN EXCHANGE SYSTEM**

A Thesis

by

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ABSTRACT

The Phoenicians were known as artisans, merchants, and seafarers by the 10th century B.C.E. They exchanged raw and finished goods with people in many cultural spheres of the ancient world and accumulated wealth in the process. A major factor that aided their success was the establishment of colonies along the Mediterranean and eastern Atlantic coasts. These colonies, established by the eighth century B.C.E., supplied valuable raw materials to the major Phoenician cities in the Levant, while also providing additional markets abroad. Excavations at a myriad of these colonial sites have recovered materials that can be used to identify connections between the colonies, the Levantine cities, and non-Phoenician cultures across the ancient world. By establishing these connections the system of maritime exchange can be better understood and modeled as the Phoenician Trade Network. This network involved both direct and indirect exchange of raw and finished products, people, as well as political and cultural ideas. The colonies were involved in various activities including ceramics production, metallurgy, trade, and agriculture. Native peoples they interacted with provided valuable goods, especially metals, which were sent east to supply the Near Eastern Markets. The Phoenician Trade Network was a system of interconnected, moderately independent population centers which all participated in the advancement of Phoenician mercantilism and wealth. Ultimately, the network collapsed in the sixth century B.C.E. allowing other powers such as the Romans, Carthaginians, and Greeks to replace them as the dominant merchants of the Mediterranean.

For my Grandparents

Oma, Opa, and Grandma Liane

Thank you for your unconditional support

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CHAPTER I

INTRODUCTION

Phoenician maritime trade from the ninth to sixth centuries B.C.E. extended from the Levant to the Atlantic coasts of Portugal and Africa. While the extent of this trade has been established through both material culture and literary traditions, the connections within the network have rarely been explored. Extant studies have only addressed material and cultural links with respect to individual sites or small geographical areas. How these trade relations relate to and make up the Phoenician trade sphere (which I term the Phoenician Trade Network or PTN), during Iron Age II, from the late ninth to mid-sixth centuries B.C.E., has yet to be established. Without a general overview of these links, the nature of this network cannot be fully understood or contextualized in either localized site reports or broader studies. By investigating the relationships between the many Phoenician colonies the diversity and complexity found within their maritime trade network can be better understood. My research uses established archaeological analysis of sites across the Mediterranean and Atlantic coasts to identify where trade occurred, what the potential trade connections were, and the ideas and cultures invested in the economic and social exchange. Most importantly it identifies the relationships between the different Phoenician colonies and the greater trade network. The result is an established baseline for understanding the exchange infrastructure that allowed the Phoenicians to dominate Mediterranean trade for three centuries.

Historical Background

The Phoenician civilization developed on the Levantine coast following the disruptions at the end of the Bronze Age. During the 12th century B.C.E. the Syro-Canaanites occupying much of the interior and coastal Levant faced internal collapse as well as external pressure peoples moving into the region.¹ A coalition of cultures constituting the Sea Peoples attacked and raided cities along the coastline before some settled to the south of modern Lebanon along the same coast.² The once stable Hittite Empire to the north crumbled, resulting in an influx of refugees and foreigners such as the Aramaeans and Assyrians.³ To the southeast nomadic and displaced populations including the Israelites moved in.⁴ In addition to exterior pressures, local bickering between city-states, raiding by groups such as the Shasu and Hapiru, and general societal discord contributed to the destabilization of the entire Syro-Canaanite region (Fig. 1).⁵ By the end of the 12th century B.C.E. the territory controlled by the Syro-Canaanites, who referred to themselves simply as Canaanites,⁶ consisted of a small stretch of land in modern Syria and Lebanon, bounded by the Mediterranean Sea to the west and the mountains of Lebanon to the east (Fig. 3).⁷

¹ Albright 1961, 328; Aubet 1994, 13-5; Joffe 2002, 432-4.

² Stager (1995, 340-4) suggests this occurs before the battle with Ramses III. He also addresses the amount of influence Egypt may have had on this settlement process. See also Yadin 1991, 300-2; Tubb 1995; Bell 2006, Map 1; Kuhrt 1995, 425-6; Joffe 2002, 434; Bell 2006, 15-6.

³ Kuhrt 1995, 393-5; Bell 2006, 13-4.

⁴ Aubet 1994, 13-4; Kuhrt 1995, 425-6.

⁵ Kuhrt 1995, 430.

⁶ Muhly 1970, 26.

⁷ Aubet 1994, 13, 17; Joffe 2002, 432.

Despite being displaced from their homelands and restricted to the limited territory that they now occupied, the remnants of Canaanite civilization quickly reestablished many ancestral maritime trading contacts from the Late Bronze Age (LBA).⁸ The Early Iron Age (EIA) Canaanites had a direct historic connection with the Syro-Canaanite seamen of the LBA. Further, the importance of trade to the economic systems of the LBA must have created a strong cultural memory for the Syro-Canaanite descendants.⁹ Archaeological evidence suggests that maritime trade continued unbroken between Cyprus, Sarepta, and Tyre from the end of the LBA to the EIA.¹⁰ These factors helped the Canaanites to again become one of the most important mercantile cultures in the eastern Mediterranean by the 10th century B.C.E. Their importance is evident both in the archaeological record as well as in literary record where, for example, biblical references associate the Tyrian king Hiram I with Solomon during the “Ships of Tarshish” trade expeditions.¹¹ It is during this century that modern scholars begin identifying Syro-Canaanites by their Greek name Phoenicians.¹²

During the ninth century B.C.E. the Phoenicians began their most well-known endeavor: the colonization and subsequent exploitation of the Mediterranean and Atlantic coasts. They engaged in the systematic procurement of these raw and cultural

⁸ This fact is illustrated by the tale of Wenamun dating to 1075 B.C.E. (Egberts 1991, 57-9). In it the priest Wenamun travels from Egypt to Byblos and finally to Cyprus on Syro-Canaanite/Phoenician vessels (Wenamun, i.50-60).

⁹ This trade network included Cyprus (Karageorghis 1982, 53, 56), Egypt (Lipinski 1977, 213; Steffy 1994, 23-5; Wachsmann 1998, 9), the Aegean (Heltzer 1988, 11-2; Bell 2006), and North Africa (Watrous 1992, 77-8; Warren 1995, 10-11; Davis 2001, 55).

¹⁰ Joffe 2002, 432; Bell 2006, 99-101.

¹¹ Joffe 2002, 435-6; 1 Kings 10:22; 2 Chronicles 9:21.

¹² Albright 1961, 328; Phoenicians referred to themselves as Canaanites, however their Greek name will be used here for clarity. For a full discussion about the origin of the name “Phoenicians” see (Muhly 1970, 24-35; Aubet 1994, 6-13).

resources beginning with the colonization of Kition on Cyprus.¹³ They acquired metals, ivory, animals, hides, wood, salt, slaves, etc bringing these goods back to the Near East.¹⁴ Archaeological and ancient literary evidence places the Phoenicians in Sardinia, Carthage (modern Tunis), and other North African colonies during this same century.¹⁵ While the literary documentation of Phoenician settlement and expansion has been called into question, archaeological evidence confirms that Phoenicians crossed the Mediterranean by the late 10th or early ninth centuries B.C.E. and began colonizing Iberia, Sicily, Sardinia, and North Africa by the ninth or eighth centuries B.C.E.¹⁶ These colonies were secured and expanded during the seventh century when the wealth and success of Phoenician expansion peaked. During the sixth century B.C.E. colonization began to decline and ultimately collapsed when an unknown crisis tore the trade network apart. It was at this time that Babylon laid siege to and captured Tyre in 576-4 B.C.E., reflecting the empire's control over Phoenicia. After the initial disruptions resulting from capture, the political organization of the city was dramatically reorganized and altered around 564 B.C.E.¹⁷ The sixth century also saw a new influx of Greek colonists in the west at sites such as Huelva where the Phocaeans are said to have settled.¹⁸ These factors and potentially others resulted in the mass abandonment and decline of the trade

¹³ Karageorghis 1982, 123-7; Hunt 1982, 62-4; Aubet 1994, 52.

¹⁴ Ezekiel 27

¹⁵ Cross 1972, 19-9; Shea 1991, 244-5, Negbi 1992, 610; Lipinski 2004, 234; Joseph. *Ap.* 1:106-27; Dion. Hal. *Ant. Rom.* 1.74.1. The earliest evidence for Carthage's establishment dates to the late ninth century B.C.E. through carbon-14 dating while the pottery dates no earlier than 770 B.C.E. (Docter et al. 2008, 379-99).

¹⁶ Kuhrt 1995, 403; Nijboer 2008, 372-4; Aubet 1994, 161-7, 197-201; 2002, 100-1; 2008, 248; Schubart 2002, 4-5; Mata 2002b, 266-94; Brody 2002, 76-7; Procelli 2008, 466; Docter et al. 2008, 379-84; Gonzales de Canales et al. 2008, 633, 637-42; Boardman 2010, 319.

¹⁷ Lipinski 2006, 197-200.

¹⁸ Gonzalez de Canales et al. 2008, 646-8; Dietler 2009, 7-8.

colonies.¹⁹ The Phoenicians never recovered their former connections; soon other cultural groups began to capitalize on and control the coasts that the Phoenicians had exploited for over two centuries.²⁰

Current State of Research

The most extensive research to date has addressed the exchange systems and multi-national nature of Phoenician trade.²¹ It has further identified the most important trade hubs and the geographical extent of the exchange network. The trade connections between smaller colonies, however, have only been identified regionally. In most cases research has established relationships between two or three sites within a small geographic area. Archaeological, architectural, historical, funerary, and metallurgical evidence also connect the major Phoenician entrepôts: Gadir, Carthage, and Tyre.²² Smaller regional sites can in most cases be linked to their major local trade hub. These entrepôts in turn relate the three regions of Phoenician trade to one another. These regions are: the eastern Mediterranean, the western Mediterranean, and the central Mediterranean.

The extant work that identifies material culture at individual sites is the foundation of this study. Many of the reports documenting Phoenician colonies and

¹⁹ Aubet 1994, 4; 1995, 49-55; 2002a, 103-6; Rodriguez 1995, 96-8; Mata 2002a, 192-6; 2002b, 263-6; Ramon 2002, 146-52.

²⁰ The primary successor to Phoenician control of the western and central Mediterranean was the colony of Carthage (Aubet 1994, 161).

²¹ Aubet 1994; Lipinski 2004.

²² Aubet 1995, 49-50; 2002, 101; Mata 2002a, 181-2; 2002b, 287; Docter et al. 2008.

cities of the ninth to sixth centuries B.C.E. identify similarities between other local sites. Reports on the many excavations throughout the Iberian Peninsula have thoroughly documented numerous material connections between the different Phoenician settlements in the region including the similarity of pottery and funerary traditions, local exchange of resources including foodstuffs and finished goods, and potential political and mercantile oversight via Gadir (modern Cadiz). These studies also note some similarities between local material culture and that further east.²³ Cultural parallels between pottery, burial practices, and architecture have been recognized between different sites across all three regions of Phoenician influence.²⁴

Carol Bell's dissertation, *The Evolution of Long Distance Trading Relationships across the LBA/Iron Age Transition on the Northern Levantine Coast*, identifies the trade that continued from the end of the Bronze Age to the beginning of the Iron Age (12th to early-10th centuries B.C.E.). In it she investigates the abundance of Levantine materials at Cyprus as well as the Cypriot and Aegean artifacts found at Tyre, Sarepta, and Tel Dor. Her research shows that exchange between the region around Tyre, the island of Cyprus, and the Aegean continued unbroken from the LBA to the EIA.²⁵ This work provides information about the activities that became the foundation for extensive commercial exchange during the ninth to sixth centuries B.C.E. Much of the Phoenician mercantilism in the eastern Mediterranean during this later period has been identified

²³ Niemeyer 1995; 2002, 37, 40; Mata 2002a, 171; 2002b 272, 285; Schubart 2002, 14; Catalan 2002; Ramon 2002, 126-30, 146-52; Prats et al. 2002, 123; Aubet 2006, 106.

²⁴ Aubet 2002b, 101; Scubart 2002, 4; Catalan 2002, 62-4; Prats et al. 2002, 123; Gubel 2006, 87-9; Van Dommelen 2006, 144.

²⁵ Bell 2006.

and documented in the archaeological records of Egypt, Israel, Assyria, the Aegean, and eastern North Africa.²⁶ The local trade between major economic entities of the Iron Age was crucial for Phoenician endeavors. The Assyrians stressed Phoenician resources further by taxing them heavily early in the ninth century B.C.E.²⁷ These factors provide strong justification for their colonial expansion. Simply put, if the Phoenicians did not exchange their goods or did not face Assyrian exploitation through taxation, there may have been little motivation for establishing their colonies and importing the goods acquired from them. The need for foodstuffs and overpopulation resulting from a small amount of controlled territory in the Levant and heavily populated cities could have also encouraged expansion out of the homeland.²⁸ The Phoenician's culture of seafaring, exploration, and exchange is yet another potential influence for the movement west. The economic and population stress, combined with cultural traditions all potentially contributed to the colonization.²⁹

The available information does not negate the problem of scale. While regional and local connections have been identified, they have yet to be placed into the intricate network of Phoenician trade. Further, the PTN does not consist of cultural and politically homogenous people.³⁰ Archaeologists have identified local variations in culture showing that the people identified as "Phoenicians" within this network produced a range of material culture forms based on traditional eastern designs. In many cases colonial

²⁶ Lipinski 1985; 2006, 181-201; Calvo 2008; Gilboa et al. 2008; Lehmann 2008; Doumet-Serhal 2008; Kourou 2008.

²⁷ Aubet 1994, 88-95.

²⁸ Aubet 1994, 76-9.

²⁹ Aubet, 1994, 70-96

³⁰ Purcell 2006, 25-6.

artifacts show unique material and stylistic derivations from Tyrian, Levantine, and Cypriot forms.³¹ The prevailing interpretation of Phoenician trade is of a homogenous network of Tyrian settlements extending across the Mediterranean, all of which sent the goods they acquired through trade and resource exploitation back to the Levant.³² The evidence described above, however, indicates that the system consisted of a disparate conglomeration of both loosely and well-connected settlements. They were founded by Phoenician cities in the Levantine homeland stressed by population and Assyrian domination.³³ My research shows that while the people occupying the Phoenician colonies were indeed associated with the Levant, this affiliation was most direct at the major local trade centers. Ultimately the material culture that developed in each region did so with respect to both local and Levantine ideas.

Methods

My research will focus on the archaeological connections that have already been established between Phoenician colonies around the Mediterranean. The work at individual sites has often documented similarities between artifacts at different locations in an attempt to establish local chronologies, note imports that date the chronologies, or list the known origins of uncovered artifacts.³⁴ This process has resulted indirectly in the

³¹ Niemeyer 1995, 74-7; Mata 2002a, 186-8; 2002b, 272, 285; Ramon 2002.

³² Aubet 1994, 70-96; Kuhrt 1995, 409-10.

³³ Aubet 1994, 76-80.

³⁴ Aubet 1994; 2002; Schubart 2002; Mata 2002a; 2002b; Brody 2002; Procelli 2008; Docter et al. 2008; Gonzales de Canales et al. 2008; Boardman 2010; Ramon 2002; Prats et al. 2002.

documentation of potential trade relationships between nearby locations. The studies also identify local traditions, which vary by region, isolating unique forms of material culture. These traditions can in most cases be associated with, or were influenced by, a major entrepôt. These trade hubs can be used to develop the extra-regional PTN. For instance, the development of the Nuragic amphorae on Sardinia was heavily influenced by Carthaginian pottery traditions from the eighth century B.C.E. It also coincided with the development of wine production by indigenous and colonial populations on the island.³⁵ These two factors indicate the presence of exchange connections between the indigenous Sardinians, the Phoenician colonists, and Carthage. The historical documentation and archaeological materials at Carthage provide evidence for trade with eastern Phoenician via Tyre.³⁶ When combined with the fact that Tyrian products have been found on Sardinia and the evidence implies indirect exchange between Tyre and Sardinia *via* Carthage.³⁷ The Tyrian goods may have come directly from the Levant, however, the strong ties between Sardinia and Carthage suggest that eastern goods made at least one stop at the North African entrepôt.

The primary hole in the extant research is the establishment of such connections. Where associations between local and imported materials, traditional and colonial architecture, and cross Mediterranean funerary practices have been established by researchers, these have not been examined to identify potential exchange networks. The dilemma for accomplishing this is the ephemeral nature of trade and the inability to

³⁵ Bernardini 2008, 539-41.

³⁶ Aubet 1994, 215-17; Docter et al. 2008, 387, 401, 416.

³⁷ Bernardini 2008, 543.

definitively state that a material made at one location and found at another represents direct trade. To return to the Sardinia/Carthage example above, the influence of Carthaginian wares on Nuragic amphorae development could have been the result of non-Phoenician merchants bringing Carthaginian goods to Sardinia. In this case the tradition would have developed independently of any direct Phoenician contact. It is the association between the wares, wine production and export, and extant Phoenician colonies that provide strong evidence for Carthaginian interactions and exchange on Sardinia. Identifying solid associations through the archaeological record, regional influence, and/or historical data will best clarify where a potential trade connection is likely to have existed.

The most critical factor when building associations is the fact that all of the proposed sites are considered to be culturally Phoenician and as such are either part of western colonial expansion or are part of the eastern littoral. As a result, though the sites investigated most certainly could have interacted with other cultures and maritime groups, such connections do not play a major role in determining Phoenician connections within the network. Three archaeological factors are used to identify the primary contacts within the Phoenician maritime system: the dominant materials in the archaeological assemblages, commonality between cultural practices, and the development of local material culture traditions and forms.

The archaeological materials observed identify any imports that may have played a major role at a given location, identify the dominant usage of a given style of material culture, and help to identify the likelihood of influence from another material culture

tradition. Imports are subsequently used to identify what trade connections may have existed, and their prominence in the record helps to indicate the regularity of the connection and the local demand for the materials. The dominance of a specific style shows what cultural traditions may play the most dominant role at a site, and if these can be associated with another location, indicate strong cultural connection between them. Lastly, as imports or less dominant materials appear in the archaeological assemblages and/or the assemblages alter their appearance over time it suggests a change in cultural practices. Such a change may be traced to, or related to, dominant internetwork connections as a given colony or region develops.

Commonality of cultural practices within and across regions is important because it implies communication between people. Two groups separated by a barrier such as the Mediterranean Sea can only share cultures if they are somehow connected. Either a given population must move from one location to another or the two populations must share ideas through some form of interaction. As the cultural practices of two populations become more similar, the degrees of interaction must increase.³⁸ Nearly identical societies must engage in constant, intimate interaction and communication. These include population and technology exchange as well as common religious and political practices.³⁹ As a result, identifying the similar cultural practices such as cultic traditions and burial activities within the PTN identifies the levels of interaction between the colonies.

³⁸ Binford 1963, 92.

³⁹ Binford 1963, 92.

The development of local material cultural traditions especially pottery forms are the other major identification tool for establishing connections. As these forms develop they can either take on entirely unique trends, or adopt ideas that are found in existing traditions. When development is entirely unique and independent, little can be said for how trade or external pressures affected it. When ideas are adopted from other traditions however, this material development identifies two important factors. First, it indicates that the influencing traditions were present where local development occurred. If this material is foreign, then it must have arrived by some means of exchange. Second, the material culture traditions somehow exerted influence over the local practices. This influence may merely be one of aesthetic appeal, or ease of production. It is also possible that population movement, external pressures, or some form of cultural pressure on the developing population. The nature of influence is outside the scope of this study, but identifying the presence of external materials and subsequent influence at a given colony is a valuable tool for recognizing primary relations within the Phoenician network.

The analysis of material culture and raw materials has been used to establish some potential relationships. Material such as metals, pottery, plant remains, and rock contain physical properties that help to identify their origin. In addition, genetic data about current human and plant populations provide evidence for the presence and physical make up of past populations.⁴⁰ These data will be valuable for identifying actual, rather than implied, movement of individuals. This information, however, cannot establish the exact *routes* of trade or the *processes* that resulted in the movement of

⁴⁰ Ortega-Feliu et al. 2007; Renzi et al. 2009; Zalloua et al. 2008; Nunez and Walker 1989.

artifacts. Nevertheless the origin and excavation location of raw and worked materials can help to clarify the resources' export and import locations, a factor that is extremely important for understanding the extent and nature of the PTN.

This study identifies the movement of both people and objects within the PTN by using established comparisons of iconography, form, design, and function of archaeological materials at different locations. The locations make up a wide swath of major sites across the Mediterranean and Atlantic coasts and represent colonies from each of the three regions. In the east Tyre is a major site, along with Tel Dor and Sarepta. Less extensive information comes from Sidon, Byblos, and the island of Cyprus. In the central Mediterranean artifact comparisons from sites on Sardinia (including Sulcis, Nora, and Sant'Imbenia), Sicily (Motya, Palermo, and Solunto), Carthage, central Italy, and Malta are used. The western region includes analyses from sites across Iberia such as La Fonteta, Ibiza, Toscanos, Cerro de Villar, Huelva, Castillo de Doña Blanca, Abul, and Santa Olaia. The North African sites of Lixus, Mogador, Rachgoun, and Mersa Medakh will complete the analysis of the region. Pottery is the primary material used to identify cultures and traditions, with less emphasis placed on architecture and funerary traditions such as tomb design and contents. Less common goods such as jewelry, ivories, and metallic objects will also supplement available connection data, but due to the rarity of their preservation in the record, they will not be relied upon.

It is import to specify the use of particular terms found throughout this thesis, as a lack of clarity could lead to confusion:

- **Phoenician Trade Network (PTN):** I propose this term to identify the network of exchange between the Phoenician colonies and the Levantine Phoenician cities. Exchange with non-Phoenician cultures was crucial to the success of this network and as such influence its organization. These groups can be considered part of the network, but only insofar as they engage in direct exchange with Phoenicians and their settlements.
- **Connection:** For this research connection will refer to the most ephemeral evidence for exchange between two locations. Any potential evidence that may propose interaction between two regions will create a “connection.” As a result the mere appearance of Baltic amber on the Bajo de la Campana wreck⁴¹ creates a connection between the Baltic and the western Phoenicians. It is important to note that these connections need not necessarily be direct since a myriad of mechanisms can move objects from one region to another.
- **“circuito del estrecho”/“circle of the strait”:** These terms denote a form of pottery that was produced in the western Phoenician colonies and was unique to the region. They may be used interchangeably as the latter is the translation of the former and both are used in research articles.
- **Mercantilism/Mercantile:** “The theory or practice of mercantile pursuits.”/“Of or relating to merchants or trading.”⁴² These terms refer to the act of exchange, or the activities of merchants, rather than to the

⁴¹ Polzer 2011, 18.

⁴² Merriam-Webster 1999.

economic theory that dominated the European colonial system from the 16th to 18th centuries AD.

- **Eastern Mediterranean (Fig. 2):** This regional designation includes most of the eastern Mediterranean basin along with land-locked states such as Assyria and the Neo-Hittite city-states. It does include the Aegean and eastern North Africa, but it does not include Malta, Sicily, or Tunisia. Other names for this cultural boundary in the volume are the “eastern region” or “eastern Phoenicia.”
- **Central Mediterranean (Fig. 2):** The geographic boundaries for the central Mediterranean are a matter of convenience and generally cultural dominance. It includes Carthage and the Tunisian cities, Sardinia, Sicily, the Italian Peninsula, and Malta. Other names for this cultural area used below are the “central region” and “central Phoenicia.”
- **Western Mediterranean (Fig. 2):** This regional demarcation is one of convenience rather than perfect accuracy. It includes sites from Algerian and Atlantic North Africa as well as Iberian colonies along both the Mediterranean and Atlantic coasts. This can also be called the “western region” or “western Phoenicia.”
- **Western Mediterranean Basin:** This is a geographic region that makes up the western half of the Mediterranean Sea. It extends from Tunisia in North Africa at its eastern boundary, to the Strait of Gibraltar to the west. It has no cultural connection with the Phoenicians and should not be

confused with the “western Mediterranean,” “western Phoenicia,” or the “western region.”

- **Eastern Mediterranean Basin:** This geographic boundary that extends from the Levant in the east to the coast of Tunisia in North Africa to the west. It has no cultural connections and should not be confused with the “eastern Mediterranean,” the “east,” “eastern Phoenicia,” or the “eastern region.”

Chapter Descriptions

Chapter II, “Syro-Canaanites and Early Phoenicians,” provides the historical background for Canaanite maritime trade during the LBA and into the EIA (13th to 11th centuries). It addresses the evidence for the potential trade relations between the coastal Syro-Canaanite cities such as Ugarit, Byblos, and Sidon with the rest of the eastern Mediterranean and the Aegean. It also addresses any evidence that may indicate trade with regions further west. The section takes advantage of archaeology, historical documentation, and iconography to identify the potential maritime trade contacts. It then establishes the importance of these connections by indicating that they are the cultural precursors to Phoenician expansion and mercantilism. As a result they provide the starting point from which the Phoenician cities begin their own maritime activities. The second portion of the chapter addresses the historical evidence for the earliest Phoenician voyages and colonization westward. Particular attention is given to the

colonies of Gadir and Carthage, since they have the most detailed ancient descriptions regarding their founding. The dates and historical assertions for the founding of these two cities are compared to extant archaeological evidence. The chapter finishes by analyzing the historical information for significant data, even when it contradicts archaeological dates.

Chapter III addresses the technological, geographic, and cultural navigation aspects of seafaring between the fourteenth and sixth centuries B.C.E. “Winds, Ships, and Seafaring” begins by discussing the wind and current conditions the Phoenicians would have encountered by listing the seasonal winds and currents around the Mediterranean and eastern Atlantic coasts. The second section details the extant evidence for ship construction during the period in question, making use of excavated ship wrecks, iconography, and historical ship descriptions. It also addresses the capabilities of ancient ships, making sure to stay within the limits of available knowledge and not giving way to the more fantastic assertions of ancient ship capabilities.⁴³ Though evidence exists that Phoenicians used warships such as the Pentecontor for colonization, this chapter concentrates on the merchant ship as the primary vessel for exchange.⁴⁴ Lastly, the chapter addresses navigation, both with regard to technologies and tools available to the ancient Phoenicians as well as with regard to the navigational arts. It makes use of archaeological, historical, and iconographic data to establish known technologies. Later, the skills and arts that the

⁴³ For instance, a 200-ton ships has been purported as part of the Ugarit fleet (Aubet 1994, 172-5).

⁴⁴ *CPG*, 5-10

Phoenicians had the potential to develop in order to successfully navigate during their voyages are discussed. This section makes use of David Lewis' book *We the Navigators: The Ancient Art of Landfinding in the Pacific* in order to establish the potential skills and show how similar abilities could have been useful for Phoenician seafaring.

“The Eastern Mediterranean,” (Chapter IV), moves on to establish the potential connections the Phoenicians maintained across the eastern Mediterranean region. It begins by establishing the importance of the eastern region especially with regard to exchange with the many states that surrounded the Phoenician homeland. Each of the major trading groups is discussed along with evidence for trade connections. The discussion then moves to cities in the eastern Phoenician trade littoral. The major cities are briefly discussed with extant evidence for their connections to other Phoenician localities as well as international entities. Cyprus is included with the Phoenician littoral due to its regular trade with and ultimate colonization by Tyre and Sidon. This section includes brief historical backgrounds of each of the cities and states, particularly with respect to trade and regional interactions.

Chapter V, “The Central Mediterranean” continues the discussion found in chapter IV, but with respect to the central Mediterranean colonies. The initial section focuses on the interaction between the Phoenicians and the indigenous people of Italy. The interaction is particularly interesting because unlike in Iberia and North Africa this interaction and exchange was not accompanied by any colonization. Carthage is the focus of the second section. The city plays a crucial role in the history of colonization to the west, especially with regard to Rome. It was the primary entrepôt of the PTN in the

west and was the largest of the colonies, reaching a size of 55 ha by the seventh century B.C.E.⁴⁵ This section discusses what made the city so important, and the factors that may have led to its success. The chapter ends by discussing the trade connections that existed across the central Mediterranean colonies as indicated by archaeological evidence in the region.

Chapter VI finishes the discussion of the three major regions with “The Western Mediterranean.” The chapter begins with a discussion of the interaction between the Phoenician colonists and the indigenous people of Iberia. It discusses evidence for Phoenicians living in the hinterland of the peninsula and the impacts that they had on indigenous people as a result of their long standing relationship. The discussion then moves to the different types of production that the Iberian colonies engaged in. Particularly, it focuses on the western colonies’ ability to support one another through local production and trade; a factor that may have subsequently helped them to focus on exporting raw materials to the east. The last section discusses the major local connections as established by archaeology and other material culture evidence. It is here that data is presented that shows the similarities and close ties among the western colonies.

The seventh chapter, “Interregional Trade and Unique Material Culture Traditions,” closes the presentation of data with two sections. First, it presents the different material culture traditions, paying special attention to pottery, that were used in

⁴⁵ Aubet 1995, 51.

each of the three regions. Traditions that were particular to individual colonies or islands, or were shared by geographic or colonial groups, are presented here. This data shows that the different regions contained distinct material culture traditions that can be used to trace trade connections within the PTN. The second half of the chapter discusses the interregional connections that are indicated by archaeology. This section uses archaeological assemblages, burial practices (including tomb design and contents), architecture, and technology to establish potential connections. Where these data converge to include multiple forms of evidence indicating a particular connection, regular trade or other interactions are proposed. This section breaks the data into three groups: connections between the eastern and central Mediterranean, connections between the central and western Mediterranean, and connections between the eastern and western Mediterranean.

The final chapter concludes the research discussed here by summarizing the proposed PTN and the evidence supporting it. It breaks the network into the three major regions of discussion and addresses the connections found within them. Both local and interregional interactions are discussed along with some of the aspects that may have influenced them. The chapter ends by suggesting some directions that research into the network can take and some ways that the proposed network can further Mediterranean and Phoenician archaeological investigations.

CHAPTER II

SYRO-CANAANITES AND EARLY PHOENICIANS

Syro-Canaanite maritime trade and seafaring activities preceded the Phoenicians by centuries. The indigenous peoples of the Levant coast were interacting with Egypt, the Aegean, North Africa, Cyprus, and perhaps even the Western Mediterranean long before Hiram cooperated with Solomon on the tenth century “Ships of Tarshish” venture.¹ The cultural and geographical association between the Syro-Canaanites and the Phoenicians indicates a direct ancestral link. In order to investigate the nature, extent, advent, and complexity of Phoenician seaborne trade, one must first inspect the practices of their Bronze Age ancestors, particularly with regard to their trade connections.

It is also important to identify the historical documentation concerning the earliest events of Phoenician colonization. Archaeological evidence for the establishment of the vast majority of Phoenician colonies will be dealt with in chapters four through six since in most cases there is little to no literary or historical precedence for their foundation. Two vital colonies, however, Carthage and Gadir, are the subject of numerous historical works on the establishment of Phoenician trade.² They also are the focal point of more than a century of debate on the importance and accuracy of historical sources as well as the extent and duration of Phoenician cross-Mediterranean trade.³ Investigating the historical documentation for the foundation of Carthage and Gadir and comparing them to the extant archaeological record will help to establish the value of

¹2 Chronicles 9.21; 1 Kings 10.22.

² Aubet 1994, 194-7, 214-8, 260-2.

³ Aubet 1994, 1-5, 194-99, 214-18, 260-2.

historical data. Further, these histories can provide valuable insight into the nature and development of the PTN.

Precursors to the Phoenician Trade Network

From the Bronze Age to the Iron Age

The connection between the Phoenicians and LBA Syro-Canaanites is reflected in historical records, cultural similarities, and the geographic location each called home. The Syro-Canaanites occupied much of modern Syria, Lebanon, and Israel. This region succumbed to the myriad impacts that brought about the end of the Bronze Age, constricting Syro-Canaanite cultural boundaries inward from the south, east, and north. As a result they came to occupy cities along the coast of the Levant and the western side of the coastal mountain ranges.⁴ The social restructuring that followed gave rise to the Phoenicians, but their society was built upon the traditions of their ancestors. Bronze Age Syro-Canaanites were influenced by the Egyptian, Aegean, Mesopotamian, Syrian, and Cypriot cultures with which they established trade relationships.⁵ Language, seafaring practices and networks, and even Phoenician political identities can be traced back to Bronze Age traditions.⁶ All the evidence reinforces the theory that the Phoenicians were directly linked to these earlier Levantine peoples historically, culturally, and technologically.

⁴ Aubet 1994, 13, 17; Joffe 2002, 432.

⁵ Aubet 1994, 13, 21-3.

⁶ Katzenstein 1973, 6-16; Aubet 1994, 17, 23-5, 29-31.

Despite the changes that impacted and reduced exchange at the end of the Bronze Age, interaction and trade did continue.⁷ Archaeological data have provided evidence for the continuation of seaborne trade out of the Levant, unbroken between the LBA and the EIA. Carol Bell's 2006 publication details her investigation of the ceramic evidence between Cyprus and the heart of the Phoenician Levant, including Tyre and Sarepta. Her analysis shows that while numerous Syro-Canaanite entrepôts and cities such as Ugarit, Hazor, and Tell Sukas were destroyed at the end of the Bronze Age, cities in the vicinity of Tyre were spared. These locations included Tell Dan, Sarepta, Kamid el-Loz, Akko, and of course Tyre itself.⁸ In addition, the archaeological strata at these sites show that ceramics continued to be imported from Cyprus and as far away as the Aegean well after the close of the Bronze Age (ca. 1200 B.C.E.).⁹ The record at sites in Cyprus, specifically on the southwest corner of the island, shows that imports from the Levant continue to appear during the same period.¹⁰ There is no direct material evidence that Syro-Canaanites were themselves shipping and trading these goods. Nonetheless the importance of Syro-Canaanite cities such as Byblos and Ugarit for eastern Mediterranean trade at the end of the Bronze Age suggests that they would have continued to invest in what had been a very profitable enterprise.¹¹

Literary evidence from the 11th century B.C.E. also documents Levantine seafarers traveling between Egypt, the Levantine coast, and Cyprus. The Tale of

⁷ Aubet 1994, 25.

⁸ Bell 2006, 12-6, Map 1.

⁹ Bell 2006, 88-104.

¹⁰ Bell 2006, 91-102.

¹¹ Bell 2006, 17-25.

Wenamun illustrates both the disorder during the LBA/EIA transition and the persistence of trade during this period. The story relays the experiences of Wenamun, an Egyptian priest of the god Amun, who travels to Byblos to acquire cedar to build the “great and august ship of Amun-re.”¹² During his journey he is robbed, threatened, steals from a local ruler, is hunted down, and blown to Cyprus while fleeing the Tjekker.¹³ Most importantly the story relays that his seaborne journeys are undertaken upon Levantine ships, that Zakar Baal, king of Byblos, controls 20 ships, and Sidon controls 50.¹⁴ It also shows that despite the potential reduction in trade he was able to book passage for both himself and his god from Egypt to Byblos. This fact implies the presence of a regular seaborne connection between locations, and as a result, consistent trade.

This story, which takes place around 1075 B.C.E.,¹⁵ provides a vital look at seafaring during the period. It identifies the continuation of trade networks and sailing practices along the Levantine Coast. It also provides direct historical documentation of Levantine involvement in seafaring and trade at this time. These data imply that Syro-Canaanite seafaring and trade practices were handed down to the Phoenicians. The direct connection established between LBA and EIA maritime activity clarifies why the Phoenicians were able to begin building a trans-Mediterranean trade network as early as the 10th century B.C.E.¹⁶

¹² Wenamun, i. 1-5.

¹³ Pritchard 1969, 25-9.

¹⁴ Wenamun, i. 50-60, ii. 1-5.

¹⁵ Egberts 1991, 57-9.

¹⁶ Aubet 2008, 247-8.

Ultimately their direct historical descent from the Syro-Canaanites allowed for knowledge and stories from earlier generations to be passed through the experiences and lessons of individuals. Some information may have been preserved in a variety of ephemeral forms: oral histories, local traditions and rituals, legendary sailing ventures, and potentially writings. Since trade continued, however, the information critical for successful maritime trade and travel would have been preserved in the most fundamental form, actual use and experience. Fathers had the opportunity to teach their children their navigational and maritime expertise. As the Phoenicians began their rise to merchant dominance the many traditions retained from the LBA would have greatly influenced a people trying to preserve, rebuild, and expand trading connections. Coupled with the potential for new ideas brought to the region by foreign settlers the Phoenicians had a wealth of seafaring history and skills in their cultural toolset to take advantage of. The following survey of the known and potential Syro-Canaanite trade connections from the Bronze Age allows archaeologists to establish what information had the opportunity to be passed on.

The Extent of Syro-Canaanite Trade

Conclusively establishing the extent of Syro-Canaanite maritime exchange is problematic with the current body of knowledge. The ephemeral nature of mercantilism and exchange goods, the near invisibility of middlemen or merchants in the archaeological record, and the fact that there is no concrete archaeological evidence of Syro-Canaanite or Phoenician colonization prior to the ninth to eighth century B.C.E.

exemplify the difficulties.¹⁷ The extent and prominence of Levantine trade has been debated for over 30 years and the argument shows no signs of stopping.¹⁸ Nonetheless, some conclusions have been reached about pre-Phoenician trade. These deductions have gone a long way to allow scholars to better understanding the nature of Bronze Age seafaring including the identification of maritime traders and the extent of trade networks.¹⁹

The body of geographic knowledge available to the Syro-Canaanites can be established by their preserved trade materials. While it is true that Syro-Canaanite trade goods do not necessarily prove the presence of these people at a given location. They do, however, identify an ephemeral intellectual connection with the final destination. The link between the location of an artifact and its point of origin is important for understanding the knowledge of a given people. This is because stories from, or about, foreign lands can be brought with people that have traveled to those places. A Mycenaean or Egyptian merchant that has traveled to Libya is just as capable of telling Syro-Canaanites about the North Coast of Africa as is a Syro-Canaanite himself. This indirect connection allows for the possibility that the purveyors of goods knew the destination of their products even if they had never been there. Such knowledge does not have the same first-hand quality available to the actual sailor or international merchant. Awareness of land in a given area, however, can be enough to send some intrepid explorer on a hunt for an unknown or fabled country. This information may have

¹⁷ Wachsmann 1987, 109; Schubart 2002, 17-8; Mata 2002a, 159-160.

¹⁸ Bass 1967, 75-8, 165-6; 1973, 29-37; 1997b, 153-9, 168-170; Muhly 1970, 35-7, 45-50; 1991, 235-9; Wachsmann 1987, 105-115; 1998, 154-5.

¹⁹ Bass 1973, 34-37; 1997b, 168-170.

influenced later Phoenician expansion just as much as the knowledge directly passed on from ancestral navigators and merchants.

Since understanding the known trade networks and goods is crucial to discerning the extent of knowledge that could have been passed to the Phoenicians, the body of information from the Bronze Age and earlier must be established. This overview summarizes the extent of Syro-Canaanite trade and the movement of their goods. As such it provides a baseline for the maximum amount of geographical information that could have been passed on through the generations.

The Levant and Cyprus

The Karpass Peninsula in northeastern Cyprus is its closest location to the Asiatic mainland, lying only 40 miles from Ras Shamra/Ugarit in modern day Syria. On clear days it is possible to see the mainland from Cyprus.²⁰ Since the Levant Coast is so close to the island, it is not surprising that contact between Syro-Canaanites and Cyprus has a long history. Interestingly the first settlements on Cyprus are attributed to the Levant while the most important influxes of foreign cultural influence have been attributed to Anatolia.²¹ The earliest definitive Bronze Age contact between the Levant and Cyprus occurs in the Early Bronze Age as demonstrated by the presence of a Syrian white ware pot at the Cypriot site Vounous A.²² From this point on there is evidence that near constant communication between Cyprus and the Levantine mainland.

²⁰ Karageorghis 1982, 11-2.

²¹ Karageorghis 1982, 24-5, 31, 40-4.

²² Karageorghis 1982, 45.

Beginning with the Late Middle Bronze Age Cypriot pottery begins to appear en masse along the Levantine coast.²³ This is paralleled by Syrian outposts in Cyprus itself. The fort at Nitovikla and the tombs at Palaeoskoutella show potential Syrian influence and design.²⁴ While these locations do not provide evidence for actual Syrian habitation or occupation, it does reflect relatively intimate communication between the two regions. Either the Syrians were building and dying on the island themselves or the Cypriots traveled to the Levant (or visa-versa) often enough that Levantine architecture, religion, and burial practices were exchanged.

By the LBA the evidence for Syro-Canaanite contact with Cyprus is found not only in the archaeological record, but in contemporaneous texts. Rib Addi, a Syro-Canaanite Governor, asserts in the Amarna tablets that one of his officials was sent to Egypt *via* Alasia, the ancient name for Cyprus.²⁵ Other Amarna letters and LBA Syro-Canaanite texts also identify Alasia as both a source of copper and a location for trade with the Levant.²⁶ These documents show the importance of Cyprus to the Syro-Canaanites.

The archaeological record, writings, and shipwrecks provide further evidence for the importance of Cyprus to the Levant.²⁷ Communication between the two regions continued for at least 1000 to 800 years prior to the end of the Bronze Age and must

²³ Karageorghis 1982, 60.

²⁴ Karageorghis 1982, 53, 56.

²⁵ Whether or not Alasia is Cyprus has been debated and there appears to be no definitive conclusion on the question. Nonetheless a strong argument has been made for Cyprus' identity as Alasia (Bass 1967, 167; Wachsmann 1998, 61). This assertion has recently been strengthened by petrographic analysis clay from the letters written by Alasian kings. This clays came from southern Cyprus (Goren et al. 2002, 197-8). See also Wachsmann 1998, 295.

²⁶ Lipinski 1977, 213-7.

²⁷ See Cape Gelidonya and Uluburan wrecks which are discussed in chapter III.

have continued after it. This is also reflected in the archaeological record at Kition, which provides some of the earliest definitive archaeological evidence of Phoenician colonization.²⁸ Even after the decline of Bronze Age empires and trade networks the island continued to be the jump off point for westward expansion and communication for the Phoenicians.

Syro-Canaanites and Egypt

Some of the earliest evidence for regular seafaring in the Mediterranean relates to the trade between Egypt and the Syro-Canaanites. As early as the Second Dynasty, Egypt was acquiring Lebanese Cedar from Byblos to build ships.²⁹ The importance of this trade is seen in Khufu's cedar-wood ships, Egyptian records of the trade from the Fifth Dynasty, and in the fact that more than 1500 years later Wenamun tried to pressure the king of Byblos into giving him cedar as his ancestors before him had done.³⁰

Not only is the presence of Levantine cedar seen in the archaeological and written record of Egypt, the trade between the two regions is depicted in art. The painting at the tomb of Kenamun shows the presence of three Syro-Canaanite ships arriving at an Egyptian harbor and unloading their goods (Figs. 4-5). Of crucial importance is the fact that the ships depicted are of Levantine make rather than

²⁸ Aubet 1994, 52.

²⁹ Wachsmann 1998, 9.

³⁰ Steffy 1994, 23-5; Wachsmann 1998, 9; Wenamun ii.1-10.

Egyptian.³¹ The relief provides evidence that the Syro-Canaanites themselves were sailing to Egypt by the time of Amenhotep III's reign and almost certainly earlier.

Literary sources abound connecting the Levant to Egypt. Many of the el Amarna Tablets describe communication not just with Rib Addi and Pharaoh, but with other Levantine officials including the king of Aziru, Abi Milku of Tyre, Amunira of Beirut, Abdi-Tirsi of Hasiru, and others.³² The last records of Ugarit from the early 12th century B.C.E. also describe communication with Egypt.³³ As mentioned, in the early years of the Iron Age Wenamun finds himself on a Syro-Canaanite ship sailing from Egypt to Byblos along the Levantine coast to trade with the local king.

The connection between the Levant and Egypt is important for two reasons. First, there was a direct land connection between the two regions. As a result, trade and communication did not require seafaring, and yet seafaring between the Levant and Egypt occurred. This demonstrates the utility and benefit of sea travel, since it was often chosen in spite of another option. Second, this sea route was one of the oldest and most continuously used arteries of the ancient world. It was sustained for generations. While the Phoenicians would never have the strength to conquer or colonize Egypt, the wealth and regularity of their mutual trade must have allowed the Syrians not only to maintain their seafaring skills but to maintain resources that would help fund westward expansion in the early first millennium B.C.E.

³¹ Wachsmann 1998, 40-3.

³² Moran 1987, xxvi-xxxiii; *EA* 141-44, 146-55, 164-9, 156-62, 227-8.

³³ Wachsmann 1998, 334.

The Aegean and the Levant

Determining the origins of direct trade between the Syro-Canaanites and the people of the Aegean is difficult. Did a Minoan ship sail east past Cyprus, did they learn about the Syrians from their contact with the Egyptians, or did a Levantine ship follow the Anatolian coast one year to Rhodes and the Aegean? Whatever the origins of the communication, some indirect knowledge of the Aegean was available to the Syrians in the Middle Bronze age. This fact is asserted by the presence of Minoan goods both in the Levant and eastern Mesopotamia.

Minoan pottery first appears in Ugarit in the Middle Bronze Age during Egypt's 13th Dynasty (1802-1649 B.C.E.). These materials are also found in both eastern Mesopotamia and Egypt, though they had long been established in Egypt.³⁴ M. Astour and M. Heltzer have suggested that Ugarit was becoming the central trading hub in the Levant and was moving both raw and finished materials to regions where those goods were in high demand.³⁵ Documents from Mari have also shown Minoan's traveled to the region with an Ugaritic translator in tow.³⁶ This suggests that either Syro-Canaanite or Minoan ships were bringing Minoan goods directly to the Levant. It is also possible that Minoan materials came to Ugarit via Cyprus.³⁷ Either way, some knowledge must have been available about the origins of Minoan pottery, and perhaps it was the awareness of their exotic nature that promoted their trade.

³⁴ Astour 1973, 17-9.

³⁵ Astour 1973, 17-20; Heltzer 1977, 208-9.

³⁶ Weiner 1989, 328; Kantor 1949, 31-2

³⁷ Astour 1973, 19; Betancourt 1998, 6-8.

Later, after the 15th century B.C.E. when the Mycenaeans replace the Minoans in the Aegean the presence of Minoan pottery is subsumed by the presence of Mycenaean goods.³⁸ Though the debate continues as to who brought the pottery,³⁹ whether it was the Syro-Canaanites or the Mycenaeans themselves does not change the fact that there was communication between the two regions. Nonetheless, the limited shipwreck data available, the evidence for the movement of raw materials, the depictions in Egyptian art, and the presence of personal items associated with merchants, especially in the Aegean, point to a Syro-Canaanite dominated seaborne trade network.⁴⁰ This network was active between the Aegean and the rest of the Eastern Mediterranean after the 15th century B.C.E. and implies intimate Syrian knowledge of the Aegean.

By the end of the Bronze Age Levantine contact with the Aegean is undisputed. Double Pithos graves found along the coast are indicative of Mycenaean people in the region.⁴¹ There are also signs of Aegean bronze working practices found in the Levant.⁴² Perhaps most telling is the tablet from Ugarit just prior to the city's destruction detailing the estate of Sinaranu. The document describes him as a king's merchant who has been granted tax relief for his trade with Crete.⁴³

Contact, either direct or indirect, between the Aegean and the Levant began as early as the Late Middle Bronze Age. This almost certainly evolved into trade routes and

³⁸ Wachsmann 1987, 105-7.

³⁹ Bass 1967, 75-8, 165-6; 1973, 29-37; 1997b, 153-9, 168-170; Muhly 1970, 35-7, 45-50; 1991, 235-9; Wachsmann 1987, 105-115; 1998, 154-5.

⁴⁰ Bass 1967, 75-8, 165-6; 1973, 29-37; 1997b, 153-9, 168-170; Wachsmann 1987, 105-115; 1998, 154-5.

⁴¹ Dothan 1961, 173; Tubb 1995, 142-3.

⁴² Tubb 1995, 136-7.

⁴³ Heltzer 1988, 11-2.

new markets as demands and technologies changed. This contact continued at least into the 12th century B.C.E. as seen in the shipwreck and literary record. As Bell has shown, this exchange was maintained by the Phoenicians as they moved goods into and out of the Aegean, developing their less than respectable Homeric reputation.⁴⁴

Eastern North Africa

Art, texts, archaeology, shipwrecks, and technology suggest that the Syrians were in contact with the previous three regions. Bronze Age interaction between the Levant and North Africa on the other hand has little direct proof. The primary evidence comes from pottery found at Marsa Maruh. The ceramics at this site include Syrian, Cypriot, Egyptian and Mycenaean LBA types.⁴⁵ The mixture of materials suggests that the location was a trading hub on the North African Coast. In all likelihood ships sailing from the Aegean, specifically Crete, stopped at the port on their way to Egypt and then onward to the Levant and Cyprus.⁴⁶ This route across the southeastern Mediterranean is supported by summer wind directions and the fact that it is the shortest distance between Crete and Africa.⁴⁷ Since the Syro-Canaanites almost certainly traveled both to the Aegean and to Egypt it is not much of a stretch to suggest that they traveled the longer, circuitous route between the two regions (Fig. 6).⁴⁸ Most importantly, since Syrian

⁴⁴ Hom. *Od.* 14.285-300.

⁴⁵ Watrous 1992, 77-8; Warren 1995, 10-11; Davis 2001, 55.

⁴⁶ L. V. Watrous (1992, 77-8) has proposed that the route could have taken ships from Egypt to Crete in addition to Crete to Egypt. The limited sailing technologies and the difficulty of sailing against the winds along such a route stand against this hypothesis.

⁴⁷ Warren 1995, 10; Davis 2001, 15-17.

⁴⁸ Davis, 2001, 66-71; Wachsmann 1998, 295-99.

goods made it to the North African Coast it is quite likely that their traders knew of the region by legend if not through first-hand experience.

Syro-Canaanite knowledge of the coast may be reflected in the literary records concerning Utica and Carthage. In the case of Utica, classical documentation asserts that it was founded in the 12th century, after the Trojan War.⁴⁹ According to the traditions the event was part of the earliest Phoenician push westward and associated with the founding of Gadir in Iberia.⁵⁰ Unfortunately there is no evidence for Phoenician presence at the site prior to the seventh or eighth century, so these assertions are tenuous at best.⁵¹

The founding of Carthage has a more reasonable date and due to the city's importance there are many accounts of its foundation.⁵² This in turn gives archaeologists valuable insight about the way in which the city was established. In the stories, after stopping quickly on Cyprus for supplies, support, and wives for the men, the captain of Elissa's fleet sails west to the North African Coast. He stops at a harbor he knows of, with the intention of going further west. However, unforeseen events result in Elissa acquiring land here and founding Carthage.⁵³ This event includes a number of interesting details in the description. First, by the time Elissa flees Tyre (in 814 B.C.E.), Cyprus already has a close connection to the Phoenicians, which corresponds to a ninth century B.C.E. founding for Kition. Second, while no colony exists at Carthage, the captain

⁴⁹ Strabo. 1.3.2; Vell. Pat. 1.2.3.

⁵⁰ Aubet 1994, 197.

⁵¹ Mata 2002a, 157.

⁵² Aubet 1994, 215-6; see page 32 below for a discussion on these sources and the dates for the founding of Carthage.

⁵³ Just. *Epit.* 18.4-6, Verg. *Aen.* 1.440-80; Joseph. *Ap.* 1.125; Sil. *Pun.* 1.72-5.

knows of the harbor there. This indicates intimate Phoenician knowledge of the North African Coast, and thus, regular visits. Lastly, in the story Utica sends gifts to their Phoenician brethren at Carthage, keeping to the tradition that Utica was founded first.⁵⁴

The literary record reveals concepts from the ancient world about the presence of Phoenicians in North Africa during the LBA and EIA. Whether or not they are true folklore such as this consists of the type of information that would help to send sailors in a westward expanding trade empire to search for a good harbor west of Marsa Maruh.

The Western Mediterranean

The evidence for a Syro-Canaanite presence in the western Mediterranean is very similar to that for North Africa. Unfortunately, the western basin does not lie along an ideal wind route between locations the Syrians are known to have sailed to. Similar to Carthage and Utica, the area is out of the way, difficult to travel to, and shows very little evidence for a Levantine presence during the LBA.

Nonetheless some evidence for Syro-Canaanite presence in the western Mediterranean does exist. The most important pieces of archaeology come from the island of Sardinia. G.F. Bass points out in his analysis of the Cape Gelidonya wreck that there are three major types of oxhide copper ingots from the Bronze Age. The first of these date prior to the 14th century B.C.E., but the other two date from the 14th century to the end of the Bronze Age.⁵⁵ The later type two and type three ingots are found throughout the Mediterranean, but as hordes at Cyprus, the Levant, and Sardinia. Bass

⁵⁴ Just. *Epit.* 18.4-5.

⁵⁵ Bass 1967, 76-7.

interprets the later ingot styles as Syro-Canaanite due to the change in markings and the regular design. He also argues that single ingots likely indicate use, while hordes suggest metal production or trading.⁵⁶ Bass concludes that the ingot hordes on Sardinia show the presence of Levantine miners or smelters in Sardinia during the LBA.

In addition to the oxhide ingots at least one small, Syro-Canaanite deity statue was found off Sardinia dating from the LBA.⁵⁷ Other Levantine, LBA deity statues have been found elsewhere in the western Mediterranean, including: Sicily, Italy, and Spain.⁵⁸ A limited number of LBA and EIA Syrian artifacts have also been found in Iberia. These include oriental scarabs, fibula, ceramic vessels, and metallic items such as a bronze helmet.⁵⁹ The amount of artifacts found in the west are limited and as a result indicate limited Syro-Canaanite trade to the region. It is possible the materials arrived at their final location through short distance regional exchanges trending westward. Unfortunately, this means that most of the artifacts cannot definitively prove a Levantine connection or even Syro-Canaanite knowledge of the western Mediterranean. The artifacts found in Sardinia are extensive enough that a direct or indirect connection with the Levant should be asserted.

As in the case of North Africa, literary traditions also suggest an early Syro-Canaanite presence in the west. Classical authors assert that the founding of Gadir on the Atlantic coast of Iberia occurred around 1104-3 B.C.E., at the same time as Utica.⁶⁰

⁵⁶ Bass 1967, 76-7.

⁵⁷ Negbi 1976, 37-9.

⁵⁸ Negbi 1976, 37.

⁵⁹ Aubet 1994, 206-11; Dyson and Rowland 2007, 102.

⁶⁰ Strabo. 3.5.5.

According to Strabo the Syrians were attempting to find the Pillars of Hercules (Melqart) as prescribed by an Oracle. Their search eventually took them west to the Strait of Gibraltar. After a number of failed attempts at identifying the pillars they eventually passed the strait and founded Gadir where a shrine was erected to Melqart. Different details from this tradition are repeated by numerous ancient authors and have been one of the main arguments for early Phoenician expansion to the west.⁶¹ Of course the archaeology from the area, like that at Utica, shows no material before the late eighth or early seventh century B.C.E.⁶² Despite the disagreement between the literary and archaeological record the prominence of the tradition of an early Levantine presence in the western Mediterranean may reflect Syro-Canaanite knowledge of the area. The materials at Sardinia allows for such an assertion.

Historical Antecedents

The Phoenician colonies at Gadir and Carthage were both highly regarded in the ancient world due to their respective exports and power. Perhaps as a result, ancient historians have documented the historical establishment of the two colonies based on the information available to them. By analyzing and comparing the information provided by ancient authors about these cities' establishment, historians and archaeologists are able to more fully understand the pre-colonial and early-colonial conditions, obtain a glimpse

⁶¹ Aubet 1994, 259-62.

⁶² Mata 2002a, 156-60.

into the strategies that lead to colonization and, of course, better determine which accounts strike closest to the truth.

Carthage

The historical evidence for the colonization of Carthage is accepted by M. Aubet and others,⁶³ though she also indicates that the city was not an ‘urban’ entity until well into the eighth century B.C.E.⁶⁴ The historical evidence is given significant credence due to the writings of Flavius Josephus. In his work *Against Apion* he states that the building of Solomon’s Temple occurred 143 years before the founding of Carthage. He determines this time distribution by listing Tyrian kings from that city’s annals.⁶⁵ While his focus is to prove the date for the construction of the temple, for the purpose of this research it provides a detailed examination into the genealogy of Tyre’s kings leading to Carthage’s establishment. His chronology is supported by the Tyrian annals, so his information contains a high level of accuracy; yet E. Lipinski has called some of it into error and made corrections.⁶⁶ Dionysus of Halicarnassus also gives a date for the founding of Carthage.⁶⁷ He provides various dates for the founding of Rome. One of these, he indicates, is the same as the founding of Carthage, 38 years before the first Olympiad in 776 B.C.E. The dates fall roughly in the same period during the last years of the ninth century B.C.E. and agree with Timeus’ dating of 814/813 B.C.E.⁶⁸

⁶³ Fantar 1988, 168; Aubet 1994, 217.

⁶⁴ Aubet 1994, 226.

⁶⁵ Joseph. *Ap.* 1:106-27.

⁶⁶ Lipinski (2006, 166-74) discusses and criticizes Josephus’ timeline in his book *On the Skirts of Canaan in the Iron Age: Historical and Topographical Researches*. He then provides a revised list and chronology.

⁶⁷ Dion. Hal. *Ant. Rom.* 1.74.1.

⁶⁸ Aubet 1994, 217.

The archaeological evidence for the founding of Carthage has recently been pushed back to the late ninth and early eighth centuries B.C.E. This evidence has resulted in the general consensus that historical dates for Carthage's founding are accurate.⁶⁹ There does remain some discussion about the new carbon-14 dates for Carthage's founding. A question exists concerning the pottery found in conjunction with the early dates. This pottery dates well into the eighth century B.C.E. and so leaves some doubt as to the carbon-14 data accurate reflects Carthage's founding.⁷⁰

With the increased acceptance historical dates for the cities founding the information found in accounts of the event can be used with more confidence. At least two ancient authors provide details about Carthage's founding and more mention the legends.⁷¹ These accounts detail the escape of the Tyrian princess Elissa/Dido from the hand of her brother, the king of Tyre. They culminate in her founding the city of Carthage. The particulars from the more extensive accounts clarify what the Phoenicians were doing in the Mediterranean during and just prior to the city's foundation. Of these, first is the assertion that Elissa initially stops at Cyprus after leaving Tyre. Here the priest of "Jupiter" offers to go with her and aid her venture. She also takes on eighty women who are to become wives for her men.⁷² This series of events, recorded by Justinus, implies certain aspects about Elissa's situation and that of Phoenicia. Fleeing Tyre in the night she is ill prepared to survive her exile and would have known as much. She heads to Cyprus on the assumption that the locals would either harbor her or provide

⁶⁹ Aubet 2008, 247; Docter et al. 2008, 390.

⁷⁰ Kourou 2008, 307; Docter et al. 2008, 384.

⁷¹ Just. *Epit.* 18.4-6, Verg. *Aen.* 1.440-80; Joseph. *Ap.* 1.125; Sil. *Pun.* 1.72-5.

⁷² Just. *Epit.* 18.5.

aid. It follows that some form of relationship existed between Cyprus and Tyre, either the Phoenicians had established a colony there or this is a reflection of their close trading partnership. The fact that the account mentions the traditions of the locals intimates that Elissa was dealing with Cypriots rather than Phoenician colonists. How the locals felt about the Phoenicians is ambiguous. The priest is more than willing to help Elissa, a Phoenician, but she comes to him in self-imposed exile and a rebel against the king of Tyre. She also appears to kidnap the eighty women for her men, so the Cypriot population may be less than willing to help her than is the priest. There is evidence for dissatisfaction on Cyprus with the Phoenicians, but it seems most locals would rather remain in their current situation than voyage to lands unknown. It is clear that Elissa's actions indicate ongoing and potentially tenuous relations between the Cypriots and the Phoenicians and the story provides historical evidence for the Phoenicians expansion during the ninth century B.C.E.

After leaving Cyprus, Elissa sails straight to Africa.⁷³ She is set on fleeing Tyre and since she has collected a priest and women for her men, she is apparently intent on founding a new Phoenician city rather than emigrating to an existing one.⁷⁴ Yet her journey is not in the vein of Odysseus or Aeneas. There is no wandering, visiting distant lands and unseen places. She travels directly to her destination and “arriving in a Gulf of Africa” disembarks, intending to move on.⁷⁵ The direct and short journey suggests that Elissa, or at least the seamen with whom she sailed had knowledge of anchorages along

⁷³ Just. *Epit.* 18.5; Verg. *Aen.* 1.475-8.

⁷⁴ Just. *Epit.* 18.4; Verg. *Aen.* 1.468-71.

⁷⁵ Just. *Epit.* 18.5.

the southern Mediterranean coast. Justinus states that Elissa planned to continue on after she finished ‘refreshing’ her men.⁷⁶ For a seafaring people founding maritime colonies, bays and protected outlets would be natural geographic requirements to provide anchorage and protection. Elissa’s stop in a good natural harbor would have been prudent thinking by the captain. It was Elissa’s good fortune that she was able to take advantage of the first ideal stop to set up her new home. The voyage reinforces the idea that by the time Carthage was founded the Phoenicians already had a thorough knowledge of the Mediterranean. This knowledge would help them to take advantage of ideal locations to set up colonies along the coasts (Fig. 7).

Elissa’s story also provides crucial information on how indigenous peoples saw the Phoenicians. In the story Elissa bargains with the locals for land and they willingly accept, provided it can fit under an ox hide. Ever the heroine, she cuts a hide into thin strips and manages to acquire the entirety of the hill subsequently known as Byrsa.⁷⁷ Justinus also relays that the natives rejoiced when the Phoenicians came to live among them since this allowed them to acquire goods through trade. He also states that after Elissa purchased Byrsa, the locals flocked to the area with grain and other goods, building homes and a city, taking Elissa as their queen.⁷⁸ These details provide an interesting picture about the nature of Phoenician trade with indigenous peoples. The locals were already aware that they could trade with Elissa’s party and appear happy to have such an opportunity. While they may have been tricked into giving more land away

⁷⁶ Just. *Epit.* 18.5.

⁷⁷ Just. *Epit.* 18.5; Verg. *Aen.* 1.480.

⁷⁸ Just. *Epit.* 18.5.

than intended, they were willing to let the Phoenicians purchase land for permanent use. They joined the new colony and as a result partook in Phoenician society. Additionally, the story suggests that the Phoenicians had already established a reputation as merchants as far away as Carthage. In order for this reputation to exist either the Phoenicians had been trading long enough for word to get around or had visited the area before. This too implies a rather extensive or long-term trade network already in existence.

Lastly, Justinus asserts that the colony of Utica had been established in central North Africa prior to the founding of Carthage. He states that Utica sent the new colony gifts to celebrate their friendship and mutual Phoenician origin.⁷⁹ Hence, according to the historical documents, colonization of central Mediterranean had begun by the time Carthage was founded. This reflects the trading practices of Tyre in the 10th century under Hiram I. His ships, in a joint venture with King Solomon, are reported to have engaged in regular voyages down the Red Sea and to the land of Tarshish for wealth and exotic goods. These voyages were regularly undertaken; bringing trade items every three years.⁸⁰ Such a venture implies the establishment of trade colonies or outposts that would have helped to expedite and assure the acquisition of goods. While the colonization of Utica, reported to have occurred during the 12th century B.C.E., may seem unrelated to voyages two centuries later, it is important to consider engaging in such an operation would be a risky proposition.⁸¹ Establishing colonies along the trade route would have increased the likelihood of their success. Thus, it is likely that by the

⁷⁹ Just. *Epit.* 18.4-5.

⁸⁰ I Kings 10.22.

⁸¹ In fact the bible records King Jehoshaphat's attempt to revive the Tarshish voyages only to meet with disaster (I Kings 22.48; 2 Chronicles 20.35-7).

10th century the Phoenicians had already begun building their network, establishing a rapport with indigenous peoples, and finding safe sailing routes throughout the Mediterranean. This would culminate with the founding of colonies.

While the ninth century colonization of Carthage is a reasonable, ancient historians provide a much earlier account for the establishment of the other major Phoenician trade hub, Gadir. The city is located on the Atlantic coast of the Iberian Peninsula and had been abandoned by the indigenous people long before it was established as a Phoenician colony.⁸² Its importance as an exporter of silver and the fame of its temple has likely contributed to its regular appearance in ancient sources. Unfortunately, the city had acquired an almost mythical history for both its discovery and its founding.⁸³ As a result few ancient authors provide a solid date for its colonization and the dates given (the early 12th century B.C.E.; see discussion below) are not generally accepted by historians and archaeologists.⁸⁴ This dissatisfaction with the historical accounts is compounded by the fact that until recently there was no in situ archaeological evidence for Phoenician colonization anywhere in Iberia prior to the eighth century B.C.E.⁸⁵ New evidence from the indigenous city and Phoenician colony of Huelva in Iberia indicates that the Phoenicians may have arrived as early as the tenth century B.C.E.⁸⁶ In the last decade the accepted dates for the earliest Phoenician presence in the west have been pushed back by two centuries. The assertions that no

⁸² Strabo. 3.2.11, 3.1.6; Plin. *HN* 434; Aubet 1994, 261.

⁸³ Strabo. *1.1.4*, *3.2.13*; Sall. *Iug.* 18.3.

⁸⁴ Aubet 1994, 197-201.

⁸⁵ Schubart 2002, 17-8; Mata 2002a, 159-160.

⁸⁶ Gonzalez de Canales et al. 2008, 637-42; Sagona 2008, 2; Aubet 2008, 247; Nijboer 2008, 374.

Phoenicians were in the west before the eighth century, built on the fact that no earlier evidence had been found, has proven to be false. A brief analysis of the sources and their comparison to known facts about Phoenician colonization will be undertaken below.

There are few details to establish the historical date for Gadir's founding. According to Strabo the Phoenicians first crossed the Pillars of Hercules and settled Gadir "shortly after the end of the Trojan War."⁸⁷ Velleius Paterculus provides a more specific date, stating that about 80 years after the fall of Troy the "fleet of Tyre" founded Gadir, and that shortly thereafter, they founded Utica.⁸⁸ The actual date of the fall of Troy is questionable, for Paterculus the date was likely that most accepted in the ancient world, about 1184 B.C.E.⁸⁹ This puts the founding of Gadir at 1104 B.C.E.; the very end of the 12th century. While Strabo is less specific than Paterculus, the impression is that of a very early founding, earlier than Utica and, therefore, before the founding of Carthage.

Looking at the archaeological record from Phoenician cities in the eastern Mediterranean, there seems to be little to no supporting evidence for these dates. Many of the Phoenician citadels were destroyed and abandoned in the 12th and 11th centuries B.C.E. and Tyre itself appears to have suffered a major decline in prosperity at the same time.⁹⁰ Though the data do indicate that Tyre could have founded Gadir around the end of the 12th century B.C.E., the situation in Phoenicia during the 12th and 11th centuries was extremely volatile. The Israelites had begun to come in from the south, refugees

⁸⁷ Strabo. 1.3.2.

⁸⁸ Vell. Pat. 1.2.3.

⁸⁹ Korfman 2004.

⁹⁰ Aubet 1994, 24-5, 40-1.

from the collapsed Hittite empire were arriving from the north, and the Sea Peoples burned and pillaged along the Mediterranean coast.⁹¹ It was a time of great calamity and would not have been ideal for establishing new colonies. A hypothesis could be proposed that the founding of Gadir was one of necessity that resulted from people looking to flee the destruction raging along the Levant during the 12th century B.C.E. Unfortunately the idea goes against all the historical information concerning both the city's founding and the nature of Phoenician colonization.⁹² Further the archaeological evidence for Phoenicians in Iberia is no earlier than the tenth century as stated above, and the earliest dates for a Phoenician presence at Gadir are from the eighth century B.C.E.⁹³ Accordingly, the early date for the city's establishment must be tabled until evidence is brought forth to support it.

Nonetheless legends of Gadir and its founding may shed light on western colonization and the voyages of the Phoenicians. Strabo provides an excellent summation of Gadirian myth about the city's founding in his *Geographia*. In it the Phoenicians are instructed by an oracle to travel west and found a settlement at the columns of Hercules. They make three journeys. The first ends at the Strait of Gibraltar, the second passes this point and they land at Onuba, and the last finds them laying anchor at Gadir. Each time they stop, they prepare a sacrifice. The first two sacrifices are

⁹¹ Aubet 1994, 24-5.

⁹² An explanation of the patterns of Phoenician colonization and the historical explanation for Gadir's foundation is found in this chapter, below.

⁹³ Aubet 1995, 49; Aubet 1988, 228; Mata 2002a, 174-5.

“unfavorable” so they return east before making another attempt. On the last journey the sacrifice is found favorable and they set up a colony.⁹⁴

One vital fact from the account is that the Phoenicians stop at cities in Iberia that are already inhabited, presumably meet the natives, and likely engage in some sort of trade or discourse before returning home. Each subsequent journey finds them further west. The legend suggests that the Phoenicians were learning about the area and determining its value to them for trade. The ever treacherous Strait of Gibraltar⁹⁵ gives justification to the multiple attempts they make and their apparent caution. They did not simply decide to found a colony in the far west. First, they determined the worth of such a colony and at the same time tested the sailing conditions before attempting to voyage beyond the Strait of Gibraltar. The implication of their interaction with the locals is supported by information taken from the story of Carthage, described above, their reputation in the ancient world, and the archaeological record.⁹⁶ It is particularly interesting that such interaction appears to be reflected in the earliest Phoenician levels found at Huelva.⁹⁷ At this site, west of Gibraltar, there is evidence for indigenous craftsmen using Phoenician techniques and cultural forms. This historical account portrays a people adventuring to beyond the limits of their knowledge and learning if, and how, they can take advantage of what lay beyond. It may even imply that the

⁹⁴ Strabo. 3.5.5.

⁹⁵ Aubet 1994, 187-90.

⁹⁶ Namely that they set up colonies near local populations. See Schubart 2002, 4; Aubet 1994, 270-272; Hom. *Od.* 15.415-480.

⁹⁷ Gonzalez de Canales et al. 2008, 637-42; Deamos 2009, 194-99.

Phoenicians were just beginning to establish the practice of colonization, making sure to pick the perfect place to set up a city so far from their home.

Diodorus Siculus suggests a different explanation for the founding of Gadir. In his history he states that the Phoenicians, voyaging for trade, sailed all around the Mediterranean. They journeyed west for this purpose and founded Gadir where they built a famous temple to Hercules. They then continued their journeys in the Atlantic at one point being thrown out into the ocean where they found distant isles.⁹⁸ His description of the Phoenician's trading ventures reflects their historical reputation for exchange rather than using divine intervention as a motive. He also points out that the Phoenicians were the first to sail so far west. This view is also held by Strabo and Herodotus adds to these accounts when he states that the Phoenicians sailed west to meet the Tartessians.⁹⁹ It appears that in the ancient world it was generally accepted that the Phoenicians were the first seafarers to reach the western edge of the Mediterranean and sail beyond it, be it for trade or for divine glory.

The interaction with indigenous people continues to be a consistent theme for the ancient histories of Phoenician seafaring. Herodotus states as much and Diodorus mentions their interaction with people at Melite (Malta) and other locations. He specifically mentions how Phoenician influence caused the Maltans to quickly rise in skill and wealth.¹⁰⁰ Perhaps the clearest example of this trend lies in the most famous export from Iberia and Gadir, silver. Diodorus and Strabo state that the river flowing into

⁹⁸ Diod. Sic. 5.20.1-4.

⁹⁹ Strabo. 3.13-14; Hdt. *Histories* 1.163.

¹⁰⁰ Hdt. *Histories* 1.163; Diod. Sic. 5.12.2-4.

the bay at Gadir was famous for its silver deposits.¹⁰¹ This and other raw metals were the main Phoenician imports to the Levant and the Assyrian Empire.¹⁰² In order to obtain silver from the interior of the peninsula they must have acquired it from the people living there. Thus, both historical accounts and archaeological evidence support the idea that Phoenicians established trade relationships with aboriginal people in order to acquire valuable commodities.

What does the historical account of Gadir's establishment indicate about the city, western colonization, and Phoenician trade? Certainly this colony and others were founded for the purpose of trade as most of the histories indicate. The story of the oracle shows that there may have been some cultic justification for expansion. Whatever oracle was consulted the oracle of trade was likely the force that sent them west.¹⁰³ The Phoenicians required time to establish trust and a trading relationship with the people of Iberia before their massive colonization movement and silver exportation operation began. This is reflected in the earliest archaeological evidence from Huelva, which now dates to the tenth century B.C.E. In all likelihood the push west began as soon as Tyre and the Phoenicians were stable enough to resume the trade begun during the Bronze Age.

If half the stories about the abundance of silver in Iberia, especially concerning the "Guadalquivir" flowing from "Silver Mountain," were true, as soon as the

¹⁰¹ Diod. Sic. 5.35.4-5, Strabo. 3.2.11.

¹⁰² Aubet 1994, 80.

¹⁰³ Mata 2002a, 156.

Phoenicians found Gadir they must have seen it as a veritable Comstock.¹⁰⁴ Presuming these Phoenicians were from Tyre, the island on which Gadire was founded must have reminded them of home, and perhaps helped to establish an early bond. They may have seen this as a ‘sign’ from Melqart that they were to build a new city here.

The analysis of the historical accounts for the foundation of Gadir and Carthage provide unique insights into the methods and nature of Phoenician colonization. The reports provide evidence for indigenous interactions, communication between colonies, skillful seafaring, and early ventures into the far west. They also provide a glimpse of the importance that ancient historians gave the Phoenicians in terms of discovery and trade.

When the information from the LBA/EIA transition is combined with the histories of Phoenician colonization, it provides a glimpse of the people that would develop the PTN. They were seafarers, traders, and discoverers. They sailed beyond the end of the world at the Pillars of Hercules, they rounded Africa, they brought trade goods to and from the four corners of the known world, and they turned a profit in the process. Whatever the justification for outdoing the deeds of their ancestors, the Phoenicians began to travel beyond the horizon at least a century before any conquering empire demanded tribute, and at least two centuries before other seafarers were able reach their limits. Ultimately they traveled for their own gods and their own riches.

¹⁰⁴ Strabo. 3.2.11; Diod. Sic. 5.35.4-5.

CHAPTER III

WINDS, SHIPS, AND SEAFARING

In order to model the PTN we must understand the environmental conditions, technological capabilities, and navigational practices that surrounded Phoenician maritime expansion. This will allow the fundamental nature of Phoenician seaborne movement and exchange to be identified by establishing the conditions expanded around. The fundamental conditions are those of environment, since winds or currents could make certain routes or connections unreasonable, if not altogether impossible. Establishing the ship and shipbuilding technologies available to the Phoenicians is more difficult as the extant knowledge regarding their ships from the ninth to sixth centuries B.C.E. is extremely limited. The evidence that does exist can be used to identify the most basic designs that Phoenician ships could have taken advantage of. Closely related to ship building is the technology used to navigate and make use of these vessels. Evidence is again limited, but some technologies and tools are evident in the archaeological, historical, and iconographic record. The skills associated with navigation especially difficult to determine since only stellar navigation was documented. Nonetheless, these skills were of the utmost importance to seafaring in the ancient world. A comparable contemporary skillset used by Polynesian seafarers helps to identify techniques that may have been useful for the Phoenicians.

Winds and Currents

Successful Phoenician sea ventures were almost entirely dependent upon environmental conditions. The weather could speed or perpetually hinder a voyage across the Mediterranean. It could take a damaging toll upon any ship if it unexpectedly changed for the worse. Successful Phoenician sailors must have been some of the most capable predictors of weather in the ancient world. They needed a vast body of knowledge concerning wind, weather, and current patterns around the Mediterranean to succeed. Those without it would not have survived long on the unforgiving sea.

Establishing the wind and current patterns of the sea greatly aids in the understanding of Phoenician trade, because wind and currents were such an integral factor for creating a successful trans-Mediterranean trade network. Modern studies performed by the United States National Geospatial-Intelligence Agency have identified dominant seasonal wind patterns around the Mediterranean Sea.¹ In addition D. Davis's 2001 master's thesis has identified the dominant surface currents around that same body of water (Fig. 8).² This information is useful for developing the most likely routes the Phoenicians would have taken during voyages across their trade network.

An important initial question is whether or not modern weather patterns can effectively provide an understanding of ancient systems. W. Murray analyzed the wind related writings of Aristotle and Theophrastos from the fourth century B.C.E. and

¹ All of the wind data for the eastern, central, and western Mediterranean were found in the National Geospatial-Intelligence Agency's *Sailing Directions (Enroute): The Eastern Mediterranean* (2011) and *Sailing Directions (Enroute): The Western Mediterranean* (2011).

² Davis 2001, 9-14.

compared them with modern wind conditions. His findings suggest that modern wind patterns *do* in fact mirror those of the ancient world and as a result these observations can be used to understand the conditions ancient mariners would have faced.³

Unlike the ancient Greek records, the extant Phoenician literary record is scarce at best and there is no documentation for the different winds that the Phoenicians may have valued or avoided.⁴ This does not reflect the significance of wind knowledge to Phoenician culture, but merely the dearth of written information. Despite the fact that Phoenician literature is absent, there are a number of Phoenician texts from the early first millennium B.C.E.⁵ These make no mention of winds, which may indicate that Phoenician knowledge of wind patterns was stored in collective memory as specialized knowledge similar to Polynesian navigational techniques.⁶ Its absence may also indicate that sailing and Phoenician seafaring traditions perhaps held a less romantic and heroic place in Phoenician culture than it did for the ancient Greeks. Winds in the following section will be identified by their direction, season, and geographic location because there are no records for their Phoenician names.⁷

³ Murray 1987, 1995.

⁴ Regarding the greed use of winds see Davis 2001, 15-22.

⁵ Lipinski, 2004.

⁶ Lewis 1994 117-20.

⁷ Concerning terminology, a northerly wind blows from the north to the south and a southerly wind blows from the south to the north. For this thesis a wind trending north is the same as a southerly, just as a south blowing wind is identical to a northerly.

Eastern Mediterranean Winds

The first winds that Phoenician ships utilized were those off the Levantine coast. Near Tyre and around the central Levant, winds trend toward the northwest all year (Figs. 9-10). Further north near Byblos and Arvad winds blow toward the east all year. Between these areas, near modern Tipoli, southeasterly winds dominate during the summer while southerlies dominate during the winter. These winds must have helped to develop the strong connections between the Levant and Cyprus that began as early as the Bronze Age and continued through the period of Phoenician trans-Mediterranean trade.⁸ The conditions in southern Cyprus also aided in this trade as winds blow to the east year round, speeding trips to the Levantine coast. A direct voyage from southeastern Cyprus to Tyre would have been difficult, as summer winds along the southeastern coast of Cyprus trend north. Winter voyages were probably avoided as easterlies often blow along the southern coast during these months, potentially sending ships off into the Mediterranean west of the island.

North of the Phoenician homeland winds are less predictable. At the turn from the Levant to Anatolia winds blow north and west during the summer. These conditions would have aided navigation to northern Cyprus and the Aegean. During the winter however, winds blow towards the south, which could have made voyages westward late in the season difficult. Once vessels had rounded the Karpass Peninsula both summer and winter winds would have blown them straight towards the Aegean, as easterlies dominate the northern gap between Anatolia and Cyprus. The northwestern corner of

⁸ Karageorghis 1982, 24-5, 31, 40-5, 123-8.

Cyprus must have also been difficult area to navigate. Year-round winds blow towards the east in this area, however westerly winds can also spring up at any time during the year. Such conditions required sailor to use caution and all their skill to predict the winds.

Between Cyprus and the Aegean, the Phoenicians had to make skilled use of their brailed sails, discussed below, due to the southerly summer wind.⁹ During winter months northerly winds blow south of Kumluca, Turkey, while southerly and southeasterly winds blow in the gap between Rhodes and Anatolia. Sailors must have changed their tack on the western side of Rhodes where the winds blow towards the southeast. Once sailors reached Crete they could have stayed north or south of the island. Summer winds trend towards the southeast along the northern coast, while they blow south along the southern coast during the summer and equinox seasons. Winter is more variable along the north, where winds blow south, southeast, and northeast. Winter winds usually only blow south along the southern coast. Summer voyages between Crete and mainland Greece were more difficult since the winds blow southeast. Spring and fall trips, when winds tend to blow towards the northwest, would have been ideal. Sailors could have used winter winds since they blow north, but they carry the risk of both rough weather and turning into an unexpected northeasterly.

Returning from Crete or Greece during the summer would have been relatively straight forward since winds blow to the south and southeast across the Mediterranean during this season. Spring, fall, and winter trips would have been far more difficult from

⁹ See p. 73 below for a discussion on the brailed sail.

Greece, though early and late trips from Crete could take advantage of northerly equinox winds. Upon reaching North Africa, the voyage back to the Levant would have had its own difficulties. Winter winds here trend to the east; however, winds during the spring and fall trend both to the north and to the west. Additionally, summer winds are variable, meaning that wind prediction skills were tested; sailors probably regularly took advantage of diurnal winds.¹⁰

Winds in the area of the Nile Delta were variable year round. They trended between northerly and westerly, often coming from the northwest. As a result, returning to the central Levant from Egypt would have necessitated either tacking or capturing the westerly wind to travel north. Diurnal winds must have been invaluable for this voyage. Travel from the Levant to Egypt must have been much easier the closer ships were to the Nile.

Eastern Mediterranean winds were easily adopted for counter-clockwise travel around the basin. Traveling either from the Levant, to Cyprus, to Egypt and back, or voyaging from the Levant, to the Aegean, back to North Africa, Egypt, and home, this direction of travel must have prevailed for all seafaring cultures. The one contradiction to this was probably the voyage from the central Levant, to Cyprus, and then back to the Levantine coast. This trip may have occurred both in a clockwise direction, if from Tyre, or a counter clockwise direction, as intimated in the tale of Wenamun.¹¹

¹⁰ See below, p. 67-8 for an explanation of diurnal winds.

¹¹ Wenamun ii.70-83.

Eastern Mediterranean Currents

The currents in the eastern Mediterranean are relatively slow and follow a counter-clockwise direction (see Fig. 8 for current data). Heading north along the coast of the Levant at 0.4 knots the current turns west where it reaches Anatolia and bends around Northern Cyprus. After passing Cyprus, it continues west at about 0.5 knots until it splits around the island of Rhodes. Here part of the current continues west to Crete while the southern branch joins the movement south to Egypt. The westward current continues along southern Crete, but has a south or southwestern direction along the northern coast. This current continues west along southern Greece, however, southeast of Crete in the middle of the eastern Mediterranean basin, it turns south until it reaches North Africa. It turns back east at this point traveling again at 0.4 knots, back to Egypt where it turns north at a speed of 0.7 knots with the flow of Nile waters. From here it returns north along the Levantine coast.

This path further lends itself to a counter clockwise direction of travel. While the strength of the Mediterranean current is extremely limited, its direction could still have aided ancient sea voyages. Of particular interest for the Phoenicians is the fact that the current directly aids in their travel past Greece and towards Italy and the Central Mediterranean. An interesting factor is that the current goes against the most common destinations from the Levant, Cyprus and Egypt. Clearly wind was a much more important stimulus for vessels sailing to these locations, and the Phoenicians and their predecessors had more than enough skill to capture winds that would overcome the current working against them

Central Mediterranean Winds

To reach the western Mediterranean basin, as well as engage in trade with and reach locations such as Sardinia, Sicily, Italy, and most importantly, Carthage, the Phoenicians must have plied the central Mediterranean regularly. Carthage was likely the main port for the region due to its size, the abundance of regional material found there, and its central location.¹² The area could have been reached either by traveling west along the northern coast of Africa or by traveling west from Crete and Greece.

Winds during the spring and fall west of Greece were dominated by southeasterlies, making this the ideal time to travel west (Figs. 11-12). During the late summer winds blow from the north or northwest which would have made the crossing more difficult. Winter winds along this route can vary considerably from southerlies to northeasterlies, resulting in difficult navigable conditions in addition to unpredictable winter weather systems. Along North Africa, between Benghazi and Tripoli, the winds vary between northeasterlies and northwesterlies year round. During the spring and fall however, winds from the south often rise up. With the advent of the brailed sail, sailing east or west along North Africa may have been the safest route since winds were relatively stable. Skilled sailors, however, would have easily found their way to southern Italy or Carthage from Crete or Southern Greece.

Upon reaching southern Italy the Phoenicians would have found themselves managing winds from the northeast or northwest during spring and summer. These winds would have been ideal to sail along southern Sicily and on to western North

¹² Docter et al. 2008.

Africa, Carthage, and Utica. Winter winds trend from the southeast and southwest, perfect for traveling north and through the Strait of Messina. Winter winds north of Sicily, however blow to the southeast making further navigation difficult. During the summer and equinox months the northern coast enjoys winds from the northeast. Along the southern coast of Sicily winds generally blow from the west to the northwest year round. Winter winds can also blow from the southwest. The winds around Sicily made for difficult sailing to North Africa from the south, but easier from the northern coast.

Winds in the vicinity of Carthage lend themselves to sailing east towards Egypt and the Levant. Summer winds tend to blow from the north near Utica and Carthage and from the northeast north of the Gulf of Gabes. Winter winds blow from the northwest near Carthage and directly from the north by the gulf. North of Tripoli the summer winds blow from the northeast and from the northwest in the winter. Winds in the spring and fall, however often blow from the south. The North African winds east of Carthage made a direct approach during the summer or winter very difficult. Sailors could have traveled north to the western tip of Sicily, especially during the spring and fall, and then caught the northeasterly to Carthage from there. On the other hand, travel back to the Levant from Carthage was relatively simple as the winds would have cooperated for most of the year.

There is no evidence for Phoenician colonization on the Italian peninsula, but indigenous sites in central Italy have provided a number of Phoenician artifacts and Phoenician replicas.¹³ Further there are numerous colonies on Sardinia and the

¹³ Nijboer 2008b.

Phoenician presence dates as early as the ninth century B.C.E.¹⁴ This evidence suggests that the Phoenicians must have traveled along the western coast of Italy. The winds along this coast would have made the voyage a relatively simple one. Spring and fall winds off Calabria and Campania are dominated by southeasterlies. These winds are also most common in the waters along the northern coast all year. The simplest summer trip would have taken the Phoenicians north of Corsica and then south to Sardinia along the island's western coast. The Strait of Bonifacio is dominated by east blowing winds during the summer months. West blowing winds prevail during the winter. Whatever the wind, navigating the strait and its unpredictable weather may have not been common. The west coast of Corsica is usually dominated by northeasterly winds all year making the weather here much more consistent. Winter sometimes brings winds from the southwest which would have increased a southward voyage's difficulty.

The winds along the western coast of Sardinia are from the west year round. This allows travel up and down this coast with relative ease. The southwestern corner of the island is dominated by winds from the northwest providing a straight line of travel from Sardinia to Sicily or Carthage.

Wind patterns in the Central Mediterranean, much like those in the eastern basin, allow for a relatively discrete mode of circular travel. This route likely went from Carthage to Sicily, north along the west coast of Italy, and then south along the western coast of Corsica and Sardinia, finally ending back at Carthage. The winds at Carthage also provided the ideal location to begin voyages back to the Levant.

¹⁴ Gilboa et al. 2008, 117, 127; Bernardini 2008, 539.

Central Mediterranean Currents

In the Central Mediterranean current systems are more complex than in the eastern and western basins. This may have created a more difficult sailing environment. The complexity, however, often follows the prevailing winds in the region thus aiding any sailing that followed them. Where the current contradicted the winds, it was weak enough, peaking at 0.5 knots, to be overcome by the wind power and skilled navigation.

Beginning with the southern Ionian sea, 0.4 knot currents travel west from Greece to Italy where they turn back toward the east once south of the Italian Peninsula. At southern Italy, before reaching Sicily, 0.5 knot currents flow south to southeast. Once sailors pushed past these currents that hampered westward travel they would have been buffeted by additional 0.5 knot currents flowing southeast through the strait of Sicily and into the eastern basin. The route along North Africa to Carthage is slightly less difficult. Once ships passed the eastern currents by rounding the Libyan coast at Benghazi, they would have reached the circular current between here and the eastern facing coast at Mahdia. By staying close to the coast vessels took advantage of the western 0.4-0.5 knot current, but they then ran the risk of shallow waters. At Mahdia the current turns back toward the east, pulled by the southeastern currents through the Strait of Sicily. Ships traveling east could stay far north of the coast and enjoy wind and currents that would speed them on their way.

North of Carthage, in the Tyrrhenian Sea, the currents form another circular loop. This loop generally matches the trending winds. These waters travel east along the north coast of Sicily where they turn northwest along the Italian coast. Maintaining a speed of

0.5 knots the currents turn upon reaching the continental coast north of Corsica. Here they split, traveling west along the continental coast towards Iberia and south along the eastern shores of Corsica and Sardinia. Along the western coast of Corsica currents travel north turning back west at the continental coast. Along the southwestern coast of Corsica they travel south until they pass Sardinia. Here they are caught up in the eastern currents along North Africa and veer towards Sicily and Carthage.

Since central Mediterranean currents often correspond to prevailing wind directions, they would have greatly aided the speed and consistency of sailing in the area. Currents are generally wind driven because the area is dominated by large islands, the Italian Peninsula, and Northern Pronouncement of Africa. The Strait of Sicily would have likely been the most difficult region to navigate with respect to currents, but only for vessels sailing west. Such conditions may have been cause for the loss of the Skerki Bank wrecks, lost while traveling across the Straight between North Africa and Sicily.¹⁵

Western Mediterranean Winds

Winds in the western Mediterranean basin are often unpredictable at any time of year (Figs. 13-14). This may have helped to contribute to the strong local trade and interaction between regional colonies since variable winds would have made long distance voyages more difficult.¹⁶ Travel to the east would have been restricted to the most important voyages and planned to coincide with the most agreeable weather and seasons.

¹⁵ McCaan and Oleson 2004.

¹⁶ Aubet 2002a, 84-95; 2006, 103; Negueruela et al. 1995, 193.

Direct travel between Carthage and Iberia was greatly aided by the presence of an easily identifiable shore that can be followed directly to the destination in either direction. Unfortunately, winds along this section of the coast of North Africa are a perfect example of the regional variability. Winds most often come from the east during the summer months and from the west during the winter. These winds would have made for fast winter travel back to Carthage if sailors were willing to travel during that time. At the Strait of Gibraltar the summer winds are again dominated by easterlies with northeasterlies coming off the Iberian coast. Winter months are dominated by westerlies with southeasterlies coming off the coast of Africa. The Strait of Gibraltar is notoriously difficult to navigate and summer must have been the best time to reach the Atlantic.¹⁷ Whether ships would have tried to take advantage of the risky winter winds to sail east in the Mediterranean is debatable.

Reaching the Mediterranean coast of Iberia was facilitated by veering northward from the North African coast with the easterly summer wind. Reaching Iberia from the north via Corsica or Sardinia would have been more difficult. The northeasterly wind off of Corsica would have aided vessels but they would have faced the yearly northwesterly off the coast near Marseille and thus had to tack the rest of the way. Winter southwesterly winds off Corsica or the year-round westerlies off of western Sardinia would have been far more difficult to navigate. A winter wind from the north, south of Hyeres, may have been used but such voyages risked the more violent season.

¹⁷ National Geospatial-Intelligence Agency's *Sailing Directions (Planner): The North Atlantic Ocean and Adjacent Seas* 2012, 378.

South of Marseilles spring and fall winds generally come out of the east aiding navigation to the south. Summer winds off the Iberian coast near Barcelona usually blow north, making southern travel difficult. Winter winds were far worse and consistently variable, blowing northwest, southwest, and near Ibiza, north, south, northwest, or southeast. These conditions made winter sailing off of eastern Iberia particularly dangerous and unpredictable. Along the southeastern corner of the peninsula summer winds tend to blow north or south with some regularity whereas during the winter the northwesterly dominates. Along the southern coast of Iberia the summer easterly is most common whereas the westerly usually blows during the winter.

In general, the western basin winds must have been more difficult to navigate than those to the east. Surprisingly the most direct route to Sardinia includes Ibiza, which was not colonized until the seventh century B.C.E. and there were no important Phoenician colonies along the easy North African route between Carthage and Iberia.¹⁸ Navigation around Iberia could have made ideal use of diurnal and seasonal winds for short jumps between relatively closely-spaced colonies. In this manner ships avoided the changeable conditions.¹⁹ Vessels may have often shunned the difficult passage through the Strait of Gibraltar. Instead merchants used the overland route from the Malaga region to Gadir and Tartessos. This would have helped maintain regular trade that was not dependent upon the weather, the seasons, and the skill of the sailors available for voyage.²⁰

¹⁸ Ramon 2002, 126-30.

¹⁹ Aubet 2002a, 84-95; 1994, 166-7.

²⁰ Aubet 1994, 189-90; 1995, 55-9.

Western Mediterranean Currents

The currents in the Western Mediterranean Basin have the same circular pattern found in the eastern basin, presuming that the western coast of Italy is included. The gap between north Africa and Iberia west of Cartagena has little circularity and must have required extensive regional knowledge and the skilled use of winds.

The most direct current in the west is between Iberia and Carthage along the North African coast. This flow travels east between 1.1 knots at the Strait of Gibraltar and slowing to 0.5 knots by the time it reaches Algiers. The eastward trending flow dominates the western Mediterranean along the southern coast of Iberia and just north of the Balearic Islands. Along North Africa it continues east past Carthage. To the north this current runs into Corsica and Sardinia. From this point it travels south along western Sardinia and north off of northwestern Corsica. At the continent it turns west along the coast and follows it until it reaches the Balearic Islands where it turns back towards the east.

Overall the currents in the northern area were useful for ships travelling to Iberia, while further south they aided in eastern voyages. Unfortunately, the winds do not always cooperate with the currents so the Phoenicians must have often traveled against them to reach their destinations.

The Atlantic Coast Winds ²¹

The extent of Phoenician colonization by the sixth century B.C.E. does not penetrate north of Santa Olaia on the Portuguese coast and Mogador off of North Africa.²² While their Atlantic colonization is limited, it does necessitate an understanding of the climactic conditions along this stretch of the Iberian and North African Coasts (see Fig. 15).

The winds along the coast of Portugal and southwestern Spain are usually from the north or northeast during the winter, though strong winds sometimes come out of the south or southwest. Summer winds usually blow out of the west ranging from the southwest to the northwest. At Gadir calms are common, a factor that probably helped the location to become the dominant port in Iberia. Summer winds consist of land and sea breezes (discussed below), blowing out of the east during the morning and out of the west in the afternoon. This allows for daily departure and arrival times. During the winter, winds are variable, but they blow most regularly from the north to the west. The conditions here would have greatly aided travel along the coast and back through the Strait of Gibraltar. Unfortunately, sailors then had to face the challenge of the year round easterlies that dominates the Atlantic side of the strait.

Along the coast of North Africa and as far out as the Canary Islands northeasterly trade winds dominate most of the year. These winds shift to blow from the northwest along the coast of Morocco as a result of sea breezes. The northern trend of these winds

²¹ The wind and current data for the Atlantic Coast were taken from the National Geospatial-Intelligence Agency's *Sailing Directions (Planner): The North Atlantic Ocean and Adjacent Seas* (2012).

²² Wachsmann et al. 2009, 228; Neville 2007, Figure 1.20, 46.

would have made navigation back to Iberia and the Strait of Gibraltar difficult. This may have been an important reason why such a small number of Phoenician colonies were established south of the Strait. The winds do lend credence to Diodorus Siculus's tale concerning the Phoenician's being blown into the Atlantic and discovering unknown islands.²³

The Atlantic Coast Currents

The currents off the west coast of Iberia flow south along the coast (Fig. 16). They make up part of the clockwise circulation of the North Atlantic Ocean. The current here flows significantly slower than in the North Atlantic generally not moving faster than about 0.5 knots. Phoenicians along the coast of Portugal and southwestern Spain would have dealt with sailing conditions similar to those found in the Mediterranean. Once they passed through the Strait of Gibraltar there was little difficulty in exploring the west coast of Iberia.

The strait itself is a far greater challenge. The currents that pass through it generally flow eastward at speeds as high as five knots. This can reverse, however, especially with easterly winds and shifting tides resulting in a western current as fast as two knots. When these factors are combined with the possibility for unexpected southerly winds it becomes clear how difficult the Strait of Gibraltar must have been to navigate with an Iron Age vessel.

²³ Diod. Sic. 5.20.1-4.

The currents along the Atlantic coast continue to flow south past Iberia and the Strait of Gibraltar and along northwestern Africa. They do not reach speeds greater than 0.6 knots along the African coast and are consistent most of the year. The current does not change direction or split until it reaches Cape Verde, much further south than the southern-most point the Phoenicians are believed to have reached.²⁴ These current conditions were again very similar to those found in the Mediterranean, but when combined with winds generally blowing from the North returning to the Mediterranean may have been exceedingly difficult for the Phoenicians.

Diurnal Winds

Diurnal winds or land-sea breezes are the result of the shift in air pressure gradients between the land and sea from night to day. The constant flow of water allows for only a slight change in surface temperature between night and day, which allows the air temperature and pressure to remain relatively stable. Conversely the thermal qualities of land allow for relatively rapid heating and cooling. As a result the pressure above land increases during the daytime and decreases throughout the night. The resulting differences in pressure between land and sea result in air flowing between them. The breeze blowing offshore in the early evening is called the land breeze while the wind blowing landward in the latest night and morning is called the sea breeze.²⁵

²⁴ Aubet 1994, 301.

²⁵ Bonnardot et al. 2002, 62.

The phenomena of diurnal land-sea breezes have been acknowledged and observed for centuries and continues to be studied.²⁶ There is little doubt that the effect was well known to ancient seafarers and that they made use of them during coastal voyages.²⁷ The phenomena would have aided departure in the evening and arrival in the morning. Coastal sailing would have greatly benefited from the winds by providing ships with consistent winds at known times of day. Short trips between nearby colonies would have received the most benefit from the land-sea breezes. Ancient mariners in regions where winds were inconsistent or subject to change would have also found these winds a welcome resource for aiding in their ventures.

The information provided here about the general current and wind directions the Phoenicians managed is not intended to limit the potential extent or directions of their sailing ventures. It is instead an assessment of the environment that they would have navigated as skilled seamen. Understanding the environmental conditions impacting Phoenician seamanship allows archaeologists to better understand the factors that may have led to the discovery and colonization of different locations. Prevailing winds, seasonal variation, dominant currents, and their relationship to the coasts and islands in the Mediterranean and the Atlantic aided navigation among the ports. This would have helped to strengthen regular interactions and trade relationships. Further, the environmental conditions argue for and against the ease and subsequent economic value

²⁶ Walter 2004, 1.

²⁷ Wenamun waits to set sail in the evening just before he finds himself in the good graces of the King of Byblos (Wenamun i. 40-5). See Wachsmann 1998, 301.

of specific trade relationships that may be proposed within the archaeological record (Fig. 17).

It is worth noting that I include the data for winter winds, which at first glance may seem unnecessary. The common perception of the ancient sailing season is that it ran exclusively through the summer. This period could be extended from March through November; however Hesiod stated in *Works and Days* that the ideal sailing period was the 50 days after the summer solstice. Additionally, the fall, winter, and spring months were generally taken up by agricultural activities, thus taking away manpower for seafaring.²⁸ Lastly the harsh weather associated with the winter months would have discouraged sailing. *Sailing Directions (2011)* for the Mediterranean published by the National Geospatial-Intelligence Agency details the increased risk of harsh weather in the Mediterranean during the winter months. It is a reasonable presumption that such conditions would have discouraged sailing.

Despite these factors, the presumption that ancient seamen would have stayed on land during the winter may be a modern fallacy. Numerous ancient authors and texts mention active winter seafaring including Thucydides, Andocides, and the *Ahiqar text*.²⁹ In addition the Phoenicians were dependent upon both their own agricultural activity as well as trade to supply food for population centers such as Tyre.³⁰ A fact reflected by Hiram I acquiring “food ... for the royal household” from Solomon in exchange for

²⁸ Davis 2001, 31-2.

²⁹ Thuc. 2.69, 3.88, 8.30, 8.34-40, 8.60; Andoc. 137-8; Davis 2001, 32-5; Yardeni 1994.

³⁰ Aubet 1994, 76-9.

goods and workmen to build his temple and palace.³¹ Such a need would have encouraged Phoenicians to travel during harvest seasons or whenever else they could acquire foodstuffs. Last is the fact that accomplished sailors plying their ships across the Mediterranean were perhaps more willing to take advantage of a fair wind blowing toward their destination, even if it were out of season. It is apparent that certain winds were more prominent in either summer or winter and some of the winter winds would have been very helpful along some routes. This suggests that the Phoenician sailing season was based on local conditions, the destination, and pragmatism rather than any rule based on the seasons.

Ship Construction

In order to better understand the nature of Phoenician seafaring, trade routes, the efficiency of the network, and the effects of the environment it is crucial to establish their ship building technology. Doing this is one of the most difficult archaeological tasks. The problem rests with the absence of concrete written information, the minimal iconographic data, especially from the ninth to sixth centuries, and the dearth of extant Phoenician ship hulls. As a result, reconstructing the methods, materials, and technological innovations used for seaborne travel during this period is at best an approximation resulting from the patchwork quilt built out of the available data.

³¹ I Kings 5.1-12.

Nonetheless, these materials do provide crucial information about what techniques were available to the Phoenicians.

In order to establish the construction techniques and technology the Phoenicians used during the ninth to sixth centuries B.C.E., it is useful to identify earlier technologies that were most likely passed to later generations. Four shipwrecks have been definitively identified from the Bronze Age including those at Cape Gelidonya, Uluburun, Kfar Samir, and Point Iria. The first three are Syro-Canaanite vessels and as such reflect some aspects of their seafaring capabilities.³² Cape Gelidonya and Uluburun have the most information and as such are most useful when establishing early technologies and techniques. Only a very limited amount of the ship was preserved on each wreck. The hull remains for both indicated they were constructed using pegged mortise-and-tenon technology.³³ The presence of a keel on the Uluburun wreck may suggest that the technology was used to provide strength against hogging and sagging. Brush material served as dunnage dunnage that was used to pad the hull from the cargo.³⁴ It is also possible it was placed above the top-strake as a screen to protect the interior of the ship from spray.

While no frames have been preserved to definitively ascertain the method used to construct the ships, the mortise-and-tenon attached strakes provide strong evidence. The presence of relatively large tenons in addition to the structure, shape, and strength provided by mortise and tenon construction indicates that the vessels were built shell

³² Bass 1997b, 168.

³³ Bass 1967, 45-9; Pulak 1998, 210-1.

³⁴ Pulak 1998, 210-3.

first.³⁵ Further, the construction used can be seen as early examples of the techniques used for the much later Kyrenia ship.³⁶ Total cargo, hull displacement, and dimensions have also been calculated for the Uluburn wreck. S.H. Lin's 2003 master's thesis addressed the question and his research concluded a maximum displacement of 28726.68 kg.³⁷ Using the extant hull remains Lin also proposed hull dimensions of 15 x 5 x 2 meters capable of carrying a total of 34.3 tons of cargo.³⁸

The evidence from the physical remains of these Late Bronze age vessels is aided by iconography from the period. Fourteenth century depictions of Syro-Canaanite vessels at the tomb of Kenamun show high sided vessels with high, straight stem and stern (Fig. 18).³⁹ A slightly earlier picture of a ship at the tomb of Nebamun is nearly identical to that shown at Kenamun and further argues for high-sided vessels with vertically projecting stern and stem (Fig. 19).⁴⁰ The similarities between the vessels are striking and while they may indicate that both depictions were copied from some original source,⁴¹ the fact that they are both used to represent Syro-Canaanite vessels certainly suggests that these traits were associated with their ships.

A vital seafaring technology was also developed at the end of the LBA: the brailed sail. Identifying the technology in the archaeological record is nearly impossible as sail material and components would both float and be most susceptible to elements of

³⁵ Pulak 1998, 210.

³⁶ Steffy 1994, 43-54.

³⁷ Lin 2003, 207.

³⁸ Lin 2003, 224.

³⁹ Wachsmann 1998, 42-5.

⁴⁰ Wachsmann 1998, 45-7.

⁴¹ Wachsmann 1998, 45.

deterioration once a vessel has sunk. Some potential brailed rings may have been recovered, though this remains uncertain.⁴² Iconography provides the best evidence for the technology's development. An Egyptian relief from Amarna, PC 103 from the Stephane Cattai collection in Switzerland, shows the use of a loose footed sail that likely would have been brailed (Figs. 20-21). Another relief from the Memphite necropolis, Berlin 24025, shows a similar sail being tied to the yard (Figs. 22-23).⁴³ Other depictions show brailed sails open or furled but with a boom-footed rig (Figs. 24-25).⁴⁴ All of these depictions date to the XVIII or XIX Dynasties and thus the brailed sail must have appeared by the late Bronze Age.⁴⁵ S. Wachsmann discusses the importance the development of the brailed sail was for developing seafaring routes and exchange in his book *Seagoing Ships and Seamanship in the Bronze Age Levant*.⁴⁶ The fact that the technology enabled sailing into the wind and tacking must have been one of the major factors that allowed Phoenicians to rapidly expand across the Mediterranean. It was probably the most crucial change in seafaring technology since planking.

Chapter II established the historical antecedents for Phoenician trade and their cultural connection to the Syro-Canaanites of the LBA. These shipwrecks and iconographic depictions illustrate the technology and ship building techniques that were available to be passed on to Iron Age seafarers. It is reasonable to suggest that some of the information could have been lost during the societal, culture, and population changes

⁴² Wachsmann 1998, 253-4.

⁴³ Vinson 1993, 135-6.

⁴⁴ Vinson 1993, 139-41, 143.

⁴⁵ Vinson 1993, 134.

⁴⁶ Wachsmann 1998, 330-1.

that took place as the LBA came to a close. The continuation of seafaring activities and traditions, as seen in the tale of Wenamun and the archaeological record at Tyre and Sarepta,⁴⁷ intimates that any loss of information was minimal. Seafaring practices continued to dominate the Levantine coast and any loss of technologies could have been easily reacquired from neighboring seafarers.

The technologies of the LBA provide some idea about Phoenician ships during the ninth to sixth centuries B.C.E., but the information becomes more valuable once the dearth of information concerning their vessels is realized. Only seven ships dating to this part of the Iron Age have been identified and of these only three have been fully excavated. The most valuable excavations with regard to ship constructions are those of the wrecks Mazarron 1 and Mazarron 2. These ships, discovered off Playa de la Isla in Spain in 1988 and 1994 respectively,⁴⁸ provide the only intact hulls from the period in question. Mazarron 1 consists of nine strakes, four frame sections, and a portion of the keel (Fig. 26).⁴⁹ The frame pieces are cylindrical in shape and tied to the strakes. The strakes are attached by mortise-and-tenon joints as is the keel.⁵⁰ The second ship, Mazarron 2 is nearly complete (Fig. 27). It measures eight meters from stem to stern and has a beam amidships of 2.22 meters.⁵¹ This ship is constructed with the same methods as Mazarron 1 using mortise-and-tenon joints and tied frames.⁵² While the side

⁴⁷ Wenamun i.1-ii.75; Bell 2006, 55-60, 106-9.

⁴⁸ Negueruela 2000, 182-3.

⁴⁹ Negueruela 2000, 183.

⁵⁰ Negueruela et al. 1995, 195-6.

⁵¹ Negueruela 2000, 194.

⁵² Negueruela et al. 2004, 478.

strakes of this hull are not preserved, it survives to the turn of the bilge.⁵³ Beams that may have acted both as horizontal support as well as benches were also preserved in the vessel. Two holes are preserved near what is presumed to be the stern of the vessel. Their function could be for a two-masted sail or more likely, related to the quarter-rudders.⁵⁴ The vessel only contained a limited amount of pottery, all related to food and water storage. It also held some mills for food preparation, but its main cargo consisted of lead bullion.⁵⁵ The distribution of artifacts, the absence of any suggestion of shelter or upper works on the hull, and the ship's small size suggest that it was a local trader or transport vessel used to transport metal to one of the larger settlements such as Cerro de Villar or La Fonteta.⁵⁶

The other excavated ship dating to the period under investigation is the Bajo de la Campana wreck located off the southeastern coast of Spain near La Manga. This site is the location of three ancient wrecks including a first century AD roman ship, a second century B.C.E. "Punic" vessel, and the seventh century B.C.E. Phoenician ship.⁵⁷ Excavation here began with a survey in 2007 and continued through the summer of 2011. No major publication of the assemblage and excavation has yet to be produced. Limited publications in the *INA Quarterly* and *INA Annual* provide some information about this seventh century Phoenician ship and its capabilities. Very few hull remains of the vessel were identified and as of yet no analysis has been completed for those

⁵³ Negueruela 2000, 183.

⁵⁴ Negueruela et al. 2004, 478-80.

⁵⁵ Negueruela et al. 2004, 477.

⁵⁶ Negueruela et al. 2004, 482.

⁵⁷ Polzer 2008, 14.

excavated and raised.⁵⁸ The cargo of the ship contained a great variety of items. Raw materials carried by the vessel included the following: elephant tusks, tons of lead ore, copper and tin ingots, Baltic amber, and pine nuts. Phoenician pottery was found in abundance including amphorae, oil jars, and various forms of tripod mortars. Lastly a number of decorative and cultic items were found as part of the cargo including an unfinished pedestal, numerous blank stele, two *thymiateria* fragments, and fragments from a bronze figurine.⁵⁹ The abundance of materials as well as their nature indicate that this vessel was far larger than those found at Mazarron. It seems to have been plying the coast, likely headed for La Fonteta to the North.⁶⁰ The actual purpose of the vessel is still in question, though it does indicate that large ships similar to the Uluburun wreck were used in the seventh century B.C.E. The Iberian and North African materials further intimate that such vessels were used for shorter regional voyages along the coast in addition to potential long distance, deep-water transport.

The fact that Phoenicians engaged in direct trade while sailing over deep waters was shown by the discovery of two shipwrecks in the Eastern Mediterranean basin. The *Tanit* and *Elissa* shipwrecks were found in 1997 off the coast of Ashkalon, Israel at a depth of 400 meters. Further investigation in 1999 sought to identify their origin, destination, cargo, and age.⁶¹ The vast majority of the artifacts on the vessel were amphorae dating to the late eighth century B.C.E. that are generally found on the Phoenician coast. The cooking ware found on the ships was also of Phoenician design

⁵⁸ Polzer 2011b.

⁵⁹ Polzer 2009, 10; 2011, 16-8.

⁶⁰ Polzer personal communication fall 2011.

⁶¹ Ballard et al. 2002, 151, 158.

indicating that the vessels' origin and crew were almost certainly Phoenician.⁶² The bathymetric scans of the artifact debris fields measure 4.5 x 11.5 meters for *Tanit* and 5 x 12 meters for *Elissa*. The initial analysis proposed a length and beam of 14 x 6.5 meters and 14.5 x 7 meters respectively for the two ships and each contained more than 10 tons of cargo.⁶³ These measurements seem unlikely as the most common and stable length to beam ratio for merchant ships is 1:3,⁶⁴ whereas the above measurements give ratios of 1:2.15 and 1:2.07. The beam of the debris field is likely exaggerated since the cargo would have spilled out of the sides of the ships as the side strakes decayed. Whatever the actual length to beam ratio, the ships' sizes are quite close to that proposed for the Uluburun vessel. This suggests that the general ship size for Mediterranean transport was relatively stable from the end of the 14th to the eighth centuries B.C.E. The Kyrenia ship, dating to the fourth century B.C.E., is 14 x 4.5 meters in size and could hold 25 tons.⁶⁵ The wrecks *Tanit* and *Elissa* were likely headed for either Egypt or Carthage, and their location indicates that they were attempting to reach their destination by the most direct route, over deep water.⁶⁶ The possibility exists that the vessels were unintentionally blown out to deep waters and sunk as a result of dangerous weather. Presuming their deep water presence was intentional, these Iron Age ships were built with what appears to be a consistent design and were capable of sailing away land, risking the dangers of the high sea.

⁶² Ballard et al. 2002, 159-63.

⁶³ Ballard et al. 2002, 157, 166

⁶⁴ Steffy 1994, 12-4; Casson 1995, 189-90.

⁶⁵ Steffy 1994, 12; Ballard 2002, 166.

⁶⁶ Ballard 2002, 165-6.

The last two wrecks dating to the Iron Age were discovered off the coast of Turkey by the Institute of Nautical Archaeology during surveys undertaken in the 1970s and 1980s. The wreck at Kekova Adasi dates to the seventh century B.C.E. and that at Kepce Burnu dates to the seventh or early sixth century B.C.E.⁶⁷ Unfortunately no extensive excavation has been undertaken at either location and the vessels' origins have not been established. The limited analysis of the cargo on the wrecks does provide a basic idea of extant trade connections in the Eastern Mediterranean basin during the period being discussed.⁶⁸ How these pertain to the PTN and ship design cannot be established at this time. Until further research has been undertaken on these shipwrecks little more can be said about them.

Further information about Iron Age Phoenician ships can be gleaned from the iconographic record. Unfortunately Iron Age depictions of merchant vessels are almost completely absent from the archaeological record. The representations that exist are discussed by L. Basche in *Le musée imaginaire de la marine antique*. In it he discusses both models and depictions, especially with respect to minor construction details.⁶⁹ The eighth century Khorsabad Wall Relief depicts Phoenician vessels (Fig. 28), but these *hippoi* are specifically designed for riverine transport and do little to address the ships that would have made up the Mediterranean trade network.⁷⁰ Since Phoenician riverine transport is so often depicted in Assyrian reliefs and appears as far west as Spain it can be suggested that this method of inland transport may have been common throughout the

⁶⁷ Greene et al. 2010, 60-1, 65.

⁶⁸ Greene et al. 2010, 65-6.

⁶⁹ Basche 1987, 303-319.

⁷⁰ Basche 1987, 307-9. Linder 1986, 275-6.

PTN.⁷¹ There is only one clear iconographic example of Phoenician transport vessels from the early Iron Age, and they appear with warships. This early seventh-century relief details the escape of King Luli of Sidon to Cyprus in 701 B.C.E.⁷² Copies and drawings of parts of the relief as well as a single extant fragment from the British Museum provide archaeologists with details of the ships depicted.⁷³ In total six warships and six round ships are shown (Figs. 29-31). In this depiction the merchant ships, shown with round hulls, appear to be equipped for war as they are decorated with shields and five of the six vessels carry spearmen as well as passengers. The fact that soldiers occupy the ships suggests that their presence on vessels was not unheard of, though this depiction specifically details king Luli fleeing Tyre. The merchantman shape is rounded on both ends with high stem and stern posts, two quarter rudders, and unexpected for a merchant ship, depict two levels of rowers. All the warships in the relief are equipped with furled brailed sails, illustrating the eighth century use of the technology. Surprisingly none of the merchant ships show evidence of sails, which is odd considering sails must have been their main form of propulsion.⁷⁴ Aside from their depictions of the sail the warship images adds little to the understanding of Phoenician merchant ships. It is questionable whether war vessels were used for long distance trade, exploration, or the establishment

⁷¹ Linder 1986, 276-7.

⁷² Basch 1969, 144.

⁷³ Basch 1969, 144.

⁷⁴ Basch 1969, 144-50; Casson 1970, 31; 1995, 56-8.

of new colonies.⁷⁵ According to an ancient account Hanno took 60 Pentecontors to explore the coast of Africa and settle colonies, so their use may have varied.⁷⁶

The extant information for Levantine shipbuilding technology during the ninth to seventh centuries B.C.E. is limited. Nonetheless an analysis of the information above does present a basic picture of the types of ships the Phoenicians used to transport goods across the Mediterranean Sea. These were generally moderate sized vessels likely averaging somewhere around 14 x 4.5 meters in size. They had stern and stem posts shown as early as the Kenamun depiction that continued to appear on images as late as the eighth century relief depicting King Luli's escape. The ships could have held at least 20 tons as shown by the cargo of the Uluburun wreck, the Kyrenia wreck, and *Tanit* and *Elissa*. They were made for centuries using shell first, pegged mortise-and-tenon construction, and if the Mazarron ships are any indication the frames were laced to the hull. A keel may have been used to provide longitudinal strength to the vessels to prevent hogging and sagging.⁷⁷ Mazarron 2 shows that the Phoenicians used beams to support the sides of the vessels. Mazarron 1 and 2 also show that the Phoenicians made ships of various sizes, likely for different tasks. The Mazarron ships, measuring only 8 x 2.3 meters would have been used for local transport to move relatively small amounts of material. The Khorsabad Wall Relief and many similar images show that the

⁷⁵ Morrison 1947, 132; Coats 1987, 97-8.

⁷⁶ CPG. 5-10; Lipinski 2004, 435-6.

⁷⁷ J. R. Steffy (1994, 84-5) argues that ancient keels provided little strength to the ships, but rather acted as a keystone on which planks are attached. He suggests that the longitudinal hull strength comes from its shape and the mortise and tenon construction. I am certain he is right, but I would point out that it seems the use of the ancient keel coincides with the abandonment of the hogging truss, as demonstrated by the Uluburun wreck and its contemporary the Kenamun depiction. Wherever the ships "backbone" comes from, it seems that the keel either indirectly or directly resulted in much greater longitudinal strength.

Phoenicians had specialized ships designed for riverine transport, the hippos ships or *hippoi*. They also constructed war ships, including pentecontors, biremes or perhaps early triremes, some of which may been used for transport on long distance, cross-Mediterranean voyages.⁷⁸

Using the brailed sail, skilled sailors could use tack and to sail into the wind,⁷⁹ something that would have been essentially impossible for the earlier boom-footed sail shown in the Kenamun depictions. The Luli relief also shows that merchant ships could be equipped with oars to provide manual propulsion. Accounts from Homer to Hanno included ships with oars crossing long distances.⁸⁰ This does raise the problem of capacity however, and the justification for sacrificing cargo for men and oars. That is, why engage in warship mercantilism? Perhaps only special voyages for colonization and exploration made use of warships. The use of a keel, in addition to providing longitudinal strength to the vessels, would have helped to cut down on lateral drift when tacking into the wind. It is uncertain how much the keel may have extended beyond the bottom of the ships or if they were made with an hour-glass shape as seen in the Kyrenia vessel.⁸¹ Nonetheless any protrusion of the keel out of the bottom of the vessel would have provided additional directional stability.

The extensive voyages carried out by Phoenician ships during the ninth to sixth centuries show that they capable of plying the Mediterranean and Atlantic. They traveled as far, or farther, than any civilization of the period and did it with enough frequency to

⁷⁸ Casson 1995, 53-9, 94-6; *CPG*. 5-10.

⁷⁹ Wachsmann 1998, 254-5.

⁸⁰ Odysseus was likely sailing a pentacontor. See also *CPG*. 5-10.

⁸¹ Steffy 1994, 55.

establish the profitable import of goods from the other side of the known world.⁸² Their method of construction, pegged mortise-and-tenon, would become the standard across the ancient world by the fourth century B.C.E., and would not be replaced until skeletal construction began developing some time between the fifth and seventh centuries CE.⁸³ These vessels were high technology whose development allowed the Phoenicians to establish their trade network.

Navigation⁸⁴

Few details of Phoenician navigation and associated technology are described in ancient depictions or literature. Some information can be gleaned from the less obvious details shown in ancient historical accounts, iconography, and through cultural comparisons between modern societies sailing with effectively the same technological tools as the ancient Phoenicians. The three major sources used to try to determine what the Phoenicians may have used to successfully navigate the Mediterranean include literature and iconography associated with LBA and EIA Syro-Canaanites, Iron Age and Classical Greek literature, and modern South Pacific navigators.

Information regarding the navigation techniques of the Phoenician's cultural ancestors provides the basis for what skills were used from the ninth to sixth centuries

⁸² Aubet 1994.

⁸³ Steffy 1994, 43-9, 80-5; Casson 1995, 201-13; Pomey et al. 2012.

⁸⁴ The necessity for successful navigation techniques, technologies, and skills for the formation of a successful trade network necessitate a basic discussion of it here. For a comprehensive discussion on the topic from the Bronze Age to the Roman period see Dan Davis' 2001 master's thesis *Navigation in the Ancient Eastern Mediterranean* (88-195).

B.C.E. The wall painting from Kenamun's tomb may show a Syrian using a line to determine depth with a sounding lead. In the same depiction a bird flies at the prow of the ship (Fig. 32). Both of these details in the Kenamun image can be directly related to the process of land finding.⁸⁵ The sounding lead would have provided valuable information to the captain as well as indicate whether or not the ship may be approaching dangerous reefs or other shallow water conditions. No extant examples of Bronze Age leads exist, though one may have been found on the Uluburun wreck.⁸⁶ In the fifth century B.C.E. Herodotus describes a second use for the lead, sampling the sediment below a vessel.⁸⁷ This information can provide navigators with information about their whereabouts or their proximity to land that a mere depth measurement may not. Unfortunately, there is no information to suggest that Phoenicians used sounding leads in this manner.

Birds were important for navigators because certain species generally only fly a limited distance beyond land and as a result provided navigators valuable with information about the distance and direction to shore.⁸⁸ The various species of birds often live in different regions and identifying them can give a navigator valuable information about *which* shore is nearby. D. Davis notes that birds had a long and valuable place in the Mediterranean navigator's tool set. In addition to their use for identifying nearby land, their release could also direct ships towards the nearest shore.⁸⁹

⁸⁵ Wachsmann 1998, figure 3.3.

⁸⁶ Davis 2001, 111.

⁸⁷ Davis 2001, 111-2; Hdt. 2.5.

⁸⁸ Lewis 1994, 178-9; Hornell 1946.

⁸⁹ Davis 2001, 89-96.

More information concerning EIA Syro-Canaanite navigation comes from Wenamun's tale where sailors may be described as using stars to obtain and maintain a heading.⁹⁰ Wenamun himself is an Egyptian priest with no sailing experience. His understanding of the basic concepts of star navigation indicates that the crew of his Syrian transport took advantage of the technique, and it was a basic tenet of seafaring. A last piece of ephemeral evidence concerning Phoenician navigation can be taken from the story of Elissa and the founding of Carthage. According to multiple accounts, after Elissa stops at Cyprus her captain takes a direct route to a bay in North Africa.⁹¹ The captain's ability to know the presence of a geographical feature 1200 miles from his starting point suggests the Phoenicians had a well-developed concept of the Mediterranean. Whether the nature of this map was conceptual or written and how the captain was able to reach his destination are not relayed in the story. The sailor's ability to know of, and successfully sail directly to, the bay at Carthage does suggest a comprehensive geographical knowledge as part of the Phoenician navigational system. It must be acknowledged that the details of this story were written over eight hundred years after the supposed event itself and more than five hundred years after the collapse of the PTN. As a result the information it provides is at best three degrees removed from the event itself. Nonetheless, there is no reason to suppose that sailors traveling and colonizing across the Mediterranean would not have an intimate understanding of its geography.

⁹⁰ Davis 2001, 163-4; Wenamun i.20-30. Prichard's 1969 Translation of this passage replaces the reference to the stars with "the break of day." Davis asserts this translation is incorrect.

⁹¹ Just. *Epit.* 18.5; Verg. *Aen.* 1.475-8.

The crow's nest provides a high vantage point for sailors to spot land, other ships, and even weather at a considerably further distance.⁹² Its appearance in the Syro-Canaanite technological sphere by the LBA, is seen in the Kenamun depiction (Fig. 33).⁹³ A second depiction that shows the feature on ancient ships comes from the tomb of Iniwia (Fig. 34).⁹⁴ The Khorsabad relief from the Palace of Sargon shows a Phoenician riverine vessel equipped with a crow's nest (Fig. 35) implying that the structural and navigational tool was not lost as the Phoenicians took up their ancestor's mantle. The ubiquitous nature of the crow's nest in the eastern Mediterranean can be seen in the iconography of numerous civilizations during the Late Bronze and Iron Ages.⁹⁵

Greek navigation in the first millennium B.C.E. was contemporary with that of the Phoenicians. As a result it is useful to address the practices that were recorded for Greek navigation, especially by Homer, presumably during the seventh or eighth centuries B.C.E. This was the same period that Phoenician colonization and trade across the Mediterranean was extensive. His epics relay the names of winds and mention a wind rose. The nature, direction, and reliability of winds was of the utmost importance for seamen relying on this element for propulsion.⁹⁶ Further, by naming the winds and placing these in a graphical representation of their direction the Greeks implied that they could themselves be used as references for navigation. Homer also mentions the use of

⁹² Davis 2001, 96-7.

⁹³ Wachsmann 1998, 45.

⁹⁴ Wachsmann 1998, 56-9.

⁹⁵ Davis 2001, 98-108.

⁹⁶ Hom. *Od.* 5.295-6; Davis 2009, 92.

navigational stars in the *Odyssey* as Odysseus leaves Calypso's island.⁹⁷ Clearly the use of stars for navigation continued long past the time of Wenamun. The third century B.C.E. classical writer Aratus differentiates between Greek and Phoenician star navigation,⁹⁸ implying that while both used the stars, the actual stars used, or perhaps even their method of use differed for earlier generations as well.

The most straight-forward method of navigation was to follow the shore and make use of landmarks, and when shores were dangerous, seamarks.⁹⁹ Sailing within sight of land provides a number of advantages for the ancient mariner. By constantly having the shore as a point of reference one can more easily deduce speed, wind direction, sailing direction, and even the presence and direction of currents. There are numerous references to the use of the shore and landmarks as navigational tools, and it is quite reasonable to presume that voyages within sight of land were common especially if they were short.¹⁰⁰ In the Mediterranean the use of landmarks for voyages must have been especially useful when the shoreline geography included considerable elevation and the air little haze. Much of the Mediterranean shore is visible far out to sea.¹⁰¹ Sailing too close to shore, however, included the risk of striking unforeseen obstacles just below the waves. When combined with the sometimes fickle sea breezes and sudden changes in wind that can result from landforms and coastal weather patterns¹⁰² coastal

⁹⁷ Hom. *Od.* 5.270-7; Davis 2001, 168-9.

⁹⁸ Aratus. *Phaen.* 37-44; Davis 2001, 169-70.

⁹⁹ Seamarks do not appear to have been commonly used and there is no record of their use in the Mediterranean prior to 480 B.C.E. (Davis 2001, 115).

¹⁰⁰ Davis 2001, 116-25.

¹⁰¹ Aubet 1994, 168-70.

¹⁰² Descriptions of sudden wind changes are found throughout the descriptions of wind patterns and trends in the National Geospatial-Intelligence Agency's documents cited for wind data.

navigation could easily become a hazardous venture. Additionally avoiding the deep sea would have added considerable time to a journey that could be made along a direct line, such as travelling to Carthage from Tyre via Anatolia. Unless the winds failed to cooperate, travelling directly to one's destination would have been considerable faster. There are numerous ancient accounts of Mediterranean seamen sailing for multiple days in order to take direct routes from one point to another.¹⁰³ In these instances the voyages are of considerable distances and are clearly made far beyond the sight of land. As a result the use of shorelines and landmarks for navigation, while valuable, must have been most common at the beginning and end of a passage.

South Pacific Navigation

A useful analog for investigating Phoenician navigational techniques is the skillset and capabilities of modern South Pacific seafarers. These fearless sailors are known for traveling hundreds and at times thousands of miles with nothing but their own skills and shared knowledge to guide them.¹⁰⁴ They made use of birds, waves, winds, sea conditions, the environment, stars, and local knowledge to travel between islands and discover new lands.¹⁰⁵ Their ability to accomplish this is a developed art rather than a scientific technology. From early in life future navigators are taught a myriad of skills and associations allowing observation to provide navigational deductions. This information is reinforced by redundancy and experience so that multiple sources are

¹⁰³ Davis 2001, 167-9.

¹⁰⁴ Lewis 1994, 21-7.

¹⁰⁵ Lewis 1994, 27-8.

always available to help the navigators determine their course.¹⁰⁶ Their successful navigation is the result of highly tuned observational skills and a wealth of cultural knowledge.

The skills that navigators from the South Pacific use to deduce their heading, location, and destination have direct parallels to the techniques and skills that are evinced and implied for the Phoenicians and other ancient Mediterranean seamen. Because this parallel exists, the techniques of these modern navigators can be used to obtain a glimpse of the techniques of the ancient mariners. The most prominent of these is the use of stars. For all South Pacific peoples the stars play one of the most prominent roles for navigation. They do not merely allow navigation by night, but in most cases make up the very foundation of their system for directional identification, their compass.¹⁰⁷ The clearest example of this phenomenon is the sidereal compass, a system of identifying direction over all 360 degrees using the locations of the rising and setting of specific stars (Figs. 36-37).¹⁰⁸ The number of stars and directional points around the horizon is directly related to the number of islands that a given people visit. If a given star (ie bearing) does not correspond to the navigation to a known island, it will not make up part of the extant star compass.¹⁰⁹

Stars have the additional function of providing the basis for some islanders' conception of location and space during sea travel. In modern navigation speed, direction, charts, and now GPS allow a sailor to know where he is. For South Pacific

¹⁰⁶ Goodenough and Thomas 1987, 4-7.

¹⁰⁷ Lewis 1994, 82-122.

¹⁰⁸ Lewis 1994, 102-111.

¹⁰⁹ Lewis 1994, 107-9.

seafarers speed is an estimate, direction is taken from the star bearing (or its relation to sun, wind, and waves), and traditionally, charts are rarely used.¹¹⁰ Nonetheless, knowing one's position on the open sea is necessary for successful navigation. The clearest example of the Pacific system of locational conception is the "Etak." In this system the stars and the vessel provide the known locations on the sea, and are related to the concept of "moving" reference islands.¹¹¹ The system is heavily based on observation as well as skillful estimations of speed and vessel performance. Despite its qualitative nature, the functionality of the "Etak" has been demonstrated repeatedly by skilled islanders to both known and unknown destinations (Fig. 38).¹¹²

While stars play the most critical role in South Pacific navigation they are not available for much of the day, so other guides must be used. The most obvious of these is the sun. The location of its rising and setting provide distinct bearings on the horizon. Knowledge of the sun's path across the sky at a given time of year results from study, observation, and education. As a result it provides reference to direction and time. For Pacific islanders this knowledge is developed with reference to landmarks on known islands as well as with respect to the rise and set location of stars.¹¹³ Wind provides an additional, albeit fickle, directional reference. Wind direction must be noted for proper sail position as well as to successfully plan an expedition. The direction is often understood with respect to sun and star locations. Swells and the ships heading both

¹¹⁰ Lewis 1994, 23-49.

¹¹¹ Lewis 1994, 173-87.

¹¹² Lewis 1994, 187-9.

¹¹³ Lewis 1994, 123-4.

provide additional reference for wind direction especially when its bearing changes.¹¹⁴ Some islanders have gone so far as to develop compass systems based on wind direction¹¹⁵ that are in some ways similar to the Greek wind rose. Fully understanding the wind compasses that still exist is difficult since they come from fragmentary navigational traditions. Some appear to make reference to star bearings, but it is unknown whether the two systems worked in tandem or wind headings trumped the star data.¹¹⁶

The last major technique used to establish bearing is the observation of ocean swells. These waves travel for thousands of miles across the Pacific and are rarely subject to local weather, their origin being consistent, powerful weather systems.¹¹⁷ South Pacific seamen are able to observe these wave patterns through the noise of locally produced waves. As these swells come from a single direction, observing them with relation to a vessel's heading establishes the boat's bearing. Often two to three major swells are discernible at any given time providing multiple reference directions, though in practice islanders only generally need one.¹¹⁸ Using swells to judge a vessel's bearing is extremely valuable during overcast conditions when the sun and stars are hidden. They also aid daytime navigation by adding additional points of reference to the sun, especially when it is high. There are other means to judge leeway drift such as noting spray to estimate speed, and observing landmarks and waves to determine

¹¹⁴ Lewis 1994, 133-6.

¹¹⁵ Lewis 1994, 111-5.

¹¹⁶ Lewis 1994, 111-22.

¹¹⁷ Lewis 1994, 124-33.

¹¹⁸ Lewis 1994, 127-33.

current.¹¹⁹ These techniques are often subject to a given culture or navigational school and can provide only examples of potential skills used in ancient Mediterranean seafaring.

Land-finding is an all important aspect of South Pacific seafaring. It is almost certain that these techniques are far more developed and important in the Pacific than they were in the ancient Mediterranean. There a sailor is bound to shortly find land by sailing in one direction. In the Pacific a minor miscalculation could send a ship into the vast open ocean, thousands of miles from the nearest appreciable land. Nonetheless, there are direct parallels between Pacific and Mediterranean techniques worth mentioning and while failure in the Pacific may find one lost on the open ocean, error in the Mediterranean could easily result with a hull torn open by an unexpected reef.

Of the many methods used by South Pacific navigators to find land the observation of birds is one of the most universal techniques. Islanders observe the species, numbers, flight patterns, and behaviors of birds in order to determine the location of land. They specifically note the range and habits of these species, often planning their voyages to approach land at dawn or dusk when birds leave and return to their nests.¹²⁰ Ethnographic evidence also suggests that birds were used to find new islands by observing migratory flight paths,¹²¹ to send messages, and perhaps even as homing birds.¹²² Another method makes use of cloud patterns and air quality to identify land many miles before it comes within sight. This technique can be especially useful

¹¹⁹ Lewis 1994, 139-91.

¹²⁰ Lewis 1994, 205-16.

¹²¹ Lewis 1994, 205-8.

¹²² Lewis 1994, 208-9.

when the land in question has a few thousand feet of elevation.¹²³ Waves are useful when attempting to identify land as the pattern of swells changes when affected by land. These changes are generally predictable and so provide information for both the presence as well as the direction of land.¹²⁴ Lastly, phosphorescence produced by reefs or other forms of life provide clues for depth as well as land location.¹²⁵ The variety of skills used to identify land before it comes into view is the result of culture and environmental conditions.¹²⁶ As a result what techniques may have been used by ancient seafarers as well as their relative importance likely varied greatly from the techniques in the Pacific. The number of skills is part of a limited set of environmental conditions, factors, and reactions that are small enough that parallels not only exist, but more importantly, are probably greater than the extant archaeological and ethnographic information can ever reveal.

The South Pacific Islanders now sail thousands of years after, and in an ocean thousands of miles from, the PTN. The two groups have overcome similar difficulties with similarly limited technologies, which imply the use of comparable skills. There are numerous examples of technique parallels including star navigation, wind compasses, the observation of weather patterns, land finding techniques such as bird finding. Other skills such as the use of swells to identify bearing and land, observing the wake and spray to determine speed, and identifying phosphorescence near land are not recorded. Yet, their potential usefulness to ancient Mediterranean navigators is unquestionable.

¹²³ Lewis 1994, 216-22.

¹²⁴ Lewis 1994, 224-52.

¹²⁵ Lewis 1994, 252-6.

¹²⁶ Lewis 1994, 256-61.

The use of wave to determine heading during overcast conditions is a particularly interesting technique and it is hard to imagine the Phoenicians did not develop a similar skill to manage the high seas under a cloudy sky. The abundance of ancestral knowledge at their backs, the long standing traditions of seafaring, and the success of their cross-Mediterranean trade all suggest the Phoenicians developed their own navigational art. The techniques used by the South Pacific islanders provide examples for what this art may have included.

It is certain that the Phoenicians made use of highly successful navigational techniques based on repeatable and teachable observation. It made use of the observation of the stars, the winds, birds, land forms, and technologies such as the potential sounding lead, the crow's nest, and the brailed sail. They must have developed a spatial conception of the Mediterranean and Atlantic shores that allowed them to successfully navigate to their intended destinations. Whether this spatial knowledge was passed down orally between experienced sailors engaged in cross-sea ventures, or was written in some form is unknown. No such documents have come down to us. Further skills such as the observation of waves, weather, currents, or sea life is uncertain, though it is beyond doubt that modern archaeological and historical data does not included a comprehensive understanding of Phoenician navigation. Modern examples of indigenous navigational techniques such as those in the South Pacific provide the best parallels to the Phoenicians and the clearest idea of what skills they may have developed to allow them to successfully voyage across the Mediterranean Sea.

CHAPTER IV

THE EASTERN MEDITERRANEAN

The eastern Mediterranean region (Fig. 39) provided the trade relations that allowed the Phoenicians to develop their mercantile based society. States stabilized and grew around the Phoenician homeland at the beginning of the Iron Age (1200 B.C.E.), allowing the remaining Canaanite cities to continue marketing their talents to their neighbors. The Hittites were replaced by the Aramaeans and the Neo-Hittite city states.¹ The Egyptians, having lost their hegemony over the Levant, nonetheless wanted Levantine goods.² Israel developed and then split into Israel and Judah, which both flourished economically and politically for a short period.³ Perhaps most importantly, the Neo-Assyrian Empire that would ultimately dominate most of the Iron Age began its ascendance to power.⁴ Abundant customers for Phoenician products and the rise Assyrian hegemony in the region helped to build coastal Canaanite wealth and, as a result, power. By the 10th century B.C.E., the material culture traditions that are classified under the Phoenician name had completely developed.⁵ Meanwhile, the trade connections that allowed them to successfully expand their mercantile empire were being developed or strengthened after the LBA decline. During this time and the following century, Phoenician kings and city states worked to further expand their

¹ Lipinski 2006, 203-13; Kuhrt 1995,411-13.

² Lipinski 2006, 163-4.

³ Kuhrt 1995, 440-1.

⁴ Kuhrt 1995, 473.

⁵ Lipinski 2006, 176.

influence and consolidate their power.⁶ Their rise was followed by the long, arduous fall from political freedom at the hands of the Assyrians, followed by their complete domination by the Babylonians.⁷

Despite the Phoenicians' ultimate political collapse to the empires that had made their wealth and success possible, they enjoyed a long period of success. While other states such as Northern Israel, Egypt, and the Neo-Hittites were conquered and politically dominated by the Assyrians by the eighth century B.C.E., the Phoenicians enjoyed political freedom until the end of the seventh century B.C.E.⁸ This freedom was bought at the price of regular gifts or "tributes" to the Assyrian Kings.⁹ One primary reason for the special leeway Phoenician cities were given by the Assyrians was that they demanded Phoenician skills and products.¹⁰ No other merchants of the period access to such a wealth of materials from a diversity of regions.¹¹ The Phoenicians' ability to embrace maritime trade by the 10th century B.C.E. and expand their their markets by the ninth century B.C.E. made them invaluable to the empires, states, and cities of the eastern Mediterranean.¹²

Completely understanding the nature of Phoenician success and their value to other people in the Near East requires an analysis of their trade connections from Greece to Assyria, from Anatolia to Egypt. The fact that Phoenician peoples did not identify

⁶ Lipinski 2006, 174-79.

⁷ Lipinski 2006, 191-99.

⁸ II Kings 17.17; Lipinski 2006, 19; Kuhrt 1995, 487.

⁹ Lipinski 2006, 166-96.

¹⁰ In addition to the fact that they effectively controlled the Levantine coast from a naval standpoint (Lipinski 2006, 194-5).

¹¹ Ezekiel 27.

¹² I Kings 9.26-8; Nijboer 2008a, 374; Aubet 2006, 95.

themselves as “Phoenician”, but rather with respect to their home city or region, necessitates an investigation of the connections between cities of the Levantine Phoenician littoral.¹³ These connections may be presupposed, however, the independent nature of Phoenician cities had the potential to result in mercantile and cultural discontinuity. Lastly, the connections between the Phoenician Levant and the colonies to the west must be established in order to address both the influence and control the east held over the west. Any perceived control over the west will also demonstrate the value of western imports with respect to eastern trade, wealth, and power.

Trade with Empires

In many cases the dispersal of Phoenician goods does not provide evidence for foreign entrepôts between the cities and states in question, but emphasizes the ubiquitous nature of Levantine mercantilism. In other situations such as in Egyptian and Assyrian literature or iconography there is evidence for locations where Phoenicians delivered their goods. Establishing the actual political or economic value of Phoenician trade is difficult with a smattering of artifacts. The abundance of specialized Levantine products in Assyria presumes that these goods maintained high value, especially with respect to the wealthy. With respect to Israel and Judah, documents discuss the importance of Phoenicians and their artisans. Their more ephemeral relationship with Greece is less certain, as the dearth of eastern products found in the Aegean suggests that there was

¹³ Lehmann 2008, 205.

little interaction. Nonetheless, texts such as Homer's *Odyssey* indicate that the Phoenicians well-known by the seventh or eighth century B.C.E., however poorly they were conceived.¹⁴ Conclusions about the actual social value of Phoenician trade for a given society may be debatable, but it is certain that with every trade, with every successful exchange, the trade network became wealthier and better established. Phoenician mercantile interaction with these four entities is discussed below with respect to archaeological and literary evidence from each region.

Ezekiel's Lament

A vivid description of the expansive international character of Phoenician trade is found in Ezekiel's prophesies against Israel and other people of the Near East. His prophesy of destruction against Tyre includes a lament for the greatness of the city on the verge of destruction.¹⁵ This lamentation, found in Ezekiel 27, consists of one of the most vivid descriptions of the political, economic, and mercantile relations Tyre had established. In it, Ezekiel lists mercenaries, artistic products, trade goods, trade connections, and riches associated with the city in relatively succinct detail. The passage imagines the city as a ship operated by accomplished sailors and defended by capable warriors. Despite its skilled crew, the ship of Tyre ultimately wrecks and is lost to the sea.¹⁶ The details it records concerning the city's international relations are invaluable for reconstructing its trade sphere and economic activities.

¹⁴ Hom. *Od* 14.287-297.

¹⁵ Ezekiel 26-28.

¹⁶ Lipinski 1985, 213.

The passage opens in verse four with a description of Tyre's domain and its woodworking endeavors, including both materials and their origins. Cedar, pine, oaks, and cyprus are listed as coming from Senir, Lebanon, Bashon, and Cyprus.¹⁷ The "Ship of Tyre" is described as having a linen sail from Egypt and blue and purple awnings from Elisha (Alashia), indicating these areas traded textiles with Phoenicia.¹⁸ Sidon, Byblos, and Arvad are described as sailors and shipwrights to serve the city, followed by a declaration of Tyre's dominance in maritime trade.¹⁹ Putt, Lydia, Arvad, Helech, and Gammad are described as soldiers defending Tyre, implying military pacts with the cities or Tyre's conscription of trained foreign mercenaries.²⁰ Verse 11 is the end of the first poem that makes up chapter 27 and finishes the establishing of Phoenician military and cultural ties.

The next section is written in prose and discusses the trade relations Tyre had built by the eighth century B.C.E. Tarshish is the first location mentioned along with the exchange of silver, iron, tin, and lead for Phoenician wares.²¹ Tarshish is commonly believed to reference Iberia,²² which would suggest that Phoenicia's colonies in the west were relatively common knowledge in the Near East. Greece, Tubal, and Meshech are listed next, along with trade in bronze and slaves.²³ This information is particularly interesting considering that Homer specifically notes that the Phoenicians bought slaves

¹⁷ Ezekiel 27.4-6.

¹⁸ Ezekiel 27.7.

¹⁹ Ezekiel 27.8-9.

²⁰ Ezekiel 27.10-11.

²¹ Ezekiel 27.12.

²² Lipinski 2006, 181.

²³ Ezekiel 27.13.

in Greece.²⁴ Beth Togarmah is noted along with the trade of warhorses and mules, after which Rhodes is listed as paying Tyre in ivory and ebony. Next, Aram is described as exchanging turquoise, purple fabric, embroidery, fine linen, coral, and rubies; Judah and Israel exchanged wheat, honey, oil, balm, and “confections”; and Damascus provided the Phoenicians with wine and wool.²⁵ The Danites, and once, again the Greeks follow them and delivered iron, cassia, and calumus. Dedan is described as trading saddle blankets; Arabia and the “princes of Kedar” sent Tyre lambs, rams, and goats; Sheba and Raamah exchanged spices, precious stones, and gold; and finally, Haran, Canneh, Eden, Sheba, Asshur, and Kilmad shipped garments, blue fabric, embroidery, and rugs to Phoenicia.²⁶ By the time this section of chapter 27 finishes at verse 24, it lists an abundance of Phoenician trade connection and the materials associated with them. These locations include cities across the Near East and as far west as Iberia, and, as such, include much of the Phoenician trade sphere and portions of the PTN.

E. Lipinski addresses this section with respect to the linguistic relationship between the trade contact and their trade materials.²⁷ His translation of the passage suggests that the merchants in the respective cities and locations were dealers in Phoenician goods. In some cases these dealers acquire the goods listed from the associated cities. In others the Phoenicians supplied materials to the locations mentioned. The most notable exceptions are: Dedan who *received* wool in exchange for saddle

²⁴ Hom. *Od* 14.287-297.

²⁵ Ezekiel 27.16-8.

²⁶ Ezekiel 27.19-24.

²⁷ Lipinski 1985, 218-19.

blankets, and Rhodes, who may have received ivory and ebony as payment, rather providing them as to Tyre. The Rhodes translation is ambiguous.

The last poem in the chapter fully realizes the ship imagery and brings the lament to a close. The “ship of Tyre” is destroyed by the east wind and its cargo is lost. The world looks on, horrified, as the great city is brought low and the people of earth weep for the destruction before them. Ultimately Tyre is to become a byword in the eyes of other nations and merchants. All the glory and wealth is not enough to save them, and does not keep the nations from “shuddering in horror” at the thought of Phoenicia after its ruin.²⁸

This portion of Ezekiel is of course prophesy against a neighbor of Israel and Judah that had sometimes been at odds with the Jewish states. It had also been ally and an economic and political partner since the time of Solomon. As such, there is both a celebratory and regretful tone surrounding the discussion of the end of Phoenicia’s greatest city. Most importantly, the passage relays the Israelite’s impression of the many trade connections that the city of Tyre enjoyed. It provides a crucial look at how diverse and well-connected Tyrian trade was during the later Iron Age.

Egypt

Tracing the mercantile connections between Egypt and Phoenician is moderately difficult due to the near constant political and cultural interactions between the two regions. Identifiable Levantine cultural material in Egypt is quite rare suggesting that the

²⁸ Ezekiel 27.25-36.

demand for products of Phoenician material culture was not high along the Nile. This does not suggest that the trade was non-existent or lower than in other regions. The tale of Wenamun discussed in chapter II conveys the abundance of material exchanged between the two regions by the kings of Byblos.²⁹ Clearly the two regions had much to provide one another during the eleventh century B.C.E. This exchange did not cease after this period, as shown by the cultural exchange from Egypt to Phoenicia, the presence of Levantine materials found at Egyptian sites, the Egyptian imports at Phoenician sites, and the evidence for Phoenician peoples in Egypt, all of which are discussed below.

Perhaps the most important evidence for direct contact between the Phoenicians and Egypt is the near ubiquitous adoption of Egyptian cultural forms and ideas into Phoenician art. The earliest example of this cultural exchange is found on the relief from the tomb of King Ahiiram from Byblos (Figs. 41-42).³⁰ The relief shows the king holding a drooping lotus flower before an assembly.³¹ Egyptian influence is also clear in Phoenician ivory reliefs. This is seen as early as the 12th century B.C.E., and ivories from the eighth century B.C.E. include more Egyptian influence than those from the 12th.³² Ivories from the Iron Age can be grouped into three categories: the Hittite group, the Syrian group, and the Phoenician group. The Hittite group was produced by the Neo-Hittite peoples and is not associated with Phoenicia production. The Syrian group can be loosely associated with Phoenician culture and shows Mediterranean and Hurrian

²⁹ Wenamun ii.10-55.

³⁰ Giveon 1978, 32-3.

³¹ The lotus flower is a common theme in Egyptian art and religion (infra n. 30).

³² Giveon 1978, 38.

influences. The Phoenician group is directly associated with Phoenician artisans and includes very distinct Egyptian influences. This influence is not a direct copy but the adoption of Egyptian symbolism and religious iconography as part of Phoenician cultic and cultural art.³³ One of the best collections of Phoenician ivories is from Samaria and dates to the eighth century B.C.E. These artifacts may have been made for an Israelite king, Ahab or perhaps Jeroboam.³⁴ Phoenician ivories have also been identified as part of the Layard Group. These ivories were found at the southwestern palace of Nimrud and includes an ivory with “the king of Hammath” inscribed in Egyptian hieroglyphs. The ivories were brought to Nimrud by Sargon II, an Assyrian king, who conquered Hammath in 720 B.C.E. Some of the collection seems to have been made specifically for the king of Hammath. The cultural influence of the Egyptians on the Phoenicians is apparent in all of the examples of the discussed Phoenician artistic forms. In particular, they show elements of religious and cultic influence that were portrayed by the Phoenician artisans.³⁵

In addition to being influenced in their homeland, Phoenicians both lived and worked in Egypt. During the seventh to tenth centuries B.C.E., they produced pottery, faience, and metal works at Tanis and Bubastis. This material was subsequently shipped to the rest of the eastern Mediterranean and to the west at such sites as Huelva. This production included some of the first “classical Phoenician bowl(s) with narrative

³³ Giveon 1978, 37-8.

³⁴ Giveon 1978, 39-40.

³⁵ Giveon 1978, 37-8.

friezes” and would later include pottery with notable forms.³⁶ There is strong evidence suggesting that the Phoenician community in Memphis survived from the eighth to the fifth century B.C.E., when Herodotus describes a Phoenician enclave in the same region.³⁷ Further evidence is found in the Ptah statue at Cadiz that was produced at Memphis, most likely by Phoenicians.³⁸ The production of alabaster and glass alabastra was taken over in Egypt by the Phoenicians as early as the ninth century B.C.E.³⁹ These materials were shipped as far away as Andalusia, where they were reused for wine and as well as in burials. Meanwhile, in Egypt, the same products were reused for cat burials.⁴⁰ Phoenicians effectively monopolized much of the production in the Nile delta as late as the seventh century B.C.E., being influenced by the local culture as much as they affected it themselves.

The material exchange between Egypt and Phoenicia includes both raw and finished goods. Statues and pottery bearing the names of Egyptian and Byblian kings such as Sheshonk I, Osorkon I, Osorkon II, Sheshonk II, and Takelot II have been found in Byblos and as far away as Iberia.⁴¹ Statues in Egypt have also been dedicated to gods from Byblos, where the objects were produced.⁴² From the ninth to seventh centuries B.C.E. metals were imported into the Nile Delta along with the techniques and artisans to work them.⁴³ Nonetheless, the presence of Phoenician artifacts in Egypt remains rare,

³⁶ Gubel 2006, 87-9.

³⁷ Schepens 1987, 322-3.

³⁸ Gubel 2006, 88-9.

³⁹ Gubel 2006, 89.

⁴⁰ Gubel 2006, 89.

⁴¹ Pernigotti 1988, 527.

⁴² Lipinski 2006, 166.

⁴³ Gubel 2006, 88.

especially before the seventh century B.C.E. Contrarily, sixteen scarabs all dating before the seventh century B.C.E and mostly from Egypt, were found during the Tyre al-Bass excavation.⁴⁴ This was in addition to six scarabs found in the city of Tyre during the seventies.⁴⁵ In the early sixth century, during the reign of Psammetichus II, the number of Egyptian imports to Phoenicia increased as does the literary evidence for communication and trade between the two regions.⁴⁶

The cultural exchange between Egypt and Phoenicia indicates a high degree of influence and thus intellectual and cultural exchange. The control of Egyptian production by Levantine professionals living in the empire during the first half of the first millennium B.C.E. provides further evidence for this connection and Egypt's reliance on Phoenicia for production.⁴⁷ This Egyptian dependence suggests that while Egypt and Phoenician may have benefitted from one another, the major markets for Phoenician trade were likely the Arameans, Neo-Hittites, the Aegean city-states, and most importantly Assyria. These markets drove trade and gave the Phoenicians impetus to expand westward.⁴⁸ Egypt and Phoenicia did have their differences, such as when Tyre aided Assyria in their attack against Egypt in 667 B.C.E., or when Egypt attacked Phoenicia during the early sixth century after the fall of Assyria, leaving Phoenicia battered, weak, and vulnerable.⁴⁹ Nonetheless the history of their relationship was

⁴⁴ Aubet 2004.

⁴⁵ Bikai 1978, 83-7.

⁴⁶ Pernigotti 1988, 528.

⁴⁷ Gubel 2006, 89.

⁴⁸ Lipinski 2006, 181.

⁴⁹ Lipinski 2006, 198.

generally peaceful.⁵⁰ The independence and wealth of Egypt greatly benefitted Phoenician expansion and trade. Unlike Assyria, the empire would merely exist as a stable, secondary market compared to the wealth waiting under the growing Assyrian and Aegean cultures.

Greece

Understanding the connections and relationship between the cultures of Greece and Phoenicia is difficult. First, establishing that the Phoenicians themselves brought goods to the Aegean is tenuous, as any foreign goods could have been brought by Greek sailors, merchants, or warriors. In addition, the amount of material that conclusively originated from the Levant is minimal or completely absent. Conversely, the Phoenician homeland has a near continuous record of Greek material at nearly every site excavated. This has suggested to some archaeologists that the Phoenicians had little part in the exchange between the Aegean and the Levant and it was dominated by Aegean seafarers.⁵¹ The extensive Phoenician expansion precludes this hypothesis, as it is unlikely that a people that colonized and traded with groups on nearly every Mediterranean shore would avoid the city states of the Aegean. Archaeological evidence strongly implies the presence of Phoenicians in the Aegean and literary evidence by the Greeks themselves identifies the people in their waters.⁵² The only truly debatable factor

⁵⁰ Lipinski 2006, 174-201.

⁵¹ Aubet 1994, 1-5; Bass 1967, 75-8, 165-6; 1973, 29-37; 1997b, 153-9, 168-170; see also Muhly 1970, 35-7, 45-50; 1991, 235-9; Wachsmann 1987, 105-115; 1998, 154-5.

⁵² Hom. *Od.* 15.415-480; See Winter 1995 for an extensive discussion about Phoenician interaction with Greeks as recorded in Homer.

is the amount of influence the presence of Phoenicians had on the Greeks. In other words, how prominent was Orientalization?

As shown in chapter II, the connection between the Levant and the Aegean dated as early as the Bronze Age. As the Bronze Age came to a close, this trade did not cease, but rather continued unabated in the heart of the Phoenician homeland. Archaeology at Sarepta and Tyre from the first few decades of the 11th century includes Late Helladic Pottery.⁵³ This assemblage may have resulted from the remnant connections between the Phoenician homeland and the Aegean during the LBA.⁵⁴ The pottery is tied to the movement of people and Aegean cultural traditions, though it may also represent direct communication and trade. During the Iron Age any extant trade further developed and is seen in both Greece and across the PTN.

Crete provided one of the most useful anchorages for Phoenician seafaring to the western Mediterranean and Egypt. The island is situated along the west trending current in the Mediterranean and winds from Cyprus blow to the north or south and could have easily provided enough propulsion for brailed sails to reach the Aegean.⁵⁵ Perhaps the most important factor is that the island is one of the largest landfall targets in the Aegean Sea. Phoenician wares have been found at Knossos, on Crete, dating from the middle of the tenth century to the middle of the eighth centuries B.C.E.⁵⁶ The Cretan site of Kommos has revealed a Phoenician transport amphora dating to the mid to late tenth century B.C.E. The Phoenician materials from Kommos were found at Temple A: Stage

⁵³ Bell 2006, 59, 99.

⁵⁴ Bell 2006, 107.

⁵⁵ See chapter III, "Winds and Currents."

⁵⁶ Gilboa et al. 2008, 156, 167; Kourou 2008, 311, 319, 329.

2 and were likely used as devotional goods.⁵⁷ Phoenician influence at the temple may continue into the seventh century B.C.E. and the design and worship at Temple B.⁵⁸ Later Levantine pottery on the island has been found at Orthi Petra dating to the seventh century B.C.E. Phoenician material on Crete certainly identifies a trade connection between the two regions, but the merchants were not necessarily Levantine, or even from the Aegean. Strong evidence for the presence of Phoenicians in Greece was also found at the Levantine temple at Lefkandi in Euboea. Tyrian wares are found from the start of 10th century at Lefkandi on Euboea.⁵⁹ Phoenician pottery at the site continues on to the mid to late eighth century B.C.E.⁶⁰ The artifacts found could indicate that the site was a Phoenician settlement and religious center. If so, it was abandoned by its Levantine cohabitants early during their trade endeavors and the population was overwhelmed by native Greeks.⁶¹

The rest of Greece shows sparse signs of Phoenician trade connections. A mid to late ninth century B.C.E Levantine decorated bronze bowl was identified in Athens.⁶² A temple site at Samos includes dedications from Egypt, Cyprus, Syria, and the rest of the Near East.⁶³ One of the most extraordinary finds at this location consists of a set of horse armor hailing from Phoenician Syria. These include a bronze frontlet and blinkers. The artifacts were manufactured during the ninth century B.C.E, but the tomb they were

⁵⁷ Shaw 1989, 181-3; Kourou 2008, 320.

⁵⁸ Shaw 1989.

⁵⁹ Calvo 2008, 36; Gilboa et al. 2008, 145.

⁶⁰ Kourou 2008, 309-14, 320, 329, 335-46; Gilboa et al. 2008, 156, 167.

⁶¹ Kourou 2008, 355; Papadopoulos 1997, 196, 205-6.

⁶² Kourou 2008, 326.

⁶³ Morris 2006, 71-2.

found in dates to the sixth. The late date may indicate that the armor had been brought as spoils from a raiding campaign.⁶⁴ Lastly, a North Syrian bronze bowl has been identified at Tragena near Lamia indicating a potential Late Geometric connection between Euboea and the northern Phoenician or the Neo-Hittite cities.⁶⁵

The intellectual and material connections between the islands of the Aegean and Phoenicia date from the earliest beginnings of their cultures. Orientalizing in Greece began as early as the 10th century B.C.E where it can be seen in Euboea.⁶⁶ From this period on, there is an intellectual exchange between cultures of the Aegean and Phoenician cities and colonies across the trade network.⁶⁷ Seafaring exchange to the Aegean during the seventh and sixth centuries is indicated by the cargos on the Kepçe Burnu and Kekova Adasi wrecks off the coast of Turkey.⁶⁸ The exact nature of the exchange between Phoenicia and the Aegean is uncertain, especially considering that the amount of Phoenician material in Greece is but a fraction of the Greek material found in Phoenician cities and colonies. Perhaps raw or delicate materials were traded for Greek pottery. For instance, purple dye and dyed clothes were made famous by Levantine production, and silver was imported from Iberia and subsequently exchanged with the rest of the eastern Mediterranean.⁶⁹ Such goods are extremely unlikely to be preserved in their original form, if at all. Thus, if these items were the primary trade goods from the Phoenicians to the Aegean peoples, the archaeological record would artificially inflate

⁶⁴ Morris 2006, 73.

⁶⁵ Kourou 2008, 329-35.

⁶⁶ Riva and Vela 2006, 11.

⁶⁷ Morris 2006, 74.

⁶⁸ Greene et al. 2010, 61-5.

⁶⁹ Aubet 1994, 17, 80-4.

the importance of Greek pottery, the main export of the Aegean to Phoenicia. Whatever the nature of trade between Greece and Phoenicia, the ubiquitous nature of Greek pottery at Levantine sites confirms the economic and mercantile importance of the relationship.⁷⁰

Assyria

The renewal of Assyrian dominance in the Fertile Crescent in the tenth century B.C.E. provided the Phoenicians with their most valuable market. The Neo-Assyrian Empire that returned the state to its economic and militant dominance grew out of the period of Near Eastern decline from 1100 to 934 B.C.E.⁷¹ The first king Ashur-Dan II began reasserting Assyrian dominance by using the Assyrian war machine to reacquire northern territories that they controlled during the Middle Assyrian period. This process was continued by his successors and built the foundation of power that allowed later kings to engage in far-reaching campaigns that expanded and consolidated regional Assyrian control.⁷² Assyrian influence turned to domination during the eighth century B.C.E. Small states that had adjusted their political and economic approaches to best take into account Assyrian influence were conquered by the empire, or forced to pay tribute to maintain their independence.⁷³ This process of growth and power consolidation

⁷⁰ This will be demonstrated in chapters five and six.

⁷¹ Kuhrt 1995, 473.

⁷² Kuhrt 1995, 478-90.

⁷³ Kuhrt 1995, 473.

continued until 630 B.C.E. This year began a period of rapid decline that ended with the Assyrian state falling to the Babylonians and Medes during the 610s B.C.E.⁷⁴

The expansion and subsequent dominance that the Neo-Assyrian Empire maintained over the Near East made the state extremely wealthy and provided it with an abundance of resources. The redistribution of conquered populations often resulted in more successful industries and higher populations than had existed under the conquered kings.⁷⁵ Immediate wealth would have come from every defeated city and palace as the plunder was carted off to Assyrian king's current abode. As a result Assyrian merchants and nobility had an overabundance of riches to invest in Phoenician materials, craftsmanship, and artisans. There is a wealth of information including iconography, historical documents, and archaeology indicating that the Assyrians were consistently benefitting from Phoenician trade.⁷⁶ These benefits came both through mercantile activities and the position of power Assyria exerted over the coastal Levantine cities.

Connection between the Phoenician cities and the Assyrians date as early as the late 12th century B.C.E. when Tiglath-Pileser I traveled from Arwad to Sumur. The same king received gifts from Sidon, Byblos, and Arwad after his travels.⁷⁷ Tribute to the Assyrians from the Phoenicians became a constant aspect of their relationship during the ninth century B.C.E. Ashunasirpal II received tribute from Arwad, Byblos, Sidon, and Tyre including bronze vases, dyed fabrics, ivory, and timber.⁷⁸ Tribute to Assyria

⁷⁴ Kuhrt 1995, 473, 544-6.

⁷⁵ Kuhrt 1995, 535-7.

⁷⁶ Aubet 1994, 88-95, 117-9.

⁷⁷ Lipinski 2006, 163; Bondi 1988, 38.

⁷⁸ Lipinski 2006, 166; Bondi 1988, 41.

continued throughout the ninth and into the eighth century when Tiglath-Pileser III began forcefully annexing portions of Phoenician territory. The Assyrian empire ultimately either controlled or demanded heavy tribute from all Phoenician territory by the end of the century and the independence of the Phoenician monarchies declined. Assyrian control of Phoenician actions was best expressed when the Assyrian king Sennacherib chose the new king of Sidon during the last years of the eighth century B.C.E.⁷⁹ By the early seventh century only Tyre, Sidon, Byblos, and Arwad maintained any political independence from Assyria. By 676 B.C.E. Sidon had been annexed as an Assyrian province. Tyre maintained the highest degree of freedom under the empire, but the entire Phoenician mainland was under Assyrian control and many of their ports were heavily taxed.⁸⁰

Assyrian domination of the Phoenician homeland was not simply accepted by the seafaring cities. Multiple military actions, siege defenses, revolts, and coups were attempted by the Phoenicians during the three centuries of Assyrian dominance. A Syrian force, including five Phoenician cities, attempted to rise against Assyria in the mid-ninth century B.C.E.⁸¹ Later, Hiram II allied with Damascus against Assyria but ultimately submitted to Tiglath-Pileser III. Luli was anointed in Sidon at the behest of the Assyrian king, deposing Hiram II of the throne, but Luli would prove rebellious as well and revolted at the end of the eighth century B.C.E.⁸² Tyre rose against the empire again in 671, but ultimately succumbed to Assyrian rule without repercussions. The city

⁷⁹ Bondi 1988, 41-3; Lipinski 2006, 184-6.

⁸⁰ Lipinski 2006, 189-96.

⁸¹ Lipinski 2006, 181.

⁸² Lipinski 2006, 189.

was besieged by Assyria in 663/2 B.C.E., perhaps as delayed punishment for the previous revolt. While most of Phoenicia would be annexed as part of Assyria, the island of Tyre maintained its political independence until it succumbed to the Babylonians in the sixth century B.C.E.

The tributary requirements the Assyrians place upon the Phoenicians created additional pressure for them to maintain a high level of wealth accumulation. Their trade network must have aided this effort, especially since Iberia brought in a steady flow of high value materials such as silver, gold, and ivory. The pressure to maintain Assyrian tribute has often been attributed as the primary justification for Phoenician expansion westward.⁸³ The early dates for expansion in the tenth and ninth centuries suggest that this interpretation is overstated and that expansion was primarily motivated by population pressures or the desire for wealth accumulated by new sources of raw materials.⁸⁴ Nonetheless colonization may have been heavily influenced by the rising wealth in Assyria and the resulting increased demand for products, which Phoenician merchants saw as a situation to exploit.

Evidence for the importance of Phoenician mercantile imports to Assyrian cities is present in Assyrian iconography. The flat bottomed *Hippoi* in the Khorsabad relief have been identified as Phoenician riverine transport vessels. The depiction dates to the late eighth century. It is from Sargon II's palace and appears to show Phoenician transport inside Assyria.⁸⁵ The Lamassu plaques depict two flat-bottomed boats operated

⁸³ Aubet 1994, 88-95.

⁸⁴ Aubet 1994, 71-84; 2008, 247; Lipinski 2006, 181.

⁸⁵ Basche 1987, 306-10; Linder 1986, 273-6.

by foreigners, likely Phoenicians, transporting timber.⁸⁶ There are also two vessels cited by E. Linder that are identified as Phoenician seagoing ships bringing tribute to Assyria.⁸⁷ The literary record supplies evidence that the Assyrians were aware of the value of Phoenician seafaring, as they consistently taxed the harbors that came under their control, allowing the Phoenicians to otherwise continue their mercantile efforts unabated.⁸⁸ There is also historical record that the Phoenicians supplied the Assyrians with skilled artisans directly associated with imported Egyptian blue glaze material.⁸⁹

Due to the ubiquitous nature of Phoenician trade with Near Eastern peoples and Assyria's predilection to conquer them, it is difficult to identify which materials were brought as trade goods and which were tributes or spoils of war. Numerous artifacts such as the Nimrud and Samaria Ivories have been identified as Phoenician produced, but the majority were made for non-Assyrian states.⁹⁰ Further many of the imports brought to Assyria are difficult to identify because a considerable amount must have been in the form of raw materials. Details of raw silver, gold, copper, ivory, and dyed fabrics can all be found in the records of tribute to the empire.⁹¹ Unfortunately, finding these in the archaeological record is nearly impossible as they have been destroyed by time, used in the manufacture of local goods, or lost. Nonetheless, the abundance of Phoenician imports into Assyria and the empire's importance with respect to Phoenician wealth and

⁸⁶ Linder 1986, 278.

⁸⁷ Linder 1986, 276-7.

⁸⁸ Aubet 1994, 94; Lipinski 2006, 195-7.

⁸⁹ Giveon 1978, 38-9.

⁹⁰ Giveon 1978, 38-40.

⁹¹ Jidejian 1968, 79; Prichard 1969, 282.

trade is without doubt.⁹² The fact that the rise and fall of the two cultures nearly coincides is certainly more than coincidence. The downfall of Phoenicia in the Levant can, of course, be attributed directly to militaristic dominance of the area and was shortly followed by their submission to the rising Babylonian empire.⁹³ That the rapid success and wealth from Phoenician trade so clearly coincides with the ascension of the Neo-Assyrian Empire can only be due to the nearly inexhaustible market Assyria provided Levantine seafarers and merchants.

Israel and Judah

The rise of the Israelite kingdom, which subsequently split into Israel and Judah, provided Phoenician cities with an eager market for manufactured goods, raw materials, and artisans. The kingdoms also proved to be willing political allies during periods of relative peace prior to the rapid expansion and Near Eastern domination of the Neo-Assyrian Empire. In return for valuable commodities and political good will the Israel and Judah were able to provide Phoenicia with cereals and other consumable products.⁹⁴ Some of these, such as olive oil, could be packaged in amphorae and shipped out to the Mediterranean markets. Others, such as cereals, were crucial for providing Phoenician cities with the food needed to support dense populations along a narrow Levantine coast line with little arable land.

⁹² Aubet 1994, 88-95.

⁹³ Lipinski 2006, 197-200.

⁹⁴ I Kings 5.1-12.

Some of the most important information about the relationship between Israel and the Phoenicians comes from the Bible. Under the rule of King David, Hiram I, the king of Tyre sent workmen and gifts to David to build his palace and celebrate his rule.⁹⁵ Hiram and Solomon enjoyed an even more productive relationship. The king of Tyre sent Solomon cedar, ivory, stonemasons, metal workers, as well as the metals themselves, to build Solomon's temple and palace. In return, Solomon sent an abundance of wine, oil, and grains. He also provided Hiram I with a gift of land, which, upon seeing, Hiram dismissed as "good for nothing".⁹⁶ The two also engaged in two sea ventures, to Ophir for gold, and a second to the semi-mystical land of Tarshish. Each of these ventures proved to be extraordinarily bountiful; every three years the ships returned with ivory, gold, silver, wood, and other exotic materials.⁹⁷

After the reign of Solomon, Israel split into Judah and Northern Israel (Israel), but this event did not end either kingdom's relationship with Phoenicia. One of the most famous accounts of their affiliation is that of Ahab and Jezebel. Jezebel was the daughter of the Phoenician king Ethbaal. He arranged a marriage pact with king of Israel, Omri, engaging his daughter and Omri's son Ahab. This was part of Ethbaal's policy to expand the influence and power of the Phoenician kingdom.⁹⁸ Jezebel ultimately proved infamous in the eyes of the Israelites for her attempt to spread Phoenician religion to Israel.⁹⁹ Phoenician infamy in the eyes of the Israelite prophets was nearly constant, as

⁹⁵ II Samuel 5.11; I Chronicles 14.1.

⁹⁶ I Kings 5.1-12, 9.11-4.

⁹⁷ I Kings 9.26-8, 22; II Chronicles 8.17-8, 21.

⁹⁸ Lipinski 2006, 176-7.

⁹⁹ I Kings 16.21-22; II Kings 9.30-7.

the declarations against Tyre and Sidon are regularly found in their books.¹⁰⁰ The most instructive is Ezekiel's description of Tyre discussed above.¹⁰¹ All of these details concerning the Phoenicians in the Bible identify a strong awareness and relatively close social and political connections between the two states.

The literary record of both the Old Testament and Phoenician annals identify close connections between the Israelites and Phoenicians that is generally confirmed by archaeological evidence. The Samaria Ivories consist of a collection of Phoenician-made ivories that were found in the city and may have been produced for the Israeli king Jeroboam II. These ivories date to the eighth century B.C.E. and were likely produced for, or purchased by, the Israelites.¹⁰² The site of Horvat Rosh Zayit on the Phoenicia/Israel border dates from the tenth to ninth centuries B.C.E. This site contains both Phoenician and Cypriot pottery, and the architecture consists of Phoenician header and stretcher construction (ashlar masonry). The excavators of the site suggest that it is biblical Cabul, the land Solomon gifted to Hiram I, who considered it worthless.¹⁰³ On the other hand, the site's earliest occupation layers may date to the late tenth century B.C.E., and thus to the time of king Omri, not Solomon. Further the presence of Isrealite "Hippo" storage jars has been used by Lipinski to argue that the site is of Israeli origin rather than a Phoenician constructed border fort.¹⁰⁴ It is reasonable that either culture built the structure, but the Phoenicians seem the most likely candidate as shown by the

¹⁰⁰ Ezekiel 26-8; Zechariah 9.2-4; Isaiah 23; Jeremiah 25.22; Amos 1.9-10; Joel 3.4.

¹⁰¹ Ezekiel 27.

¹⁰² Giveon 1978, 40.

¹⁰³ Lipinski 2006, 177-8.

¹⁰⁴ Lipinski 2006, 178.

abundance of Phoenician pottery and the architecture. Whoever established the site, it provides evidence for a close relationship between the two states. The presence at the border of a fortification is also evidence of (possibly tense) military relations between the two countries as well as economic and political associations.

Tel Dor provides another connection between the Israelites and the Phoenicians. The archaeological evidence in the city contains an abundance of artifacts, suggesting that it was culturally, and potentially politically, Phoenician into the ninth century B.C.E.¹⁰⁵ Dor was traditionally considered part of Israel under Solomon's rule, though actual Israelite control of the city may date after the mid-ninth century B.C.E. since the Phoenician materials extend well past this time.¹⁰⁶ The Phoenician cultural dominance at the city certainly extended into the period of Israelite control and, as a result, economic relations would have as well.

According to A. J. Nijboer, Tombs at Lefkandi on Euboea also show stylistic and material similarities to those found in Israel.¹⁰⁷ While the similarities date to the tenth century, the connections between Lefkandi, Phoenicia, and Israel must be more than coincidence, especially considering the fact that Israelites are never known to be seamen.¹⁰⁸

The political, cultural, and economic connections between the Israeli states and Phoenicia as demonstrated through historical literature and archaeology indicates that

¹⁰⁵ Gilboa et al. 2008, 114-17.

¹⁰⁶ I Kings 4:11; Gilboa et al. 2008, 158.

¹⁰⁷ Nijboer 2008, 367.

¹⁰⁸ In fact, their attempt to venture to sea without Hiram met with disaster (I kings 22.48; 2 Chronicles 20.35-7).

the cultures maintained close connections. These relations remained stable at least until Assyria came to dominate the region at the end of the eighth century B.C.E. After this period, there is little reason to believe that trade between Judah and Phoenicia ended, especially as Assyria would have reaped monetary reward through the connection via taxation. The Israelite and Judeans imported metalwork, ivory and bone art, jewelry, glass, statuary, and terracotta masks and figures from Phoenicia for much of the Iron Age II period (tenth to sixth centuries B.C.E.).¹⁰⁹ The return economic benefit as foodstuffs, oils, and other resources for the Phoenicians must have been substantial.

Phoenician trade throughout the Near East and eastern Mediterranean was expansive. It did not just include the four major cultures detailed here, but as seen in Ezekiel 27, many others. Philistia, Judah, Israel, North Syria, Cilicia, Assyria, Greece, the Neo-Hittite cities, Edom, Hamath, and many more all traded with, and were subsequently influenced by, the Phoenicians. In turn, the resulting exchanges allowed the Phoenicians to remain successful in their endeavors and to accrue great wealth. Israel, Assyria, Greece, and Egypt, however, were particularly important cultures in these mercantile relations, especially for historians. They provided abundant literary evidence about Phoenicia, and all of them provide crucial markers both in literature and archaeology to identify details about Phoenician trade activity.

Most importantly, nearly every Near Eastern state that interacted with Phoenician trade activities was ultimately subsumed under the Assyrian umbrella. Those that were not conquered acted in conjunction with Assyrian policies since it was the economic,

¹⁰⁹ Brody 2002, 76.

militaristic, and political superpower in the region.¹¹⁰ The ultimate result of this is that little evidence is left detailing the daily details of Phoenician trade. Fortunately, these details have little bearing on the development of the Phoenician's maritime trade network. The actions of Assyria are by far the most important economically and politically to the Phoenician homeland, and in conjunction with the information from the Aegean, Israel, and Egypt one is able to rebuild the economic environment that allowed for Phoenician success.

The Eastern Maritime Trade Network

The success of the PTN necessitated the multitude of connections between their city states in the eastern Mediterranean and the many regional powers that have been discussed. Trade between these entities helped to maintain cultural ties as well as strengthening the maritime trade network. The ability of a Phoenician merchant to trade his goods at Tyre, Sidon, Byblos, Arwad, or any other city associated with the culture expanded their markets increasing, the likelihood that he could make a profit off of his cargo. It is almost impossible to fully understand the nature of these trade relationships due to the absence of preserved documentation concerning the internal trade practices of these cities. Did a Phoenician merchant from Tyre pay a fee to land and sell his wares in Byblos or Arwad? What allowed the cultural connections between the cities to remain strong despite the fact that they seemed to act independently of one another

¹¹⁰ Kuhrt 1995, 473-500, 536-7.

economically, politically, and militarily? How much influence did the king of one city have over another? Many questions remain unanswered and our limited understanding forces archaeologists and historians to use the information available to understand what they can of Phoenician trade and cultural connections.

The most important factor that can be asserted for this discussion is that these Phoenician cities were indeed “Phoenician” in culture and identity. The conformity of pottery forms and other material culture is crucial to understanding the identity of these sites, but, more importantly, for understanding their intercommunication. These cities did not live in a vacuum. Competing ideas, material and artistic forms, architectural methods, religions and more all existed together. Yet Phoenician cities are considered to be effectively one people in terms of material culture.¹¹¹ While some of this information most certainly stems from the documentation of ancient historians such as Josephus as well as the records of Assyrian kings, the archaeology from Phoenicia generally conforms to ancient historical record.¹¹² The fact that the Phoenician cities spread across the coast of the Levant share artistic and material forms suggests regular communication and that ideas and cultural norms were shared. As a result, the cities of the eastern Mediterranean that made up this portion of the PTN must have maintained very close ties. The following section describes the evidence for, and implications of, the ties between several major Phoenician cities and regions.

¹¹¹ Lipinski 2006, 174-6.

¹¹² Calvo 2008.

Tyre

Historically and archaeologically, Tyre is the standard by which the rest of eastern Phoenicia is understood.¹¹³ The city in many ways *is* the history of the Phoenicians, as it was the city that maintained its independence longest and clearly demonstrated the many traits of Phoenician culture.¹¹⁴ Unfortunately, the material culture lacks a comprehensive chronology,¹¹⁵ though recent excavations at Tyre al-Bass by M. Aubet provide new data from stratified deposits and associated artifacts.¹¹⁶ The importance of the city with respect to understanding Phoenician trade and history makes the city the foundation for establishing the trade connections between the Phoenician littoral and the colonies across the Mediterranean and Atlantic.

One of the closest and most direct Phoenician connections to Tyre is Sarepta. This city, located just southeast of Tyre, shows material connections to its neighbor as early as the 11th century B.C.E.¹¹⁷ The connection between the two cities was maintained until the sixth century and Tyre's downfall to the Babylonians.¹¹⁸ The close material culture connections between them must have largely been the result of their close geographic location. That said, they also appear to have maintained different international ties. Whereas Sarepta kept strong connections with the Aegean, Tyre had much stronger associations with Cyprus.¹¹⁹ Nonetheless, the close internal ties between

¹¹³ For a full discussion on the history of Tyre see Katzenstein 1973.

¹¹⁴ Aubet 1994, 31.

¹¹⁵ Calvo 2008, 19-20.

¹¹⁶ Calvo 2008, 26-7.

¹¹⁷ Bell 2006, 99-100.

¹¹⁸ Calvo 2008, 67.

¹¹⁹ Bell 2006, 99.

the two cities can even be seen in the pottery that was imported to and influenced the Iberian colony of Huelva during the eighth century B.C.E.¹²⁰

Despite its close ties to Sarepta, Tyre's true sister city was Sidon. Connections between them are evinced through both historical documentation and archaeology. The establishment of Tyre was attributed to Sidon during the eleventh century B.C.E.¹²¹ This reconstruction has been proven to be incorrect since archaeology at Tyre dates as early as the third millennium B.C.E.¹²² Nonetheless, the ties between Sidon and Tyre from the early days of Phoenician culture is well established historically.¹²³ The two cities were truly united under the priest king of Sidon Ethbaal I, who established himself as the king of Tyre and deposed the royal line of Hiram I.¹²⁴ This united rule of two of the most important cities in Phoenicia existed until the Assyrians named their own king of Sidon, Luli in the late eighth century B.C.E. The practice continued through the next century. The Assyrians' choices were not always the best, as when, for example, Luli revolted against Assyrian around in the mid-720s and again in 701 B.C.E.¹²⁵ Exchange between the two cities is evident in the pottery assemblage until at least the late seventh to sixth century B.C.E.¹²⁶ Of the major Phoenician cities in the eastern Mediterranean, Sidon and Tyre most certainly maintained the closest political, economic, and as a result, cultural connections.

¹²⁰ Gonzalez de Canales et al. 2008, 634-6.

¹²¹ Just. *Epit.* 18.3, 5.

¹²² Ciasca 1988, 147.

¹²³ Aubet 1994, 29-31.

¹²⁴ Lipinski 2006, 180.

¹²⁵ Lipinski 2006, 187-90; Bondi 1988, 43.

¹²⁶ Calvo 2008, 67.

Tyre and Cyprus maintained the closest political and economic relationship between locations not encompassed by Levantine Phoenicia. The trade connections between the Syro-Canaanites and Cyprus were well established in the LBA and EIA, as discussed in chapter II above. Further evidence is found in the development of neck-ridge jugs on the mainland.¹²⁷ During the EIA, trade connections between southwestern Cyprus and Tyre have been established archaeologically. This exchange also exists with Sarepta, but appears far stronger with Tyre.¹²⁸ Additional evidence for connections is shown by the exchange of pottery during the tenth century B.C.E.¹²⁹ Cyprus and Tyre's connection strengthens in the ninth century B.C.E. with the colonization of Kition.¹³⁰ Cypro-Archaic pottery dating to the late ninth and eighth centuries B.C.E. found in the Levantine city shows continued mercantile ties between them.¹³¹ This exchange remains unbroken into the sixth century B.C.E. as shown by the continued appearance of Bichrome IV ware in the Levant.¹³²

With respect to the PTN, Tyre took the lead with Phoenician colonization and settlement in the eastern Mediterranean. One of the earliest North African settlements, Auza, was established in the ninth century B.C.E. by Ethbaal I. Current evidence does not provide the location of ancient Auza; however, it has been proposed that the location of the city is Aziris, despite the fact that no Phoenician wares have been found there.¹³³

¹²⁷ Calvo 2008, 25-6.

¹²⁸ Bell 2006, 97.

¹²⁹ Calvo 2008, 31-2, 35.

¹³⁰ Smith 2008, 293.

¹³¹ Calvo 2008, 56.

¹³² Calvo 2008, 66.

¹³³ Boardman 2010.

Scholars have also proposed other sites for the colony including: Marsa al-Awgia, Burda, and Marsa Matruh, where Cypriot and Aegean wares have been found and evidence exists suggesting the presence of Phoenicians.¹³⁴ Once Auza was established, it is reasonable to suggest that Tyre maintained connections with it, though, since its location is unknown, this assertion must remain unproven.

Ethbaal also established Botrys north of Byblos in the ninth century B.C.E., where again, ties must have been retained with the mother city Tyre at least until Assyria conquered northern Phoenicia in the eighth century B.C.E.¹³⁵ Tyre also established the colony of Mriandos, which is known to have maintained connections with its founding city until the eighth century B.C.E.¹³⁶

Many other, less famous Phoenician cities in the eastern Levant had well established connections with Tyre. The burial practices at Tel Akhziv have strong parallels to those from Tyre al-Bass.¹³⁷ The pottery at the two sites also show parallels from ninth to the sixth centuries B.C.E.¹³⁸ The cultural ties with this city on the border of Israel may represent the political and social dominance of the Phoenician cities over their non-Assyrian neighbors. The burials found at Tambourit near Sidon also show strong parallels to those at Tyre al-Bass.¹³⁹ The archaeological parallels between Tyre and this site date as late as the eighth century B.C.E.¹⁴⁰ Tel Abu Hawam, Tel Keisan, Tel

¹³⁴ Lipinski 2006, 178-9.

¹³⁵ Lipinski 2006, 178-9.

¹³⁶ Aubet 2008, 250.

¹³⁷ Aubet 2004.

¹³⁸ Calvo 2008, 32-65.

¹³⁹ Aubet 2004.

¹⁴⁰ Calvo 2008, 56.

Qasile, Ashod, and sites along the Carmel coast of Israel all contain evidence for strong material culture parallels with Tyre.¹⁴¹ These data indicate close mercantile connections between the sites, beginning in the tenth century B.C.E. and continuing to the seventh to sixth centuries B.C.E. Politically, Tyre maintained control over the Akko valley during the tenth and ninth centuries B.C.E. The earliest pottery identified as “Phoenician” comes from sites here including Akhziv, Tell Keisan, and Tell Abu Hawam.¹⁴² Historically, Hiram I engaged in a successful military campaign during the tenth century to obtain control of the region.

The wide dispersal of sites along the Levantine coast that share ties with Tyre indicates a high degree of influence maintained by the Phoenicians over the region. The consistency of forms found on Phoenician produced goods from different cities does not allow for a direct connection between the sites listed and Tyre itself. It does provide strong evidence that they maintained some form of material culture connections with Phoenicia in general. It is merely a matter of convenience to associate these locations with Tyre, since the city has the most extensive archaeological record.

Byblos

Endemic political strife exists in many of the regions where the Phoenicians maintained political hegemony. As a result, very little archaeological research has been carried out at most Phoenician sites.¹⁴³ Byblos, located in modern Lebanon, is a primary

¹⁴¹ Calvo 2008, 32-65.

¹⁴² Lipinski 2006, 174-6.

¹⁴³ Calvo 2008, 19-20.

example of this dilemma, and as a result there is little extant information about the site from the Iron Age. Further, the information regarding its foreign connections is limited even with respect to documentation.¹⁴⁴ Fortunately some data do exist understand the history of the city.

After the LBA and EIA, during which Wenamun and the Amarna Tablets record Byblos as having direct connections with Egypt and maintaining other strong mercantile connections, Byblos appears to fall under the shadow of Tyre and Sidon and out of the historical record.¹⁴⁵ Nonetheless the city maintained valuable trade connections despite its fall from importance. The Assyrian empire required Byblos to pay tribute beginning in the ninth century B.C.E., which continued into the seventh.¹⁴⁶ For the city to have avoided annexation and deportation, it must have acquired enough wealth to buy its freedom. Byblos continued to be involved in the trade of cedar during the tenth century B.C.E., as indicated by biblical texts, and into the ninth century B.C.E. as detailed by the Assyrians.¹⁴⁷ Materials for tribute during the ninth century included gold, silver, tin, iron, antimony, linen, dark purple wool, blue wool, ivory, and animals, which were almost certainly acquired through trade.¹⁴⁸ These goods also closely reflect the tributes given by Tyre, suggesting that the two cities maintained similar mercantile connections.¹⁴⁹ Interaction with Egypt also continued into the Iron Age II period (1000-550 B.C.E.), as shown by the production and importation of statues produced at

¹⁴⁴ Jidejian 1968, 75.

¹⁴⁵ See “Precursors to the Phoenician Trade Network” in Chapter 2.

¹⁴⁶ Lipinski 2006, 166, 189.

¹⁴⁷ Jidejian 1968, 72-6.

¹⁴⁸ Jidejian 1968, 79.

¹⁴⁹ Bondi 1988, 41.

Byblos.¹⁵⁰ The city was most certainly important. On the other hand, its political and economic connections to the rest of Phoenicia seemed to be slim since the city worked very hard to maintain peace with Assyria and did not aid its Phoenician neighbors.¹⁵¹ It seems that Byblos maintained far closer ties to these locations culturally, but not politically, economically, or militarily.

Sidon

It is difficult to identify the trade connections out of Sidon that cannot be associated with Tyre. Since the two cities were effectively under the same political control from the ninth to the end of the eighth century B.C.E., trade connections were almost certainly similar. Even after the two cities were forcefully split by the Assyrians, it is unlikely that their mercantile activities changed. After the city was annexed into Assyria in the early seventh century B.C.E. some of the trade may have altered, especially for merchants preferring to stop at a non-Assyrian controlled port.¹⁵² The Assyria gift of the southern portion of the Sidonian province to Tyre suggests the empire recognized the close ties between the cities and their territories.¹⁵³ Sidon itself must have maintained strong cultural connections with Tyre long after annexation due to their proximity and long history of interaction.

Like all major Phoenician cities, connection between the Assyrians and Sidon can be traced back to the eleventh century B.C.E. Tribute from the city to Assyria started

¹⁵⁰ Pernigotti 1988, 527; Lipinski 2006, 166.

¹⁵¹ Jidejian 1968, 75-82.

¹⁵² Lipinski 2006, 191-2.

¹⁵³ Lipinski 2006, 192.

in the ninth century B.C.E. and continued until the Sidon's fall to Esarhaddon in 676 B.C.E.¹⁵⁴ Despite the fact that Sidon suffered one of the worst fates at the hands of Assyria, it was also the most celebrated Phoenician city after Tyre. Sidonians are repeatedly mentioned as masters of artistic skill, ship building, and metal work by Homer.¹⁵⁵

Archaeological evidence does identify numerous potential Sidonian trade connections outside of Tyre, Assyria, and Egypt. After the establishment of Kition on Cyprus, the political dominance of Phoenicia on the island was in a constant state of flux. The Phoenicians established a "Carthage" on Cyprus, which was probably located near Kourion. Sidon is believed to have been directly related to the founding of the colony, and at least one Sidonian man was buried at Kourion during the seventh century B.C.E.¹⁵⁶ Pottery from the burials at Tambourit (the necropolis associated with Sidon), dating to the ninth and eighth century B.C.E., can be associated with materials in Israel at Akziv, at Amathus on Cyprus, at Hazor, at Khalde near Beirut, and along the Carmel Coast.¹⁵⁷ That the artisans of Sidon, especially those who worked ivory, were in high demand is indicated by the many Phoenician ivories excavated in Assyria, but taken from Israel, Hammath, and other conquered cities.¹⁵⁸ There can be no doubt that Sidon played a major role in the dispersal of Phoenician goods and the mercantile activities of the cities.

¹⁵⁴ Lipinski 2006, 191.

¹⁵⁵ Hom. *Od.* 14.287-97, 15.415-8; *Il.* 23.740-4; Jidejian 1971, 27-8.

¹⁵⁶ Smith 2008, 273, 293.

¹⁵⁷ Calvo 2008, 56.

¹⁵⁸ Gubel 1987, 27; Givon 1978, 37-40.

Arwad

Arwad is located on an island and was the northern-most Phoenician city in the Levant. Its position made it an ideal city for trade with the Neo-Hittites and the Aramaeans. Unfortunately, no extensive data exist that address the city's trade activities. The only extant information concerning Arwad is found in the Assyrian Annals as records of tribute sent to the empire. Despite its tribute, Arwad was far more willing to actively against the Assyrians than was Byblos. The city's northern location and its military actions against Assyria both provided strong incentive for the Assyrians to annex the city into the empire as soon as possible. Despite this, even after losing control of the mainland, the city remained independent long after Sidon and the neighboring regions were annexed.¹⁵⁹ Its island location must have been the determining factor in Arwad's ability to resist control, as Assyria maintained no standing navy.¹⁶⁰

Arwad sent gifts to the Assyrian king Tiglath-Pileser I in the 11th century. Actual tribute to Assyria was documented during the ninth century B.C.E. by Ashurnasirpal II.¹⁶¹ The city was involved in a revolt against the empire in the ninth century B.C.E. that was a joint venture between multiple cities including Phoenicians and northern Syrians.¹⁶² Assyria obtained control of the mainland off Arwad during the eighth century B.C.E. by taking Amrith, which had served as the city's mainland port. Amrith may have been an extension of Arwad itself, over which the city exerted political control

¹⁵⁹ Lipinski 2006, 185.

¹⁶⁰ Lipinski 2006, 185.

¹⁶¹ Lipinski 2006, 166.

¹⁶² Lipinski 2006, 180-1.

prior to Assyrian domination.¹⁶³ Once Amrith fell under Assyrian control during the seventh century B.C.E., they began heavily taxing the Phoenician imports to the coast. The king of Arwad thwarted this taxation by forcing ships to dock at the Phoenician controlled harbor (perhaps on Arwad itself) rather than the Assyrian port, killing any that did not comply. He ultimately submitted to the Assyrian king, not long after providing military aid against Egypt. Arwad, nonetheless, retained some level of economic opposition against Assyria until Ashurbanipal came to power.¹⁶⁴

The Phoenicians maintained markets in Aramaea, with the Neo-Hittites, and in Anatolia in the northern region of their influence.¹⁶⁵ Arwad must have been involved with this trade, though ubiquitous eastern Phoenician material culture makes the connections difficult to identify. Archaeology at the city does identify some eastern connections. Arwad maintained cultural and artistic connections with Egypt, as demonstrated by two reliefs dating to the seventh or sixth century B.C.E. The panel has numerous Egyptian motifs and iconographic depictions. These depictions can be associated with the production centers around Tyre where similar reliefs were produced.¹⁶⁶ Glass demon head pendants found from the seventh or sixth century B.C.E. have been identified at Tyre, Byblos, and Arwad, providing evidence for connections between these cities.¹⁶⁷ Traditional terracotta masks produced by the Phoenicians have

¹⁶³ Ciasca 1988, 150.

¹⁶⁴ Lipinski 2006, 195-7.

¹⁶⁵ Lipinski 2004, 114-5.

¹⁶⁶ Moscati 1988, 300.

¹⁶⁷ Uberti 1988, 480.

been found in the city of Amrith. These masks can be dated from the ninth to seventh century B.C.E. and are part of common Phoenician material culture.¹⁶⁸

Tel Dor

The last major location on the Levantine coast to be discussed is Tel Dor. The excavations at the site have been recently completed and are associated with well-stratified data and well correlated carbon-14 dates.¹⁶⁹ The sites foundation is attributed to one of the Sea Peoples, the *Sikila*, during the eleventh century B.C.E., as recorded by Wenamun.¹⁷⁰ Later, the Bible records that it came under the control of the Israelites, specifically as one of Solomon's provinces.¹⁷¹ The site contains a considerable amount of Phoenician material and as such seems to have maintained relatively strong ties with the cities as early as the tenth century B.C.E.

The archaeological evidence from the city provides a number of cultural and trade connections across the eastern Mediterranean. Pottery from the site can be connected to Egypt, Syria, Cyprus, Philistia, and the Aegean from the twelfth to the ninth century B.C.E.¹⁷² Weak connections, based on pottery, can be suggested between Tyre and Dor from the twelfth to tenth centuries. Stronger trade relations appear to have existed between the city and Sarepta, Tel Keisan, and Cyprus. The exchange with Cyprus appears particularly strong, as pottery found at Enkomi had been produced at

¹⁶⁸ Ciasca 1988, 354-6.

¹⁶⁹ Gilboa et al. 2008.

¹⁷⁰ Gilboa et al. 2008, 114.

¹⁷¹ I Kings 4.11.

¹⁷² Gilboa et al. 2008, 117.

Dor.¹⁷³ It is during the end of this period that the strongest cultural ties to Phoenicia develop.

The connections to Phoenician culture that develop during the late tenth century B.C.E. are found in a number of forms. Bichrome pottery from the site is also found at Tyre and Sarepta.¹⁷⁴ Parallel forms are also found at Tel Keisan, Tel Abu Hawam, Megido, Tel Quasile, and Yoqne'am.¹⁷⁵ Cypriot table ware is found in Dor during this time, suggesting a local population from Cyprus or the adoption of some Cypriot traditions. Most importantly, it is during this period that thick triangular transport wares were “invented” at Dor to be exported across the eastern Mediterranean.¹⁷⁶ These pots were produced as a sort of “Phoenician logo” for their products.¹⁷⁷

At the end of the tenth century, during the transition between the Iron Age I and Iron Age II, Phoenician pottery from Dor continues to be found at Tyre, Sarepta, Tel Keisan, and at Tel Abu Hawam.¹⁷⁸ Similarities between ceramic production are indicative of exchange and potential communication between the sites. Imports to Dor change at the end of the 10th century B.C.E. to include a new influx of pottery from Euboea.¹⁷⁹ Products from this area of Greece are also found at Tyre and Tel Rehov during the tenth century B.C.E. transition. Cypriot tableware continues to appear at Tel Dor and may indicate more extensive Cypriot commercialism across the eastern

¹⁷³ Gilboa and Sharon 2003, 31-3.

¹⁷⁴ Koehl 1985, 45-6; Gilboa et al. 2008, 137.

¹⁷⁵ Gilboa et al. 2008, 134.

¹⁷⁶ Gilboa and Sharon 2003, 34-5; Gilboa et al. 2008, 145-6.

¹⁷⁷ Gilboa et al. 2008, 146.

¹⁷⁸ Gilboa et al. 2008, 147.

¹⁷⁹ Gilboa and Sharon 2003, 135.

Mediterranean.¹⁸⁰ Most interestingly is the presence of silver at the site derived from the Aegean, Anatolia, and Sardinia.¹⁸¹ Clearly metal trade at the end of the tenth century is quite expansive and extends into the western Mediterranean basin.

The record of Phoenician influence at Dor ends in the ninth or earliest eighth centuries B.C.E. A mud brick wall discovered at the site displays traditional Phoenician architectural elements and indicates that these were used at Tel Dor as late as the ninth or eighth century B.C.E.¹⁸² During the ninth century, Dor made Cypriot Bichrome pottery, which has been found on Cyprus at Amathus.¹⁸³ Ninth century pottery artifacts from Dor find parallels at Tyre, Sarepta, Tel Keisan, Tel Abu Hawam, Megido, and Tel Rehov.¹⁸⁴ Euboean pottery also continues to be imported during this century, indicating the continuation Dor's Greek connections.¹⁸⁵

During the period of Phoenician influence at Tel Dor, the city apparently maintained one of the highest levels of mercantile and cultural connections with Cyprus of all the Phoenician cities. This does not alter the evidence for the site's connection to Phoenicia since Cyprus is one of Phoenicia's closest and most consistent trade partners. By the end of the ninth century B.C.E. the material culture in Dor begins to shift away from Phoenician traditions, perhaps as a result of increasing Israelite control over the region.¹⁸⁶ Until this time Dor maintained trade relations with the Levantine region as

¹⁸⁰ Gilboa 1999, 12.

¹⁸¹ Gilboa et al. 2008, 156.

¹⁸² Ciasca 1988, 151.

¹⁸³ Gilboa 1999.

¹⁸⁴ Gilboa et al. 2008, 158.

¹⁸⁵ Lemos and Hatcher 1991; Gilboa et al. 2008, 166.

¹⁸⁶ Gilboa et al. 2008, 166-8.

well as Cyprus, though there is some evidence that it traded with Greece and perhaps even with Sardinia.

Cyprus

Cyprus is the last major region of Phoenician cultural influence in the eastern Mediterranean to be discussed. Cyprus represents a different model of interaction from the international trade connections Phoenicia had with other regions in the east. Unlike the case with Assyria, Egypt, or even the Greek islands and cities, Cypriot connections are more consistent and common. As has been discussed above, Cypriot wares, or Phoenician produced pottery with similar forms, have been found at Tyre, Sarepta, Tel Dor, the Carmel Coast, Tell Afis, and other sites.¹⁸⁷ Unlike the other political entities with which they traded, the Phoenicians took political and economic control of parts of the island as early as the ninth century at Kition, and established additional colonies following this.¹⁸⁸ As a result, for the purposes of this research, Cyprus is considered an integral part of the PTN.

Trade connections between the Levantine coast and Cyprus date well back into the Bronze Age and the EIA as noted previously. The literary documentation and archaeological evidence for the connections during these periods are quite extensive. Both Tyre and Sarepta maintained consistent trade with the island, especially the southwest corner. Of the two cities, Tyre appears to have maintained stronger relations

¹⁸⁷ Bell 2006, 70; Lehmann 2008, 208-9; Gilboa et al. 2008, 143; Calvo 2008, 35.

¹⁸⁸ Smith 2008, 263-4, 272, 281-5.

with Cyprus.¹⁸⁹ Levantine pottery and weights were found at *Maa-Palaeokastro* which also showed a great deal of eastern Mediterranean cultural diversity. EIA Canaanite jars of a type found at Tyre and Sarepta were also discovered at *Palaepaphos-Skales* and *Kition*.¹⁹⁰

Phoenician pottery designs on the island indicate that connections between Tyre and the rest of Phoenicia continued during the tenth century B.C.E. Trade relations with Syria can also be attested by pottery found at *Kition*.¹⁹¹ Tombs dating to this period show similar organization of burial goods to those found at *Lefkandi* on *Euboea* and in Northern Israel. Both sites can be tied to Phoenician traditions and as such provide important links between the Levant and Cyprus.¹⁹² The archaeological record on the island dating from end of the tenth century to the end of the ninth indicates an expansion of Phoenician influence as well as substantial international trade. Aegean ceramics made on Cyprus are found both at Tyre as well as in the Aegean. Cypriot pottery is also found at Athens. At sites on Cyprus and in the Aegean these Cypriot produced wares are associated with Phoenician pottery styles.¹⁹³ The close Phoenician connections with the island can be observed not only in the material culture, but the use of Phoenician script there. The earliest Phoenician inscription on Cyprus was found at *Salamis* and dates to the ninth century B.C.E.¹⁹⁴ The script appears again on pottery as well as in inscriptions

¹⁸⁹ Bell 2006, 90, 107.

¹⁹⁰ Bell 2006, 95-7.

¹⁹¹ Calvo 2008, 35; Gilboa et al. 2008, 143.

¹⁹² Nijboer 2008a, 367.

¹⁹³ Calvo 2008, 43-4, 48.

¹⁹⁴ Smith 2008, 274-5.

written in Cypriot with Phoenician letters.¹⁹⁵ It is also during the ninth century that the Phoenician colony of Kition is established by Tyre.¹⁹⁶ It was thought that the Phoenician colonization of Kition was of an abandoned site. However, new research indicates that Kition was never abandoned prior to Phoenician occupation.¹⁹⁷ The “colony” may have actually been the result the Phoenicians seizing political control. This event, combined with the regular immigration of Phoenician people, helped the city to quickly develop a strong Levantine material culture. Whatever the nature of the colony, the site displays signs of culture exchange with Tyre in the form of pottery and architecture.¹⁹⁸

The eighth century B.C.E. saw the further expansion of Phoenician political control on the island. Cypriot “Carthage” was founded on the island during the early decades of the century.¹⁹⁹ The location of the colony is unknown, but Smith proposes that it was near Amathus.²⁰⁰ The discovery of a seventh century inscription of a Sidonian man living at the city found at Kourion potentially narrows the colony’s location.²⁰¹ Imports found in tombs at Salamis and Amathus dating to this century contain materials from Euboea, Athens, and the Levant, specifically Tyre.²⁰² Salamis may have also been under some form of Phoenician control during the eighth and seventh centuries, as indicated by the presence of Levantine cultural traditions, particularly evident in

¹⁹⁵ Smith 2008, 265-6, 273.

¹⁹⁶ Karageorghis 1982, 123-7; Hunt 1982, 62-4; Aubet 1994, 52.

¹⁹⁷ Smith 2008, 281-5.

¹⁹⁸ Aubet 1994, 51-4; Karageorghis 1982, 123-7.

¹⁹⁹ Smith 2008, 272-3.

²⁰⁰ Smith 2008, 273-5

²⁰¹ Smith 2008, 273-5, 278, 293.

²⁰² Calvo 2008, 54-6.

tombs.²⁰³ The expansion of political influence on the island must have resulted from successful trade relations and further expanded with the successful political hegemony over Kition.²⁰⁴ This period parallels the expansion of Assyrian influence across the Near East. Perhaps Phoenicia was encouraged by Assyria to control Cypriot exports, especially copper. It is also possible that the increased threat of Assyria resulted in extensive population movement from the Levant to Phoenicia's closest trading partner.

Cyprus's close cultural connections with the Phoenicians continued well into the classical period, but Phoenician political control began to wane during the seventh century, giving way to Assyrian domination.²⁰⁵ Trade relations continued through the seventh and into the sixth century B.C.E. as seen by the presence of Bichrome IV ware at both Tyre and the island.²⁰⁶ Material culture from Cyprus associates Amathus to Israel and Khalde, and pottery connects the island to Sarepta and Akhziv.²⁰⁷ The continuation of trade relations between Cyprus and Phoenicia, despite the latter's rapid submission to the Assyrian empire, presumably resulted from Assyria's lack of a navy. As such, the empire depended the fleet of their Phoenician vessels to exert influence over Cyprus.²⁰⁸ Even as the Phoenicians lost their political sovereignty, the cultural and economic connections they shared with the Cypriots continued. These factors show that the island

²⁰³ Smith 2008, 276-7.

²⁰⁴ Smith 2008, 263-4.

²⁰⁵ Smith 2008, 276.

²⁰⁶ Calvo 2008, 62.

²⁰⁷ Calvo 2008, 66.

²⁰⁸ Lipinski 2006, 194-5.

is not only part of the PTN, but a crucial location involved in the economic expansion and influence of the Phoenicians across the Mediterranean.

The eastern Mediterranean was a technological, economic, mercantile, and political pressure cooker that resulted in the mass dispersal of eastern people and culture. The Phoenicians took advantage of their skills as seamen to expand and trade, directing their activities toward economic gain. Their expansion would not have been possible without the local connections to wealthy empires demanding exotic goods, rare metals, and the products of skilled craftsmen and artisans. These markets were both the ultimate goal as well as the jump-off-points for cross-Mediterranean trade ventures. As part of this network, an Egyptian scarab might be traded in Tyre for oils or ivory, sent across the sea in exchange for raw materials and precious metals, and ultimately end up back in the east to be exchanged with an Assyrian merchant.

None of these ventures would have been possible without the local trade network that allowed goods to be transported to the markets that demanded them (Fig. 42). Regional cities and colonies provided access and infrastructure to reach Phoenician trade partners. The partners themselves provided markets for the many materials and products imported from the west and produced in the cities. These ties formed a dependable maritime network that would support regional exchange for at least three centuries.

CHAPTER V

THE CENTRAL MEDITERRANEAN

The central Mediterranean served as the crossroads for the PTN. This region produced multiple colonies with their own pottery trends and shipping containers. Carthage was the most important colony in the area: this city was both the major entrepôt for the region and, due to its location on the North African tip across from Sicily, an excellent anchorage for ships heading east or west. Other important colonies were located on Sicily, Sardinia, and along the North African coast near Carthage. In many respects, the region was self-contained, though it did maintain important political, cultural, and trade relationships with cities and colonies to the east and west.

Carthage as a Major Entrepôt

Beginning in the sixth century B.C.E., Carthage is best known historically as a powerful city and maritime empire dominating the western Mediterranean basin.¹ Long before the period of Punic dominance however, the city was founded as a colony of Tyre. The ‘new city’ quickly developed a with planned infrastructure and a useful anchorage. It took advantage of the skills of its citizens and its geographic location to develop invaluable trade connections, becoming a major central Mediterranean entrepôt within two or three generation of its founding. Carthage also developed its own material cultural that was exported to the many locations with which the city maintained

¹ Warmington 1969, 223-42.

consistent trade relations. Ultimately its importance as a port of trade and a colony of Phoenicia both helped to bring riches back to Tyre and the Levant as well as providing the foundation for the city's development as a major maritime power.

After the fall of the PTN, the city of Carthage established its own political empire that proved to be even more powerful than its Levantine predecessors. It became the nemesis of Rome during the third and second centuries B.C.E., resulting in the Punic wars. Ultimately Carthage was destroyed, a victim of its own success.² The threat that Carthage posed to Rome was a direct result of the foundations that allowed the city's rise. As part of the Phoenician colonization movement, it was born out of a technologically advanced maritime culture. Its established ship-building technologies permitted Carthage to become the naval superpower of the western Mediterranean before Rome had any respectable ships.³ The Punic Empire was built on economic relationships established during the ninth to sixth centuries B.C.E.⁴ With the new political autonomy Carthage enjoyed beginning in the mid seventh century B.C.E.,⁵ the city began establishing its own colonies in the central Mediterranean.⁶ This process of settlement evolved into an aggressive expansion program during the sixth century B.C.E. The Punic domination of Sardinia provides clear evidence for this change. Prior to the sixth century B.C.E., Phoenician settlements appear to have coexisted with the indigenous people on the island. There was some natural cultural diffusion; however, there is no evidence for

² Warmington 1969.

³ Warmington 1969, 154-64.

⁴ Warmington 1969, 134.

⁵ Smith 2008, 277.

⁶ Lipinski 2006, 194.

the forceful adoption of cultural practices.⁷ This relationship changed during the mid-sixth century when Punic culture appears to be forced upon Sardinians across the island, indicating political and cultural control rather than merely resource and material exchange.⁸ Expansionist policies such as these brought Carthage the resources and wealth necessary to build an empire to challenge the Roman Republic.

While Carthage is famous for its activities as an independent empire, it is crucial to appreciate that Carthage's expansion was entirely dependent upon previously established mercantile connections. These were the result of the city's function as a major trading hub for regional and cross-Mediterranean exchange within the PTN. The Carthaginians did not have to search for locations or populations with valuable resources and skills. This information was well known to them already, because most of the material moving east would have passed by, or stopped at, Carthage. This was also true for ships traveling west. Carthage was crucial for Phoenician expansion.

According to historical accounts, Carthage was founded at the end of the ninth century in 814/13 B.C.E as discussed in chapter II. The legend of Elissa/Dido and the associated dates for Carthaginian establishment, post-date the historical foundation dates for other Phoenician sites including Lixus, Gadir, and Utica. Contrarily, archaeological evidence for the establishment dates of all four colonies are relatively congruent.⁹ Of these four cities, only Gadir and Carthage became major trade ports. The early city of

⁷ Bernardini, 2008, 537-70; Aubet 1994, 235-53.

⁸ Bernardini 2008, 571-3.

⁹ Aubet 1994, 194-9.

Utica in North Africa was quickly overtaken by Carthage with regard to importance, though it appears to have maintained its autonomy into the sixth century B.C.E.¹⁰

The origin story of Carthage has important details that may explain Carthage's rapid growth. Carthage was supposedly founded by a group of noblemen led by a Tyrian princess, which suggests that the colony was not merely established to obtain additional resources. Instead, it involved the establishment of a new power center, a *city* rather than a *colony*. Whether or not the event was actually a diaspora of nobles fleeing for their lives, it is quite likely that a number of important, wealthy Tyrians with administrative talent were involved in Carthage's founding. Aside from the historical account, this is implied by the organization of the city from its earliest years, which included a layout that appears to be planned and based on Tyre.¹¹

The capabilities of the individuals that founded Carthage may have helped the newfound colony to quickly establish itself as a productive and profitable entrepôt along the east-west Mediterranean passage. With proven skill and wealth, the nobles could have quickly developed the infrastructure to support large populations and aid the shipping industry. Soon shipping-related industries would have been encouraged to set up shop in the city. Ship builders, artisans, industrialists, wood-workers, natives, and merchants would have helped Carthage grow and prosper. These factors also would have encouraged the development of Carthage as a trade center for the entire Mediterranean. Phoenician merchants from Sardinia, Sicily, and North Africa would have found in Carthage an invaluable regional city exchange their wares. Merchants from the Levant

¹⁰ Aubet 1994, 230-1.

¹¹ Niemeyer 1995, 74-5.

and from Iberia could both sell goods as well as learn about the best markets for their goods. The city, the largest Phoenician colony in the west, must have been Tyre's western jewel.

Unfortunately, many of these assertions must remain little more than conjecture. Carthage drops out of the historical record after its establishment until ancient historians begin detailing the city's sixth century B.C.E accomplishments. Carthage's agreement with the Etruscans to thwart piracy, their military actions across the western Mediterranean basin, and their involvement in Sicily, Iberia, and Sardinia were reported by Greek and later Roman historians.¹² These events detail the rise of the Carthaginians as an empire. Unfortunately, they provide no information about the interactions between the Carthaginians, the Levant, and the western colonies. Historical documentation does indicate that Carthage provided tribute to Tyre as late as the mid seventh century B.C.E., even as the city was beginning to establish its independence from the Levant.¹³ The written evidence provides a context for Carthage's trade relationships, but it is only archaeological information that is able to show the diversity of connections between the city and the rest of the Mediterranean.

The many imported materials found at Carthage demonstrate its importance for central Mediterranean exchange. These include North African, Sicilian, and Sardinian wares as well as pottery from Greece and both the eastern and western Mediterranean. These materials provide evidence for connections at all of these locations. The similarities between locally produced material goods and the material culture at other

¹² Warmington 1969, 83-153.

¹³ Lipinskin 2006, 194 .

sites across the central Mediterranean provide evidence not only for the movement of products around the regions, but the exchange of ideas and individuals able to transport culture from one location to another.

Locally produced pottery found in contexts with Greek and Euboean pottery were associated with carbon-14 dates that suggest Carthage's founding was indeed, as historically asserted, 814/13 B.C.E.¹⁴ The Greek and Euboean pottery is dated to the eighth century, and, as such, casts doubt on the ninth century carbon-14 age.¹⁵ Nonetheless, the diversity of the materials, in conjunction with the extremely unlikely possibility of finding the earliest materials from a new colony, argue that the historical dates for the city's founding are accurate.¹⁶

The pottery repertoire documents the abrupt rise of Carthage's trade relations and international connections. Eighth century artifacts at the city not only hail from Greece and Euboea, but also from Phoenician colonies around the Mediterranean. Artifacts at the city from the central Mediterranean dating to eighth century B.C.E. hail from Sardinia at Sulcis and North African site at Utica.¹⁷ Carthage most certainly maintained relatively close trade relations with the Levant and its patron city. As mentioned, the city planning was based on Tyre and the early architecture was Tyrian in form.¹⁸ Tyrian ceramics are found in Carthage as early as 800 B.C.E. and continue to appear through

¹⁴ Docter et al. 2008, 383; see also Aubet 2008, 247-8.

¹⁵ Docter et al. 2008, 384; see also Kourou 2008, 307.

¹⁶ Aubet 2008, 247.

¹⁷ Docter et al. 2008, 384-5, 387; see also Kourou 2008, 307; Warmington 1969, 36-82.

¹⁸ Niemeyer 1995, 74-5.

the eighth century.¹⁹ Connections with Iberia begin almost with the founding of the city. Artifacts at Morro de Mezquitilla that date to the late ninth and early eighth centuries B.C.E. show parallels the Carthaginian assemblage.²⁰ The city also shows early connections with southern Iberia with the appearance of western produced “circuito del estrecho” pottery contextually dated soon after the city’s establishment.²¹ Thus, the archaeological record clearly shows that the early years of Carthage included rapid growth and the quick establishment of trade connections that would encourage economic success and take advantage of its location in North Africa.

During the late eighth and first half of the seventh centuries B.C.E., Carthage maintained the trade connections that it had established during its first few generations and built upon them. Pottery from North Africa and Spain both appear in the archaeological record at the city as “circuito del estrecho” wares. Sardinia also continued to be a crucial trade connection show in the Carthaginian pottery assemblage.²² The relationship includes more than trade as seen in the development of Nuragic amphorae, which show direct parallels to early Carthaginian amphora styles in their early-eighth century B.C.E. forms. They continued to be exported from Sardinia to Carthage well into the seventh century B.C.E.²³ Relations with Sicily first become apparent during the early seventh century B.C.E. when transport amphorae and lamps from Carthage have

¹⁹ Docter et al. 2008, 387, 401.

²⁰ Aubet 2008, 247-48.

²¹ Aubet 2008, 247; Docter et al. 2008, 392-3, 403.

²² Docter et al. 2008, 384-5, 387.

²³ Docter et al. 2008, 400-4.

parallels with those found at Motya.²⁴ It is surprising that trade relations with Sicily occur so late considering Carthage's proximity to the island. This may be the result of the historically proposed mass abandonment of Phoenician colonies that resulted from the arrival of Greek settlers.

Eastern forms of pottery maintain a distinct presence at Carthage, as seen with the appearance of red slip and bichrome pottery throughout the seventh century B.C.E. Locally produced pottery can be associated with Tyre, showing a continuing link between the two cities.²⁵ The variety of Greek wares in Carthage expands during the late eighth and seventh centuries to include pottery from across the Greek littoral. Pithekoussian and colonial Greek pottery show up in Carthage during the late eighth century B.C.E.²⁶ Attic pottery also appears at this time, though its occurrence is rare. Euboean pottery also continues to arrive at Carthage during this period. The expansion of Greek contacts during the seventh century is evinced by pottery from Corinth and the appearance of eastern Greek Black wares.²⁷ Lastly, during the eighth century there may have been some limited cultural and material exchange with the Phoenician colony at Malta as Maltese ceramics are found at Carthage and a distinctly Carthaginian plate was found on the island.²⁸

By the end of the seventh century B.C.E., Carthage began to establish its independence from Tyre and the rest of Phoenicia. Though the city continued to send

²⁴ Procelli 2008, 466.

²⁵ Docter et al. 2008, 387.

²⁶ Docter et al. 2008, 404, 410-13.

²⁷ Docter et al. 2008, 404-10.

²⁸ Sagona 2008b, 518-20.

Tyre tribute, it began establishing its own colonies and to act as an independent political entity.²⁹ Its newfound “freedom,” or perhaps will to act, may have been influenced by the contemporary crisis in the Phoenician homeland. The rapid downfall of Sidon and subsequent weakening of Tyre, Arwad, Byblos, and other locations must have resulted in less oversight, control, and demands from the east. Further, news of the Assyrian threat in the Levant could have acted as motivation to expand the influence and economic prosperity of Phoenician culture and ideas where the Assyrians could never become a threat. This, of course, presumes that the Carthaginians thought of themselves as Phoenicians and would have personally associated themselves with the situation in the east; a proposition that, at this time, is reasonable, but unproven.

Carthage maintained its trade relations and expanded upon its military and political activities during the sixth century B.C.E.³⁰ Connections with Sicily as well as eastern Greece and Corinth are well represented in the archaeological record at this time.³¹ Cultural and material connections with Tyre may have continued as well. The materials and design of Carthaginian tombs show direct parallels with the patron city.³² There is no doubt about the power, mercantile and political connections, and military might of Carthage by the sixth century B.C.E., during which it began to establish itself as a power in the west and to expand its influence across the now defunct PTN. This network provided immediate access to mercantile and territorial expansion.

²⁹ Lipinski 2006, 194; Warmington 1969, 34-5.

³⁰ Fantar 1988, 169-71.

³¹ Docter et al. 2008, 403, 404-5, 409-10.

³² Docter et al. 2008, 416.

Encouraging merchants to stop at Carthage, and more importantly, to engage in mercantile activities in the city, required more than just a convenient location. The cosmopolitan nature of the archaeological assemblages from the city provides strong evidence for a diverse variety of shipping and trading opportunities. The many mercantile connections, seafaring infrastructure, and local industry at Carthage would have lured merchants and seamen alike to the city to exchange goods and obtain vessel support and maintenance. Locally produced pottery at the city is found as early as the mid-eighth century B.C.E.³³ With this production came the development of localized pottery forms based on eastern designs. These wares influenced foreign material culture such as Sardinian amphorae and Sicilian ceramics.³⁴ Carthaginian pottery is found across the western Mediterranean and probably reached Etruria where local amphorae were also influenced by Carthaginian wares.³⁵ Some of the pottery exported across the Mediterranean was for everyday use such as lamps or table wares. Others were used to transport goods such as amphorae and large red-slip pots. These containers contained commodities that may have been locally produced at Carthage or repackaged at the city including wine, grains, or fish.³⁶ Whatever the contents of these containers, the wide dispersal of Carthaginian ceramics imply that the city was known for exporting both valuable utility and decorative goods as well as perishable commodities such as food, oils, and wine.

³³ Docter et al. 2008, 384-5.

³⁴ Procelli 2008, 469.

³⁵ Bernardini 2008, 546; Docter 2000.

³⁶ Bechthold and Docter 2010.

Central Mediterranean Trade Connections

Unlike the eastern Phoenician littoral, there is no distinctive cultural, mercantile, political, or geographic feature that delineates the central Mediterranean as a unique region within the PTN (Fig. 43). The demarcation is entirely subjective, but useful, when establishing the PTN as a means of organization for the many colonies west of the Aegean. The Phoenicians in the central Mediterranean region traded regularly not only with local peoples, their own colonies, and islands, but with North Africa and Iberia. The main delineation between the central and western colonial spheres in the Mediterranean is the regional entrepôt. For the central region, Carthage is the overarching cultural and mercantile force and impacts nearly all of the sites in the region. The connections through, and with, Carthage have already been identified. Within the central Mediterranean, demarcated by the Aegean in the east and Ibiza in the west, there also exist additional cultural and exchange connections visible at the individual colonies.

Sicily

Phoenician materials first appear in Sicily during the ninth century B.C.E. An earlier Levantine presence on the island is not confirmed, but by the ninth century eastern artifacts and perhaps iron-working technology, are recorded at indigenous sites.³⁷ The settled presence of Phoenicians at their colonies appears to date to the early eighth century B.C.E. According to Thucydides, these colonies predate 734 B.C.E. the earliest

³⁷ Procelli 2008, 464.

years of which saw them spread across the island.³⁸ These colonies are historically attributed to the ninth century B.C.E. and were supposedly abandoned as a result of Greek immigration to Sicily; however no evidence exists for these colonies in the archaeological record.³⁹ The most conclusive evidence for regular Phoenician trade with the island during the ninth century B.C.E. is found in the presence of early Nuragic, Carthaginian-influenced, amphorae and iron-working.⁴⁰ Motya, Solunto, and Palermo were founded during the eighth and seventh centuries B.C.E. as is evidenced by the archaeological record. These three sites indicate that the PTN included Sicily. These colonies may have even exerted sufficient influence to maintain some measure of maritime control over the Tyrrhenian Sea.⁴¹

Of the three known colonies on Sicily, the island of Motya is the earliest. Definitive dates indicate it was established in the eighth century B.C.E.⁴² The founding of the colony is traditionally traced to Hercules, but is historically regarded as Phoenician, as recorded by Thucydides.⁴³ Phoenician pottery designs and funerary practices are confirmed by the eighth century B.C.E. at the site of Birgi.⁴⁴ Phoenician pottery production at Motya continues through the seventh century B.C.E.⁴⁵ This colony's trade connections extend into the central Mediterranean region of the trade network. Eighth century Nuragic amphorae found at Motya indicated a connection with

³⁸ Thuc. 6:2; Diod. Sic. 20.58.

³⁹ Procelli 2008, 464, 466.

⁴⁰ Leighton 1999, 229; Procelli 2008, 464-5.

⁴¹ Procelli 2008, 467.

⁴² Isserlin and Taylor, 1974.

⁴³ Thuc. 6:2-6.

⁴⁴ Procelli 2008, 469; The site lies directly across from the island of Motya on mainland Sicily.

⁴⁵ Procelli 2008, 468.

Sardinia.⁴⁶ The grave goods and the composition of tombs at Birgi, dating to the early seventh century B.C.E., have direct parallels with the assemblages at Carthage.⁴⁷ Unique pottery forms, including amphorae dating to the seventh century B.C.E., were produced at Motya and have been found at Malta.⁴⁸ This pottery began production during the late eighth century B.C.E. and appears to have been exported at least across the central Mediterranean.⁴⁹ Motya also had some connection with the Greeks as imports from the Aegean are also found: these include proto-Corinthian styled pottery dating between 740 and 700 B.C.E.⁵⁰ This connection may have been maintained through the Greek colonists on Sicily or perhaps via the Phoenicians. Motya fell under Carthaginian rule during the sixth century B.C.E.⁵¹

One of the most well-known features from the site at Motya is the dual harbor design consisting of an inland (closed) and a seaward (open) harbor. The northern open harbor maintained a deep anchorage for large vessels while the inner, “locked” harbor would have been suitable for ship repair and, potentially, the unloading of cargo. The northern harbor was connected to a causeway that led to the closed harbor.⁵² This is a traditional harbor design seen at Tyre, Gadir, and Carthage.⁵³ Unfortunately the closed harbor on the site dates to the sixth or fifth century B.C.E., indicating that it was created

⁴⁶ Lo Schiavo 2005, 575-91.

⁴⁷ Procelli 2008, 468.

⁴⁸ Sagona 2002, fig. 339; Procelli 2008, 475.

⁴⁹ Procelli 2008, 475.

⁵⁰ Di Stefano 2005, 595-6.

⁵¹ Isserlin and Taylor, 1974.

⁵² Isserlin, 1971.

⁵³ Aubet 1994, 178-82; Warmington 1969, 128-31.

under Carthaginian control rather than earlier, when the site was a Phoenician mercantile colony and did not benefit the PTN.⁵⁴

The Sicilian colony at Solunto was established by the seventh century B.C.E. The settlement produced local amphorae during this period, likely to store locally-produced consumables for export.⁵⁵ Information on the site is relatively sparse, though some trade information is available. It was certainly connected to Carthage, as indicated by its influence on locally produced ceramics. This site also includes pottery with eastern Phoenician influence and ceramic workshops reflecting western Phoenician designs. These materials date to seventh and sixth centuries B.C.E., though the workshop was used into the fifth century.⁵⁶

Like Solunto, Panormo (modern Palermo) was established during the seventh century, as dated by the local production of amphorae.⁵⁷ Grave goods at the colony dating to the seventh century B.C.E. show cultural associations with the goods in traditional eastern Phoenician tombs. This connection is identified both by the grave goods chosen as well as the eastern-influenced designs of locally produced pottery within the tombs. Sixth century B.C.E. cultic materials continue to reflect Levantine traditions. Additionally local pottery from the sixth century employs both Greek and Phoenician designs.⁵⁸ The knowledge of Greek ceramic traditions implies that the goods

⁵⁴ Isserlin and Taylor, 1974.

⁵⁵ Procelli 2008, 469.

⁵⁶ Greco 2005, 675.

⁵⁷ Procelli 2008, 475-7.

⁵⁸ Procelli 2008, 470.

were well known by the colony's inhabitants. Their adoption in association with Phoenician forms suggests a shift in cultural identity at the site.

The earliest international trade connections at Sicily are confirmed from the Middle to Late Bronze Age. Cypriot pottery from this period was discovered on the island.⁵⁹ These finds are potentially related to the Marsa Matruh route dating to the LBA. Eighth century contacts with Phoenicia include Levantine pilgrim flasks and Egyptian soapstone scarabs found at Villasmundo.⁶⁰ In the seventh century B.C.E Milazzo-Mylai has produced Levantine amphorae including at least one ceramic artifact with Phoenician script. The Greek sites Himera and Chamarina also contain contemporaneous Phoenician.⁶¹ This evidence indicates that Sicily maintained continual eastern Mediterranean connections beginning long before the Phoenicians arrived. Once the Phoenicians did arrive and colonize, they traded within the network as well as with indigenous cultures on Sicily, Malta, and probably Italy.

Sicily was in many ways a melting pot. Unique material culture traditions were produced on it that combined Phoenician and indigenous traditions. It was in this environment the Phoenicians lived, near Italians, Greeks, Sicilians, Carthaginians, and their fellow colonists. The island remained part of the PTN until it fell under Carthaginian control during the second half of the sixth century B.C.E.

⁵⁹ Procelli 2008, 463.

⁶⁰ Procelli 2008, 466

⁶¹ Procelli 2008, 477.

Sardinia

Definitive Phoenician influence on Sardinia is dated to the ninth century B.C.E. and potential connections between the island and the Levant can be traced to the LBA and EIA. The evidence for this comes from both pottery and the presence of Sardinian silver in the east.⁶² The confirmed Phoenician presence on the island during the ninth century is shown by numerous artifacts and written inscriptions. This early period of interaction has been considered a pre-colonial stage, during which the Phoenician merchants established a rapport with the indigenous Sardinians.⁶³ Most Phoenician sites on the island have eighth century B.C.E founding dates according to archaeology.⁶⁴ Activity and trade at these colonies continued into the sixth century when, after a short period of negligible Phoenician influence and partial abandonment, the Carthaginians took control of the island. This conquest was short and brutal, involving a dramatic shift in interaction between colonists and indigenous peoples and resulting in the forceful acceptance of Punic culture.⁶⁵

Nora is the oldest Phoenician settlement on the island according to Greek sources.⁶⁶ Archaeological evidence on the site dates its establishment to the eighth century B.C.E.⁶⁷ This date is called into question by the presence of the Nora Stele. This artifact, found at the site in 1773, includes an inscription that has been translated

⁶² Gilboa et al. 2008, 117, 127; Bernardini 2008, 539. A discussion on the early connections to Sardinia is detailed in chapter II.

⁶³ Bernardini 2008, 570.

⁶⁴ These dates are discussed below. For a general overview of Phoenician activity on Sardinia see Dyson and Rowland 2007, 102-12.

⁶⁵ Bernardini 2008, 573.

⁶⁶ Acquaro 1988, 214; Balmuth 1992, 691.

⁶⁷ Van Dommelen 2006, 144; Aubet 2008, 248.

multiple times since it was first published in 1835.⁶⁸ One of the most recent attempts is provided by Edward Lipinski:

“in Tarshish
And he was driven
in Sardinia
He is safe. Safe
is the crew of the
‘Queen’. Structure
which the herald has built
for Pummay”⁶⁹

Lipinski agrees with the long held premise that the inscription dates to the ninth century B.C.E., and so the stone asserts that Phoenicians were at least present on the island by that time, if not actively colonizing it.⁷⁰ The inscription also makes note of a ship, the “Queen” and the safety of the crew.⁷¹ The assertion on the stone that a ship and its crew reached Sardinia provides evidence for maritime travel to the island. It also mentions Tarshish and so provides literary evidence for the connection between Iberia and Sardinia by the time the Stele was inscribed.⁷² While the numerous translations of the inscription are somewhat at odds, they all agree with the date, the identification of Tarshish and Sardinia in the inscription, and all but one attribute it to a successful sea voyage.⁷³

⁶⁸ Albright 1941, 17; Antonaccio 2009, 321.

⁶⁹ Lipinski 2004, 238.

⁷⁰ Lipinski 2004, 236; Albright 1941, 20.

⁷¹ Lipinski 2004, 238-40.

⁷² Lipinski (2004, 248-52) provides a full discussion on the meaning of Tarsish and the debate on its meaning.

⁷³ Earlier translations have included details such as Pummay as a God or a King, “Queen” as a military commander, “crew” was translated as “soldiers,” “troops,” or “forces,” and the suggestion that the inscription was a record of a military expedition rather than a successful voyage (Shea 1991, 243, Cross 1972, 15-6).

The actual colony of Nora has a later founding date, established by a cup fragment dating to 730 B.C.E.⁷⁴ The cup itself provides evidence for connections to Sicily, perhaps prior to the Phoenician diaspora across the island and their concentration at Motya, Solunto, and Palermo. Seventh century material at the site includes pendants and jewelry, some of which have stylistic similarities to products from Carthage. Workshops were found at the site, where it appears that pottery may have been decorated.⁷⁵ The site definitely maintained connections with the central region of the Mediterranean and, as indicated by the workshops, produced local wares. The Nora Stele may suggest that a connection existed between the site and Iberia, but since no documentation exists establishing the context in which it was discovered, the stele cannot be definitively associated with Nora itself. The best that can be said is that it is made of local sandstone and so was certainly produced on Sardinia and not imported.⁷⁶ Thus, it does strongly indicate a connection between *Sardinia* and Iberia.

The site of Sulcis, located on the offshore island of Sant'Antioco off Sardinia's southwest coast, is considered to be the earliest Phoenician settlement on Sardinia. Its founding is currently established archaeologically to the mid-eighth century B.C.E. by a Phoenician shaped jar with Euboean styled decorations.⁷⁷ This may indicate the existence of Greek connections from the earliest dates of Sulcis's founding and Sardinian colonization. It is just as possible that the pottery represents the general Greek/Phoenician connections which are subsequently reflected in the archaeological

⁷⁴ Bernardini 2008, 552.

⁷⁵ Chiera 1978.

⁷⁶ Albright 1941, 20.

⁷⁷ Balmuth 1992, 692.

assemblage. Sulcis may have been the primary port for the export of lead mined near Iglesias. ⁷⁸ Sulcis has the most extensive Sardinian collection of eastern Phoenician materials, which dates to the eighth-seventh centuries B.C.E. Like Nora, the site had two ports, the northern, less protected and shallow port, and the southern port by the Palmas Gulf which had a deep anchorage and was well protected. ⁷⁹ Plates made in the western Phoenician style dating to 740-670 B.C.E. were found at Sulcis. These artifacts had parallels at Gadir, Lixis, and Carthage, providing some evidence for a connection between these sites. ⁸⁰ Sulcis was connected to the local region of Sardinia as shown by artifacts found near Monte Sirai and the general Sirai region. ⁸¹ While Sulcis's connection to Euboea can be debated, it did maintain some form of trade with Greece early after its founding. Greek cups dating from 740-670 B.C.E. were found at the site along with late eighth century proto-Corinthian wares. ⁸²

Bithia and Tharros were also both founded during the eighth century B.C.E. ⁸³ Bithia is considered to be part of the Sardinian export system that distributed goods across the western Mediterranean basin. The site's connections to mainland Italy are shown by the discovery of Bucchero pottery dating to the seventh century B.C.E. ⁸⁴ Tharros was actively involved in the Mediterranean trade system, exporting local products. ⁸⁵ The site was also involved with Tyrrhenian trade, specifically with the

⁷⁸ Acquaro 1988, 214.

⁷⁹ Acquaro 1988, 215-7.

⁸⁰ Bernardini 2008, 546.

⁸¹ Perra 2001, 21-32.

⁸² Bernardini 2008, 543, 552.

⁸³ Van Dommelen 2006, 144.

⁸⁴ Bernardini 2008, 558; Acquaro 1988, 214.

⁸⁵ Acquaro 1988, 222.

Etruscans whose pottery appears at the site during the seventh and sixth centuries B.C.E.⁸⁶

Sant’Imbenia, located in northwestern Sardinia at Alghero, contains evidence for LBA and EIA eastern Mediterranean connections in the form of pottery in indigenous context.⁸⁷ Colonization at this indigenous site during the eighth century may have been intended to establish mutual enterprise and living conditions between the Phoenicians and the locals. As early as the ninth century, the Phoenicians may have brought vines to begin wine production with the indigenous Sardinians.⁸⁸ The wine was packaged in locally-produced amphorae that developed out of the Nuragic and Carthaginian traditions. These wares were subsequently exported across the western Mediterranean, especially to Carthage, as discussed above. The exchange between Sardinia and Carthage was also associated with Greek materials including Euboean and proto-Corinthian wares.⁸⁹ The site is not a traditional colony in that the interaction between the locals and the Phoenician immigrants was unusually strong, but the relationship seems to have been successful.

Other Phoenician sites exist across the island of Sardinia such as Cagliari and Monte Sirai. Phoenician colonies are limited to the coasts as was standard Phoenician practice. Punic sites related to Carthage’s forceful domination of the island, on the other hand, are located both inland in and along the coast.⁹⁰ The abundance of the early

⁸⁶ Bernardini 2008, 556-8.

⁸⁷ Bernardini 2008, 539.

⁸⁸ Bernardini 2008, 539.

⁸⁹ Bernardini 2008, 539-41.

⁹⁰ Acquaro 1988.

colonies provides indirect evidence for how important the island was to the PTN. Significantly, Sardinia was clearly connected to the network, and interestingly some of the most successful cases of interaction between indigenous peoples and the Phoenicians.⁹¹

Malta

Malta was the home of a Phoenician colony, Melita, founded by the eighth century B.C.E.⁹² The colonization may have been preceded by a pre-colonization period; evidence for this can be found in the earliest artifacts establishing contact with Levantine culture that dates to the early first millennium B.C.E.⁹³ The evidence for this contact consists of imports from Sicily. Many of the early Phoenician wares are indistinguishable from local pottery by sherd size and shape.⁹⁴ The main island was overwhelmingly dominated by the indigenous culture aside from some mercantile interaction with foreigners. The primary location for this interaction seems to have been the temple of Tas-Silig. The site is well represented by LBA and EIA artifacts indicating early contact between the island and the eastern Mediterranean.⁹⁵ Once the island was colonized by the Phoenicians, the colony was not completely Levantine in material culture, and by extension, population. The site contained a strong mixture of both Levantine and indigenous peoples representing yet another case of cooperation with

⁹¹ Bernardini 2008, 570-1.

⁹² Sagona 2008b, 500, table 2.

⁹³ Sagona 2002, 43-4.

⁹⁴ Sagona 2008b, 499, 504, 512; Atauz 2004, 40-2.

⁹⁵ Sagona 2008b, 503.

local inhabitants.⁹⁶ Nonetheless, the groups did not completely intermingle. The cultures did represent unique peoples that made up disparate groups, especially during the early stages of colonization.⁹⁷ However, people intermingled relatively rapidly and the indigenous peoples seemed more than willing to adopt some Phoenician cultural traits such as burial traditions and tomb designs.⁹⁸

Malta traded with both North Africa and the Italian islands. During the seventh century B.C.E., unique pottery made at the Sicilian site of Motya in found at Malta.⁹⁹ Interaction between the two islands continued for at least a two centuries. Lamps and plates dating to the eighth century B.C.E. were found at Malta and were likely produced at Carthage.¹⁰⁰ Greek trade with the island dates to the eighth and seventh centuries B.C.E., as indicated by the presence of proto-Corinthian wares and pottery with bird depictions.¹⁰¹ Greek colonists from Sicily also engaged in trade with Malta, perhaps even colonizing the island of Gozo.¹⁰² Egyptian connections may have existed directly or indirectly through the Phoenician inhabitants as represented by sarcophagi from Rabat.¹⁰³

After the seventh century B.C.E. international contact with Malta decreased dramatically. Imports to the island were all but non-existent during the sixth century and

⁹⁶ Sagona 2008b, 488.

⁹⁷ Sagona 2008b, 488.

⁹⁸ Vella 2005, 445; Sagona 2008b, 511, 520.

⁹⁹ Procelli 2008, 475.

¹⁰⁰ Sagona 2008b, 518-20.

¹⁰¹ Sagona 2002, 105.

¹⁰² Ciasca 1988b, 206.

¹⁰³ Ciasca 1988b, 208.

there are no transport amphorae at the site that date to this period.¹⁰⁴ The era of Maltese introversion also coincided with a change in local burial practices. The local inhabitants ceased practicing cremation, a distinctly Phoenician practice, and began burying their dead.¹⁰⁵ The Carthaginians ultimately established more contact with the island after this century, but they never inhabited or dominated it as they did Sardinia and Sicily.¹⁰⁶

The Italian Question

Both Sicily and Sardinia hosted numerous Phoenician colonies as early as the ninth century B.C.E. These lasted through the end of the PTN in the mid-sixth century. Surprisingly, there is no evidence for the establishment of colonies along the coast of the Italian mainland.¹⁰⁷ The wind and currents in the Tyrrhenian Sea discussed in chapter III were ideal for sailing north along the Italian coast from northern Sicily and would have been well suited to the establishment of colonies along the west coast of the Italian Peninsula. For the Phoenicians, known as prodigious colonizers and merchants, to not take advantage of a coast so near to known colonies suggests there must have been cultural, political, or military roadblocks in the region. Despite the absence of colonies there, there is abundant evidence that Italy, especially around the central region, maintained consistent trade relations with Phoenician peoples and that they adopted numerous Phoenician cultural traditions, as discussed below.

¹⁰⁴ Sagona 2008b, 522.

¹⁰⁵ Sagona 2008b, 524.

¹⁰⁶ Ciasca 1988b, 206-8.

¹⁰⁷ Nijboer 2008b, 424.

The earliest Near Eastern materials found in Italy date to the tenth century B.C.E. These artifacts include Levantine and Egyptian imports from a burial context at Torre Galli, which may represent some of the earliest regular contact between Phoenician merchants and the people of Central Italy.¹⁰⁸ Phoenician imports appear in Villanovan tombs dating to the mid-ninth to mid-eighth centuries B.C.E. and from the mid-eighth through the first quarter of the seventh century B.C.E. Similar were interred in the Tomba Principesca del Vivaro, which contains Levantine materials dating to the second half of the eighth century, Pianoro del Civita containing Phoenician artifacts from the end of the eighth century, and Francaville Marittima.¹⁰⁹ Phoenician imports regularly appear across Italy during the late eighth and early seventh centuries B.C.E., indicating a period of potentially significant eastern influence.¹¹⁰ Phoenician materials in burial contexts continue through the seventh century B.C.E., and not surprisingly, increase during this, the Orientalization period.¹¹¹

The level of interaction between the Phoenician merchants and the Italians is best shown by their adoption of eastern cultural ideas found in material culture. For instance locally produced wares in Italy copy Phoenician forms as early as the end of the ninth century B.C.E. The most pronounced of these are bronze bowls found from the eighth and seventh centuries. The Phoenician bronze bowls are particularly noticeable in the archaeological record and are often cited as evidence for eastern trade connections with

¹⁰⁸ Pacciarelli 1999.

¹⁰⁹ Nijboer 2008b, 427-8, 431, 445.

¹¹⁰ Nijboer 2008b, 440-4.

¹¹¹ Nijboer 2008b, 444.

Greece.¹¹² The fact that Cypriot and Phoenician styled bowls were produced locally in Italy, presumably for use by local noblemen (or women), suggests that Phoenician styles were being adopted as status symbols.¹¹³

Ephemeral Phoenician practices were also adopted in Italy. Beginning in the eighth century B.C.E. Italians began practicing hepatoscopy, studying the livers from sacrificed animals to learn mystical portents.¹¹⁴ This practice developed in the Near East and so, combined with the abundance of Phoenician styled objects across the peninsula, it was likely brought from the Levant to Italy. Bronze bowls produced in Italy were associated with the Italian's practice of traditional Phoenician banqueting rituals and, thus, represent another example of cultural exchange during the eighth and seventh centuries.¹¹⁵ Pianoro del Civita, dating to the eighth century B.C.E., is a discrete example of the Italians adopting Phoenician cultural ideas. The site contains architectural designs with distinctive Levantine influence, indicating the exchange of construction techniques. The site consists of a sanctuary of Phoenician design and also contains numerous eastern cultic objects.¹¹⁶ An exceptional find from Francaville Marittima dating to 800 B.C.E. is an "Apulian Sistrum:" a Levantine musical instrument.¹¹⁷ While it may be a purely decorative status symbol, it is quite possible that it was used for its intended purpose, to make music. Presuming that music was produced with the sistrum, in all likelihood the artistic ideas for its use, including songs, note structure, and instrument technique, were

¹¹² Kourou 2008, 320, 329-35; Riva and Vela 2006, 11; Purcell 2006.

¹¹³ Nijboer 2008b.

¹¹⁴ Burkert 1992, 46-53.

¹¹⁵ Rathje 1990; Nijboer 2008b, 424.

¹¹⁶ Nijboer 2008b, 427-8.

¹¹⁷ Zacani Monturo 1974-1976, 13-50; Nijboer 2008b, 431.

all transferred through the Phoenicians. A last example of communication between the two cultures is the adoption of Phoenician goldsmithing techniques by Italian metal smiths by the seventh century B.C.E.¹¹⁸

Clearly there were interactions between the Phoenicians and the people on the Italian peninsula as early as the tenth century B.C.E. that continued at least until the end of the seventh century. The degree and method of interaction is uncertain since most research on central Italian tombs during the period in question focuses on nobility.¹¹⁹ As a result, it does not establish the importance of Phoenician culture to the general population. Nonetheless, the desires of the nobility, at the least, created a need for Phoenician-styled goods. It seems that this demand was not satisfied by eastern imports since most of the “Phoenician” goods were locally produced.¹²⁰ It has been suggested that the absence of Phoenician colonies and imports in Italy was Greek antagonism.¹²¹ High costs demanded by the Phoenicians or, contrarily, a minimal return for their investment may have also influenced the dearth of *genuine* Phoenician imports. A.J. Nijboer suggests that the Phoenicians were interested in trade with Italy in order to reach the market of central Europe.¹²² If so, then the Italians may have passed the goods from Phoenician merchants north to receive a higher return on the imports. In this case, Italians would have interacted regularly with the eastern merchants, and when they exchanged the imports with their northern neighbors, would have had the opportunity to

¹¹⁸ Nijboer 1998, 206-9.

¹¹⁹ Nijboer 2008b.

¹²⁰ Nijboer 2008b.

¹²¹ Moscati 1988a, 53.

¹²² Nijboer 2008b, 426.

observe the many designs and styles. At this point, it may have been easier and cheaper for them to reproduce what they saw rather than importing expensive Phoenician products.¹²³ This also had the potential of providing the Italian nobles with their own market to the north, producing cheap Phoenician replicas.

It is difficult to know exactly why the Phoenicians refrained from settling along the Italian coast. Their interactions with Italians were consistent for three centuries; the Italians adopted Phoenician cultural traditions and technologies; the weather conditions were ideal for regular voyages to the region from local colonies; and the Phoenicians must have wanted to tap into the central European market. The Greeks may have indeed thwarted Phoenician settlement in Italy. The complete absence of Phoenician wares on sites with Greek artifacts, and visa versa does provide some evidence for this antagonism.¹²⁴ If this were the case, it is curious that the Greeks would allow Phoenician trade to continue in the region while working to keep them from establishing colonies. An alternative theory to the absence of Phoenician settlements argues that their trade with the Italians was either so successful or unsuccessful as to make a permanent settlement unnecessary or not cost effective. The Phoenicians traditionally built positive relationships with indigenous peoples to encourage trade rather than forcing them to provide goods or services.¹²⁵ If the relationship with the Italians was not strong enough, or their products were not valuable enough, it may not have been worthwhile to establish consistent contact through colonization. If the value was considerably high and the

¹²³ In terms of resource management rather than actual economic or monetary value.

¹²⁴ Nijboer 2008b, 437-40.

¹²⁵ Bernardini 2008, 570; see also Sagona 2008b, 520-2, Aubet 2008, 248.

relationship significantly strong, settlement may have provided little additional return. Further, as the Italians adopted Phoenician technologies, Phoenician industrial centers, such as Toscanos and Cerro de Villar in Iberia, may have been unnecessary in Italy. The Italians would have been able to produce and finish goods they exchanged with the Phoenicians themselves. Whatever the reasons for the weak connections between Italians and Phoenicians, the Phoenician trade sphere did include the Italian peninsula while the PTN was active.

The central Mediterranean region is one of the more celebrated extensions of Phoenician culture due to the rise of Carthage and its subsequent historical connections with Rome. Prior to these events the region was the central hub of the PTN, and colonies within the region maintained relatively close connections (Fig. 44). All ships engaged in cross-Mediterranean trade must have involved at least one stop in the region prior to departing for their final destination. As a result, such voyages could have provided additional venues for exchange between the central, eastern, and western Mediterranean. The wealth that moved across the sea and flowed through the central colonies allowed that region to develop long after the Phoenician mercantile dominance in the east ended, giving way to other rising cultures.

CHAPTER VI

THE WESTERN MEDITERRANEAN

The western Mediterranean region of the PTN consisted of the Iberian Peninsula, the Atlantic and western Mediterranean coasts of North Africa, and the island of Ibiza. This demarcation is somewhat arbitrary but is meant to represent the furthest western extent of Phoenician trade and colonization by the beginning of the sixth century B.C.E. It makes up less geographic area than the central and eastern regions, but the concentration of Phoenician colonies in the area is far greater than those elsewhere save perhaps on Sardinia.¹ The local trade connections within the region are relatively clear in the archaeological record. The major entrepôt for the western region was Gadir, established at the end of the twelfth century B.C.E according to the historical tradition.² Archaeologically its founding is not confirmed before the eighth century B.C.E.³ The city was not only one of the most important ports in the west, like Carthage in the central Mediterranean, it established its own colonies in North Africa and north along the Portuguese coast during the seventh century B.C.E.⁴

The most important factor for the success of western colonies was the rapport the Phoenicians built with the indigenous Iberians. As seen in chapters two and five they consistently engaged in communal interaction with indigenous peoples when they established colonies. Sardinia adopted Phoenician cultural ideas while providing raw materials, engaging in mutual pottery development, and working with the colonists to

¹ Aubet 1994, 305-7; 2002a, 79.

² This is discussed in “Historical Antecedents” in chapter 2.

³ Aubet 1994, 261-2; see also Aubet 1995, 51-2.

⁴ Aubet 1995, 51.

produce and ship wine. Despite the historically asserted abandonment of many Sicilian sites after the establishment of Greek colonies, Phoenician immigrants to the island engaged in trade with Greek immigrants. No colonies were established on the Italian Peninsula, but the Phoenicians did engage in mercantile and cultural interaction with the people there. Iberia, however, provides the most details about the effects of Phoenician interaction with indigenous peoples. Arriving during the height of the local trade among the Iberians, the Phoenicians were able to take advantage of already established connections to maximize their acquisition of valuable materials such as silver.⁵ They did this by quickly establishing their own connections with numerous indigenous groups.⁶

The western Mediterranean is one of the most valuable regions to study with regard to the PTN. These colonies were extremely successful, providing an abundance of valuable goods to the eastern Mediterranean. It also may be the earliest region of Phoenician colonization. Lastly, numerous sites within the region have been excavated with enough detail to show the range of colony styles and functions. The detailed study of indigenous peoples can provide information about the effect and interaction between the immigrants and the locals. Iberia and the Atlantic coast make up the western extent of the PTN and Phoenician expansion before the collapse during the sixth century B.C.E. and completes this discussion of the three major regions.

⁵ Aubet 2008, 248.

⁶ Aubet 1994, 279-85; 2002b, 103.

Western Mediterranean Exchange

Iberia is the focal point of local exchange in the western Mediterranean region (Fig. 45). The western areas of North Africa are connected to these regions as well, especially on the Atlantic coast. These colonies were better connected geographically to those to their north rather than those to their east. The winds and currents in the Atlantic are primarily northerly. In addition, the Strait of Gibraltar could be avoided when sailing from the Portuguese colonies or Gadir to Lixus or Mogador.

The difficulty of crossing the Strait and the ease of local travel may help to explain why the vast majority of colonies whose founding is attributed to Gadir are on the Atlantic coast. The necessity of crossing the treacherous Strait of Gibraltar to travel east or west between, for instance, Cerro de Villar or Toscanos and Gadir, Portugal, or North Africa created an inadvertent communication barrier. Nonetheless, connections between the areas were maintained, as shall be seen, and Gadir apparently was able to exert a relatively high level of administrative control over the region. Further, by the seventh century B.C.E., Gadir sponsored the founding of colonies on Ibiza and perhaps along the Algerian coast.⁷

Indigenous peoples across the west made up the local export industry for the PTN by exchanging goods with the Phoenician colonies. In order to sustain regular export of western commodities the Phoenicians maintained multiple indigenous sources for the goods through different colonies. Communication between the colonies was vital

⁷ Aubet 2006, 106.

in order to continue export if a source of goods unexpectedly dried up. In addition, the various colonial products and specialties made each colony dependent upon the others for physical and economic survival. If the grain and meat shipments from Cerro de Villar to Gadir were to suddenly cease, it may have stressed food stores at the region's political center. Understanding the specifics of the exchange network across the western Mediterranean is beyond current archaeological knowledge, but it is not unreasonable to suppose that cutting a few of the major exchange hubs out of the Iberian network had the potential to dramatically reduce the functionality of the PTN.

Using the available information concerning the western colonies, connections have been confirmed and the record shows that many of the regional sites were well connected to one another. These connections are established below by the similarities between artifacts as well as other cultural traits including burial and architectural traditions. The main colonies detailed below show the most visible trade and exchange connections between the western colonies.

Gadir

Historical sources give Gadir a founding date at the end of the twelfth century B.C.E. Archaeological finds from the site, however, place its origins in the second half of the eighth century B.C.E. These dates are taken from the city itself as well as from the first evidence for material exchanged with indigenous sites in the neighboring estuary and do not allow for the definitive assertion of pre-colonial relations.⁸ It is reasonable,

⁸ Aubet 1995, 49; Aubet 1988, 228; Mata 2002a, 174-5.

especially given the early dates from Huelva, that Gadir was at the least identified as a potential settlement site during the ninth century and that the adjacent Guadalquivir River was investigated as a useful tributary for trade and resource procurement. It is extremely unlikely that the Phoenicians established a colony at one of the best areas for access into Tartessos without having prior knowledge of the region's resources and indigenous towns that the Guadalquivir could service. Thus, some Phoenician investigation and relations must have occurred in the region prior to the earliest evidence for settlement at the site.

The main difficulty with establishing the earliest dates for Phoenician occupation at Gadir is the fact that the Phoenician colony is buried five meters below the modern city. As a result, investigations into the earliest Levantine occupations are limited to construction and emergency recovery events.⁹ Fortunately, on the mainland peninsula, directly across the Guadalquivir estuary, lies the site of Castillo de Doña Blanca (Doña Blanca). It rests on a hill that once lay directly on the bay of Cadiz, though now it is surrounded by land.¹⁰ The colony was established during the eighth century by the Phoenicians in an area dotted with indigenous settlements. This colony acted as a port between Gadir and the mainland. At least one harbor has been identified on the eastern side of the site and the abundance of Phoenician material at the location assert its importance with respect to moving trade goods into and out of Tartessos. It maintained strong ties with the local Iberian inhabitants who probably settled at the site in limited

⁹ Aubet 1988, 228.

¹⁰ Mata 2002a, 170.

numbers, living with the Phoenician colonists.¹¹ The relationship between Gadir and Doña Blanca allows for the latter site to be used to determine the trade relationships that existed at Gadir itself. Presuming all the imported wares at Doña Blanca came directly from Gadir, it follows that the site is a reflection of the connections at Gadir.¹²

The relationship between Gadir and other Iberian colonies is unique with respect to trade. Since the western arm of the PTN was presumable overseen by Gadir, it could be presumed that the region maintained a homogenous set of material culture. Instead certain pottery forms show a unique distribution among the colonies. Plate forms found at Castillo de Doña Blanca appear at Toscanos and Chorreras in strata I and II dating to the eighth century B.C.E. and later. The same plate forms were found at Morro de Mezquitilla in contemporaneous levels. These plates are extremely rare at Cerro de Villar and Huelva.¹³ This is particularly interesting because the site at Toscanos is a mere 30 km east of Cerro de Villar and Huelva is only 96.5 km northwest of Gadir, on the same side of the Strait of Gibraltar. That these locations were so close to Gadir or its trade partners and yet adopted and used different tableware forms may indicate the absence of direct trade between the sites.¹⁴ Cerro de Villar's local pottery production, necessitated by the sparse indigenous population unable to supply local vessels, may have made the site a location for pottery export and *not* import, thus decreasing the

¹¹ Mata 2002a, 171-4.

¹² Mata 2002a, 170-2.

¹³ Mata 2002a, 177-8

¹⁴ Population makeup in all likelihood played a major role at Huelva which consisted of a large indigenous population which predated the Phoenician colony at the site (Jurado 2002, 245-7; Gonzalez de Canales et al. 2008, 648-52).

likelihood of using Gadirian pottery or its designs.¹⁵ The amphorae found at Castillo de Doña Blanca include three forms during the eighth century B.C.E. Two of these are associated with eastern Mediterranean forms and production. The most common amphora is the *de sacco* or R-1 design, which is commonly associated with southern Iberia and the western Mediterranean region.

At the end of the eighth and the beginning of the seventh centuries B.C.E. pottery designs at Castillo de Doña Blanca continue to show similarities with those found at colonies on the eastern half of Iberia. Cups and plates can be associated with similar artifacts found at Toscanos, though the pottery is rougher and of poorer quality than in the early eighth century. All the amphorae at Doña Blanca correspond to the R-1 design.

¹⁶ As the seventh century B.C.E. continued western Phoenician forms were standardized into the “circuito del estrecho” style that is found around southern Iberia and western North Africa. This style is found at Doña Blanca and its prominence indicates trade relations across the western Mediterranean and Atlantic coasts. The plate forms found during this century continue to parallel pottery identified at Toscanos, which in turn provides a strong chronology for the western forms.¹⁷ This pottery can also be connected to the necropolis at Trayamar, located north of Malaga. *Cruz del Negro* styled urns appear at Castillo de Doña Blanca during the seventh century and are found across the western Mediterranean.¹⁸ At this time Gadir embarks on its own colonial program.

Mogador and potentially Lixus are established in North Africa, the colony of Abul is

¹⁵ Mata 2002a, 182.

¹⁶ Mata 2002a, 184-8.

¹⁷ Mata 2002a, 184-8.

¹⁸ Mata 2002a, 188-90.

founded along the Portuguese coast, Cerro del Prado is established along the Strait of Gibraltar, and sites on the eastern side of Iberia in Alicante and on Ibiza at Sa Caleta are founded.¹⁹ Pottery forms found at Lixus and at Tavira strongly resemble those found at Castillo de Doña Blanca. Plates found at Mogador are also effectively identical to those found from this century at Doña Blanca.²⁰ These artifacts provide evidence for the connections between Gadir and both Portugal and North Africa. These data show that during the seventh century B.C.E. Gadir expanded its influence, taking advantage of the wealth and mercantile success among the Phoenician colonies during the period.²¹

During the sixth century B.C.E. Castillo de Doña Blanca and by association Gadir, were continually inhabited. Occupation at Doña Blanca is divided into two stages, the initial phase extended into the early seventh century and is identified by the regular observation of red-slip wares in the Phoenician archaeological repertoire. The second phase began in the second half of the seventh century and is marked by a variety of Phoenician forms especially bichrome designs and *Cruz del Negro* urns. This period ends during the second quarter of the sixth century B.C.E. and is associated with a change in activity across the Phoenician colonial sphere, particularly in Iberia. Sites are abandoned, trade decreases, and during the second half of the century Carthaginian influence gradually increases.²²

The influence of Gadir upon the western colonies is unquestionable. Its connections with sites across the western region of Phoenician colonialism are

¹⁹ Aubet 1995, 51; Ramon, 2002, 130.

²⁰ Neville 2007, 98-9.

²¹ Aubet 1995, 50.

²² Mata 2002a, 192-6.

established archaeologically and it maintains a strong historical place in the catalogue of colonies established by Levantine seafarers.²³ It is unfortunate that the location of the modern city limits what can be discovered about its layout, size, and sphere of influence. Future excavations, especially if concentrated on the oldest periods of eastern occupation, should reveal much more valuable information. Hopefully, these will continue to be undertaken whenever the opportunity arises.

Portugal and Huelva

The Atlantic coast of Iberia was the western and northern limit of archaeological evidence for Phoenician colonization. Their influence extended further north than Santa Olaia and much further into continental Europe than the coastal colonies, but no colonies were established further from the eastern Mediterranean homeland.²⁴ The hinterland east of the Atlantic coast was rich in resources, especially metals, giving the Phoenician strong reason to establish settlements in the area.²⁵ Numerous sites show evidence for Phoenician connections including Lisbon, Tavira, Castro Marim, Satarem, Almaraz, Alcacer do Sal, Conimbriga, and Setubal. These locations are not Phoenician colonies. They were established during the LBA by aboriginal Iberians, and Phoenician materials make up only a small percentage of their archaeological assemblages. These sites must have been attractive trading locations for Phoenician seafarers. They are all located on elevated land and provide a clear view of the surrounding landscape. The sites are also

²³ Aubet 1988, 228-32.

²⁴ Arruda 2009, 114-6; Nijboer 2008b, 426.

²⁵ Arruda 2009, 126-9.

all located along the major rivers of the southwestern coast of Portugal: the Mondego, the Tagus, the Sado, the Rio Guadiana, and the leeward Algarve.²⁶ Due to their location these sites many must have acted as trade hubs where Phoenician products were exchanged with Iberian goods from up-river. The red-slip and other traditional wares found at the sites likely indicate trade with Gadir, but the materials lack defining characteristics and without more thorough research it is difficult to say if they are from the western, eastern, or central Phoenician material traditions.²⁷

The three sites of Abul, Cerro da Rocha Branca, and Santa Olaia were established by the Phoenicians and must have been important locations along the Portuguese coast. Here they had more direct control over the distribution and exchange of materials. In addition to the fact that no period of occupation predates the Phoenician presence at these sites, the architecture and dominant Phoenician archaeology both identify the sites' origin.²⁸ Little exchange information is available at the sites as all three contain Phoenician materials and show both eastern and western attributes. The oldest of the three sites is Santa Olaia, established during the eighth century B.C.E., likely as part of the early colonial movement out of Tyre and the east. Contact with Iberians around the site can be dated as early as the ninth century B.C.E. The colony is the northernmost site in Portugal and may have been associated with tin and gold deposits to the north. It includes a major industrial complex focusing on the production of iron and cupellation. It also must have been engaged in relatively regular trade as there appear to be

²⁶ Arruda 2009, 113-115.

²⁷ Arruda 2009, 115.

²⁸ Arruda 2009, 115; Correia 1995, 239.

improvements made to the harbor including a potential breakwater.²⁹ The smelting furnaces at the site are similar to those found at Toscanos and pottery including red-slip and grey wares points to connections with Gadir and Toscanos.³⁰ Cerro da Rocha Branca was a small settlement established during the late eighth or early seventh centuries B.C.E. The material at the site consists of red slip and gray ware with associated western amphorae. The styles connect the site to the rest of Phoenician Iberia and the regional trade network.³¹ The colony of Abul was established during the seventh century B.C.E. and its founding is attributed to Gadir by F. Mayet.³² The site is purely Phoenician in character and includes traditional eastern architecture and common Phoenician wares.³³ Petrographical analysis of the pottery found at the site has been directly connected to pottery from Castillo de Doña Blanca.³⁴ This information suggests that Gadir was the primary trade connection for Abul and that it may indeed have been founded by the regional entrepôt. A second period of rebuilding and subsequent use is dated to the late sixth or early fifth century B.C.E. and is likely related to Carthaginian influence.³⁵

Huelva is vital for the study of Phoenician colonization in Iberia because it has provided the earliest dates for their presence as well as for their colonization. Contact is associated with minimal contact between the indigenous Iberians and the Phoenicians. The settlement was founded by the Iberians during the tenth century B.C.E. and is

²⁹ Wachsmann et al. 2009, 227-33; Neville 2007, 42.

³⁰ Neville 2007, 42.

³¹ Neville 2007, 36-8.

³² Neville 2007, 39.

³³ Wachsmann et al. 2009, 233-4.

³⁴ Neville 2007, 39.

³⁵ Neville 2007, 39-40; Correia 1995, 240.

initially associated with the production of copper. This was replaced by silver production after Phoenician colonization, indicating that the metal was the site's main export during most of its interaction with the Phoenicians.³⁶ Buildings dating to no later than the eighth century are constructed with traditional Phoenician pier and rubble architecture, and Phoenician pottery indicates their occupation and likely colonization at the site.³⁷ Cultural materials at Huelva are found in a cultic building used from the eighth to the fifth century B.C.E. These materials include pottery, bones, a bull shaped altar, ashes that likely derived from sacrifices, bull horns, and eastern weights.³⁸ Clearly Phoenicians had a well-established presence here during the height of the PTN and as such the site is probably a colony inhabited by both Iberian and Levantine peoples.

Artifacts on the site dated before 770 B.C.E. point to connections with numerous Iberian colonies including Morro de Mezquitilla, Correrias, and Toscanos.³⁹ Connections with Aegean people is shown by pottery dated as early 900-835 B.C.E. though there is some debate about the provenience of these materials.⁴⁰ Later Greek wares date to the second half of the eighth century B.C.E. suggesting that this connection was consistent.⁴¹ The occurrence of Greek wares gradually increases indicating closer relations with the Aegean. These ties ultimately result in the site being controlled by Greek settlers

³⁶ Neville 2007, 146-7.

³⁷ Niemeyer 1995, 85.

³⁸ Deamos 2009, 196.

³⁹ Gonzalez de Canales et al. 2008, 637.

⁴⁰ Gilboa et al. 2008, 170.

⁴¹ Gonzalez de Canales et al. 2008, 633.

between 630 and 540 B.C.E. These colonists are historically identified as the Phocaeans.⁴²

The Portuguese coast and Huelva are the most productive sources of metal in Phoenician Iberia. The abundance of metal workshops and the proximity of rich mines with copper, silver, tin, and gold provided more than enough reason for the Phoenicians to settle and trade along the Atlantic coast north of Gadir. Additional products ranging from agricultural goods to salt, and wood to slaves would have increased the value of these colonies. With respect to access to valuable raw materials these colonies must have been among the most prolific in the entire PTN.

Southern and Eastern Iberia

According to Aubet, “innumerable” colonies were founded along the southern coast of Iberia to the east of the Strait of Gibraltar. Additionally at least two sites lie along the eastern side of the peninsula, La Fonteta and Ibiza. The Phoenician colonies at Cerro de Villar, Toscanos, Morro de Mezquitiilla, and Corrales are useful for establishing the local trade relations that existed in the region. The information about these sites is supplemented by their local necropolises. La Fonteta is a relatively isolated colony along the eastern coast of Iberia and is the northernmost colony on the Peninsula. The colony at Ibiza is unique in that it exists for less than a century before political and economic changes bring it under the influence of Carthage.

⁴² Gonzalez de Canales et al. 2008, 646-8.

The sites around Malaga in southern Iberia produced a wide range of products, as a result, exports to the trade network. This allowed the colonies to support one another with respect to necessary resources such as food, pottery, and wine and helped to provide a more stable colonial region. Cerro de Villar is located at the head of the Rio Guadalhorce on a small islet near Malaga. The site was predominantly a trade center that specialized in the export of agricultural products and pottery, and it may have been the most important colony along the southern coast.⁴³ The local industry may have also included lumber for ship building and wood working.⁴⁴ The placement of the industrial center in the center of the site is similar to the urban organization at Toscanos.⁴⁵ The fact that this urban design appears repeatedly at numerous Phoenician colonies suggests that it is a standardized colonial layout for production centers. Attic SOS amphorae occur at Cerro de Villar as well as at Toscanos, Huelva, and Rachgoun in North Africa.⁴⁶ An alabaster urn from the necropolis near Almuñecar has a single parallel found near Cerro de Villar.⁴⁷ Late eighth century shaft graves are associated with Cerro de Villar at the necropolis Cortijo de Montanez . These differ distinctly from later burials and are rare outside of Iberia. They do appear across southern Iberia and make up a distinctly Phoenician tradition.⁴⁸ Near the end of the Cerro de Villar's occupation during the early

⁴³ Aubet 1994, 321.

⁴⁴ Aubet 1997.

⁴⁵ Aubet 2006, 100.

⁴⁶ Neville 2007, 43.

⁴⁷ Neville 2007, 58.

⁴⁸ Neville 2007, 60-2.

sixth century, Etruscan and Greek pottery increases in number before the site is suddenly abandoned ca. 580-560 B.C.E.⁴⁹

Toscanos, like Cerro de Villar, was established during the early eighth century B.C.E. on an estuary at the head of the Rio Velez.⁵⁰ The site was a trade emporium and industrial center as indicated by the presence of the large warehouse Building C and the industrial center within the city's boundaries.⁵¹ The layout of the early site has parallels with Cerro de Villar as mentioned earlier, but a more direct connection between the two colonies can be seen in their mutual urban reorganization at the end of the seventh century B.C.E.⁵² The fact that the event occurs simultaneously indicates that the two sites were responding either to one another or an economic change that affected both of them. This relationship in turn implies either direct or competitive trade relation between the sites. Seventh century B.C.E. artifacts from the Mazarron I wreck indicates that connections also existed between Toscanos and both Correrias and Morro de Mezquitilla.⁵³ The Toscanos necropolis at Cerro del Mar was largely destroyed as a result of later activity in the region. A recovered seventh century Proto-corinthian *Kotyle*, a large decorated urn, does indicate some connection with Greece.⁵⁴ Further the alabaster urns found at the site have direct parallels at the necropolis of Almuñecar and

⁴⁹ Aubet 1994, 324-5.

⁵⁰ Aubet 1994, 317.

⁵¹ Niemeyer 2002, 37; Aubet 2006, 100.

⁵² Aubet 2006, 103.

⁵³ Negueruela et al. 1995, 193.

⁵⁴ Neville 2007, 58-60.

Morro de Mezquitilla.⁵⁵ The site was ultimately abandoned around 550 B.C.E. making it yet another casualty to the changes of the sixth century B.C.E.

Morro de Mezquitilla was established as early as 800 B.C.E. at the mouth of the Algarrobo River on the top of the hill Morro de Mequitilla.⁵⁶ It is the earliest purely Phoenician site in Iberia, and only Huelva has a confirmed earlier eastern Mediterranean presence. The site has parallels to Almuñecar through tomb design and contents.⁵⁷ Connections to Toscanos may be observed in simple handmade Phoenician pottery forms, which are unique in the Phoenician ceramic tradition as most of their wares are wheel thrown.⁵⁸ The site is connected to the rest of the colonial sphere along the Malaga coast by the presence of red incense burner commonly found at these sites.⁵⁹ Reorganization and rebuilding during the seventh century B.C.E. associates the site with the same economic and mercantile sphere as both Toscanos and Cerro de Villar as all three locations prospered and required investment in infrastructure at the same time.⁶⁰ Seventh century pottery at the Morro de Mezquitilla associates it with both Toscanos and Corerras, which in turn indicates a connection to Gadir.⁶¹ The chamber tomb construction observed at the site is unique among the necropolises discussed above. These tombs are simpler to construct and lined with ashlar which probably came from the hill overlooking Toscanos. The necropolis may have also had shaft tombs that were

⁵⁵ Neville 2007, 58.

⁵⁶ Schubart 2002, 17-8; Neville 2007, 17.

⁵⁷ Neville 2007, 62-8.

⁵⁸ Schubart 2002, 17.

⁵⁹ Schubart 2002, 16.

⁶⁰ Neville 2007, 22-3.

⁶¹ Negueruela et al. 1995, 193.

overlooked by workers and archaeologists performing rescue excavations at the necropolis. If shaft tombs were present, they correspond to burials discussed above, such as those at Toscanos and Cerro de Villar.⁶²

Other sites such as Almuñecar, known later as Sexi, and Correrias were also associated with the Malaga region of Iberia. Correrias was near Morro de Mezquitilla at the mouth of the Algarrobo River but did not have nearly as much success and was abandoned by the seventh century B.C.E.⁶³ It may have been forsaken in favor of Morro as a result of the seventh century economic boom, but the actual cause is unknown. While it was occupied it did sustain local trade connections with Morro and Toscanos as observed in the materials from the Mazarron 1 wreck.⁶⁴ The site of Almuñecar maintained a multitude of connections across the Mediterranean, discussed in the next chapter, and strong connections with the other local colonies.

The site of La Fonteta was established between 720 and 750 B.C.E. and faces the island of Ibiza at the mouth of the Segura River.⁶⁵ It was occupied until the early sixth century B.C.E. and must have acted as a trade hub as well as an industrial center.⁶⁶ The site had some direct or indirect trade relationship with Africa as shown by the presence of painted ostrich egg shells,⁶⁷ though these could have been imported from another workshop with an African connection. The extensive nature of the imports can be presumed from the cargo of the Bajo de la Campana wreck which is believed to have

⁶² Neville 2007, 62-5.

⁶³ Schubart 2002, 4.

⁶⁴ Negueruela et al. 1995, 193.

⁶⁵ Neville 2007, 15.

⁶⁶ Prats et al. 2002, 118, 123.

⁶⁷ Prats et al. 2002, 117.

been destined for La Fonteta.⁶⁸ The cargo, which includes ivory, wood, lead ore, bronze, copper and tin ingots, amber, and numerous forms of Phoenician pottery, hails from all the regions of the western Mediterranean trade sphere.⁶⁹ Gold and silver work found at La Fonteta shows parallels in North Africa and thus strengthens the possibility for a connection there.⁷⁰ Much of the pottery found at the site was associated with Greek imports from Corinth and East Greece indicating an Aegean connection.⁷¹ The vast majority of the pottery on the site was produced with clays from southern Iberia. These may have been from Cerro de Villar, though any of the other southern sites such as Toscanos or Morro de Mezquitilla could have also produced them. The pottery designs were traditionally western Phoenician and they firmly place the colony within the western Phoenician sphere. La Fonteta also maintained a direct connection to Sa Caleta on Ibiza once it was founded. La Fonteta may have also been the source of the southern Iberian pottery found on the island. There is a strong likelihood that La Fonteta was involved in the colonization of Ibiza.⁷²

Sa Caleta itself was founded in 630 B.C.E., most likely by Gadir. The proximity between the island and La Fonteta must have made the latter colony an ideal jump off point for trips to Ibiza. Sa Caleta's economy was devoted almost entirely to the metal industry and the San Argentera mine, importing all of its pottery and probably most of

⁶⁸ Polzer 2009b, 8-9.

⁶⁹ Polzer 2011, 16-8.

⁷⁰ Prats et al. 123.

⁷¹ Prats et al. 2002, 117.

⁷² Prats et al. 2002, 123.

its foodstuffs from Iberia and the central Mediterranean.⁷³ As stated above, much of the pottery originated from the Malaga region of southern Iberia and was likely imported to the island via La Fonteta. Greek wares dating to the early-sixth century B.C.E., as well as Etruscan goods, show other contacts on the island.⁷⁴ Sa Caleta was abandoned in the early-sixth century B.C.E. when the occupants are believed to have moved to the bay of Ibiza. Here the evidence suggests the metal industry on Ibiza re-focused on the smelting of lead. Pottery found at the second site is similar in form to that at Sa Caleta, but now it was locally made at the bay of Ibiza. Foodstuffs may have continued to be imported and some materials were exchanged with the central Mediterranean.⁷⁵ The site, its age, and its occupation were largely identified by the associated necropolis Puig de Molins, though burials do not date earlier than the sixth century B.C.E.⁷⁶ The site fell under the sway of the Carthaginians as numerous Iberian colonies were abandoned in the mid-sixth century.⁷⁷

North Africa

The Phoenician colonies in North Africa are concentrated between Carthage and the Atlantic coast of modern Morocco. They are located in the region of Carthage, along the Mediterranean coast of Algeria, and in Morocco itself. Some of the sites with

⁷³ Neville 2007, 32; Ramon 2002, 126-30.

⁷⁴ Ramon 2002, 138.

⁷⁵ Ramon 2002, 146-50; Neville 2007, 33.

⁷⁶ Ramon 2002, 134-8.

⁷⁷ Aubet 1988, 238.

Phoenician influence include Mogador, Lixus, Utica, Rachgoun, and Mersa Medakh.⁷⁸ The western sites in pelagic Morocco provided the Phoenicians ivory and gold through mercantile activities as well as fish.⁷⁹ Utica and other sites near Carthage are within the Punic sphere and are closely related to it.⁸⁰ The Algerian colonies are historically identified as trading posts founded by Gadir.⁸¹ The colonies of western North Africa are not nearly as well studied as those in Iberia and the central Mediterranean. Nonetheless their trade sphere is important when attempting to understand the PTN.

The Algerian sites of Rachgoun and Mersa Medakh were settled during the seventh century B.C.E. Rachgoun is an island off the mouth of the river Rafna and was abandoned during the fifth century B.C.E. The pottery from the site is western Phoenician and includes tripod bowls, R-1 amphorae, pithoi, and *Cruz del Negro* urns. The imports at the site share the same physical characteristics as those from Iberia, indicating that the site was best connected with the peninsula through both culture and trade. Attic SOS amphorae at the site indicate a Greek connection but may be more indicative of the western Mediterranean trade connections as they are also found at numerous southern Iberian sites, including Huelva and Mogador on the Moroccan Atlantic coast. The funeral practices at Rachgoun have direct parallels to indigenous Iberian graves in the Guadalquivir valley identifying a unique connection with the indigenous Iberians. These practices are also visible at Tyre indicating they could also have originated from the east. Mersa Madakh does not have an abundance of Phoenician

⁷⁸ Fantar 1988.

⁷⁹ Aubet 1994, 300-1.

⁸⁰ Fantar 1988, 168-71.

⁸¹ Aubet 1995, 51; 2006, 106.

material, and the preponderance of handmade pottery suggests the population was not predominantly Phoenician. The artifact assemblage does include R-1 amphorae, and *Cruz del Negro* wares. This identifies the Phoenician connections with the site as western and likely Iberian.⁸²

The Moroccan sites of Lixus and Mogador are much better represented both historically and archaeologically. The sites may have been founded by Gadir; though, they are historically attributed to Tyre.⁸³ The indigenous people in the regional hinterland were rich in ivory and gold and as such could exchange these raw materials for finished goods with the Phoenicians living along the coast. The site of Lixus at the mouth of the Loukkos River was one of the few sheltered harbors available along the western North African coast. The site had access to lead, iron, and salt for export in addition to other indigenous trade materials.⁸⁴ The pottery at the site dates the settlement's founding to the eighth or seventh centuries B.C.E. and shows trade connections with Castillo de Doña Blanca and the Guadalquivir hinterland. The close ties between Lixus and southwest Iberia are evinced not only by the imports found at the site but also by the handmade pottery from Lixus found in Iberia. These wares share design similarities with the indigenous pottery from the Guadalquivir valley.⁸⁵ The North African site at Mogador is the southernmost Phoenician colony currently known and is located on a small island across from the small river, the Wadi Ksob. It was seasonally occupied beginning in the seventh century B.C.E. and was abandoned in the

⁸² Neville 2007, 43-4.

⁸³ Aubet 1994, 299-300; Aubet 1995, 51.

⁸⁴ Neville 2007, 44-5.

⁸⁵ Aubet 1994, 300-1; Neville 2007, 44-5.

mid-sixth century. Mogador was probably a small trading post engaged in fishing and sporadic exchange with inhabitants of the African interior. The pottery assemblage indicates connections with the western Phoenician colonies, especially Castillo de Doña Blanca. Other pottery forms suggest trade relations with Toscanos. Eastern Greek ware and Attic SOS amphorae were also found at the site, most likely imported from the Iberian colonies, and identify an ephemeral, secondary connection with the Aegean. A direct connection with the Iberian colonies is evident by graffiti found on some artifacts. The name Magon is identified on amphorae and ceramics from the island which may point to familial or social connections with another Magon buried at the Iberian site of Almuñecar.⁸⁶

While historical references refer to the many western North Africa colonies (especially Lixus) having been founded by Tyrian Phoenicians as early as the twelfth century,⁸⁷ the archaeological evidence contradicts this. The sites west of Carthage are clearly western as exhibited in both local and imported pottery traditions. Burial practices also show both western Phoenician and, surprisingly, indigenous Iberian connections. The imports out of the region were certainly valuable, especially the ostrich eggs, ivory, and potentially animal skins or the animals themselves. Western North Africa never obtained the wealth, success, or power found at Iberian sites and none but Lixus survive after the fall of the PTN. The Carthaginians were far more prolific in their colonization of North Africa after the mid-sixth century B.C.E.⁸⁸

⁸⁶ Aubet 1994, 301-4; Neville 2007, 46.

⁸⁷ Neville 2007, 44; Aubet 1994, 299-302.

⁸⁸ Fantar 1988.

Colonies in Iberia: Nature and Production

The nature of the Phoenician colonies in Iberia with respect to local production, exchange, and exportation has been a subject of research for over a decade and a half. Maria Aubet has been one of the most prolific publishers on the topic since the publication of her book *The Phoenicians and the West*.⁸⁹ Her research has suggested that the colonies did not all exist as mere ports of trade where Iberian products were loaded and Phoenician goods were distributed to the local markets, but rather they had a variety of purposes and products reflected in the local hinterlands. The variety of products that the local sites produced allowed the Iberian colonies to support one another with respect to trade, foodstuffs, industry, and raw materials.⁹⁰

Despite the variability of production at colonies across the Iberian Peninsula, the organization of use-areas in settlements, such as: production, storage, and residential areas, follow standard Phoenician patterns. The different areas are separated from one another and each individual unit remains cohesive. For example, the colony at Toscanos includes a large central structure probably used for storing merchandise.⁹¹ This building is separated from smaller storehouses and production centers that, when combined with the variable quality of building construction, indicate the division of population groups such as workers, artisans, and slaves. This is also reflected at other major trade centers in Andalusia including Cerro del Villar and Morro De Mezquitilla. At these sites the urban

⁸⁹ Aubet 1995; 2002a; 2002b; 2002c; 2006; 2008.

⁹⁰ Aubet 1995, 51.

⁹¹ Niemeyer 2002, 37.

centers are surrounded by industrial areas that produced products such as pottery and metals.⁹² In addition to urban and potential social organization, the nearly identical layout of the colonies indicates a planned systematic settlement pattern for the establishment of small commercial colonies and trading posts.⁹³ The similarities between the Andalusian colonies which include architecture, funerary practices, material culture, and exchange connections, and the contemporary occurrence of important events such as the mid-seventh century B.C.E. expansion and the sixth century B.C.E. collapse, reflect some form of centralized organization. The origin of this organization was almost certainly Gadir. This colony was sufficiently independent to found its own colonies in North Africa, Alicante, the Strait of Gibraltar, and Ibiza and, as will be seen, was also connected by material culture to these sites.⁹⁴ This organization provided strong trade relations and mutual support that allowed production to be diversified across the peninsula.

The focus of production at different sites or emphasis on trade can be seen in the archaeology. Ibiza, first colonized around 630 B.C.E. at Sa Caleta, consisted of a trading post organized around the processing of metals: lead, iron, and silver bearing galena. These metals ores were imported to the island from mainland Iberia in addition to being found on the island itself. The second colony on the island, Ibiza, founded in the early sixth century B.C.E., continued to produce metal but extended its purposes to regional

⁹² Aubet 1995, 50; Neimeyer 1995, 74.

⁹³ Aubet 1995, 50; Neimeyer 1995, 74.

⁹⁴ Aubet 1995, 51-2.

control, maintaining mercantile traffic, and increasing regional stability.⁹⁵ The colony near Malaga at Cerro de Villar was founded for the purpose of maintaining indigenous trade inland as well as producing pottery and amphorae. These were exported to other colonies and exchanged with the native Iberians. After initial success the site increased local pottery production to include pithoi and additional commercial amphorae. The ceramic industry here continued to develop until it eventually included centers for clay working, turning, finishing, and firing.⁹⁶ The colony also transported a variety of goods produced in the peripheral region of the town including grains, grapes and wine, fish, and olive oil.⁹⁷ At Toscanos iron was produced and worked on the hill of Cerro del Penon.⁹⁸ Peripheral production at the colony included pottery by the second half of the seventh century B.C.E.⁹⁹ The large storage building mentioned above provides evidence that the site was a trade center. Defensive works were also constructed around the settlement including a defensive ditch.¹⁰⁰ Morro de Mezquitilla, established in the early eighth century B.C.E., had metallurgical workshops and blacksmith forges soon after its founding. The early presence of these specialized industrial structures emphasizes the importance of metalworking there.¹⁰¹ Huelva was a trade center as well as a production site as shown by the abundance of foreign pottery from multiple sources, raw materials used in item production by local and foreign artisans, and the seeming international

⁹⁵ Aubet 1995, 60-1.

⁹⁶ Aubet 1995, 56-7.

⁹⁷ Aubet 2006, 103.

⁹⁸ Niemeyer 1995, 71.

⁹⁹ Aubet 2006, 103.

¹⁰⁰ Niemeyer 1995, 71; Aubet 1995, 50.

¹⁰¹ Aubet 2006, 103-4.

flavor of the site.¹⁰² The Portuguese site at Santa Olaia, established by the late eighth to early seventh centuries B.C.E., is the northernmost Phoenician colony. This location is associated with tin deposits found up the Rio Mondego from the site, which includes an industrial installation with furnaces for metal working.¹⁰³ The site of Abul dating to the seventh and sixth centuries B.C.E., was purely Phoenician containing no indigenous materials. The site consists of a single building built in two phases along an estuary that has since become tidelands above sea level. Abul may have been built to manage the loading and unloading of goods that were destined for nearby indigenous villages whose excavation has produced Phoenician materials.¹⁰⁴ The variable nature of these sites shows how they all contributed to the successful acquisition of goods from indigenous populations and contained production centers that could provide materials both locally and for export. In order for them to have succeeded they must have maintained some form of local exchange and support network.

This network's ultimate goal, however, was not mutual support but the export of goods to eastern Phoenicia. While metal is considered the primary export, some alternative ideas, mentioned at the beginning of the chapter, have been proposed for the justification of Phoenician colonization in the west. The production of salt or agricultural products, the harvesting and subsequent export and/or production of wood and ships, and the export of slaves have all been suggested as major factors of western Phoenician

¹⁰² Gonzalez de Canales et al. 2008, 633; Deamos 2009, 194-6.

¹⁰³ Wachsmann et al. 2009, 227-31.

¹⁰⁴ Wachsmann et al. 2009, 233-4.

colonization, trade, and export.¹⁰⁵ Aubet's argument for the importance of agricultural products at Iberian colonies and the interaction between the hinterland and the colonies themselves are reasonable.¹⁰⁶ There is abundant evidence for agricultural activity around the colonies and in nearby indigenous areas. The populations of colonies must have been supported agriculturally so it reasonable to assume that sites in the region of Malaga or Gadir specialized in agricultural production.¹⁰⁷ The export of slaves is an activity that is nearly impossible to observe archaeologically. No slave holding area or other culturally unique artifacts and architecture associated with the slave trade have been identified, so this facet of mercantilism remains invisible within the record. Wood is a raw material that could have been exploited, exported, and worked in Iberia. Unfortunately no shipyards or evidence for lumber production has been identified at Phoenician colonies.¹⁰⁸ As a result the argument for its exploitation remains ephemeral. The production and export of salt faces similar difficulties as the lumber and shipbuilding industries. No observable salt production facilities have been identified, despite the fact that numerous sites were ideal for its production.¹⁰⁹ The near ubiquitous presence of metallurgical facilities at Phoenician colonies across the Iberian Peninsula indicates that metals were indeed the primary draw to, and export from, the western colonies. Some locations did focus on other production such as agriculture, pottery, trade, regional management, or a combination of these, but these supported the greater export industry.

¹⁰⁵ Aubet 2002a, 90-3; Arruda 2009, 124-7; Treumann 2009, 169-70; Perez 2009, 239.

¹⁰⁶ Aubet 2002a, 84-95.

¹⁰⁷ Aubet 2002a, 91-3

¹⁰⁸ Treumann 2009, 169-85.

¹⁰⁹ Arruda 2009, 124.

Until some product other than metals shows a greater presence in the archaeological record, metals must remain the dominant theorized export.

The social organization of the Phoenician colonies was probably controlled by a small number of elite merchants or investors at each site. They may have founded the colonies themselves or under the aegis of a greater political authority.¹¹⁰ Such an authority would help explain the similar characteristics noted among numerous sites. The elites may have also been members of political or family groups that worked together to found the colonies with unique specializations in mind, which expanded as the colonies prospered.¹¹¹ Colonists in many locations interacted with the indigenous peoples and in some cases must have intermingled and perhaps even integrated themselves into local groups.¹¹² The elite individuals within both the Phoenician colonial system and the indigenous societies must have interacted, organizing the distribution and exchange of goods. This interaction would have allowed ideas and wealth to be exchange that would have benefited the elites in both societies and ultimately alter societal structure. The colonies were dependent upon their wealthy merchant or entrepreneurial leaders to maintain their success but looked to Gadir in southwestern Iberia for the social stability that would promote production and exchange.

The colonization of Iberia was a well-organized and a well-funded venture that was undertaken by culturally similar individuals presumably connected to a single political or social entity. Historical evidence suggests that this entity was Tyre. The first

¹¹⁰ Aubet 2006, 105.

¹¹¹ Aubet 2006, 105.

¹¹² Deamos 2009, 213-4.

colonies were all founded by the middle of the eighth century B.C.E. and were centrally organized around Gadir. Additional colonies appeared during the seventh and into the early sixth centuries, but these sites were established by Gadir rather than the eastern Mediterranean cities. The Iberian colonies were created primarily to take advantage of the metal resources of the peninsula or to support those locations that would smelt, work, or export the metals mined by the indigenous cultures. They were situated at the mouths of rivers because these locations were well protected anchorages and provided easy access to the colonies' hinterlands.¹¹³ After metallurgy, agriculture was the primary production of Iberia and trade was the primary activity, as all sites maintained harbors or anchorages that would allow relatively efficient seaborne exchange. The colonies on the Iberian Peninsula are well documented and show parallels to the rest of the Phoenician colonial expansion including pre-colonization, exchange, local production, and interaction and intermingling with indigenous peoples. These same traits are all manifest in the colonization of North Africa and Carthage, Sicily, Cyprus, and Sardinia. The Iberian colonies continued trading long after the Phoenicians in the Levant began their political decline at the hands of the Assyrians. It was only after onset of the somewhat mysterious sixth century transition that the western arm of the PTN failed, most of the Iberian colonies were abandoned, and trade collapsed.¹¹⁴

¹¹³ Aubet 1994, 310.

¹¹⁴ Aubet 1995, 55, 59, 61-2.

Trading With Local Peoples: Indigenous Interactions in the West

The Phoenician interactions with indigenous Iberians are crucial for two reasons. First, as mentioned above, the aboriginal Iberians had established trade routes and connections in the interior of the peninsula.¹¹⁵ By establishing and maintaining a relationship with the peoples around the areas they colonized, the Phoenicians were able to maintain lines of exchange to the entire Iberian population and their resources. Second, the Phoenicians' justification for the colonization of the peninsula was the abundance of raw materials, particularly metals which they could acquire and subsequently ship to Tyre and the rest of the eastern Mediterranean.¹¹⁶ Indigenous mines, and not the Phoenicians, produced the raw ore that was subsequently brought to Phoenician and indigenous sites to be smelted and refined prior to export.¹¹⁷ In return for these shipments the aboriginals were given foodstuffs, pottery, and other more valuable products. These Phoenician goods helped change indigenous cultures. Tracing these changes provides a better understanding of the extent of Phoenician trade, as well as providing an example of the nature of Phoenician influence on cultures across the Mediterranean.

The beginning of interactions with the indigenous Iberian peoples dates as early as the 11th and 10th centuries B.C.E. Curved iron knives were found at Quinta do

¹¹⁵ Aubet 2002b, 103; 2002c, 226-31.

¹¹⁶ Lipinski 2006, 181.

¹¹⁷ Aubet 2002b, 97-8, Jurado 2002; Arruda 2009, 126.

Marcelo in Portugal with carbon-14 dates between 994 and 783 B.C.E.¹¹⁸ Wheel-made pottery, iron knives, glass beads, and polychrome ceramics were found at Cachouca in Idanha-a-Nova with dates between 1025-845 and 893-602 B.C.E. At Huelva other discoveries confirm not only the early presence of Phoenicians, but potentially the earliest evidence for colonization. Spear shafts from the site found at the deepest levels of excavation date to the tenth century B.C.E.¹¹⁹ This may indicate a period of pre-colonial contact and the Phoenicians' early efforts to tap into the mining and metal industry that the local inhabitants had already established. Later dates provide the earliest radiocarbon dates for potential colonization at around 900 B.C.E. These early dates for Phoenician presence are from the Atlantic coast of Iberia and include both southern Spain and the coast of Portugal.¹²⁰ Thus, the eastern Mediterranean seafarers not only reached Iberia during the earliest years of their mercantile expansion but also established contact with indigenous people and explored the western limit of their expansion. These early interactions suggest that the expansion of their mercantile repertoire was a fundamental goal of their seaborne exploration. The early dates for contact also indicate that there was nearly four centuries of interaction between the Phoenicians and the aboriginal Iberians.

In order to understand the nature of contact between the two groups it is vital to understand why people from the opposite end of the Mediterranean Sea would sail to and settle on the Iberian Peninsula. Numerous explanations have been proposed, some of

¹¹⁸ Arruda 2009, 120-1.

¹¹⁹ Nijboer 2008a, 374.

¹²⁰ Gonzalez de Canales et al 2008, 637-42.

which have already been discussed; however, it is clear that the fundamental drive behind this movement was the acquisitions of valuable materials, and especially metals, to expand their wealth and mercantile capabilities.¹²¹ Indeed, the fact that the Phoenicians established colonies across the Mediterranean without endeavoring to obtain land or to gain political control supports this view, as does their historical reputation as merchants trading with a multitude of nations, discussed in chapter III. Lastly, the fact that the Phoenicians consistently integrated into indigenous societies near their colonies, including in Iberia, indicates that they did not engage in militaristic or forceful exploitation of populations. Instead, mutual exchange for desired wares drove Phoenician interactions. This in no way suggests that eastern merchants did not take advantage of less technologically advanced, or culturally different, peoples to obtain what they wanted. It merely indicates that they established relationships to accomplish their goals rather than using less amenable means, and that their goals did not include territorial expansion.

Knowing what materials Phoenicians voyaged to acquire provides the last link for understanding the role Phoenicians played in their relationship with the Iberians. It has already been established that whatever other materials the Phoenicians may have exported, metals were the primary cause for far western expansion; there can be no doubt that the Phoenicians exploited, smelted, and exported the metals coming out of the Iberian mountains.¹²² Bridgette Treumann has proposed that the demand for lumber for

¹²¹ The materials they acquired through trade and exported are discussed below in “Colonies in Iberia: Nature and Production.”

¹²² Arruda 2009, 123-5.

shipbuilding and woodworking drew eastern peoples to Iberia as the forests along the Levantine coast were depleted.¹²³ The acquisition of other valuables, including grains and other foodstuffs, salt, as well as slaves, have also been proposed as driving factors for Phoenician colonization in the west.¹²⁴ The cargo from the seventh century B.C.E. vessel at the Bajo de la Campana site is particularly enlightening in this regard. The wreck's cargo included tons of raw lead ore, many elephant tusks, copper ingots, amber, and a large quantity of Phoenician storage containers. While the vessel did contain some finished goods and decorative pieces, the vast majority of the cargo consisted of raw materials.¹²⁵ These data all have one thing in common: raw products drove Iberian colonization. Whatever the justification for the Phoenicians' voyages to Iberia — be it for untrained slaves, valuable metals, salt acquisition, *etc.* — their goal was to expand their range of exchange items by establishing new sources for the raw materials used to produce desirable and marketable manufactured goods.

The Phoenicians acquired Iberian products primarily through trade. The reciprocal trade for these valuable commodities provides information about the nature of the exchange and the goods Iberians received for their products. Eastern items can be seen in indigenous iconography by the ninth century B.C.E. Stele found in the southwestern corner of Iberia depict warrior chieftains with a multitude of objects identifying their wealth. During the pre-colonization period (ca. 10th century B.C.E.) the

¹²³ Treumann 2009.

¹²⁴ Arruda 2009, 124-5.

¹²⁵ Polzer 2009a, 10.

stele show shields, spears, swords, and other prestige items with few common goods.¹²⁶ Later, during the late ninth and early eighth centuries, the items depicted on the stele are predominantly eastern trade goods such as combs, fibulae, lyres, mirrors, and two wheeled carts.¹²⁷ The change in iconography corresponds to the appearance of Phoenicians in Iberia as well as the use of these stele in Tartessos and the Guadalquivir River valley.

The objects depicted have been found at multiple indigenous sites around Seville, at sites north of Andalucia, at Huelva, and along the Portuguese coast. The sites in the Tejo valley in Portugal contain relatively rich eastern Phoenician assemblages. They are located at the mouths of rivers and were inhabited as early as the Bronze Age. Once interaction with the Phoenicians began the Tejo Valley sites increased in size, and arguably importance, as trade materials moved through them. Additionally, the indigenous acculturation at the sites appears to be represented by the eventual dominance of eastern styles within their ceramic assemblages.¹²⁸ The assemblages at sites along the Portuguese coast further emphasize Phoenician importance. The Phoenician materials at these locations tend to appear in much greater numbers than at interior trade centers or other indigenous sites. These goods were traded to major centers, which must have been controlled by wealthy aristocrats or chieftains. The fact that inland trade centers along estuaries have an abundance of foreign imports indicates their importance as political centers and for wealthy individuals within indigenous

¹²⁶ Perez 2009, 236-7.

¹²⁷ Perez 2009, 237-8

¹²⁸ Correia 1995 241.

society.¹²⁹ Numerous sites in the region around Seville contain both cultic and common Phoenician wares such as red-slip pottery, as well as Levantine figurines and Greek pottery. These artifacts may have been part of religious offerings as suggested by the presence of associated devotional cups and ivory tableware.¹³⁰ The cemetery near Seville at Cruz del Negro also reveals traditional Phoenician wares in addition to tombs with eastern designs and contents.¹³¹ Excavations at Huelva recovered evidence for three different occupation locations: an indigenous site, a Phoenician site, and a Greek site. The indigenous site at Huelva contained multiple artifacts and materials such as ivory, wood, and tools that may indicate the presence of indigenous artisans. These artifacts are associated with Phoenician cultural items suggesting interaction between the two groups.¹³² Another site, Plaza de Armas de Puente Tablas in Andalusia, began importing Phoenician items via the Guadalquivir and Tartessos soon after colonization began.¹³³ Thus, the exchange between the Iberians and Phoenicians began early and consisted of manufactured items such as pottery, figurines, fibulae, combs, utensils, and knives.

Exchange was not limited to just material goods but also included technologies, religion, agricultural practices, architecture, and societal organization. The agricultural impact within Iberian cultures as a direct result of Phoenician contact was extremely important.¹³⁴ Olives and wine are the two major products that were imported by the Phoenicians. Iberians harvested wild grapes as early as the Neolithic period and the

¹²⁹ Correia 1995, 241-2.

¹³⁰ Deamos 2009, 199-207.

¹³¹ Deamos 2009, 214.

¹³² Deamos 2009, 194-6.

¹³³ Rodriguez 1995, 90-1.

¹³⁴ Buxo 2009, 155-7.

practice was continued until contact was made with eastern Mediterranean peoples. However, there is no evidence they used grapes to produce wine.¹³⁵ Once Phoenicians arrived on the peninsula their colonies were often distinguished by the presence of wine production and imports. During the earliest colonial periods wine was imported, but by the eighth century B.C.E. local wine production had begun in Iberia, especially at Gadir and Cerro de Villar. Local amphora production at the latter site can be subsequently associated with wine production. From here it was exported to southern France, Ibiza, the central Mediterranean region, and the rest of Iberia. Wine was apparently first produced by Iberians with Phoenician assistance until the colonists established their own wine industry.¹³⁶ Olives and olive oil appear first as imports to Phoenician colonies and was imported to the indigenous region of Ebro as early as the seventh century B.C.E. Olive tree groves were planted in the region around Gadir during the seventh and sixth centuries B.C.E., and as with the early wine industry, they were maintained by Iberians.¹³⁷ Wine grapes and olives must have been produced by relatively wealthy aristocrats because they required an extensive investment. Unlike more common grains that could be harvested twice a year, olives and grapes require an extensive period to mature and much cultivation before they are able to provide a return on investment. Thus, the farmers must have had sufficient wealth to accommodate these requirements.¹³⁸

¹³⁵ Buxo 2009, 158-9.

¹³⁶ Buxo 2009, 158-9.

¹³⁷ Nunez and Walker 1989; Buxo 2009, 159.

¹³⁸ Buxo 2009, 162.

The Phoenicians also brought new cereal crops, fruits, and grasses to Iberia. These included different forms of wheat, barley, millet, oats, peas, legumes, alfalfa, lentils, and peaches. Many of these were first planted at the end of the EIA soon after Phoenician contact or colonization. These foods are associated with new tools and new technologies such as the production of iron and new planting techniques.¹³⁹ These new crops, technologies, tools, and agricultural practices were a major Phoenician import to the Iberians. They were provided to the Iberian people by both direct and indirect exchange through communication, observation, and mercantilism.

Architecture and social organization are two of the most interesting and fundamental changes that resulted from the presence of Phoenicians in Iberia. Indigenous architecture traditionally consisted of round huts in small villages.¹⁴⁰ They were often constructed using mud and organic materials and villages were organized around agricultural development and intensification rather than specialized industry and artisans. The social organization appears to have been structured around warrior chieftains and consisted of a stratified social hierarchy that controlled agricultural production, trade, and resource distribution among the different social levels.¹⁴¹ Specialized classes of artisans developed before Phoenician colonization to include ceramicists, ivory carvers, metallurgists, and manufacturers of flint tools and luxury items. Many of these goods were produced for local aristocrats and leaders whose

¹³⁹ Buxo 2009, 163-4.

¹⁴⁰ Rodriguez 1995, 89-92

¹⁴¹ Chapman 1995, 36-8; Perez 2009.

burials represented their wealth and showed the available local production.¹⁴² The presence of these specialists is also seen in the earliest levels at Huelva where there is evidence for a Phoenician presence. This may be interpreted in several ways: that local products were in demand by the Levantine foreigners, that the cultures shared ideas, or that indigenous towns were useful emporiums during the earliest years of Phoenician contact and colonization.¹⁴³ This interaction may have resulted in an increase of social importance for the indigenous artisans.

The Phoenician influence on the indigenous social order is also reflected in the changes made to architecture and urban development. Many Iberian sites retained traditional architectural designs; however, numerous locations do show evidence for the adoption of Phoenician architecture. The site of Aldovesta is a 200 square-meter building that shows some evidence for traditional Phoenician influence, having been constructed with rectilinear walls and multiple rooms.¹⁴⁴ The site may have been used by indigenous Iberians as a trade center. The abundance of Phoenician wares, making up 57 percent of the ceramic collection, strongly indicates the presence of, or contact with, eastern people. The building at the site of Turo Del Calvary, which dates to the seventh and sixth centuries B.C.E., is finished with lime, a feature commonly associated with Phoenician architectural influence. The floor plan has parallels in the east including temples at Kition and Agia Irini.¹⁴⁵ Lime and clay molding found at the site of Tossal Redo, which also dates to the seventh century B.C.E., may indicate eastern

¹⁴² Chapman 1995, 39.

¹⁴³ Deamos 2009, 195-6.

¹⁴⁴ Belarte 2009, 95-6.

¹⁴⁵ Belarte 2009, 96-8.

Mediterranean architectural ideas were adopted here as well.¹⁴⁶ The site of Era de Castell shows a greater adoption of Phoenician structural design and planning. The pre-urban site altered its architectural practices from huts built around post holes and hearths to rectangular houses separated by streets containing party walls and stone plinths.¹⁴⁷ The site of Barranc de Gafols shows a similar development during the seventh century B.C.E. Here adobe walls were used in buildings, a technique that does not pre-date Phoenician contact on the peninsula¹⁴⁸. The sites of Puig Roig, Ferradura, and Sant Jaume-Mas d'en Serra all show Phoenician town and architectural development similar to Era de Castell.¹⁴⁹ Estuary sites in Portugal, such as those in the Mondego, Tejo, and Sado valleys, increase in size shortly after local exchange with Phoenician colonists begins.¹⁵⁰ After contact the sites undergo a process of urbanism and become political centers. In this case urbanism is generally associated with the use of "streets," the adoption of rectangular architecture, and the establishment of areas dedicated for specific purposes such as metallurgy, pottery production, or residence. The adoption of Phoenician architecture style also occurs at relatively rural and small sites as well. Fernando Vaz, Neves, and Corvo, in Beja Portugal contain relatively small settlements that could not be described as urban.¹⁵¹ Yet the buildings at these sites are all constructed with square corners, with multiple rooms, and the sites include buildings with possible

¹⁴⁶ This practice is found in Phoenician context at Tel Dor (Shahack-Gross et al. 2005). See also Belarte 2009, 97.

¹⁴⁷ Molera et al. 2000.

¹⁴⁸ Sanmarti et al. 2000.

¹⁴⁹ Belarte 2009, 98-101.

¹⁵⁰ Correia 1995, 241-7.

¹⁵¹ Correia 1995, 243-5.

Phoenician cultic connotations. In Tartessos at the site of Carmona the cultic building found at the center of town is constructed using Phoenician designs but is surrounded by traditional indigenous architecture and town organization.¹⁵² This building, as well as others found at sites across the Tartessos region, shows Levantine cultic practices that may indicate the regular presence, or at least the influence, of Phoenicians: their presence would have been a means of transferring ideas about architecture and urban planning. The adoption of these new concepts concerning structural design and town management are unlikely to have been exchanged solely through trade connections. The interaction between elites in both Phoenician and Iberian societies would have allowed different practices to be observed. As trade resulted in new civic organizations such as increased populations, emphasis on production and specialized industries, and the demand for agricultural and mineral products, the Iberian elite may have seen value in restructuring their towns to facilitate political control and production. Thus, while the Phoenicians may not have directly imparted their architectural knowledge or mandated that indigenous towns adopt eastern urban design, the impact they had on indigenous society at least indirectly promoted the implementation of new systems of construction and civic organization.

The exchange of religious ideas is also evident throughout the period of Phoenician colonization. The series of sites that most likely show the adoption of eastern Mediterranean cultic practices are in the towns around Seville and in the region around Carmona. Sites such as Carambolo Alto, Cerro Cacareno, Cerro De Cabeza, and Castalo

¹⁵² Deamos 2009, 199-212.

contain cultic centers with distinctive eastern traditions.¹⁵³ These are reflected by the materials found in the centers including: oxhide shaped altars, cattle horns, broken pottery, and cultic figurines. The site at Carmona has the most extensive eastern Phoenician archaeology of any pre-Roman site.¹⁵⁴ The cultic building includes locally made pottery with eastern motifs, ivory spoons that have parallels at Carthage and Syracuse, and a combination of Phoenician, Greek, and indigenous ceramics. All of these sites have been described as either indigenous structures showing evidence for acculturation and the adoption of Phoenician religion or, alternatively, as cultic centers that catered to the practices of eastern merchants, travelers, and immigrants.¹⁵⁵ The abundance of eastern wares that have been found in Iberia certainly indicate a relatively high level of acculturation and there has been no definitive evidence for the colonization of interior Iberia by Phoenician immigrants. On the other hand, the transfer of cultural ideas, technologies, agricultural practices, and architecture within indigenous populations certainly would have occurred most rapidly at locations inhabited by Phoenicians. Furthermore, the idea that cultic buildings were constructed to support Phoenician merchants directly trading with interior Iberia is supported by the close connection between trade and religion in eastern culture.¹⁵⁶ As a result it is possible that these cult centers were most often frequented by Phoenicians and that indigenous leaders only visited them on special occasions.¹⁵⁷ Cultic acculturation is not limited to Tartessos

¹⁵³ Deamos 2009, 199-206.

¹⁵⁴ Deamos 2009, 206-8.

¹⁵⁵ Deamos 2009, 211.

¹⁵⁶ Deamos 2009, 211-13.

¹⁵⁷ Deamos 2009, 211-13.

as evidenced by the site of Huelva. The indigenous site here includes a traditionally Phoenician cultic building that shows evidence of potential indigenous use.¹⁵⁸ The depictions of chiefs and their prestige goods found on the stele discussed above include figures whose heads are decorated with bull horns, an eastern spiritual motif associated with Syro-Palestine.¹⁵⁹ Other sites that show evidence for the adoption of Phoenician religious practices and ideas include Calvari and Tossal Redo.¹⁶⁰ Despite arguments to the contrary, the fact that Iberian people adopted Phoenician religious practices and/or used their cultic buildings is well established archaeologically soon after colonization began.

Iberia supplied an abundance of materials and greatly increased the resources that the Phoenicians were able to supply to the cities and states in the eastern Mediterranean. Acquiring these goods through exchange at the coastal colonies and the inland trade emporia resulted in an influx of wealth into indigenous societies. It also encouraged the adoption of new ideas and technologies encompassing agriculture, religion, architecture, and social and urban organization. This exchange was not unidirectional, as can be seen in the depictions of notched shields, which originated in Iberia and spread to Greece and the Near East, as well as in the development of new pottery forms.¹⁶¹ The impacts of Phoenician exchange forever changed the nature of indigenous Iberian society and greatly enriched the Phoenicians. This causal development may have been paralleled across the Mediterranean wherever the Phoenicians established colonies.

¹⁵⁸ Deamos 2009, 196.

¹⁵⁹ Perez 2009, 236.

¹⁶⁰ Belarte 2009, 97-8.

¹⁶¹ Perez 2009, 235; Mata 2002a, 184-8.

The Phoenician presence in the western Mediterranean was established as early as the tenth century B.C.E. This allows for an Iberian presence during the rule of Hiram I and the biblical account of Solomon's trade enterprise using "Ships of Tarshish." The tenth century dates found at Huelva, reinforced by confirmed ninth century B.C.E. colonization, indicate pre-colonial activities. Later, as the region was colonized, the abundant resources in Iberia and in nearby North Africa must have been a windfall for eastern Phoenicians (Fig. 46). This subsequently resulted in the accumulation of wealth by the western colonies and by the indigenous elites trading with them. The colonies ultimately crumbled during the sixth century B.C.E., an event that as yet is not well understood. It may be directly related to the fall of Tyre to Babylon in the early part of the century. This is unlikely, however, since the greatest period of colonial success in the region, the mid-seventh century B.C.E.,¹⁶² coincides with the continuous domination and fall of eastern Phoenician cities to their Assyrian overlords. Whatever the reason for the sixth century cessation of the western Mediterranean Phoenician trade sphere, it was overarching as it impacted the colonies across the central region. This event is important because it indicates that the western trade sphere was closely knit and well organized. Trade and communication among the colonies was regular, allowing for extremely successful exchange with indigenous peoples, a strong regional support system, and profitable exports. The western arm of the PTN was perhaps the most successful, and subsequently, the most valuable region of their cross-Mediterranean exchange system.

¹⁶² Aubet 2002a, 103-8; 2006, 103-4.

CHAPTER VII

INTERREGIONAL TRADE AND MATERIAL CULTURE TRADITIONS

Connections between the three regions, east, central, and west, and variations in material culture around the PTN are the last variables to be addressed in this study. These data are critical for understanding the nature of the colonial interactions and potential trade relations. The importance of identifying the trade between the regions is self-explanatory. It is only these links that allow the network to be an interrelated cultural, economic, and political system. Without them the various colonies across the Mediterranean Sea and Atlantic would be little more than independent trade and industrial settlements founded by the Phoenicians or their descendants.

The unique material cultures that developed in the colonies provide two crucial forms of evidence. First, because the artifact styles are associated with specific locations, identifying these colonial artifact types at other sites indicates exchange connections between colonies. Second, the colonial artifact types are similar enough to traditional Phoenician forms that their distinct styles demonstrate the development of ideas and unique cultural traditions from eastern origins. The lowest archaeological levels at the earliest colonial sites generally correspond to eastern Mediterranean materials. These develop over time to reflect the unique material culture traditions found at any given site. As such, these materials show divergent paths of material culture development that resulted over the period of Phoenician colonialism.

Regional Material Culture

Unique cultural developments can be observed in pottery, metal working, ivories, and funerary practices. The differences between these traditions within the PTN are not merely limited to the three regions but also conform to geographic boundaries, colonial groups, and even to individual colonies within the regions. The development of each tradition discussed below occurred within one of the three regions and does not cross their boundaries. As a result, it is useful to organize the discussion of unique material culture by the three Phoenician regions. In addition, the development of a tradition often has particularly strong ties with other cultural developments within the same region.

A full analysis of the distinct cultural materials found across the PTN is beyond the scope of this study. My analysis briefly identifies unique traits that experts in pottery, art, and other forms of material culture have detailed in different Phoenician regions. This is coupled with the materials' point of origin to verify that the Phoenician colonists were not culturally static.

Eastern Mediterranean Pottery and Ivory Traditions

There are two primary traditions that originate in the Eastern Mediterranean; that from Phoenicia itself, found at Tyre, Sidon, Sarepta, Tel Dor, and other major localities, and the forms developed on the island of Cyprus. A less distinct tradition is related to the settlement and production of Phoenicians in Egypt. Its appearance is limited to a small

group of artifacts, namely alabaster jars that were used in funerary contexts.¹ The other two traditions are extremely important paradigms for the development of material culture across the rest of the PTN. Over time, Cypriot and Levantine artifacts show mutual influence in form and design at least as early as the Bronze Age and continue to influence one another well into the Iron Age. These materials were exported along with Phoenician populations to the colonies and served as the basis for later regional and local forms.²

Some of the first traditional Phoenician wares were identified in the Akko Valley.³ These materials include red slip pottery, gray ware, bichrome ware, and a multitude of shapes such as jugs, pithoi, amphorae, lamps, and plates. The Levantine Phoenicians also specialized in products such as ivory, bronze bowls, jewelry, and wood-work.⁴ The materials within Phoenicia are essentially homogenous and well distributed across the Levantine cities and their trade international markets: Assyria, Israel, the Neo-Hittite cities and the rest of the Near East. There are potential differences between northern and southern products, with northern goods showing more distinct Aegean influence while southern products include more Egyptian designs. This is particularly true of the ivories.⁵ This differentiation is tenuous as many of the goods from the north originated from the Neo-Hittite cities and other regions technically north

¹ Gubel 2006, 89.

² See “Interregional Trade” in this chapter for the regular appearance of these materials at the colonies.

³ Lipinski 2006, 176 .

⁴ Calvo 2008; Aubet 2004; Kourou 2008, 326-35; Gilboa et al. 2008; Bikai 1978; Giveon 1978, 38-40.

⁵ Giveon 1978, 38-40.

of the Phoenician littoral.⁶ In addition to the possible Aegean connection, several art historians have identified strong oriental influences in Greek wares dating to the early Iron Age.⁷ This may suggest that traditional Phoenician goods impacted Aegean traditions more than the Greeks did the Phoenicians. Cyprus was a much more important influence on traditional Phoenician pottery. Design elements such as bichrome decoration and forms such as the Cypriot Pithoi were initially found on the island but would eventually be produced in the Levant for export to Cyprus.⁸ Ultimately, this would develop into a Phoenician “brand” that was produced at sites such as Tel Dor and included unique elements that distinguished their transport wares from others. The “brand” was produced for export and would help the Phoenicians to build their reputation as merchants.⁹

The Cypriot material culture traditions were developed with near continuous contact with the Phoenicians. This, combined with the mutual influences and local production of ceramic materials, indicates that the pottery from the island was pseudo-Phoenician as early as the tenth century B.C.E.¹⁰ By the ninth century, when Kition was settled by the Tyrians, Cypriot products, including containers and tablewares, were being imported regularly to sites such as Tel Dor, Sarepta, Tyre, and Sidon.¹¹ In addition to being exported, Cypriot pottery styles were produced in the Levant and shipped to the

⁶ Givon 1978, 38-40; Kourou 2008, 329-35.

⁷ Gubel 2006; Morris 2006; Riva and Vella 2006.

⁸ Gilboa et al. 2008, 131-2.

⁹ Gilboa et al. 2008, 117, 146, 154-5.

¹⁰ See chapter II “precursors to a Trade Network” and chapter IV “The Eastern Maritime Trade Network”

¹¹ Calvo 2008, 42-4, 56, 66; Bell 2006, 99; Gilboa et al. 2008, 130-2, 145, 158; Smith 2008, 293; Bikai 1978.

island, where they appear in the archaeological record.¹² Traditional Cypriot wares include bichrome pottery, black-on-red, and black-slip designs, as well as various forms such as jugs, tripods, vases, and plates.¹³ The close ties between the Levant and Cyprus with respect to trade and political control certainly impacted the development of these two traditions.¹⁴ Once the Phoenicians began their systematic colonization of the Mediterranean, Cypriot wares are found at nearly every site. Their products are nearly as ubiquitous as traditional Phoenician goods and influenced the development of material culture traditions as far away as Tartessos in Iberia.¹⁵ The distribution, influence, and near constant production from the LBA past the sixth century B.C.E. shows that Cypriot cultural material was an extremely important tradition for the Phoenicians and is in many ways a branch of Levantine cultural traditions.

The alabaster jars that were produced by Phoenician potters in Egypt make up a tradition that was separate from more customary Levantine wares. The cultural tradition of the jar's shape and design is essentially Egyptian and was borrowed by the Phoenicians for export from, and use in, their settlements. These jars must have been an excellent source of income, and they must have produced the jars notably well since they took over production early in the period of colonization.¹⁶ As a result, the Phoenicians in Egypt were able to corner the demand for a product that was known to be popular across

¹² Gilboa et al. 2008, 117.

¹³ Bikai 1978; Hunt 1982, 58-72; Karageorghis 1982, 121-3.

¹⁴ Karageorghis 1982, 123-38.

¹⁵ Neville 2007, 99.

¹⁶ Gubel 2006, 87.

the PTN.¹⁷ The jars also indicate Egyptian influence on Phoenician cultural traditions and the importance given to Egyptian ideas within the Phoenician cultural spheres.

Central Mediterranean Traditions

The material culture traditions in the central Mediterranean show regular mutual influences. Carthage supplies the most common forms found throughout the region. They are at virtually every colony in the central Mediterranean, are found in parts of the western Mediterranean, and greatly influenced other traditions that developed near the city.¹⁸ Other unique traditions were developed on Sicily, Sardinia, and Malta. The Sardinian pottery tradition, known as Nuragic wares, was created by the indigenous peoples, but their eighth century B.C.E. amphorae developed with Carthaginian influence.¹⁹ The unique traditions from Sicily and Malta are far more restricted than those from Carthage or Sardinia, generally found only at the source colony. Their development does show the gradual cultural separation from the homeland as the colonies grew and thrived. They also show that, despite the importance of Carthage, that city's influence was not all encompassing.

The central North African material culture tradition effectively centered around, and developed in, the city of Carthage. It is based on traditional Phoenician designs that were copied and adapted for export and local use.²⁰ The basic styles and decorations generally conform to Levantine forms including bichrome, red slip, and plain

¹⁷ Gubel 2006, 89.

¹⁸ Discussed in chapter V and below in "Interregional Connections."

¹⁹ Choltco 2009, 16-25.

²⁰ Docter 2003.

decorations on bowls, cooking stands, lamps, incense burners, amphorae, and jugs. These wares are extremely well distributed across the central Mediterranean, as well as being locally made.²¹ There is no evidence for the production of these forms of pottery at any other central Mediterranean sites suggesting that they were exported to sites across the Mediterranean. Tomb forms and content organization at Carthage and its close network connections are also unique. They consist of pit and shaft forms that demonstrate an “elaborate simplicity” in their layout and funerary goods.²² These cultural traditions are found in the west, though in far fewer numbers, and generally do not include funerary traditions. The Carthaginian material culture traditions ultimately spread across the entire Phoenician littoral in the central and western Mediterranean once the city established its own empire.

The Nuragic amphorae from Sardinia, produced to export local goods, were developed by natives in conjunction with Phoenician settlers using Carthaginian forms.²³ The production of wine on the island was especially associated with the Nuragic amphorae. These jars are found across the central Mediterranean suggesting that Sardinian wines were somewhat popular in the region.²⁴ The development of a unique culture on the island was also the result of cohabitation between the Phoenicians and the indigenous Sardinians. The settlement patterns of local peoples were impacted as early as the pre-colonization period, suggesting that there was an early cultural impact on the

²¹ Docter et al. 2008.

²² Fantar 1988, 172-4.

²³ Bernardini 2008, 539.

²⁴ Docter et al. 2008, 400-4; Bernardini 2008, 539.

people.²⁵ All the changes that diverged from the original Phoenician or Carthaginian forms may have resulted from exchange and interactions between Phoenician settlers and native Sardinians.

At the island colony of Motya, Sicily developed its own pottery forms. The material created at the site includes bichrome, geometric, and red slip designs on amphorae, mushroom jugs, trefoil lipped jugs, vases, and plates. These were based on traditional Phoenician designs from the Levant and were produced as early as the eighth century B.C.E. During the seventh century, the designs changed slightly to include single-handled pots and jugs and red-slip incense cups.²⁶ By the sixth century the cookware was handmade and flat based with rectangular handles. These sixth century forms may actually be attributed to the indigenous Sicilians since their design differs dramatically from the Levantine repertoire. In fact this style, which is also found in Malta, may have had little Phoenician influence. The eighth and seventh century pottery was produced while Levantine pottery continued to be imported. The similarities between eastern and Sicilian designs suggest that the local pottery was produced to meet the demand for Phoenician tableware rather than to create distinctly different designs. Nonetheless, the differences do suggest gradual cultural drift from the homeland. It is important to note that while traditional Levantine designs appear to be the primary influence for the Motyan designs, there is some evidence for a Carthaginian influence in the pottery developed at Solunto.²⁷

²⁵ Bernardini 2008, 570-1.

²⁶ Procelli 2008, 472-5.

²⁷ Procelli 2008, 469.

On Malta pottery was produced by both indigenous populations, as well as the Phoenician colonists. Body sherds from the earliest pottery produced after colonization, ca. the eighth century B.C.E., are indistinguishable as being either Phoenician or indigenous.²⁸ As the colony became better established the local Phoenician wares were influenced by traditional Levantine forms. Phoenician pottery included lamps, trefoil jugs, neck ridge jugs, and round-topped jugs, which replaced mushroom-topped jugs.²⁹ The Maltese indigenous potters adopted many Phoenician elements, including a matte red-slip finish, gray ware, and wheel-thrown production. Potters also adopted new forms such as tripod mortars, oil jars, dipper jugs, and pot stands. By the seventh century B.C.E., traditional forms, including thistle head beakers, small bowls, large and baggy urns, and biconical jugs, had gone out of use.³⁰ Ceramicists have pointed out that the Phoenician pottery repertoire on the island in turn quickly reflected indigenous elements.³¹ The indigenous adoption of Levantine pottery traditions until the sixth century B.C.E. indicates close communication between the two populations and their willingness to absorb traditions. The Phoenician traditions on Malta show a rapid dissemination from the original Levantine styles, particularly considering the colony continued to import wares from eastern Phoenicia. The relative isolation of Malta from the rest of the central Mediterranean and the close indigenous and Phoenician interaction must have contributed to this rapid change.

²⁸ Sagona 2008b, 504.

²⁹ Sagona 2008b, 518-20.

³⁰ Sagona 2008b, 513-5, 522-4.

³¹ Sagona 2008b, 520.

Western Mediterranean

The material culture traditions in the western Mediterranean were wide spread and have been categorized into two distinct regional forms: “circuito del estrecho” (circle of the strait) wares and *Cruz del Negro* jugs. This is in contrast to the apparent lack of uniform traditions in the central region. While Carthage certainly maintained strong connections with colonies in the central Mediterranean, its cultural, and by inference, social, influence was far outdone by western centralized organization. The facts that localized traditions in the region were effectively standardized into only two major types of pottery and were well distributed across the western sphere,³² suggests that mercantile and political organization maintained the distribution of goods and trade connections across the region.

The “circuito del estrecho” ceramic tradition was developed in the Iberian colonies shortly after the eighth century B.C.E. It was produced continually in the west until the mid-sixth century B.C.E. and was imported or produced from Abul to Ibiza and from Mogador to Rachgoun. The pottery in the repertoire primarily consists of black-on-red decorations, gray ware, and red-slip ware on numerous ceramic forms: carinated bowls, urns, pithoi, plates, bowls, and lamps. The black-on-red designs are usually on pithoi and urns while the tableware is made predominantly on red slip or gray ware.³³ The sudden appearance of Circuito del Estrecho wares in the archaeological record may be attributed to new influences at the Iberian colonies such as Cypriot or other eastern imports; however, it is also possible that the need to produce pottery locally may have

³² Mata 2002a, 188.

³³ Mata 2002a, 184-8.

been the most important factor.³⁴ Local potters may have been obligated by their customers to produce forms that approximated popular trends. The pottery was certainly made at Cerro de Villar, which had a large ceramic production center.³⁵ The petrographic correlation between imported Phoenician pottery along the Portuguese coast and Castillo de Doña Blanca may point to another production center near Gadir.³⁶ Other major colonies with industrial centers such as Toscanos and Lixus could have also produced this pottery and it appears to have been made at indigenous sites such as Pena Negra.³⁷

Cruz del Negro urns are the other major form that was well distributed across the western Phoenician colonies. These pots have cylindrical bodies and were developed out of eastern eighth century B.C.E. prototypes, possibly the neck-ridge jugs.³⁸ They were often used as funerary urns at indigenous sites in Iberia as well as at the cemetery of Rachgoun.³⁹ The pots are traditionally western and are rarely found outside of the region. These are decorated with bands and stripes along the body and have two handles.⁴⁰ The restricted distribution, local development and production, and apparent cultic and mercantile importance for indigenous Iberians make *Cruz del Negro* urns a valuable piece of unique material culture. The use of *Cruz del Negro* urns for cremations is an important consideration for understanding these pots. This tradition is most common at necropolises near indigenous sites, though they may be attributed to

³⁴ Mata 2002a, 186.

³⁵ Aubet 2006, 100.

³⁶ Neville 2007, 39.

³⁷ Neville 2007, 28, 44-5; Aubet 2006, 100.

³⁸ Mata 2002a, 188; Neville 2007, 171.

³⁹ Neville 2007, 43-4.

⁴⁰ Neville 2007, 171; Mata 2002a, 188.

Phoenicians.⁴¹ The fact that the only other site where this tradition occurs is at Rachgoun suggests that either indigenous Iberian populations were immigrating to Phoenician colonies or that the Phoenician colonists were living and dying among the indigenous Iberians on the Peninsula.⁴² When living among the Iberians, the Phoenicians may have had to use the closest approximation of pottery forms for traditional burials. Whatever the case, the unique distribution and use of *Cruz del Negro* urns provides additional information about connections within the western PTN.

The western *de sacco*, Type 1, or R-1 amphora appears as a local transportation ceramic by the eighth century B.C.E.⁴³ At this time it is associated with more traditional eastern amphorae at Castillo de Doña Blanca in southern Iberia.⁴⁴ The R-1 wares had sloping, carinated shoulders, wide, pear-shaped bodies, and round handles. Later, at the end of the eighth and in the early-seventh centuries B.C.E., these amphorae developed more prominent carinations and thicker rims. During this same period, they effectively replaced the eastern forms entirely, being the only amphora form observed at Castillo de Doña Blanca and the most common across the Iberian Peninsula and in North Africa.⁴⁵

Unsurprisingly, the unique developments in material culture outside the homeland are closely connected to traditional Phoenician styles from the eastern Mediterranean. These must have evolved as generations of Phoenicians developed their own industry to produce products such as pottery. They may indicate varying degrees of

⁴¹ Deamos 2009, 193-204.

⁴² Neville 2007, 43-4.

⁴³ Schubart 2002, 15.

⁴⁴ Mata 2002a, 181, 186; Neville 2007, 15-46.

⁴⁵ Mata 2002a, 181, 186; Neville 2007, 15-46, 171; Prats et al. 117; Schubart 2002, 15.

cultural separation from traditional practices and, as such, suggest that the regions and colonies were dependent upon their own resources for survival. This factor, along with indigenous relations and hundreds to thousands of miles of separation from other Phoenician settlements, allowed the natural development of new designs, ideas, and forms. Nonetheless, the near constant importation of eastern goods and the fact that all unique forms of material culture were closely tied to eastern styles show that the colonists maintained some level of identification with the homeland.

Interregional Connections

The exchange of goods across the three major regions created the connections that allowed the PTN to exist. These relations were essential for the success of the Phoenician colonial program. Without them, the major eastern colonies would have received no benefit from their westward expansion and the colonies would have ceased receiving valuable goods such as eastern jewelry, pottery, cultic goods, and more exotic products such as Greek pots and Egyptian scarabs. In the following sections I will attempt to demonstrate that either direct or indirect connections between two or three regions are visible in the archaeological, funerary, or architectural evidence at every Phoenician site west of the Aegean.

The limited archaeological data and standard material culture between the eastern Mediterranean cities make it difficult to identify where in the east western imports arrived. In addition, the nature of western imports, as raw, unfinished materials, makes

them effectively absent from the eastern Phoenician archaeological record. As a result, it is easiest to organize any connections between the eastern Mediterranean and the colonies with respect to the western regions. The organization of data between the west and central Mediterranean will use a similar model, framing the information with respect to the western colonies.

Trade between the Eastern and Central Mediterranean

The city of Carthage has close connections historically and archaeologically with the eastern Mediterranean. The historical connections have already been discussed; however, it is important to begin this discussion by emphasizing the fact that Carthage was considered to be a Tyrian colony, established ca. 814/13 B.C.E. The archaeological evidence confirms the colony's eastern origins, and shows that ties with the east were maintained until at least the seventh century B.C.E.

The evidence for Carthage's Tyrian origin is most obvious in the organization and urban layout observed from its earliest years. The city was laid out in a grid with strictly rectangular buildings situated along streets or lanes. That its establishment was well organized and planned is demonstrated by the presence of property boundaries and an apparent land register.⁴⁶ Levantine influence continued into the seventh century B.C.E., as buildings were strictly constructed using the Phoenician pier-and-rubble method from this point on. During this century, streets were paved with rubble and built

⁴⁶ Niemeyer 1995, 74-5.

with a gutter channel running down their center.⁴⁷ These features of Tyrian architecture are crucial for establishing the importance of eastern relations to Carthage. That that this relationship with the east was sustained into the seventh century suggests that the material connections between the regions were significant. They reflect direct communication and exchange between the Phoenicians in the east and the Carthaginians.

Traditional eastern pottery is found in Carthage from the earliest dates now identified for the city. Levantine Bichrome ware and red-slip ware are found in the archaeological record throughout the eighth century and well into the seventh century B.C.E. as are Cypriot wares.⁴⁸ One particularly interesting artifact design that indicates well-established cultural connections between Carthage and the east is a piece of locally made black-on-red pottery with geometric decorations in a reserved “zone” of the pot.⁴⁹ This practice is traditionally associated with burial urns and the Carthaginian tophet. The practice also occurs in Tyre where similarities with Carthage extend to burial practices and tomb assemblages, thus, showing similarities in pottery usage, cultic traditions, and burial practices.⁵⁰

The cultural and material connections between Carthage and the Levantine Phoenicians are well established. They are not limited merely to the presence of imported material culture, but are reflected in table wares, cultic and burial items, and the locally produced pottery forms that were developed using eastern traditions. The fact that Carthage and the eastern Phoenician cities appear to develop in tandem throughout

⁴⁷ Niemeyer 1995, 74-5.

⁴⁸ Docter et al. 2008, 387, 393, 401-3.

⁴⁹ Docter et al. 2008, 399.

⁵⁰ Docter et al. 2008, 416.

the seventh century B.C.E. suggests that they maintained relatively consistent communication even after Carthage established its own hegemony.⁵¹ These ties would ultimately break as the eastern cities fell to the Assyrians.

The connection between the eastern Mediterranean and Sardinia begins as early as the 10th century B.C.E. when silver from the island is found at Tel Dor.⁵² During the ninth century B.C.E. Levantine imports to the island became relatively common there, which equates with the beginning of Phoenician colonization. At Sulcis, Phoenician pottery is found from the eighth and seventh centuries. Pottery that can be directly associated with Tyre is found from the middle of the eighth century at Ozpizo. Of all the Phoenician colonies on Sardinia, Sulcis has the most extensive collection of eastern Phoenician pottery, suggesting that it was a major entrepôt for Levantine goods.⁵³ The colony of Sant’Imbenia is the other major site with an extensive amount of Levantine pottery.⁵⁴ The materials here date as early as the ninth century B.C.E. and include both traditional Phoenician red-slip forms, “Phoenician fine ware,” and a collection of eastern amphorae. The imports continue to appear at the site through the seventh century B.C.E., and material from a later date may be present.⁵⁵ The necropolises at Bithia and Tharros, colonies founded during the eighth century B.C.E.,⁵⁶ have the best documented eastern Phoenician connections dating to the late seventh and first half of the sixth centuries. Here, locally produced pottery based on traditional Phoenician forms is well dated by

⁵¹ Smith 2008, 277; Lipinski 2006, 194.

⁵² Gilboa et al. 2008, 156.

⁵³ Bernardini 2008, 543-9.

⁵⁴ Bernardini 2008, 539.

⁵⁵ Bernardini 2008, 539.

⁵⁶ Van Dommelen 2006, 144.

Etruscan *Bucchero* and Corinthian pottery. Eastern imports to the island continue to occur during this later period of the PTN and include mushroom mouth jugs, table amphorae, trefoil mouth jugs, and tableware.⁵⁷

The abundance of material that is imported into the island of Sardinia from eastern Phoenicia suggests that the two places were directly connected through trade. The connections are tenuous at best since there is very little to show strong cultural and interactive associations between the two areas. The imports could have as easily come from Carthage as from the east, and even direct trade between the Levant and the Sardinian colonies would have probably often involved a stop at Carthage. Some credence for a direct connection is given by the potential exchange between Sardinia and the east from the LBA to the 10th century B.C.E.⁵⁸ On the other hand, the fact that the Nuragic amphorae were developed using Carthaginian pottery forms, the abundance of Sardinian materials found at Carthage,⁵⁹ and the proximity between the two central Mediterranean entities suggest that trade with the east was maintained via Carthage.

The island of Sicily is a far more interesting case than Sardinia with respect to its eastern connections. The material connections at Phoenician colonies on Sicily were well established. Here, ties to the east have a much earlier potential date. Wine, pottery, copper ingots, and bronze goods suggest connections between Cyprus and Sicily as early as the Middle to Late Bronze Age.⁶⁰ These contacts are questionable, and it is only in the eighth century B.C.E. that the regular importation of eastern Phoenician goods occurs. In

⁵⁷ Bernardini 2008, 556-70.

⁵⁸ Gilboa et al. 2008, 117, 156.

⁵⁹ Docter et al. 2008, 387, 404, 412-417.

⁶⁰ Procelli 2008, 463.

addition to traditional Phoenician pottery, such as Pilgrim flasks, other eastern products, including Egyptian scarabs and Greek pottery, regularly appear at colonial sites.⁶¹ At Motya, eighth to sixth century B.C.E. pottery found in tombs on the island and at the mainland necropolis of Birgi reflect traditional eastern Phoenician forms such as bichrome mushroom mouth jugs and trefoil mouth jugs. These pots are locally made, however, and reflect the adoption of eastern and Carthaginian traditions.⁶² Eastern connections may be better represented by Cypriot transport amphorae that appear on Motya during the seventh century B.C.E.⁶³ The colony at Solunto shows similar connections. Here, locally made pottery from the seventh and sixth centuries reflects eastern forms, but the repertoire also is indebted to Carthaginian traditions indicating that the city's influence was more direct than influence from eastern cities.⁶⁴ Lastly, the Phoenician colony at Palermo has produced local pottery based on Greek traditions found in imported Corinthian and Attic wares. Conversely, the cultic and ritual items at the colony are derived from eastern traditions.⁶⁵ The site shows a strong Phoenician religious culture but must have had regular contact with Greek materials as is reflected in the pottery repertoire. This, in all likelihood, was the result of the interaction between Phoenician colonists and their colonial Greek neighbors to the east and south.⁶⁶

Thus, the Sicilian colonies maintained a more indirect connection with the Levant than did Sardinia. Goods were imported, but cultural influences strongly reflect

⁶¹ Procelli 2008, 466-8.

⁶² Procelli 2008, 467-9.

⁶³ Procelli 2008, 475.

⁶⁴ Procelli 2008, 469-70.

⁶⁵ Procelli 2008, 470-1.

⁶⁶ See "Central Mediterranean Trade Connections" in chapter 5.

Carthage's version of Phoenician material culture rather than actual eastern wares. Two additional factors are worth noting with regard to this analysis. Recent genetic research performed on the modern population of Sicily has shown that African and Near Eastern populations influenced the genetic makeup the Sicilian population.⁶⁷ Unfortunately, the research did not investigate Greek genetics, so the comparable influence from Aegean settlements is uncertain. In addition, an earlier genetic study attempted to determine whether Greek or Phoenician populations affected the modern makeup of the Sicilian population with respect to geographic location. No differences between the islands regions could be observed, indicating that any genetic differences across the island have long been removed through intermarriage and population movement. Essentially, the Sicilians have a homogenous genetic makeup that does not reflect past geographic population concentrations.⁶⁸ The genetic data do indicate that Phoenician populations indeed colonized the island and subsequently cohabitated with other local populations. This increases the possibility for some direct cultural exchange, though the ties to North African populations suggest that these were one or more generations removed from the east, having descended from the Levantine colonists of Carthage.

A second factor is the unique burial and cultic traditions found specifically at the colony of Motya. Within the burials the distribution of faunal remains indicates a higher percentage of animals compared to humans, a trend that is in direct contrast to traditional practices. The burials at the colony are made up of similar tomb compositions, but with

⁶⁷ Piazza et al. 2000.

⁶⁸ Rickards et al. 1998.

slightly different pottery counts and forms.⁶⁹ These differences suggest that the influence of both the eastern Mediterranean and Carthage on Sicily were somewhat limited. They also strengthen the idea that eastern Phoenician traditions and, thus, mercantile interactions were relatively well removed from Sicilian colonial peoples and culture. The Phoenician settlements on Sicily clearly developed their own traditions and by the seventh century B.C.E. diverged culturally even from the major trade hub at Carthage.

The last colony to note with respect to eastern connections is Malta. Traditional Tyrian pottery is imported to the island as early as the ninth century B.C.E.⁷⁰ This period, as discussed in chapter V, reflects pre-colonization and, as such, likely shows direct connections with the east as part of Phoenicia's western expansion. This period of discovery and interaction with the island must have justified its colonization during the eighth century B.C.E.⁷¹ At this time there is an increase of eastern imports that includes Tyrian red slip and bichrome wares. This pottery continue to appear in the archaeological record through the seventh century B.C.E.⁷² Locally produced wares also reflect eastern forms through the end of the seventh century, and include both handmade and wheel-thrown ceramics.⁷³ For example, a bronze lamp holder found at Ghajn Quijet on the island is commonly associated with Cypriot contexts and dates to the end of the eighth or early seventh centuries B.C.E.⁷⁴

⁶⁹ Procelli 2008, 468-9.

⁷⁰ Sagona 2008a, 513.

⁷¹ Sagona 2008a, 500, table 2; Atauz 2004, 40-3.

⁷² Sagona 2008a, 513-15.

⁷³ Sagona 2008a, 503, 515-18.

⁷⁴ Sagona 2008a, 513.

With the exception of Carthage the material found on Malta indicates the most direct connection between the Levant and any central Mediterranean colony. The adoption of cremations and eastern burial practices on the island during the eighth and seventh centuries indicates that the relations included cultural as well as material exchange.⁷⁵ Ultimately, the connection was broken during the early sixth century B.C.E. and, as the island does not seem to have had a well-established connection with Carthage, it lost much of its Oriental character. This would continue until Carthage finally turned to the island during the early-fourth century B.C.E.⁷⁶

Eastern connections with the central Mediterranean were maintained through direct trade to Malta and Carthage (Fig. 47). Other colonies on Sardinia and Sicily maintained an eastern character, but this was diluted due to the fact that Levantine Phoenician connections passed through Carthage and may have also included a stop at Malta. This is reflected by the Carthaginian character of Phoenician materials and the cultural traditions observed on Sardinia and Sicily. Of the two, Sardinia appears to have maintained closer ties to the east, reflecting either lesser Carthaginian influence, exchange with eastern Phoenicia in which Carthage acted as an anchorage en route, or perhaps merely a less rapid cultural shift away from eastern Phoenician traditions. Whatever the case, any exchange between the eastern Mediterranean and the Italian islands must have included at least one intermediary element.

⁷⁵ Sagona 2008a, 518-20.

⁷⁶ Sagona 2008a, 522-8; Atauz 2004, 50-2.

Central and Western Mediterranean Connections

Following the pattern established above, connections between the central and western Phoenician colonies will be organized with respect to the western region. Unlike the eastern Mediterranean, the central region does show some evidence for exchange and cultural ties with the west. The evidence for exchange is most visible in the west by the presence of Carthaginian imports. Further, the appearance of western goods in the central region is rare save at Carthage. As a result, establishing the extent and nature of exchange between the two regions is easiest with respect to the western locations. Imports to the central Mediterranean will be briefly addressed.

Gadir and its primary mainland port at Castillo de Doña Blanca appear to be the ideal locations for identifying central Mediterranean imports. As the main entrepôt and center of western political organization, Gadir should have been the primary location for foreign goods to reach both colonial and indigenous markets. Despite this central Mediterranean products associated with Gadir are limited. The most prominent evidence consists of amphorae dating to the eighth century B.C.E. These originated from the area around Carthage and other site in Tunisia.⁷⁷ After the eighth century Carthaginian imports dropped dramatically and few central Mediterranean goods are found at the city until the sixth century B.C.E., after the collapse of the trade network.⁷⁸ Connections between Gadir and the central Mediterranean did not cease entirely, as can be observed

⁷⁷ Neville 2007, 99.

⁷⁸ Mata 2002, 192-6.

in parallels between plate forms found in Gadir, Sardinia, and Carthage from the second half of the eighth to the first quarter of the seventh centuries.⁷⁹

Of the western settlements Gadir did not have the strongest connection with the central Mediterranean. Other colonies show much stronger ties with the region. The apparent disconnect between the two primary entrepôts west of the Levant after the eighth century may reflect a western preference for eastern goods or a political and cultural rivalry. Such a rivalry could have resulted in Gadir avoiding Carthaginian influence while working to become economically dominant. The minimal appearance of central Mediterranean goods in the archaeological record at Gadir and Doña Blanca may also reflect the success of western internal trade. There may have been little need or demand to import goods from the central Mediterranean when locally made “circuitos del estrecho” wares and locally produced wine, oil, and food served the same purpose. Whatever the reason for Gadir’s disconnection with the central Mediterranean, it did not extend across the west nor did it keep western goods from traveling east.

One of the primary regions of colonial production in the west, southern Spain, shows relatively regular trade relations with the central Mediterranean. The shaft graves at Toscanos are found across Iberia as early as the eighth century B.C.E. until they fell out of practice during the seventh century, to be replaced by more elaborate burials similar to those at Motya and Carthage.⁸⁰ The tomb assemblages found at the necropolis from Morro de Mezquitilla also reflect Carthaginian practices.⁸¹ At the Andalusian site

⁷⁹ Bernardini 2008, 546; Mata 2002a, 181.

⁸⁰ Neville 2007, 60-2.

⁸¹ Docter et al. 2008, 416.

of Almuñecar, tomb design from the “Laurita” necropolises at Cerro de San Cristobal shows one parallel at the Carthaginian Necropolis at Junon. These tombs, consisting of deep pits with an inset niche, are most common in the east and may not reflect connections with the central Mediterranean, although the parallels between the grave goods in the tombs at Almuñecar and Carthage do point to some cultural or mercantile connection.⁸² This organization of grave goods is also relatively common across portions of the western and central regions including sites on Sardinia, Malta, Algeria, and Ibiza.⁸³ Lastly, parallels for the chamber tombs found near Almuñecar and Chorreras from the seventh century B.C.E. are found at Utica, Carthage, and Cyprus during the same time period.

In addition to other burial traditions, southern Iberian material cultural connections existed in the central Mediterranean. The colony at Toscanos shares similar architectural features with the colony at Motya. Specifically, the major store house at Toscanos is a direct parallel to a similar structure at Motya.⁸⁴ Parallels to both structures are found at eastern Phoenician sites that were constructed at the same time. These associations may indicate that they both fulfilled similar functions at the colonies. The connection between the buildings at Motya and Toscanos is certainly indirect, but they are suggestive of a single architectural origin. Red-slip tableware produced at the colony of Cerro de Villar near Malaga are found in Carthage during the eighth and seventh centuries B.C.E., and lamps and amphorae from the same site are found in the central

⁸² Catalan 2002, 59-62; Neville 2007, 49-52, 56.

⁸³ Neville 2007, 67-8.

⁸⁴ Aubet 2006, 100; Niemeyer 2002, 37.

Mediterranean from the seventh century B.C.E. onward.⁸⁵ The connections between southern Iberia and Carthage are well established as early as the eighth century B.C.E. and continue through the seventh century. “Circuito del estrecho” pottery is common at Carthage and suggests regular imports from Iberia, if not mutual exchange.⁸⁶

West Iberian colonial connections with the central Mediterranean also exist. The site of La Fonteta shows some cultural associations with colonies to its east, as seen in burial stele. Direct parallels of the La Fonteta Stele are found in tombs at Motya and Carthage. In addition, gold and silver artifacts from the Iberian site were produced at Tharros on Sardinia, Carthage, and in central North Africa.⁸⁷ At Ibiza the material connections begin soon after its seventh century founding. According to J. Ramon, the early levels of Sa Caleta contains numerous examples of central Mediterranean amphorae from “Sardinia, Sicily, and/or Tunis.”⁸⁸ After the colony moved to the bay of Ibiza, central Mediterranean imports not only continued, but became more common as the sixth century B.C.E progressed. Central Mediterranean transport amphorae are found at the point of Joan tur Esquerrer dating to the first quarter of the century.⁸⁹ Early sixth century Etruscan pottery is found in the necropolis at Puig de Molins along with locally made sandstone betyls. These were common in the central Mediterranean beginning in the sixth century B.C.E.⁹⁰ The archaeological evidence suggests that the central Mediterranean, and especially Carthage, maintained regular trade connections with

⁸⁵ Docter et al. 2008, 392-3, 403.

⁸⁶ Aubet 2002, 101; 2008, 247; Docter et al. 2008, 384-5, 387.

⁸⁷ Prats et al. 2002, 123-4.

⁸⁸ Ramon 2002, 133-4.

⁸⁹ Ramon 2002, 141.

⁹⁰ Ramon 2002, 138-9.

western Iberia. This was likely both the result of their close proximity and the fact that La Fonteta, and later Ibiza, would have been ideal locations to begin voyages to Sardinia.⁹¹ The fact that Carthage exerted its influence over Ibiza soon after the collapse of the PTN provides further evidence for close connections between these colonies since there is little to no break in their contact.⁹²

The connections between the central Mediterranean and the western colonies along the Portuguese coast and North Africa are relatively tenuous. North African pottery dating to the eighth century B.C.E. has been found in Carthage,⁹³ while plates found in Sardinia have parallels at Lixus.⁹⁴ In general the materials found at North African sites reflect an almost entirely western cultural tradition that is contrary the assemblages found in the central Mediterranean.⁹⁵ Coastal Portuguese colonies show no direct connection to Carthage. The only evidence for a connection with the region is the presence of Carthaginian material at indigenous sites in Tartessos.⁹⁶ At best, this may suggest the possibility that Carthaginian materials passed through these colonies to reach the interior.

Huelva is the only colony east of the Strait of Gibraltar aside from Gadir that appears to have maintained some level of connection with the central Mediterranean. The construction method of the early colonial buildings, which dates no later than the eighth century B.C.E., consists of pier and rubble architecture, which reflects both

⁹¹ Ramon 2002, 50.

⁹² Neville 2007, 33.

⁹³ Docter et al. 2008, 384-5.

⁹⁴ Bernardini 2008, 546.

⁹⁵ Neville 2007, 43-6.

⁹⁶ Deamos 2009, 207-8.

Carthaginian and eastern Phoenician technologies.⁹⁷ This connection is, of course, of little value as the architectural techniques of the eastern Mediterranean would have been exported across the Mediterranean and western Atlantic during colonization. During the first half of the eighth century Carthaginian pottery can be found at the colony, providing stronger evidence for a connection.⁹⁸ Later, during the second half of the eighth century B.C.E., Sardinian and Italian pottery are also found at Huelva.⁹⁹ After this century, central Mediterranean goods notably drop in quantity.

An interesting note can be made from a genetic study of the region. Genetic markers place the population of Huelva with “western European” populations, but within that group they are centrally located.¹⁰⁰ In other words, the genetic markers place the modern Huelvan population in the middle of the western European group rather than at the western fringe where they are geographically located. Additionally, compared to North African populations, those from Huelva are most closely related to people from the region around Tunisia, that is, ancient Carthage.¹⁰¹ While my study makes no attempt to interpret what these genetic data signify for the movement of human populations, it is worth noting that eastern Mediterranean, Greek, and central North African peoples colonized and lived in this area genetically identified as central western European. That said, the authors of the genetic study, R. Calderon and his colleagues, maintain that their

⁹⁷ Niemeyer 1995, 85.

⁹⁸ Gonzales de Canales et al. 2008, 637.

⁹⁹ Gonzales de Canales et al. 2008, 633.

¹⁰⁰ See Calderon et al. 2006 for their geographic delineation of “western European.”

¹⁰¹ Calderon et al. 2006, 675-7.

results reflects the movement of Neolithic and early Holocene people rather than later Iron Age populations.¹⁰²

Connections between the central and western Mediterranean are surprisingly poorly represented in the archaeological record prior to the sixth century B.C.E. While they do exist, they are limited at Gadir, the primary entrepôt and political center; they are all but non-existent east of the Strait of Gibraltar; they are not seen in western North Africa; and only southern and western Iberia show any signs of consistent cultural and material exchange. Where the exchange is somewhat well established, the materials and associations with the central Mediterranean are but a shadow of the influence that Gadir and western Phoenician cultural traditions exerted over the western Mediterranean colonies.

The evidence suggests that Gadir maintained relatively strong influence over the region, and/or that the exchange of pottery, foodstuffs, culture, technologies, and people within the western colonial sphere was sufficiently efficient that imports from Carthage and other central sites were unnecessary or unwanted. This evidence may also reflect the movement of goods that has been traditionally accepted with respect to the western colonies. Raw materials were sent directly to the eastern Phoenician cities, who in turn, shipped their products to their colonies for use and exchange with indigenous populations. In such a system, Carthage would have been little more than a stop along the route for goods moving between the east and west, while the other central colonies would have been avoided altogether. The stop at Carthage would have allowed some

¹⁰² Calderon et al. 2006, 676-7.

people and goods to be sent west from the city, though the record suggests that these primarily went to indigenous peoples or the western colonies. Ultimately, it appears that Carthaginian and central connections with the west were tenuous at best, and where they did exist, concentrated east of the Strait of Gibraltar. They appear to have been of little cultural and economic importance, which is in contrast to the influence that the eastern Phoenicians exerted over region (Fig. 47).

Western and Eastern Mediterranean Connections

The connections between Gadir and the Levant are well established both historically and archaeologically. The colony was founded by Tyre according to the historical traditions discussed in chapter II, though probably not as early as the end of the 12th century B.C.E. Once established the colony traded with the eastern Phoenicians. This showed little signs of decline prior to the sixth century collapse. Trade to the east involved the movement of valuable goods, especially silver, through the early sixth century B.C.E.¹⁰³ Other valuable materials that could have been exported to the east from Iberia and Gadir, included: ivory, copper, iron, tin, salt, slaves, lead, wood, exotic animals or their pelts, and even purple dye.¹⁰⁴ Unfortunately, none of these goods are likely to be preserved in the archaeological record as they are all raw materials that would have been reworked and subsequently traded. Instead, archaeologists rely on the historical record, such as Ezekiel 27 and I Kings 10.22, which indicate that gold, silver, ivory, and exotic animals were shipped east from Tarshish. Fortunately, while the

¹⁰³ Aubet 1995, 49.

¹⁰⁴ Arruda 2009, 123-5.

identification of most of the raw materials exported to the west must be taken on faith, evidence does exist for eastern imports to the west.

Western pottery forms and traditions developed out of metropolitan pottery designs identified at the Tyre al-Bass cemetery. Their influence dates as early as the eighth century B.C.E. and continue to affect the designs of western pottery production through the sixth century B.C.E.¹⁰⁵ At Gadir itself, and, more specifically at Castillo de Doña Blanca, a number of factors point to the presence of extensive eastern influence and regular cross-Mediterranean connections. Most importantly, from its establishment Gadir exerted organizational, mercantile, and potentially political control over the western Mediterranean colonies. The regional sites contained a remarkably standardized artifact assemblage consisting of “circuito del estrecho” pottery. This is in direct contrast to the central Mediterranean where the islands of Sardinia and Sicily each developed their own pottery forms based on Carthaginian derivations. Gadir’s organizational and mercantile oversight in the region almost certainly derived from the east, either by direct influence, or more likely, through skillful leadership and planned administration.¹⁰⁶ Another important feature of Gadir tied to traditional eastern culture and practices is the temple of Melquart. This temple is described in histories and documentation pertaining to city’s origin. The importance of the temple and its construction as a vital cultic element shows clear ties to the east and must have helped the city retain its cultural origins, as Melquart was the primary Tyrian deity.¹⁰⁷

¹⁰⁵ Calvo 2008, 65-8.

¹⁰⁶ Aubet 2006, 106.

¹⁰⁷ Neville 2007, 86-7.

The archaeology and layout at Gadir and Castillo de Doña Blanca provide more evidence for strong Levantine connections. The location and design of the colony of Gadir closely emulates that of Tyre in the east. Gadir's relationship with the mainland port at Doña Blanca is a direct parallel to Tyre.¹⁰⁸ At least one wall built at Doña Blanca is architecturally identical to those found across eastern Phoenicia.¹⁰⁹ In addition, eastern imports are found at the site. Two types of eastern Phoenician amphorae are found dating to the eighth century B.C.E. along with "Samaritan fine ware."¹¹⁰ Locally-made carinated bowls found at Doña Blanca are found in the same context and period at Hazor, Tyre, Tel Keisan, and in the Khaldeh necropolis.¹¹¹ Tyrian bowls from the eighth century B.C.E. were also imported to Doña Blanca.¹¹² During the seventh century, copies of Cypriot black-on-red pottery were produced locally, suggesting the importation of prototypes from Cyprus, now well under Phoenician influence and control.¹¹³ The urban layout at Castillo de Doña Blanca has direct parallels to the eastern Phoenician city of Beirut and reflects traditional eastern designs using rectangular structures separated by narrow lanes. In addition, the buildings contain large central stones, another feature common in eastern architecture.¹¹⁴ Perhaps most interestingly is the presence of a statue of Ptah, found at Gadir and dating sometime between the ninth and seventh centuries

¹⁰⁸ Mata 2002a, 173.

¹⁰⁹ Mata 2002a, 177.

¹¹⁰ Mata 2002a, 181-2.

¹¹¹ Mata 2002a, 178.

¹¹² Mata 2002a, 182.

¹¹³ Mata 2002a, 188.

¹¹⁴ Neville 2007, 94-6.

B.C.E. This statue was constructed in Egypt by Phoenician immigrants and was subsequently exported to the far west.¹¹⁵

Eastern imports and influence at Gadir are documented historically, archaeologically, and architecturally. The east influenced local pottery forms for nearly three centuries and in all likelihood received valuable imports until the sixth century collapse. Eastern Phoenician influences and connections were not limited to Gadir nor to its nearest port at Doña Blanca. They are found across the Iberian Peninsula.

The coastal Portuguese colonies are furthest from the eastern littoral. Nonetheless, Eastern practices and goods reached the region. The northernmost colony of Santa Olaia shows evidence for Phoenician contact and their limited presence by the ninth century B.C.E.¹¹⁶ Colonization began by the late eighth or early seventh centuries B.C.E. Phoenician pottery continued to be imported to the site into the sixth century at which point Celtic pottery replaced it. The Phoenician wares include red slip and gray ware, some of which show eastern graffiti. The pots themselves include both amphorae and *pithoi*. In addition to the imports, the archaeology includes a number of elements that reflect Eastern influence. The buildings are rectangular in shape, are supported by stone retaining walls, and contain stone stocles.¹¹⁷ At least one of these was constructed using pier and rubble masonry and has parallels with structures at Castillo de Doña Blanca, Huelva, and across Levantine Phoenicia. Metallurgy was important at the site, including the production of tin, gold, iron, and bronze. While tin, gold, and bronze

¹¹⁵ Gubel 2006, 88.

¹¹⁶ Wachsmann 2009, 227-8; Neville 2007, 42.

¹¹⁷ Neville 2007, 41.

working were not foreign to the region, iron was an eastern technology.¹¹⁸ Lastly the harbor associated with the site may include a mole or breakwater that perhaps reflects other harbor improvements to the east at Athlit, Sidon, and Motya.¹¹⁹

The assemblage from Abul primarily consists of western Phoenician pottery from its establishment in the second half of the seventh century B.C.E. Nonetheless, the site consists of a large, rectilinear building of traditional Phoenician design. Further, local metallurgy appears to have focused on iron production, another eastern technology and product.¹²⁰ Aside from the metallurgy and architecture, a single blind stone anchor was used in the construction of the floor leading to a quay out of the building's southeastern passage.¹²¹ The use of anchors in construction is well documented in traditional Phoenician architecture and the anchor shape and design is of eastern Mediterranean origin.¹²²

The colonies along the Portuguese coast show some level of eastern Phoenician connection and influence. In the case of Santa Olaia, this perhaps represents direct interaction during its earliest year after establishment. In addition to technological and architectural influences at both Abul and Santa Olaia, the latter site also contains eastern imports in its artifact assemblage. After the eighth century B.C.E., however, any influence and connections were probably indirect. During this time, Gadir would have

¹¹⁸ Neville 2007, 42; Correia 1995, 241.

¹¹⁹ Correia 1995, 240-2; Wachsmann 2009, 233.

¹²⁰ Wachsmann 2010, 233-4; Correia 1995, 240; Neville 2007, 39.

¹²¹ Wachsmann 2009, 234.

¹²² Frost 1969; 1991; Hirschfeld 1994.

been the likely intermediary, especially for the eastern imports that appeared to remain in demand at Santa Olaia.

It is important to note that eastern Mediterranean influences were not limited to the colonies, but are also found within the hinterland where iconography, imports, and architectural designs reflect the presence of eastern materials and ideas. The interior indigenous populations across the peninsula were greatly impacted by eastern technologies, culture, ideas, and importations.¹²³ Eastern influence at the indigenous and colonial site of Huelva begins as early as the 10th century B.C.E. Spear shafts, tableware, ivory, iron, ostrich eggs, as well as copper and silver products dating to the tenth and ninth centuries have all been excavated at the site. These are either imports or locally produced goods that reflect eastern cultural traditions.¹²⁴ The colony itself shows eastern influence in architecture, as represented by a pier and rubble wall constructed during the eighth century B.C.E. A direct parallel to this is found in an architectural feature at Tyre discussed by D. R. Mata.¹²⁵ In addition to architectural features, Cypriot and eastern Phoenician imports dating to the eighth century B.C.E. are found at Huelva. Locally produced pottery reflecting forms found at Tyre and Sarepta date to the same century.¹²⁶ A cultic structure at Huelva, in use until the fifth century B.C.E., was constructed using traditional Phoenician rectilinear designs and contains materials that reflect Levantine Phoenician religious practices. The building contains abundant ash, broken Phoenician pottery, a mound with cattle horns, and eastern cultic items. It also contains a weight

¹²³ Sanmartti 2009; Buxo 2009; Deamos 2009, 199-214; Aubet 2002b, 199-224; 2002c, 225-40.

¹²⁴ Gilboa et al. 2008, 191; Nijboer 2008a, 369-70.

¹²⁵ Mata 2002b, 267-70.

¹²⁶ Gonzales de Canales et al. 2008, 633-6.

depicting a “bull skin shaped altar.”¹²⁷ The site ultimately fell under Greek control sometime between the second half of the seventh century and early sixth centuries.¹²⁸

Until this event, eastern influence and connections certainly existed at Huelva.

South Iberian colonies also show consistent influence and connections to eastern Phoenicia. The colony at Toscanos demonstrates eastern influence from its earliest establishment in the eighth century B.C.E. Like all the southern Iberian colonies, its layout consists of traditional eastern Phoenician organization including rectilinear buildings separated by lanes or streets.¹²⁹ The large warehouse or storage building at Toscanos shows direct parallels to a structure at Al Mina.¹³⁰ The architectural similarities at southern Iberian colonies continued into the seventh century when urban reorganization and expansion made use of pier and rubble construction techniques and the Phoenician “salient corner.”¹³¹ Iron production at numerous site is again an eastern technology introduced into local use.¹³² In addition to technologies and architecture numerous southern colonies have eastern pottery in their assemblages. Egyptian and Levantine imports dating from the eighth to the seventh centuries B.C.E. have been excavated at Almuñecar.¹³³ Pottery produced at Morro de Mequitilla is based on traditional eastern forms. The ceramics, which would become the “circuito del estrecho” wares, were heavily influenced by eastern Phoenician and Cypriot wares throughout

¹²⁷ Deamos 2009, 196-7.

¹²⁸ Gonzales de Canales et al. 2008, 646-8.

¹²⁹ Niemeyer 1995.

¹³⁰ Aubet 2006, 100.

¹³¹ Niemeyer 1995, 75.

¹³² Niemeyer 1995, 71; Aubet 2006, 103.

¹³³ Catalan 2002, 52-3, 65-74.

their production from the eighth to sixth centuries B.C.E.¹³⁴ Other eastern imports to the region include a set of Tyrian weights from Cerro de Villar dating to the seventh or eighth centuries and a seventh century bronze spear and scarab from the Mazzarron wrecks that are associated with Chorreras.¹³⁵

The architecture, layout, industry, and technology found at southern sites such as Toscanos, Morro de Mezquitilla, Chorreras, Cerro de Villar, and Almuñecar reflect eastern cultures and traditions resulting from their eastern origins. Additionally, most of the sites are associated with tombs whose design and/or contents are reflections of eastern practices.¹³⁶ The vast majority of the material culture in the region consists of western wares and all of the colonies are designed with similar urban layouts, show relatively analogous burial practices, and an overwhelmingly small number of eastern Phoenician imports. The similarities with the east coincide not only geographically, but also temporally, suggesting that they are all part of a single eastern movement that ultimately fell under the local control of Gadir.¹³⁷ As a result eastern connections are not likely to represent any form of direct interaction between the east and southern Iberia, but rather the influence of the colonies' eastern origins and Gadir's continued eastern connections.

Lastly, the western Iberian and North African colonies show few strong eastern connections. The site of La Fonteta is overwhelmingly western in material culture. Aside from the presence of traditional Phoenician urban organization and architectural features,

¹³⁴ Schubart 2002, 14-7.

¹³⁵ Aubet 2006, 100; Negueruela et al. 1995, 195.

¹³⁶ Neville 2007, 47-82.

¹³⁷ Aubet 2006, 98-9.

such as rectilinear buildings, there is no reason to suspect an eastern connection.¹³⁸ The only exception to this is rather impressive. A red slip lamp found on the site has the name of the owner scratched into it, “MELQRTYSP.” This Phoenician name is Tyrian in origin, and, while it may merely reflect the Tyrian origins of the population and its descendants, it is nonetheless a clear eastern connection.¹³⁹ The colony at Ibiza shows no evidence of eastern importation or direct influence outside of its establishment by a western Phoenician population. As such, it maintained numerous eastern characteristics that are found at all colonies, but the material culture is almost entirely western and central Phoenician in origin. A sixth or seventh century scarab is the only major exception from the assemblage, though it by no means indicates any direct, and only the vaguest indirect, eastern connection.¹⁴⁰ The assemblages of North African sites consist entirely of western Phoenician artifacts and reflect western colonial assemblages. As a result, there is little reason to suspect that any goods reflecting eastern connections, such as Cypriot bichrome pottery at Mogador,¹⁴¹ represent anything other than the movement of goods and peoples between *Iberia* and western North Africa.¹⁴²

The eastern technologies, architecture, traditions, and material similarities found in Phoenician colonies across the western Mediterranean in most cases reflect the cultural origins of the colonists rather than continued interactions with eastern populations (Fig. 48). Certainly the initial years at some early colonies such as Santa

¹³⁸ Prats et al. 2002, 113-125.

¹³⁹ Neville 2007, 27.

¹⁴⁰ Ramon 2002, 127-52; Neville 2007, 32-3.

¹⁴¹ Neville 2007, 46.

¹⁴² Neville 2007, 42-6.

Olaia, Huelva, Morro do Mezquitilla, Toscanos, and La Fonteta may have included regular connections, either direct or indirect. It was at this time that the western colonial sphere was being established, and new populations to the region must have come from the east. However, the absence of any significant archaeological evidence for eastern imports at many sites suggests this period must have quickly ended and regular connections to the east broken. Instead eastern Mediterranean influence was a reflection of the seemingly consistent connections between the Levant and Gadir. The result was that the western Phoenician colonies were able to establish and maintain a stable set of cultural and material traditions that were derived from, and in many ways retained, their eastern origins. The archaeological differences are strong enough to show that the eastern Mediterranean had no overt influence in the western colonies, nor did the eastern Phoenicians maintain regular direct or indirect trade with most sites.

CHAPTER VIII

CONCLUSIONS

The connections established by cultural activities such as worship and burials, technologies such as architectural techniques and metallurgy, and artifact assemblages such as local and imported pottery, allow us to deduce a basic network. It is important to note that these connections need not necessarily be direct since a myriad of mechanisms can move objects from one region to another. Nonetheless this system of exchange, detailed below, is an initial offering that other researchers may refine, rewrite, or change as the available evidence develops. Nonetheless, the proposed connections take into account crucial factors in order to establish the most likely Phoenician contacts within the PTN.

The Phoenician Trade Network

Eastern Mediterranean

The PTN originated out of the eastern Mediterranean. From the shores of the Levant it spread across the ancient world and, if Ezekiel was correct, had a hand in nearly all eastern markets. The importance of the East was not just a result of the fact that the region was home to the Phoenicians but also that it contained their primary markets. Of course, these same markets became their downfall as Assyria and finally Babylon grew to conquer and absorb the Phoenician homeland. Nonetheless the east was

where the Phoenicians began building their wealth, and it was the hub of their exchange system.

That hub consisted of the Phoenician cities, Cyprus, and the empires with which the Phoenicians exchanged – or payed tribute to – both in raw and worked materials. At its center, the Phoenician cities traded among one another and vied for political control along the coast. Sidon and Tyre ultimately became a single political unit until it was split by Assyria in the seventh century B.C.E. The exchange of goods among then resulted in a common tradition of pottery and other material culture items such as bronzes, ivories, and woodcarvings. Despite their uniform archaeological appearance, the Phoenicians were one people only in name and exchange, as the cities were only loosely connected and shared culture as a material rather than as “a way of life.” Each city identified itself as its own state, with its own political powers and rights.¹

Slightly removed from the central Phoenician exchange between cities was the island of Cyprus. Trade between the coastal Levant and Cyprus began during the Bronze Age and continued unbroken past the fall of the PTN. Initially Cyprus appears to have been little more than a Phoenician trading partner. They exchanged pottery, influenced one another with respect to material culture development, and maintained close ties architecturally. By the ninth century B.C.E. their relationship had become one of political control as the Phoenicians began to colonize the island.² The establishment of colonies such as Cypriot Carthage and Kition tied both Tyre and Sidon to the island. Based on the regular appearance of Cypriot materials both in the Levant and in colonies

¹ Lehmann 2008, 205; Purcell 2006, 25.

² Karageorghis 1982, 52-123.

across the central and western Mediterranean the island had become an extension of the core cities. The copper and pottery exchange out of Cyprus and into the Phoenician market was both regular and direct, reaching the entire Phoenician trading sphere.

The most vital aspect of eastern Phoenician mercantilism was trade with states in the region such as Israel, Egypt, and Assyria. These entities not only expanded the goods that could be offered by the merchants of Tyre, Sidon, or other Phoenician cities, but also provided them with their most valuable market, the rich, luxury-hungry elites of the Near East. Trade with these states took a number of forms. In addition to overland trade, the iconographic depictions of potential Phoenician rivercraft may indicate that these waterways were used to exchange with Assyria.³ Nonetheless, these rivers are outside the seafaring sphere being investigated here. Exchange with states that controlled coastal territory such as the Philistines and Egyptians could have, and almost certainly did, take advantage of sea routes. The winds and currents would have allowed relatively direct travel from Cyprus to Egypt and then up the coast past the Philistine territories. Phoenicians could also use the coastal routes to expedite trade with northern groups such as the Neo-Hittite city states. Overland routes would have been necessary to reach most of them, but goods were almost certainly shipped to Arwad and then taken over land to cities in Northern Syria. The importance of trade between Phoenicia and the local states is seen in evidence that the Phoenicians engaged in the development of harbors along their coast. In addition to developing harbors at cities they controlled, Athlit shows evidence for the importation of materials, such as obsidian and gravels, specifically used

³ Linder 1986, 276-7.

to improve the harbor. These materials come from Phoenician controlled areas and their use as breakwater foundations shows Phoenician influence on design and technology.⁴ This suggests that for Phoenicians, maintaining successful harbors with their neighbors was as important as maintaining those they controlled.

In addition to the regular exchange with states and cities in the Near East, the Phoenicians maintained connections with the Greeks. The evidence for a Phoenician presence in the Aegean, especially on Crete and Euboea, was given in chapter IV. The fact that Phoenicians were themselves in the Aegean indicates that the Levantine cities were active participants in the exchange process. The extent of their participation in this trade can be debated, but it is important to note that Crete was an ideal location from which voyages both to Egypt and the western Mediterranean could begin. Because Phoenician populations actively emigrated to, and traded with, both locations, it is quite likely that they made use of Aegean islands on their voyages.⁵ If nothing else the region would have provided a convenient market on the way to the West. This connection may have been the origin for many of the Greek wares found across all the colonies to the West.

Eastern Phoenicia also engaged in direct exchange with the colonies established in the central and western Mediterranean. This was necessary during the pre-colonization and initial colonization from the tenth to early eighth centuries B.C.E. While later colonies such as Motya, Polermo, Mogador, Ibiza, and Tharros may have

⁴ Haggi 2009, 278, 281.

⁵ For further discussion concerning the relationship between the Phoenicians and the Aegean, see chapter IV “Trade with Empires.”

been populated from places such as Carthage, Gadir, Sulcis, or La Fonteta, the populations of the earliest colonies must have been Levantine or perhaps Cypriot. In addition, the early colonists would have maintained some direct contact as the new colonies were settled and supplied. This period must have been extremely brief, for at many early colonies – such as Toscanos, Morro de Mezquitilla, La Fonteta, and Nora – there is no evidence for a period of direct eastern exchange. The archaeological record suggests that either no record was left of eastern exchange prior adoption of regional exchange practices during the eighth century that would last until the sixth century B.C.E., or that such a period never existed; this is an unlikely suggestion due to the strong Phoenician character of local traditions.

The interregional exchange system between the eastern Phoenicians and those living further west consisted of three regular connections. The most dominant appears to be that between Carthage and Phoenicia. Carthage acted as the primary exchange hub between east and west. Regular exchange between the Carthage and the East is evident throughout the city's archaeological assemblages.⁶ Further, of all western cities, Carthage's cultural practices most reflected eastern traditions and cultural developments.⁷ The second major exchange connection was that between Gadir and the East. While little evidence comes from Gadir itself, Castillo de Doña Blanca is one of the few sites in the West that shows relatively regular eastern imports in its archaeological record. In addition, both Carthage and the colonies around Gadir show distinctive eastern urban layouts as well as architectural techniques, technologies, and

⁶ See chapter V in “Carthage as a Major Entrepot” for a full discussion.

⁷ Neville 2007, 47-82.

designs.⁸ The last major connection was between the eastern Mediterranean and the island of Malta. Unlike Gadir and Carthage, Malta was not a vital trade hub servicing an entire Mediterranean region. It appears to have been a stop between the Aegean and Carthage, south of Sicily, conveniently placed in the middle of the sea for regular exchange and communication. While it is possible that the colony was used to monitor the movement of groups such as the Etruscans or the Greeks between east and west, there is little evidence for this. Whatever the value of Malta, it is the only western colony that maintained regular exchange with the eastern Phoenicians and yet was not a major entrepôt.

Central Mediterranean

Exchange in the central Mediterranean colonies appears to have been centered around Carthage. As discussed above, Carthage was the primary entrepôt both for the region and for goods being transported to and from the eastern Mediterranean. The archaeology at the site is cosmopolitan in nature including a significant number of Greek, western Phoenician, Sardinian, Sicilian, Cypriot, and eastern Phoenician wares.⁹ The fact that such a variety of goods is found at the site may indicate that merchants from all these locations traveled through the city, just as it may mean that a single merchant traveled to all the locations or merely acquired varied wares along his route that resulted in a varied collection. What is more likely that the movement of Phoenician

⁸ See chapter VII in “Western and Eastern Mediterranean Connections” for full discussion.

⁹ Docter et al. 2008, 384-417.

peoples across the west resulted in a vast array of materials being brought into the PTN and exchanged among the colonies across the Mediterranean.

With the exception of Malta, regional exchange in the central Mediterranean was closely tied to the city of Carthage. On Sardinia, Carthaginian adaptations of eastern wares heavily influenced the development of the Nuragic amphorae. These containers are common at Carthage and Carthaginian wares are regularly found on Sardinia. This suggests a close connection between the two. The abundant eastern pottery at Sulcis may indicate direct connections between Sardinia and the East; however, it is more likely these wares were imported from Carthage. Sicily shows material culture development based on Carthaginian forms. There is also evidence for the exchange of goods between the two locations. Sicily shared burial traditions including shaft graves and grave good organization with Carthage.¹⁰ The close material culture, exchange, and cultural traditions suggest that Sicily was well connected to the regional entrepôt.

Phoenician exchange between the eastern and western Mediterranean went through Carthage. Not only is there an abundance of “circuit del estrecho” wares in Carthage, a number of burial traditions from there appear in western colonies. While Carthaginian pottery and other material culture forms are not common in the west, they do show up in the record, especially at indigenous sites. There are four potential areas that may have maintained direct Carthaginian connections, the first of these is Gadir. As the major entrepôt of the west, it would seem to be the most likely trade connection between central and western Phoenicia. As shown in chapter VII, however, there is little

¹⁰ Neville 2007, 69-70, 72.

evidence for Carthaginian wares in the region around Gadir. Central Mediterranean and Carthaginian pottery do appear at Castillo de Doña Blanca during the early part of the eighth century B.C.E., but they disappear by the end of the century and do not show up again until after the sixth century collapse. Huelva may present a second connection, as Carthaginian, Sardinian, and Italian pottery are all found at the site. The evidence suggests that the colonies west of the Strait of Gibraltar were not heavily invested in the import of central Mediterranean goods. If the proportional remnants of pottery reflect actual import practices, Eastern wares appeared to be in higher demand, and if so, it is quite possible that Carthage shifted its trade connections to reflect this.

The exchange between southern and western Iberia and the central Mediterranean, discussed in chapter VII, is the third potential connection between west and central Phoenicia. The colonies around Malaga show a number of cultural traditions, specifically with respect to burials, that reflect both Carthaginian practices and their change over time. Almuñecar is the best example of this, as shaft, chamber, and notched shaft tombs all occur at the colony as well as at Carthage. The grave goods also show parallels with the central Mediterranean.¹¹ Since southern Iberia was the primary production center for “circuito del estrecho” pottery, it is quite likely that it was the origin for such pottery found in Carthage. In eastern Iberia, Ibiza is the last potential connection, showing particularly close ties to Carthage and the central Mediterranean. The colonies on the island not only included numerous imports from the region but also

¹¹ Neville 2007, 49-68.

shared burial practices with it and southern Iberia. Ibiza appears to have had significantly closer ties to the central Mediterranean colonies than did La Fonteta.

Carthage was the primary entrepôt of the central Mediterranean, but its importance does not negate the activities and connection found between Sardinia, Sicily, and Malta. There is evidence for a connection between Sicily and Sardinia as seen in pottery discussed in chapter V. More importantly, the wind and current data from chapter III suggest that these two islands would have been ideally located for mutual interaction. Colonies from both islands also had easy access to the Italian peninsula and as such must have played an important role in the Phoenician exchange with the indigenous people there. Sicily itself was the only central Mediterranean location, indeed the only Phoenician *colony*, that appears to have maintained some regular connection to Malta. The exchange of indigenous wares and pottery forms between the two islands suggests that some trade connection was maintained. Malta's location just south of Sicily must have aided in the connection, though it is surprising that Sicily was well connected to Malta and Carthage was not. Lastly of the two Italian islands, Sardinia appears to have maintained the closest ties to the western Mediterranean. The appearance of parallel pottery forms at Gadir, Lixus, and on Sardinia provide some evidence for this, as does the mention of Tarshish on the Nora Stone. It is possible that the western colonies of La Fonteta and Ibiza regularly interacted with Sardinia, especially on voyages from west to east. The wind patterns and geographic relationships were ideal for this interaction. Unfortunately, it is difficult to suggest any strong connections between the west and

Sardinia and it is possible that most interaction was ephemeral consisting of stops between La Fonteta/Ibiza and Carthage.

Carthage dominated trade in the central Mediterranean, but it appears to have done so as a result of its ideal position along the direct route between the eastern and western Mediterranean. Any ships or exchange between the two basins of the Mediterranean would have had to pass through the Strait of Sicily and thus very near to Carthage. Its position helped it to monopolize all interaction across the region and, as a result, benefit from every ship that passed through the city. There is little evidence, however, that Carthage dominated the region politically or culturally as Malta, Sicily, and Sardinia each developed their own material culture traditions, engaged in mutual exchange, (sometimes to the exclusion of Carthage: *i.e.* trade between Malta and Sicily), and was unable to dominate Phoenician imports to Italy. The city also failed to gain a strong foothold in the western Mediterranean where its influence appears limited to cultural exchange rather than to any material or mercantile dominance. This is in direct contrast to the oversight and strong cultural ties that existed across the western Mediterranean colonies.

Western Mediterranean

Connections between colonies in the western Mediterranean were under the oversight of Gadir. This is evinced most strongly in the historical record and is suggested by the artifact assemblage and events recorded within the archaeological record. New colonies established along the coast of western North Africa, Portugal, and at Ibiza

during the seventh century are western in character and appear to be part of a colonial movement out of Gadir. At the same time, established sites across the Mediterranean, including Toscanos, Morro de Mezquitilla, La Fonteta, Cerro de Villar, and Santa Olaia, undergo industrial and urban expansion and reorganization. The contemporaneous nature of the events implies the involvement of a central political entity promoting and overseeing these changes across these Phoenician colonies. Gadir's historical status as the primary western colony makes it the most likely candidate for political dominance.

There is also strong evidence that Gadir maintained regular material exchange across the western Mediterranean. Pottery from Castillo de Doña Blanca includes parallel forms from Toscanos, Cerro de Villar, and most other southern Iberian colonies. Material from Doña Blanca also appears at the colonies in North Africa, such as Lixus and Mogador, and along the Portuguese coast, such as at Santa Olaia. Not only are the material forms all part of the same tradition, consisting of *cruz del negro* urns, “circuito del estrecho” pottery, and R-1 type amphorae, but the assemblages are effectively parallel, including the same imports and in many cases pottery usage.¹² The similarities extend to western Iberia where La Fonteta and Ibiza contain pottery produced in southern Iberia. La Fonteta begins using locally produced pottery during the seventh century, but these wares still maintain the “circuito del estrecho” design.¹³ The use of a single material culture tradition across western Phoenicia is parallel to the situation in the Levant where the Phoenician cities maintained a single set of designs. In the west,

¹² Neville 2007, 35-46.

¹³ Neville 2007, 27-8.

however, it seems that political and mercantile oversight was combined with the similarities in material culture.

The oversight of Gadir did not disallow mutual interaction among the western colonies. As Maria Aubet points out, the colonies along the southern coast were set closer than a day's coastal voyage from one another allowing for extremely easy interaction.¹⁴ Their similarities in layout and assemblages further indicate regular communication. The imports of southern wares to La Fonteta and Ibiza show that exchange between the south and west existed, and the ship that resulted in the Bajo de la Campana wreck may have been travelling from southern Iberia to La Fonteta.¹⁵ In addition to communication between colonies, there was regular interaction with the indigenous people of Iberia. It represents yet another aspect of the PTN, the overland and fluvial exchange between the interior of Iberia and the coastal colonies. This exchanged, either performed by the Phoenicians themselves, or using the Iberians for transport, allowed Phoenician goods from all three regions to reach the indigenous Iberians in exchange for raw goods such as metal ore, slaves, and wood. The hinterland also provided foodstuffs for the colonies, which were likely shipped between them. This interaction has been discussed in detail by Aubet and must have helped to build the relationships between the indigenous people and the Phoenicians and between the colonies themselves.¹⁶ This interaction also allowed western Phoenicia to strengthen its independence from the central and eastern Phoenicians. These activities made the

¹⁴ Aubet 1994, 166-8.

¹⁵ Polzer 2009b, 8-9.

¹⁶ Aubet 1995; 2002a; 2002b; 2002c; 2006; 2008.

western colonies self-sufficient and allowed them to concentrate on the production and subsequent exportation of raw goods to the east.

The interregional connections between the east and west have already been discussed above.¹⁷ Carthage and the central Mediterranean maintained connections with Gadir as well as southern and western Iberia. The eastern Phoenicians appear to have maintained strong connections with only Gadir, and their materials seem to have been primarily destined for indigenous markets. Eastern connections were necessary during the earliest years of colonization as populations moved into the west from their Levantine homes. As a result, the colonies were established with eastern designs and technologies. The continuation of these traditions was the result of the colonies' eastern Phoenician origins and Gadir's oversight rather than consistent interaction with the Levant. Overall the west could be better described as a western Phoenician authority rather than a western extension of Tyre or any other Levantine city.

The most important aspect of reconstructing the network of Phoenician trade is how it can aid in the advancement of social and archaeological research in the Archaic Mediterranean. The network can provide clues to where eastern peoples may have settled and where evidence for contact between indigenous peoples and colonists may be found in the future. For instance the evidence for interaction between Italy and the Phoenicians, in conjunction with the location of the Sardinian and Sicilian colonies, indicates that the most likely locations for identifying trade through shipwrecks, ports, entrepots, etc. would be directly east of Sardinia or northeast of Sicily. Another area of

¹⁷ Supra 253-55.

investigation that this research can expand upon is World Systems Analysis and its inquiries into economic and political interactions among ancient peoples. Aubet discusses some aspects of the theory with regard to Phoenician exchange in her book *The Phoenicians in the West: Politics, Colonies, and Trade*.¹⁸ In terms of understanding political and social interaction among the colonies, the research of Chase-Dunn and Hall as well as Santley and Alexander are useful.¹⁹ With respect to the Phoenicians' interaction with indigenous peoples, Wallerstein's original work from 1974 may be most informative, along with the work of Gills and Frank.²⁰ The information presented here could be useful for understanding the nature of the political and social interactions of the Phoenician trade sphere with respect to this research.

The PTN spread across the Mediterranean, into the Atlantic, and involved empires, traders, and cultures across the ancient world. The Phoenicians' exchange system included not only the seaborne network, but also overland exchange throughout the Near East. Their ability to access markets across the ancient world and subsequently take advantage of them led to the fame and fortune for which Phoenicians have been known both ancient and modern times. They accomplished what no other people before them had: the development of a stable cross-Mediterranean system of exchange. While they may not have been the first to explore the distant lands of the Atlantic coast, the Strait of Gibraltar, Italy, and the Iberian Peninsula, their success in establishing regular

¹⁸ Aubet 1994, 97-143.

¹⁹ Chase-Dunn and Hall, 1991; 1992; Santley and Alexander 1992; Hall and Chase-Dunn 1993, 125; Bell 2006, 23.

²⁰ Wallerstein 1974; Gills and Frank 1991; 1992; Hall and Chase-Dunn 1993, 125, 129.

trade across their colonies for two and a half centuries was a feat that went unmatched until the establishment of the Roman Empire.

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Abbreviations

<i>AJA</i>	American Journal of Archaeology
<i>AOAT</i>	Alter Orient und Altes Testament
<i>AttiMGrecia</i>	Atti e Memorie della Società Magna Grecia
<i>BAR</i>	British Archaeological Reports
<i>BASOR</i>	Bulletin of the American Schools of Oriental Research
<i>BiblArch</i>	Biblical Archaeologist
<i>IEJ</i>	Israel Exploration Journal
<i>IJNA</i>	International Journal of Nautical Archaeology
<i>JAS</i>	Journal of Archaeological Science
<i>JAOS</i>	Journal of the American Oriental Society
<i>JARCE</i>	Journal of the American Research Center in Egypt
<i>JEA</i>	Journal of Egyptian Archaeology
<i>JESHO</i>	Journal of the Economic and Social History of the Orient
<i>JMA</i>	Journal of Mediterranean Archaeology
<i>JRS</i>	Journal of Roman Studies
<i>NEA</i>	Near Eastern Archaeology
<i>OJA</i>	Oxford Journal of Archaeology

Index of Ancient Sources

Amos	Biblical book of Amos
Andoc.	Andocides <i>On the Mysteries</i>
Aratus <i>Phaen.</i>	Aratus <i>Phaenomena</i>
I Chronicles	Biblical book I Chronicles
<i>CPG</i>	<i>Codex Palatinus Graecus 398, Fol. 56 r.</i> Periplus providing details of Hanno's voyage.
Diod. Sic.	Diodorus Siculus <i>Bibliotheca Historia</i>
Dion. Hal. <i>Ant. Rom.</i>	Dionysius Halicarnassensis <i>Antiquitates Romanae</i>
EA	El Amarna Texts
Ezekiel	Biblical book of Ezekiel
Hdt.	Herodotus <i>The Histories</i>
Hom. <i>Od.</i> <i>Il.</i>	Homer <i>The Odyssey</i> <i>The Illiad</i>
Isaiah	Biblical book of Isaiah
Jeremiah	Biblical book of Jeremiah
Joel	Biblical book of Joel
Joseph. <i>Ap.</i>	Josephus <i>Contra Apion</i>

Just. <i>Epit.</i>	Justinus <i>Epitome</i>
I Kings	Biblical book I Kings
Plin. <i>HN.</i>	Pliny (the elder) <i>Naturalis Historia</i>
II Samuel	Biblical book of II Samuel
Sall. <i>Iug.</i>	Sallust <i>Bellum Iuguratinum</i>
Sil. <i>Pun.</i>	Silius Italicus <i>Punica</i>
Strabo	Strabo <i>Geographia</i>
Thuc.	Thucydides <i>History of the Peloponnesian War</i>
Vell. Pat.	Velleius Paterculus <i>Compendium of Roman History</i>
Ver. <i>Aen.</i>	Vergil <i>The Aeneid</i>
Wenamun	The Journey of Wenamun to Phoenicia
Zechariah	Biblical book of Zechariah

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APPENDIX: FIGURES

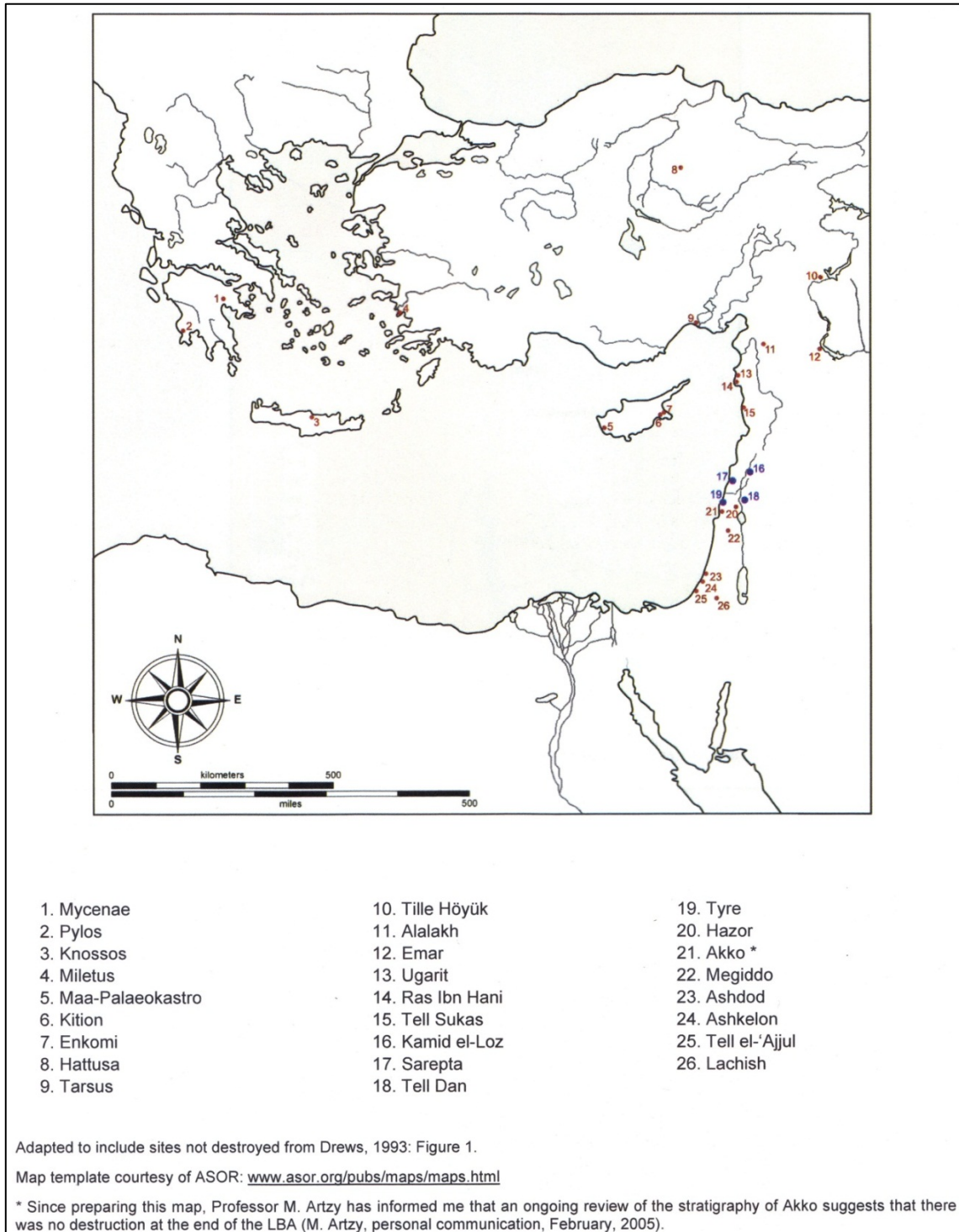


Fig. 1: Map of Levantine cities at the end of the Bronze Age (Bell 2006, Map 1).

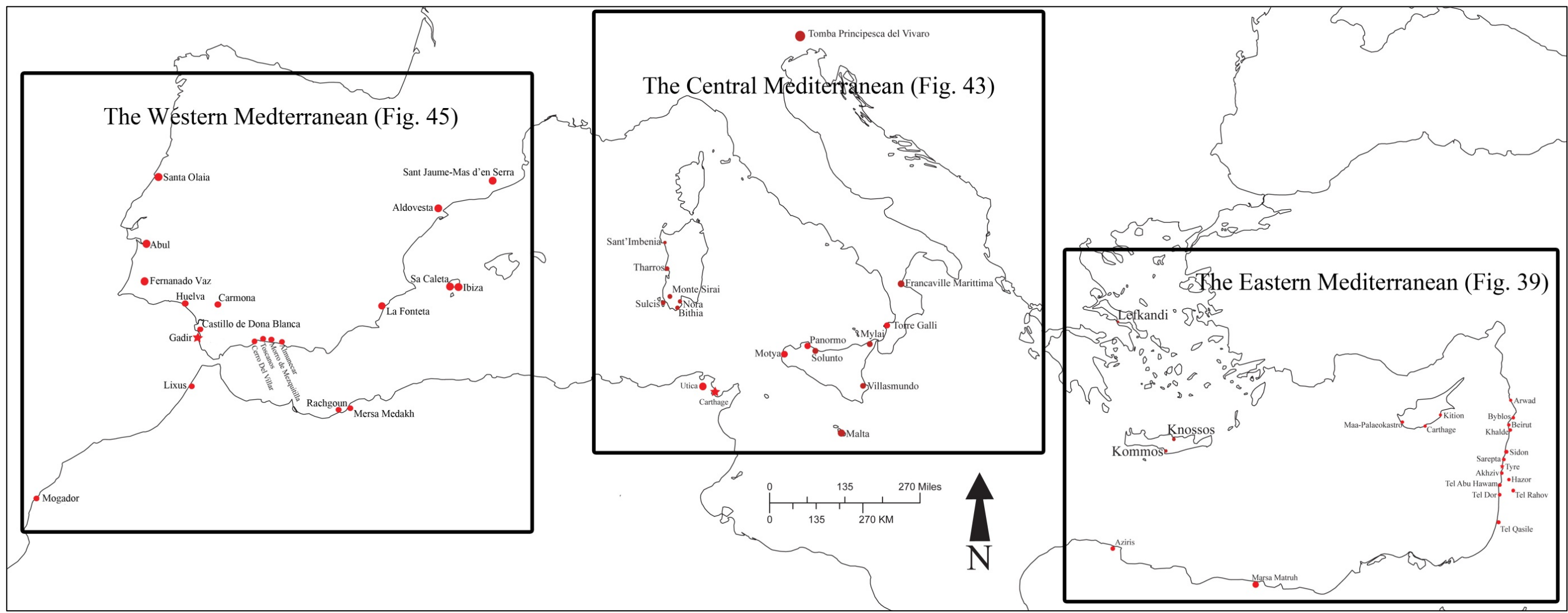


Fig. 2: Map of Mediterranean depicting the three major regions of study and various important sites discussed in the text.



Fig. 3: Map of Phoenicia ca. 900 B.C.E.

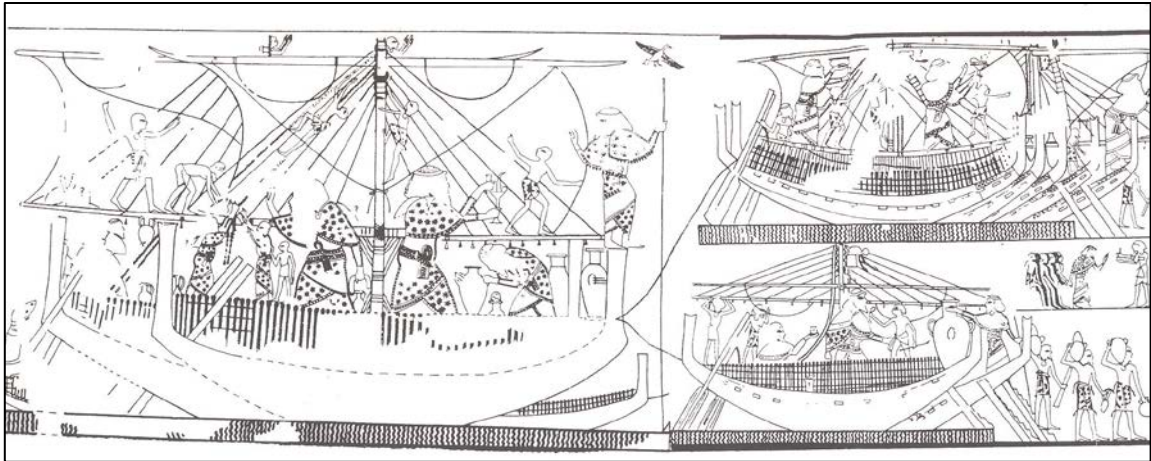


Fig. 4: Syro-Canaanite ships painted at the Tomb of Kenamun (after Davies and Faulkner 1947, plate 8).

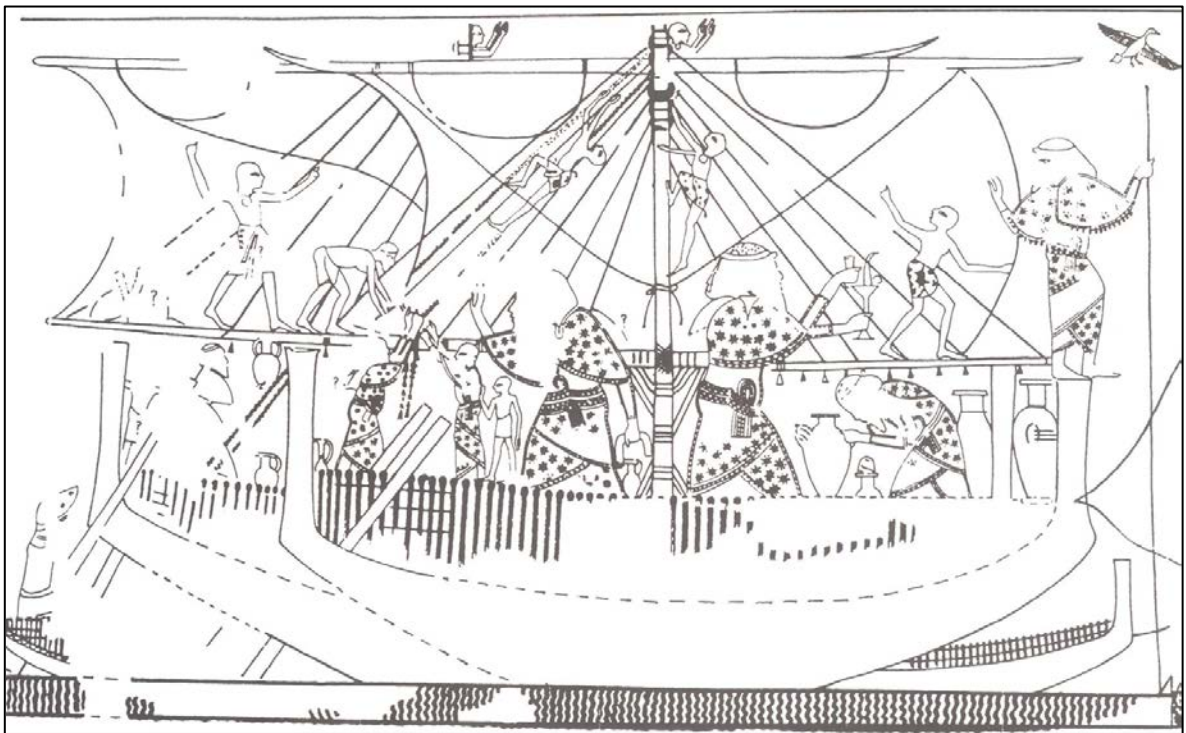


Fig. 5: Depiction of Syro-Canaanite ships arriving in harbor from the Tomb of Kenamun (after Davies and Faulkner 1947, plate 8).

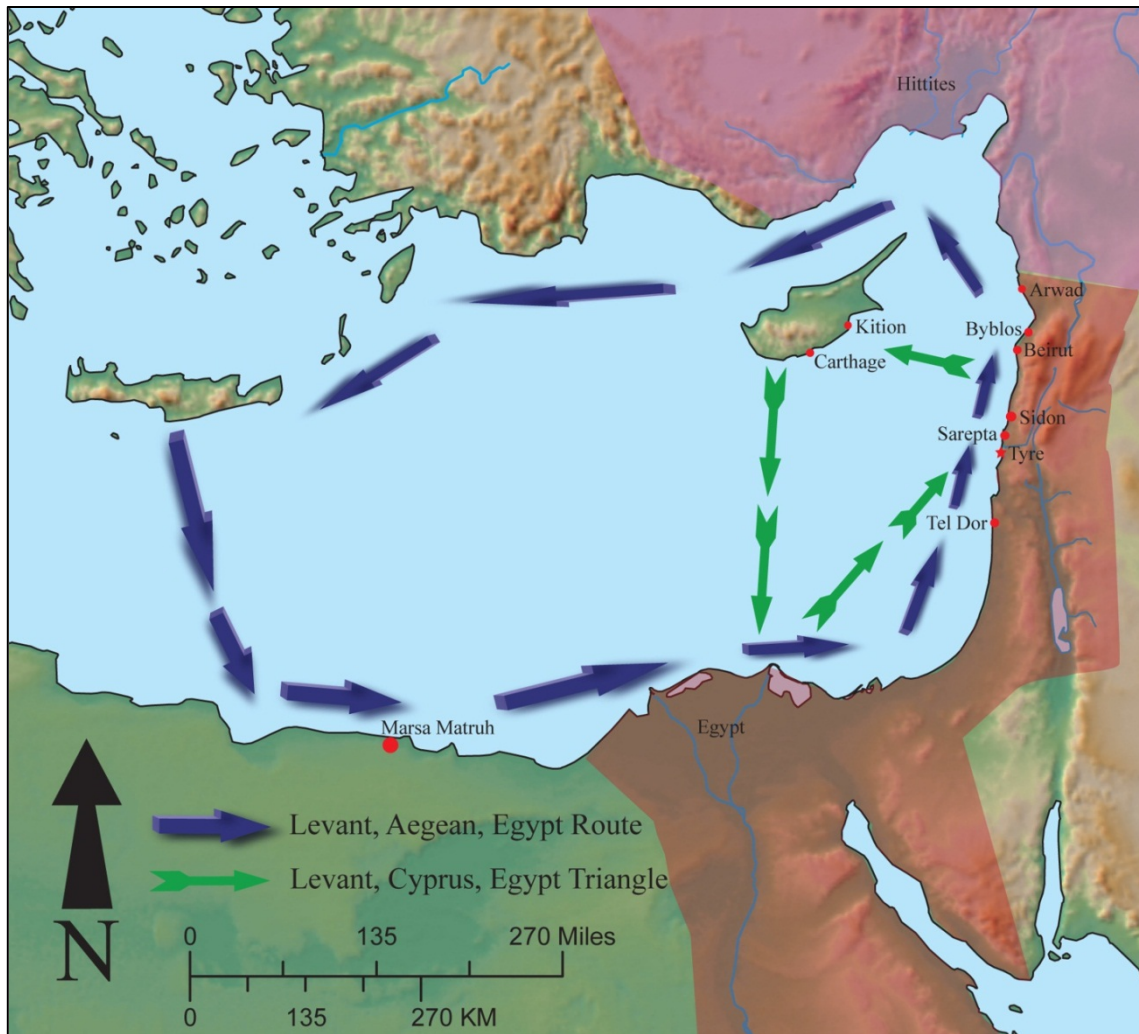


Fig. 6: Proposed LBA Syro-Canaanite routes in the eastern Mediterranean.

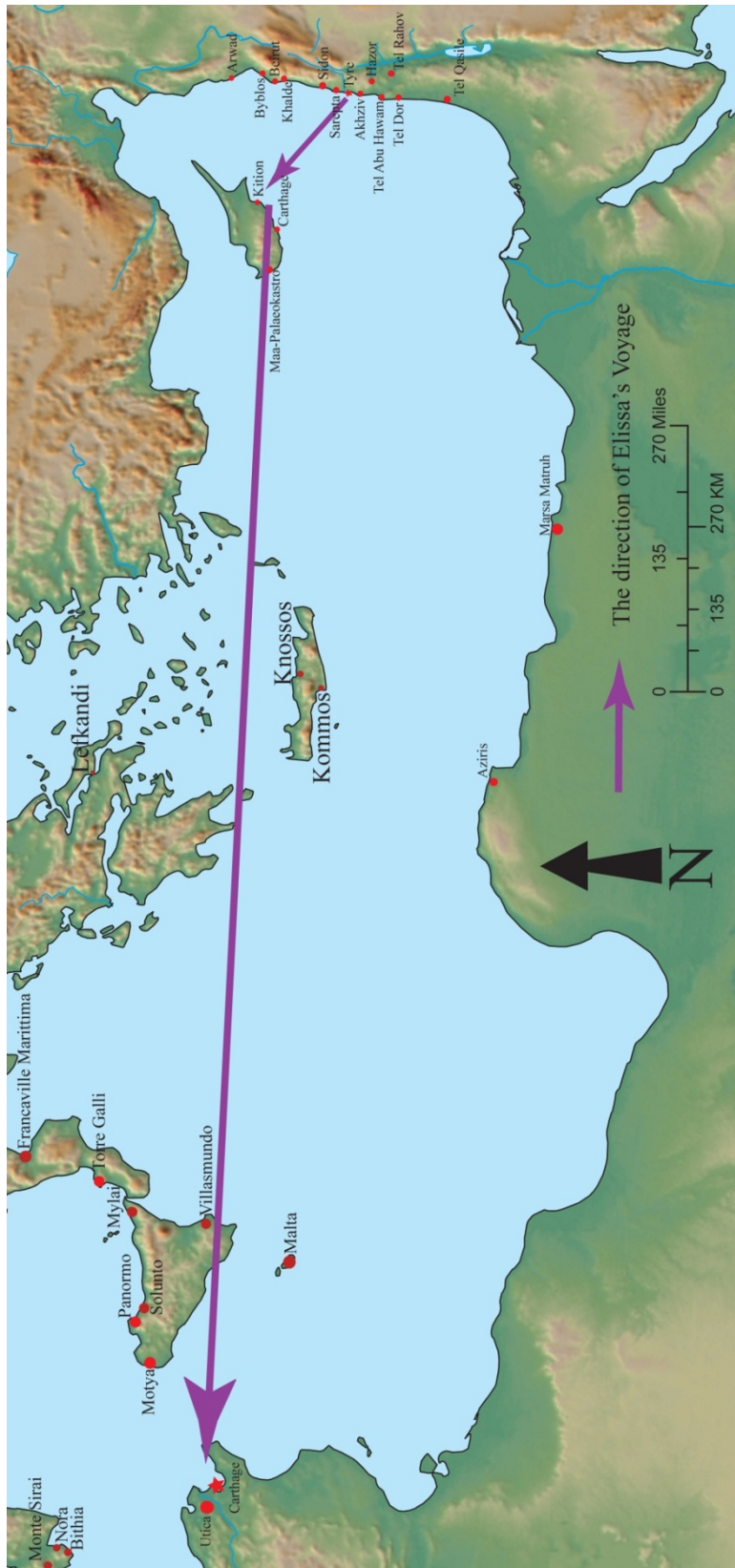


Fig. 7: A graphical representation of Elissa's voyage detailed in the story.

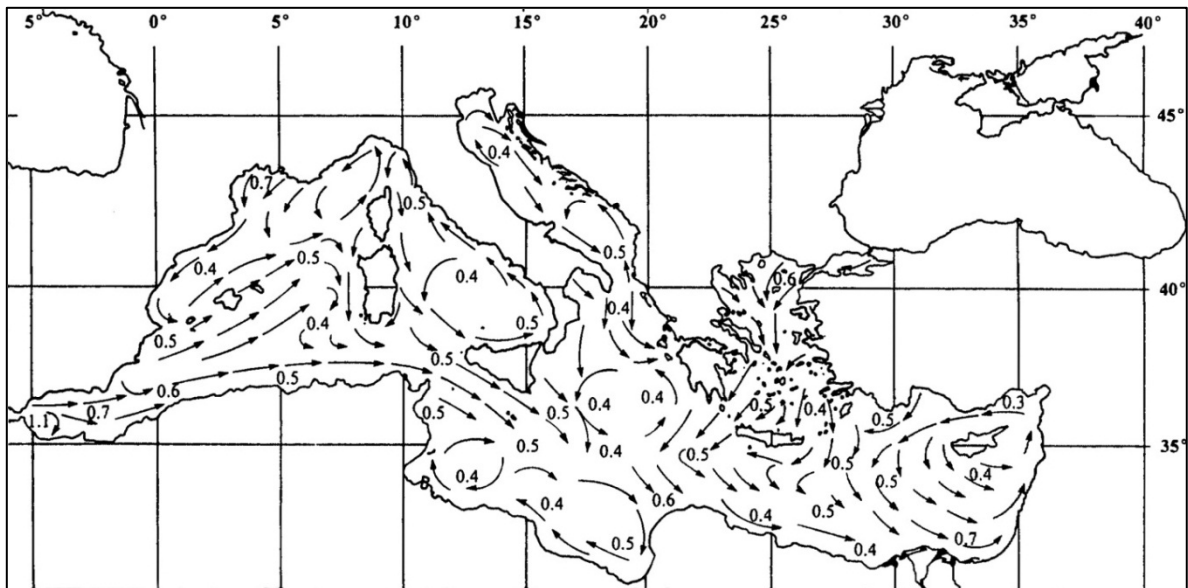


Fig. 8: Mediterranean current patterns (Davis 2001, Figure 2.1).

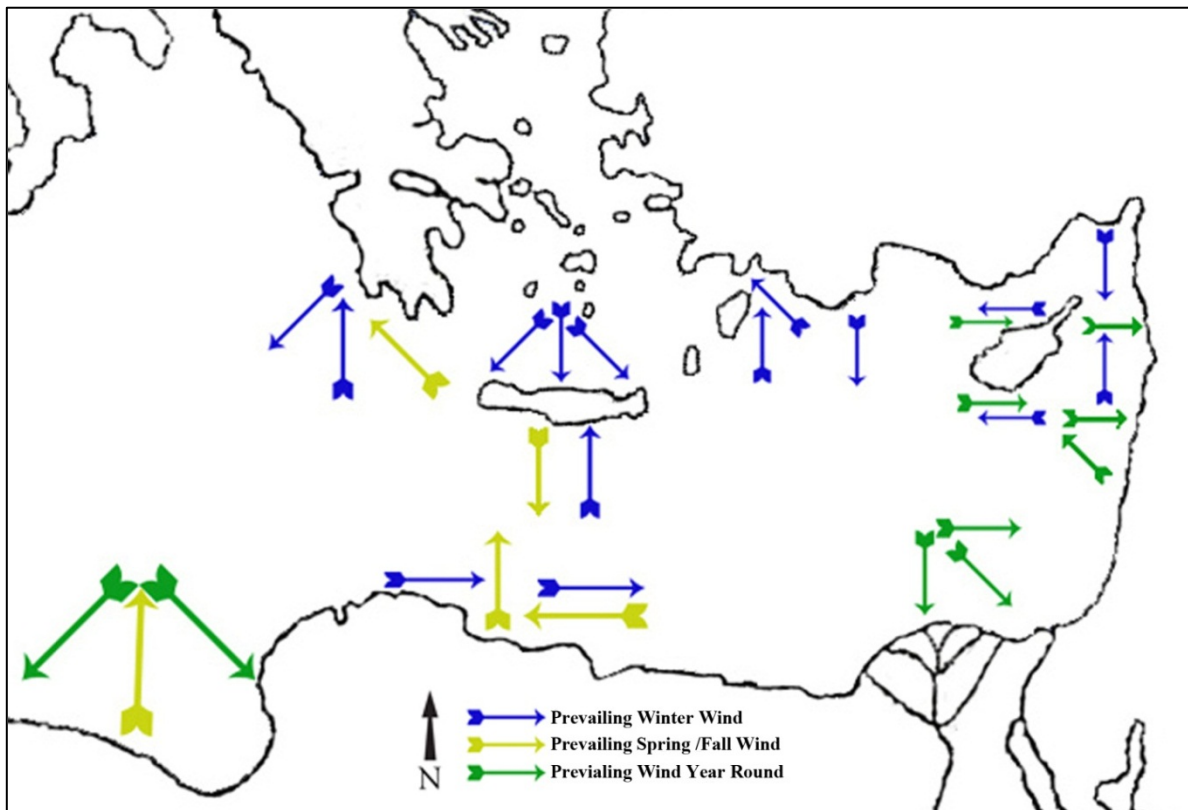


Fig. 9: Prevailing winds in the eastern Mediterranean during winter. Based on data from National Geospatial-Intelligence Agency (2011) "Sailing Directions (Enroute): The Eastern Mediterranean."

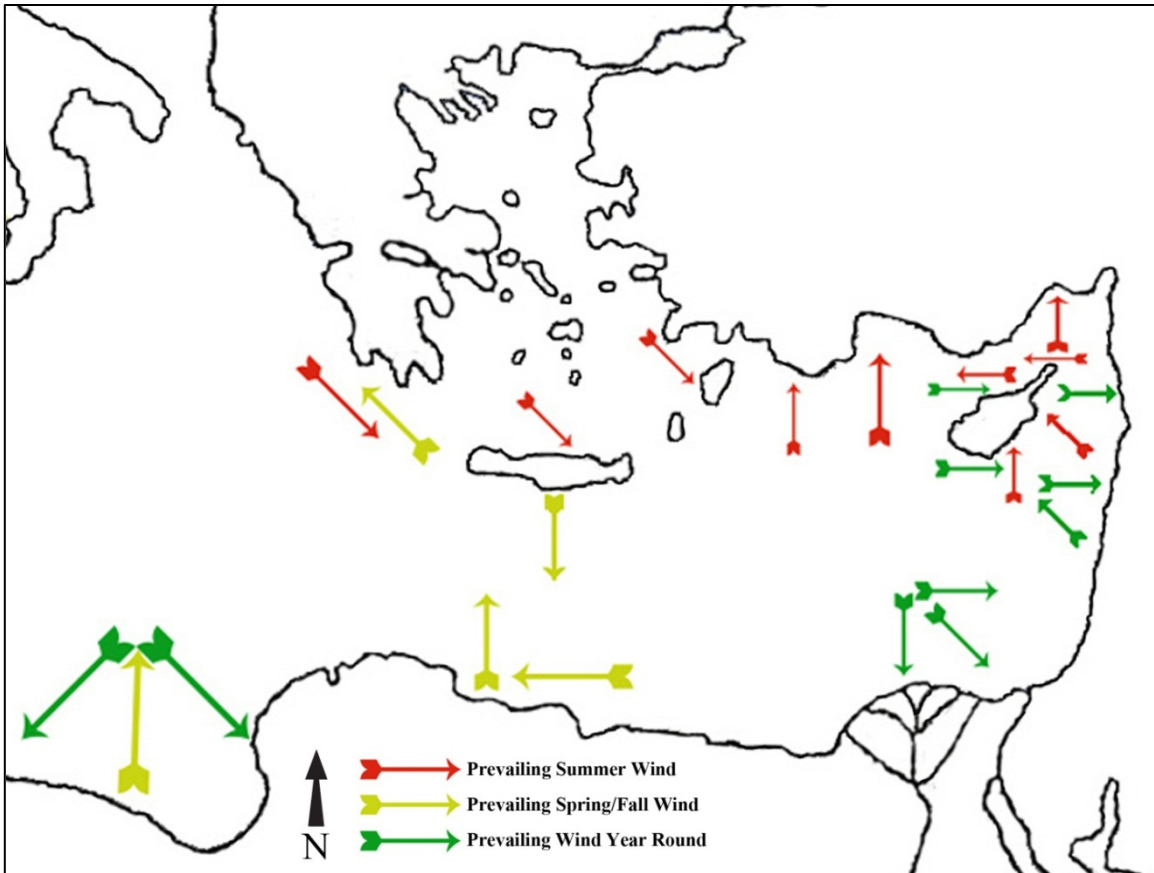


Fig. 10: Prevailing winds in the eastern Mediterranean during summer. Based on data from National Geospatial-Intelligence Agency (2011) "Sailing Directions (Enroute): The Eastern Mediterranean."

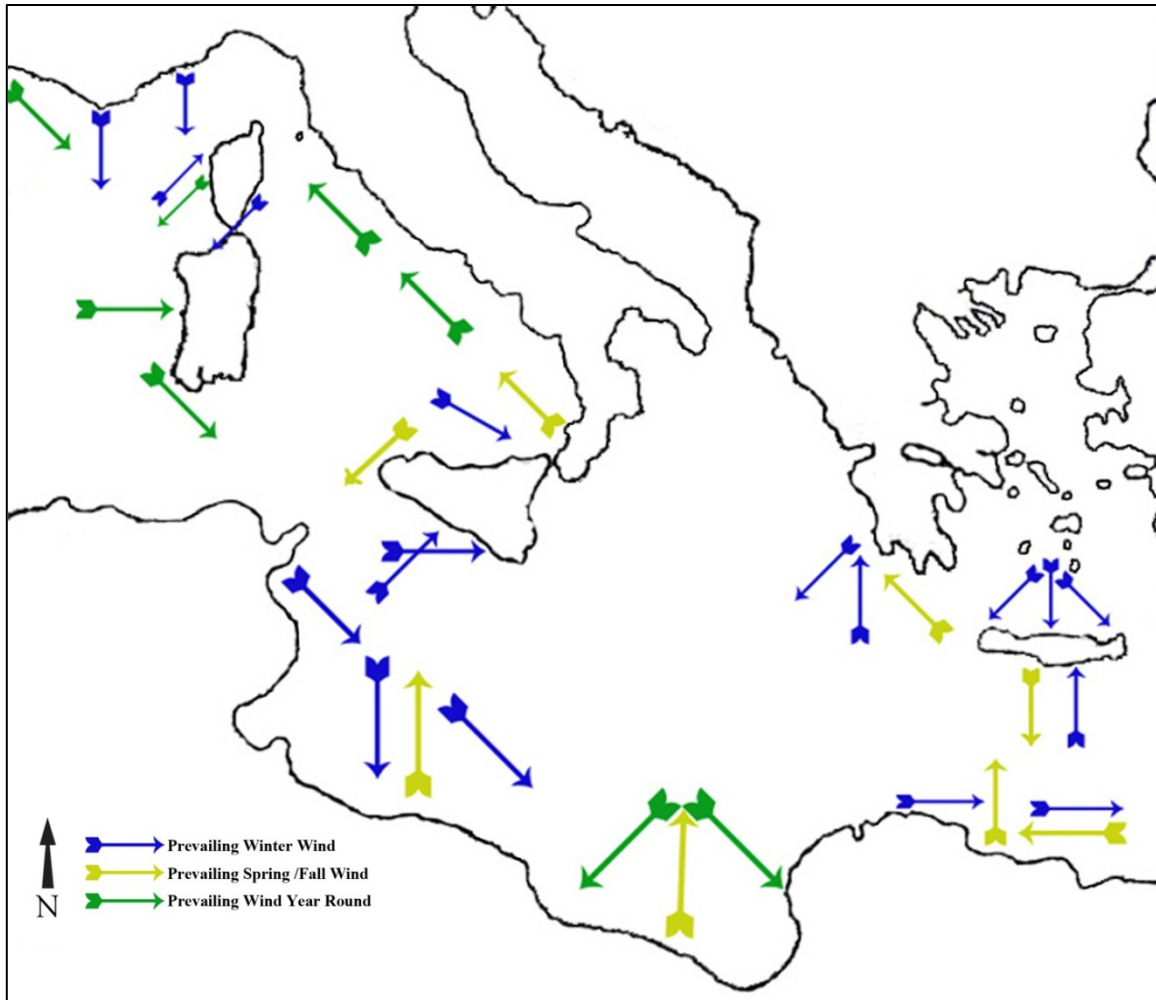


Fig. 11: Prevailing wind in the central Mediterranean during winter. Based on data from National Geospatial-Intelligence Agency (2011) "Sailing Directions (Enroute): The Eastern Mediterranean" and "Sailing Directions (Enroute): The Western Mediterranean."

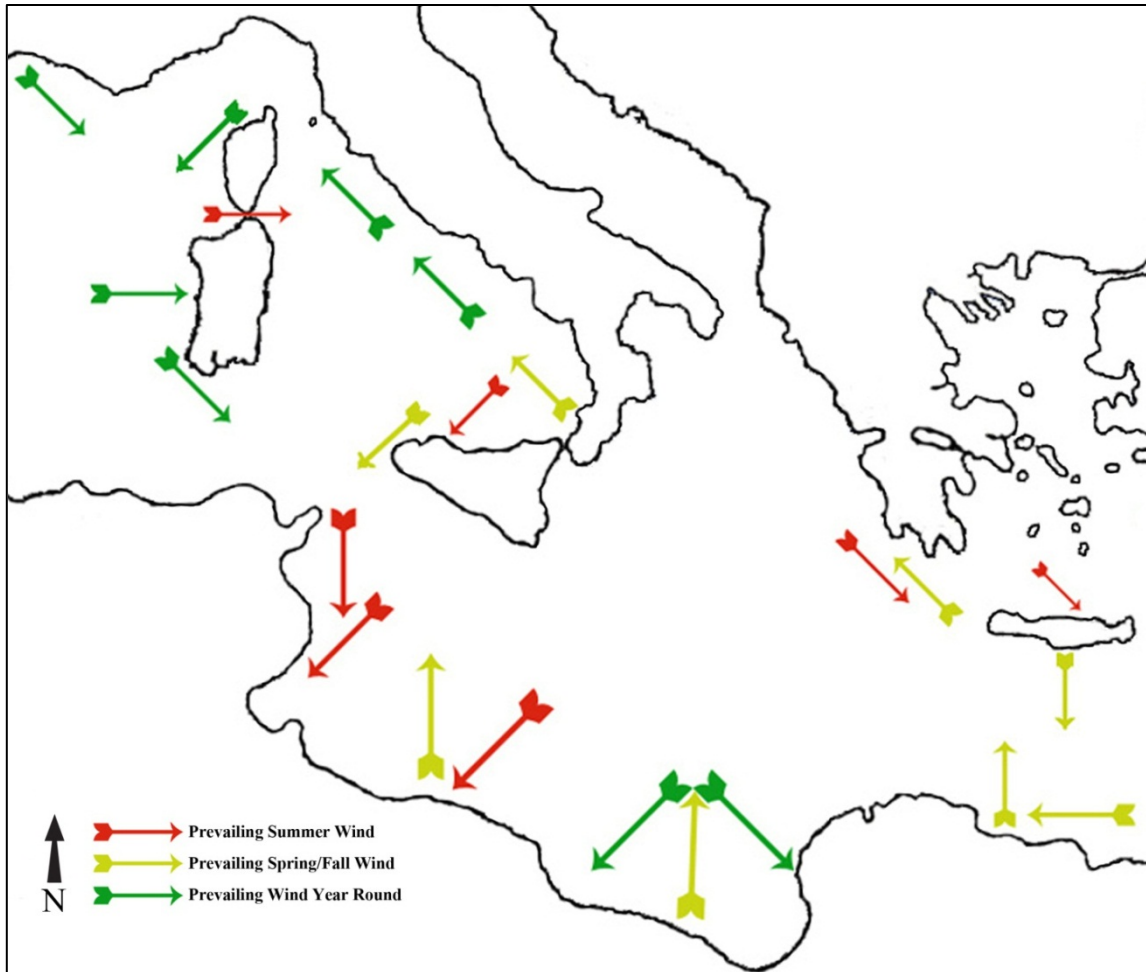


Fig. 12: Prevailing winds in the central Mediterranean during summer. Based on data from National Geospatial-Intelligence Agency (2011) "Sailing Directions (Enroute): The Eastern Mediterranean" and "Sailing Directions (Enroute): The Western Mediterranean."

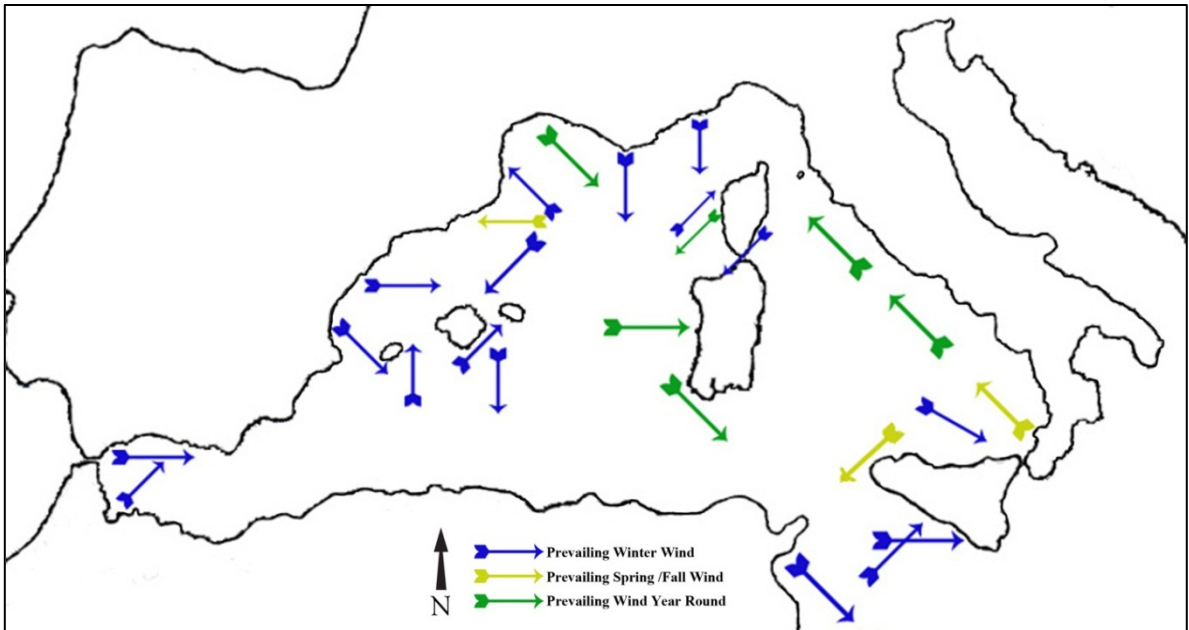


Figure 13: Prevailing Winds in the western Mediterranean Basin during the winter. Based on data from National Geospatial-Intelligence Agency (2011) "Sailing Directions (Enroute): The Western Mediterranean."

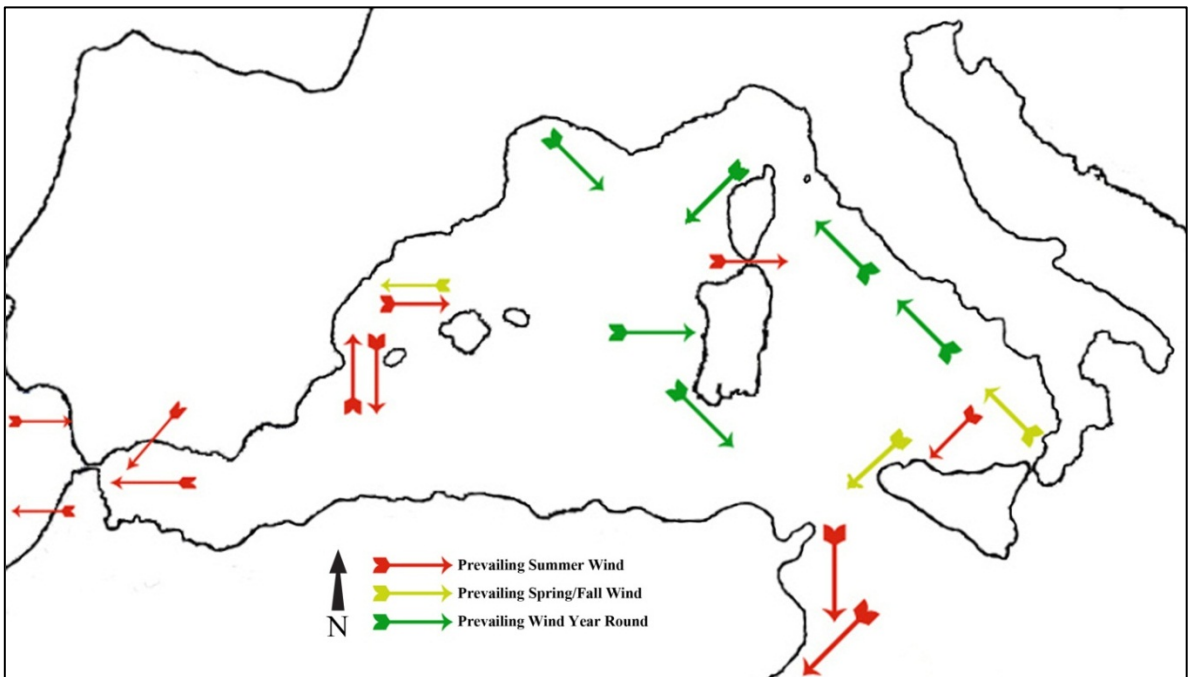


Fig. 14: Prevailing winds in the western Mediterranean Basin during summer. Based on data from National Geospatial-Intelligence Agency (2011) "Sailing Directions (Enroute): The Western Mediterranean."

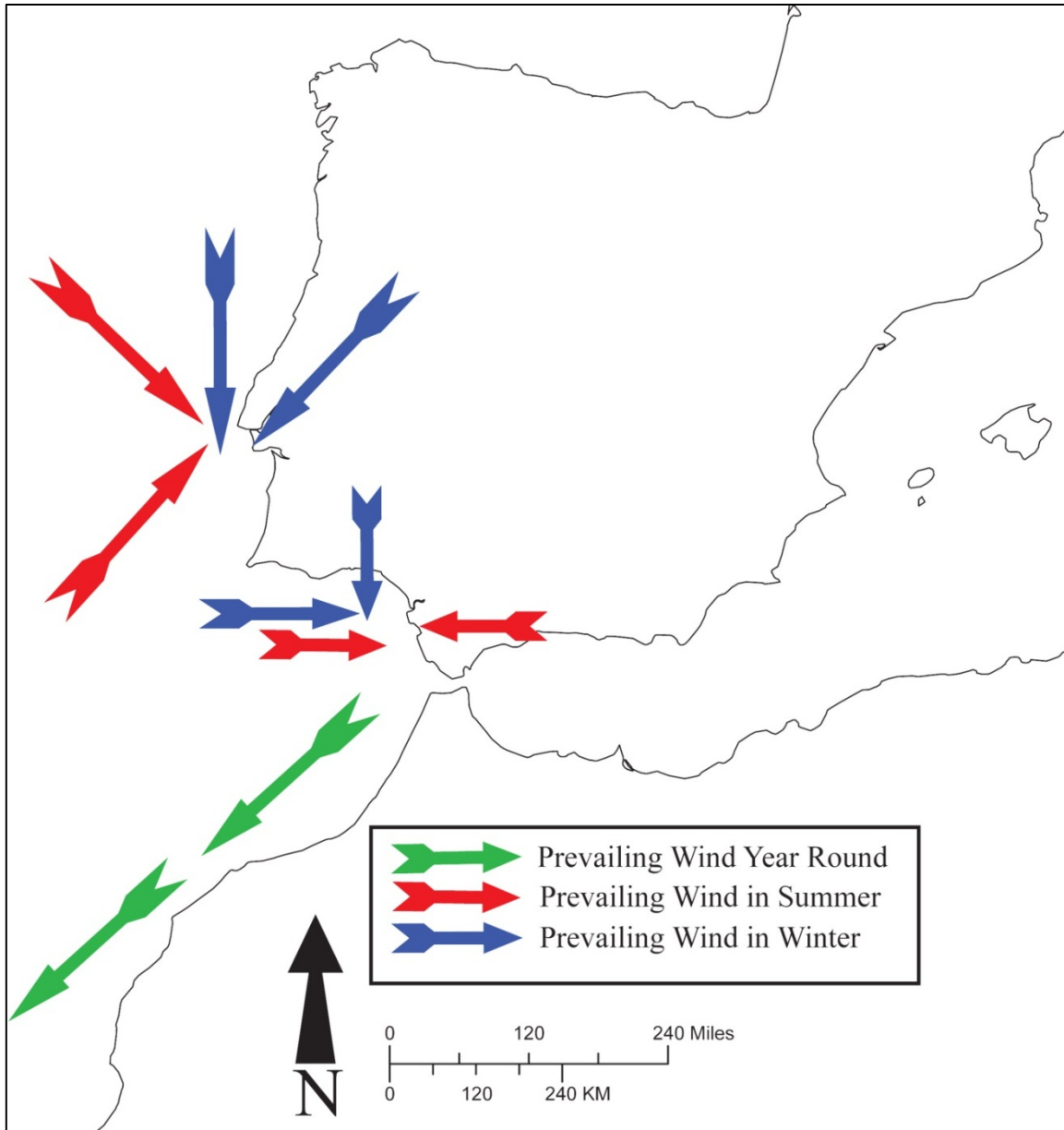


Fig. 15: Winter and summer winds along the Atlantic Coast. Based on data from National Geospatial-Intelligence Agency (2012) "Sailing Directions (Planning Guide): North Atlantic Ocean and Adjacent Seas."

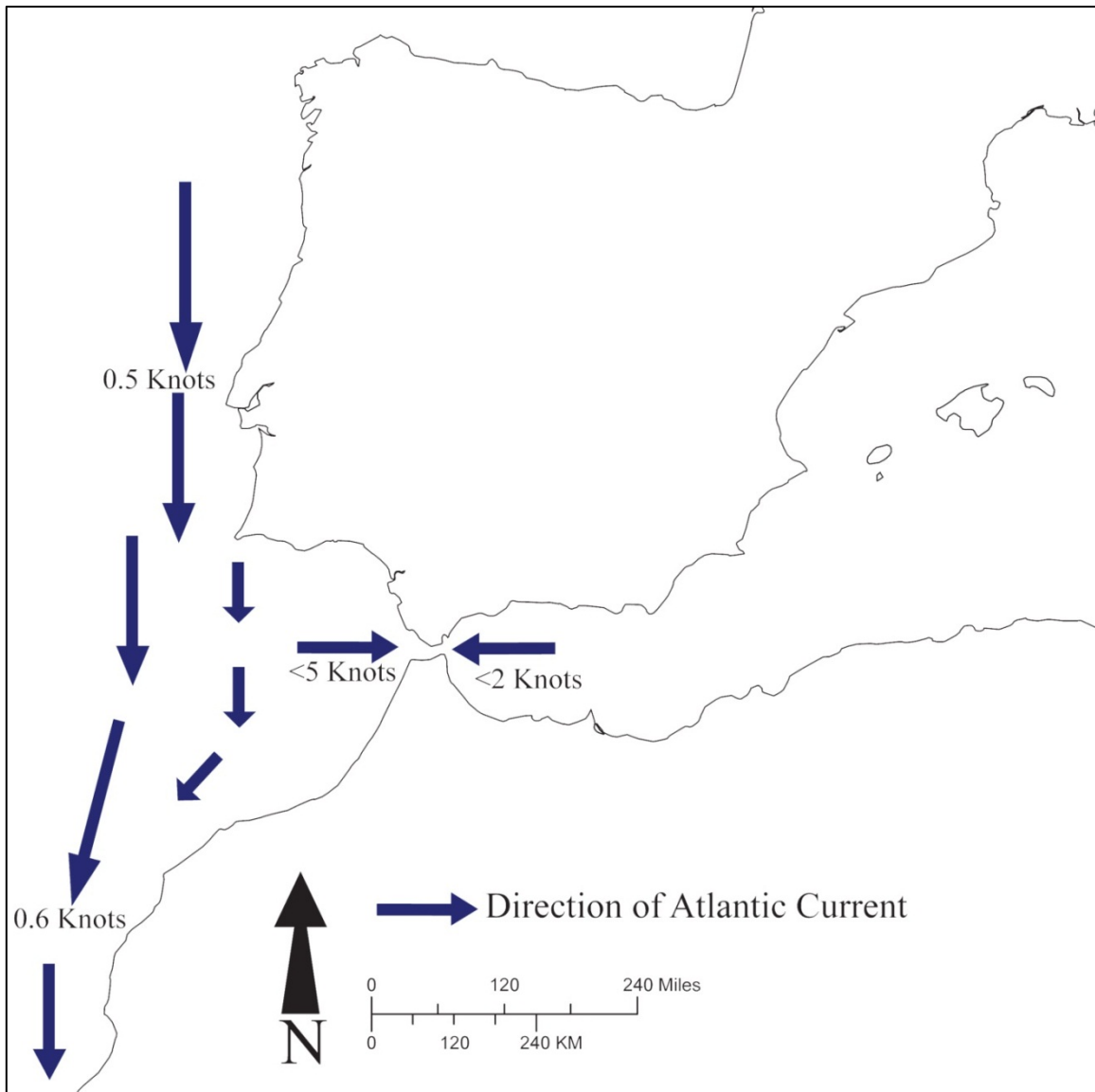


Fig. 16: Currents and their speed along the Atlantic coast and the Strait of Gibraltar. Based on data from National Geospatial-Intelligence Agency (2012) "Sailing Directions (Planning Guide): North Atlantic Ocean and Adjacent Seas."

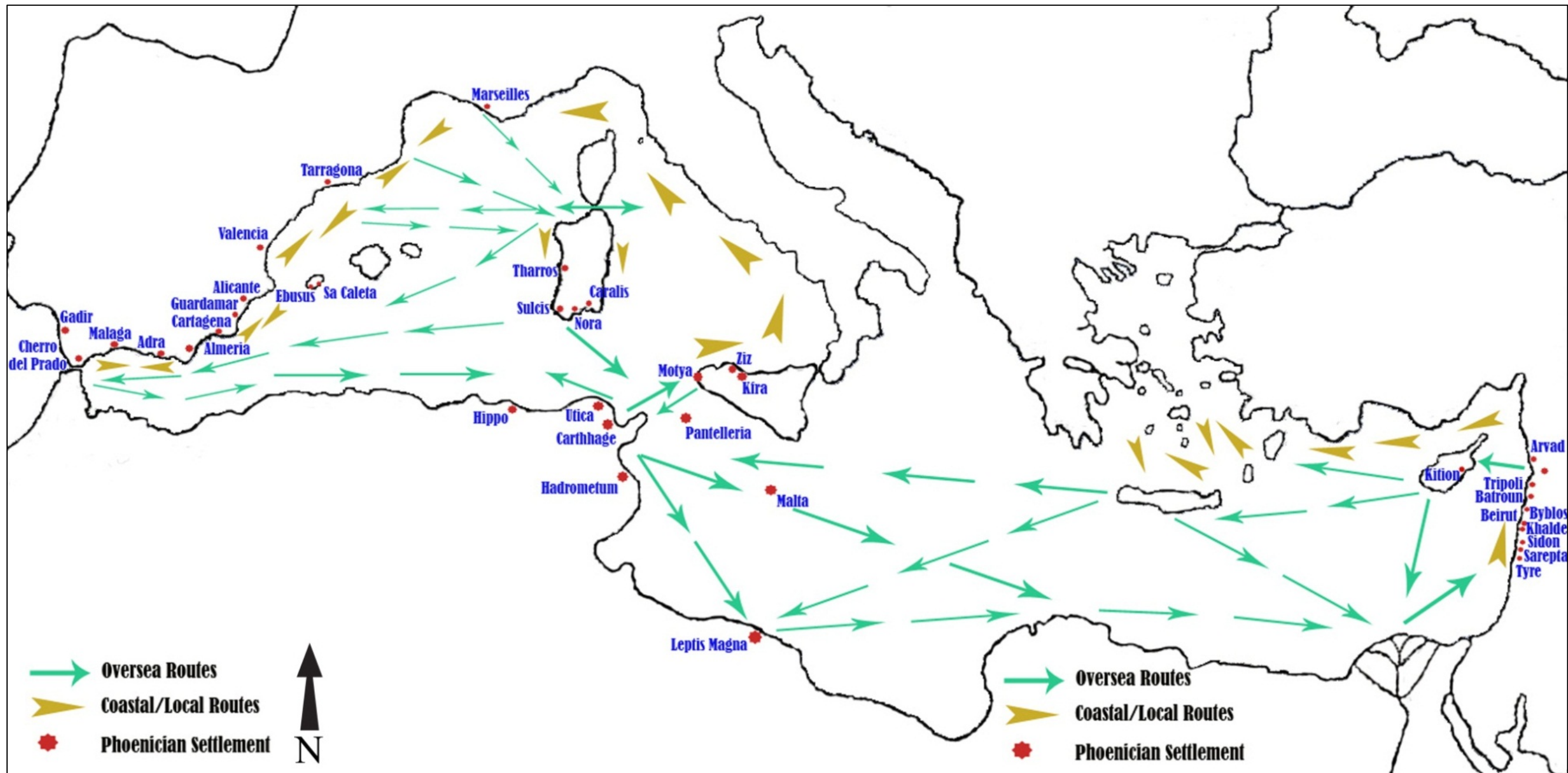


Fig. 17: Potential Mediterranean routes determined by wind and current data. Author's reconstruction using wind and current data from National Geospatial-Intelligence Agency (2011) "Sailing Directions (Enroute): The Eastern Mediterranean" and "Sailing Directions (Enroute): The Western Mediterranean."

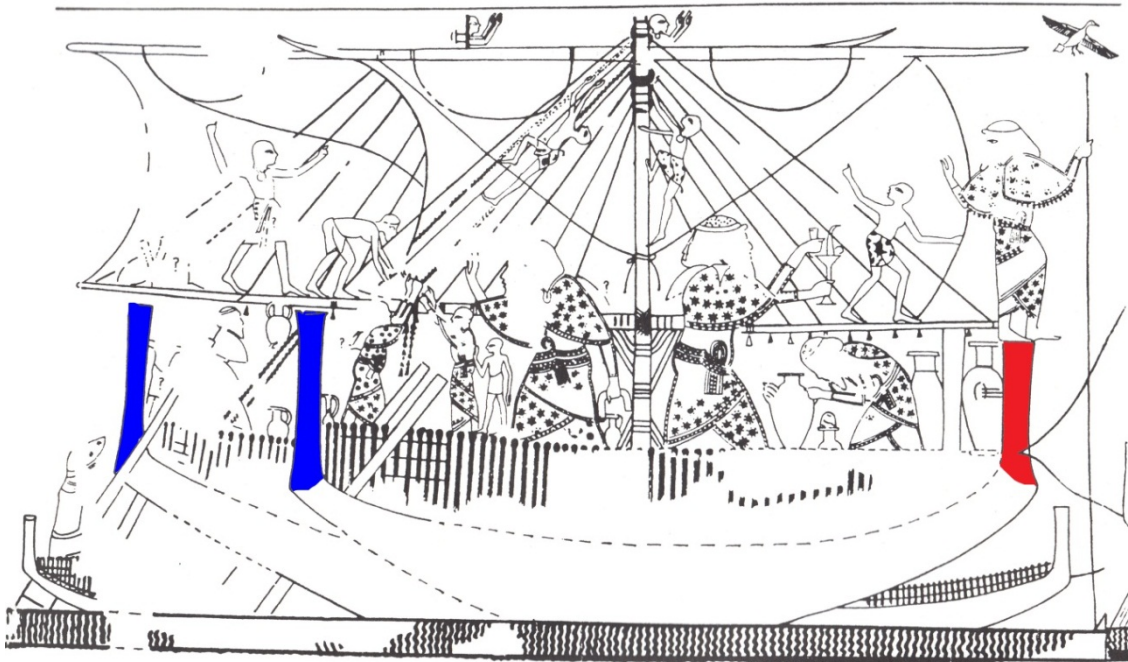


Fig. 18: Depiction of the Kenamun ships with stem and sternposts highlighted (modified from Davies and Faulkner 1947, plate 8).

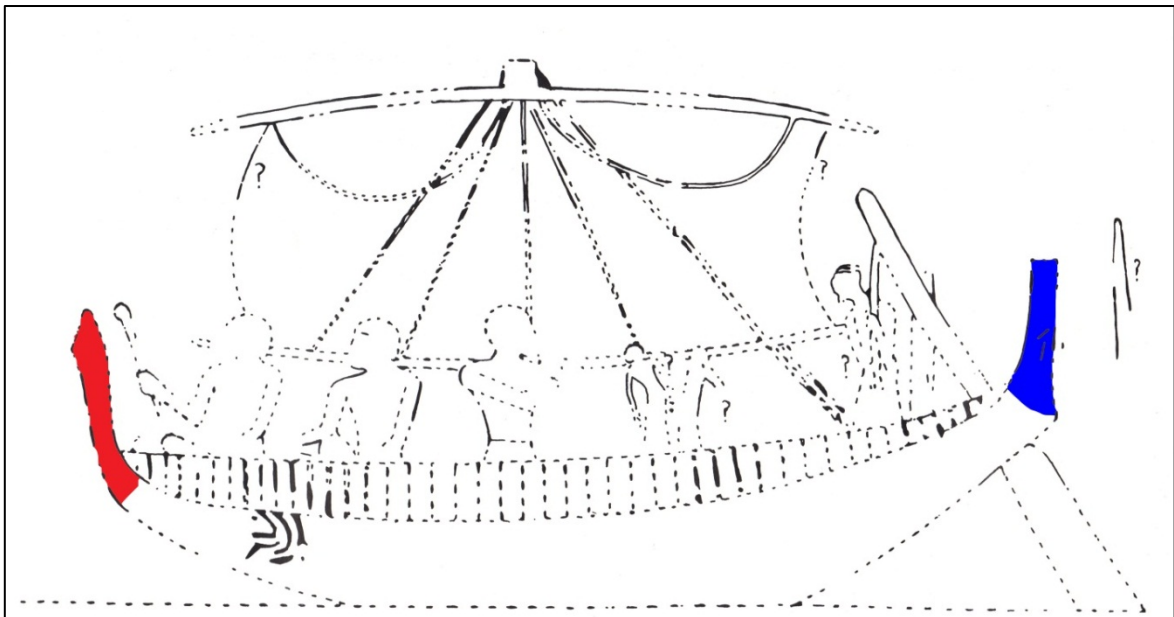


Fig. 19: Depiction of Nebamun ship with stem and sternposts highlighted (modified from Säve-Söderbergh 1957, plate 23).

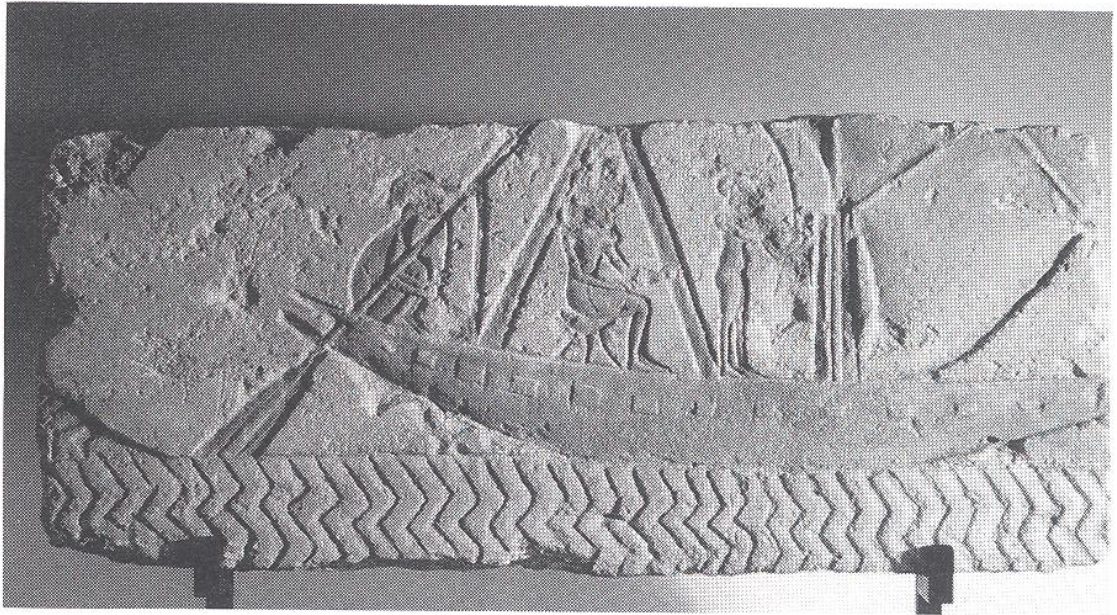


Fig. 20: Relief PC 103 from the Stephane Cattai collection in Switzerland. It depicts a loose footed, possible brailed sail dating to the mid-14th century B.C.E. (Vinson 1993, 135 fig. 2a).

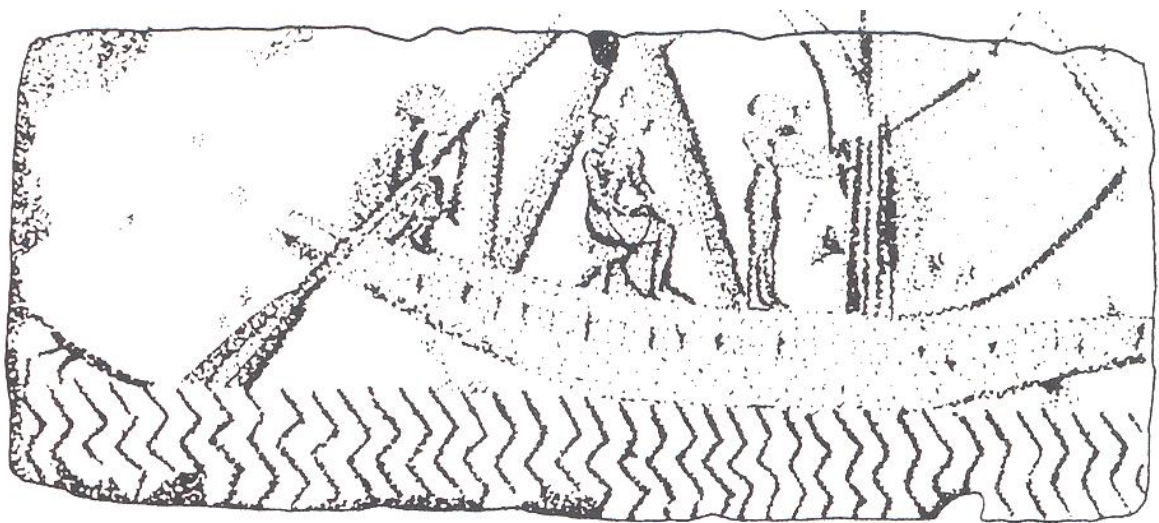


Fig. 21: Drawing of PC 103 from the Stephane Cattai collection in Switzerland (Vinson 1993, 135 fig. 2b).



Fig. 22: Relief Berlin 24025 showing a loose footed brailed sail being furled and tied to the yard. Dates to the late 14th to early 13th centuries B.C.E. (Vinson 1993, 136 fig. 4a).



Fig. 23: Drawing of Berlin 24025 dating to late 14th to early 13th centuries B.C.E. (Vinson 1993, 137 fig. 4b).

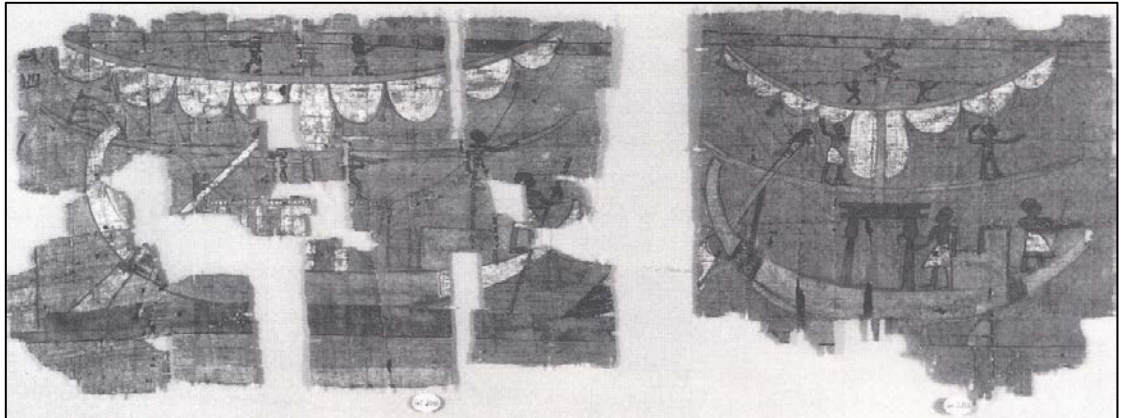


Fig. 24: Turin Papayri 2032 and 2033 showing a rig with a boom-footed brailed sail tied to the yard. Dates to the 13th century B.C.E. (Vinson 1993, 139 Figure 5).



Fig. 25: Depiction of a boom-footed brailed sail (ship on right) from Amenemheb's tomb TT278. Dates to the 20th Dynasty, the 12th century B.C.E. (Vinson 1993, 141 Figure 6).

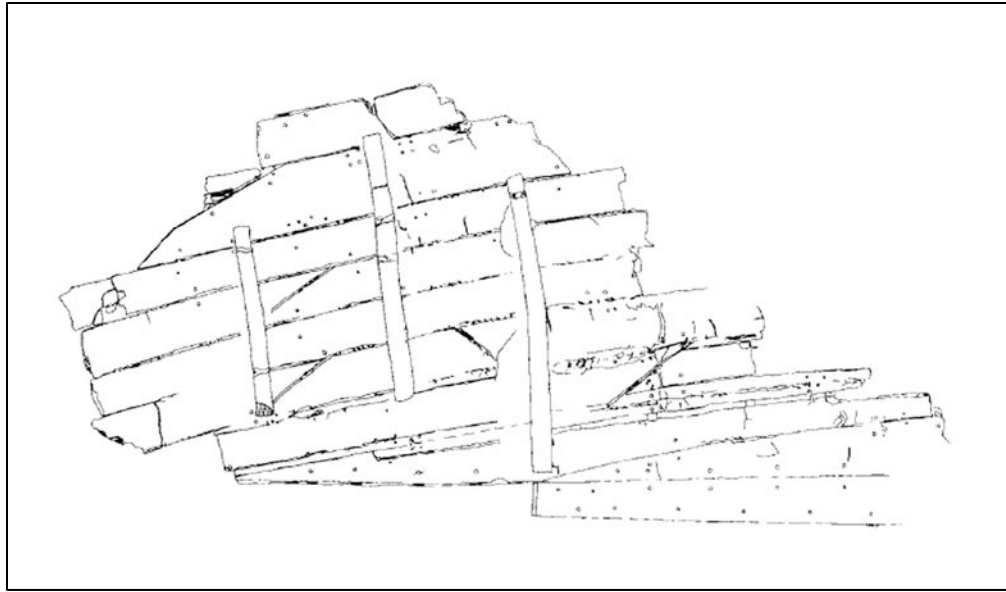


Fig. 26: Field sketch of Mazarron I (Negueruela et al 1995, Figure 11).

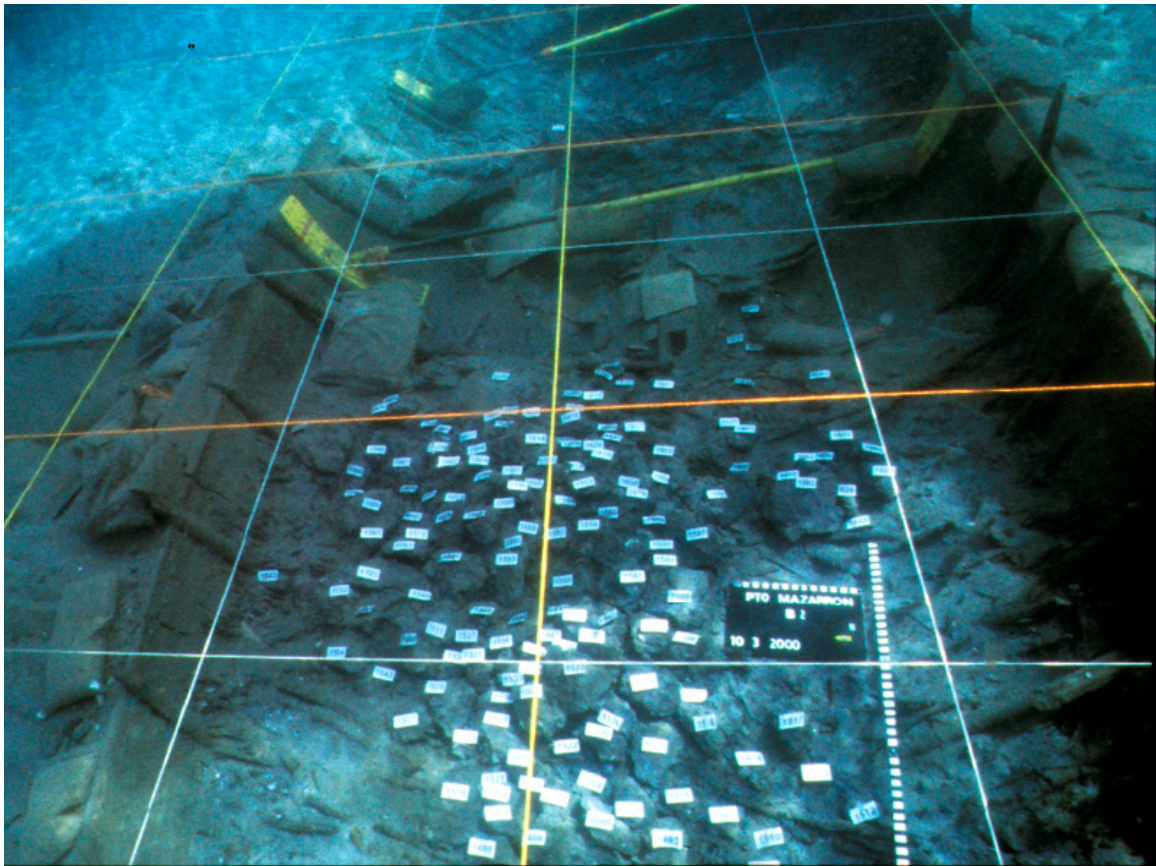


Fig. 27: Mazarron II during excavation (UNESCO 2012, <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/unesco-manual-for-activities-directed-at-underwater-cultural-heritage/unesco-manual/documentation/documentation-techniques/>).



Fig. 28: Riverine vessel from Khorsabad wall relief (Casson 1995, Fig. 92).

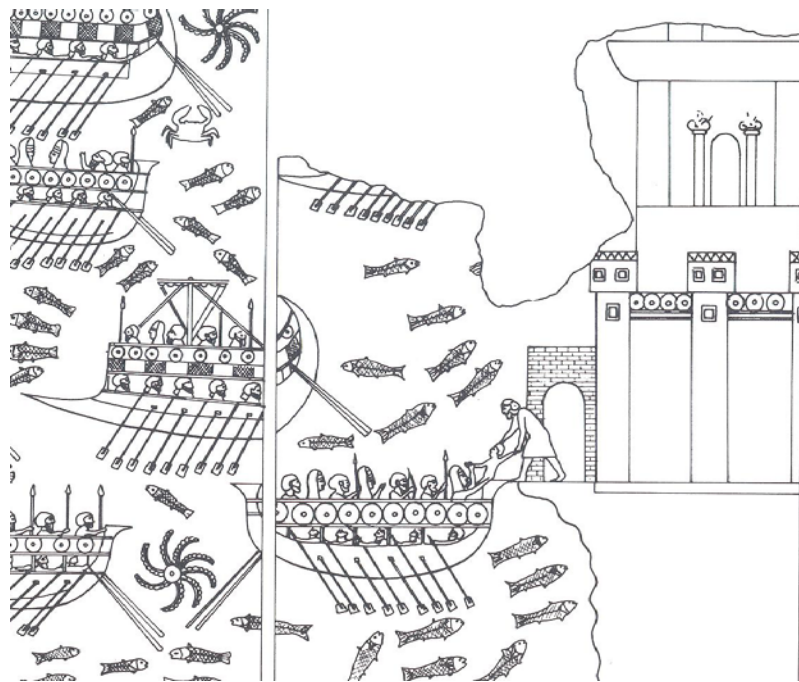


Fig. 29: King Luli escaping Tyre (Aubet 1994, 39 fig. 14).

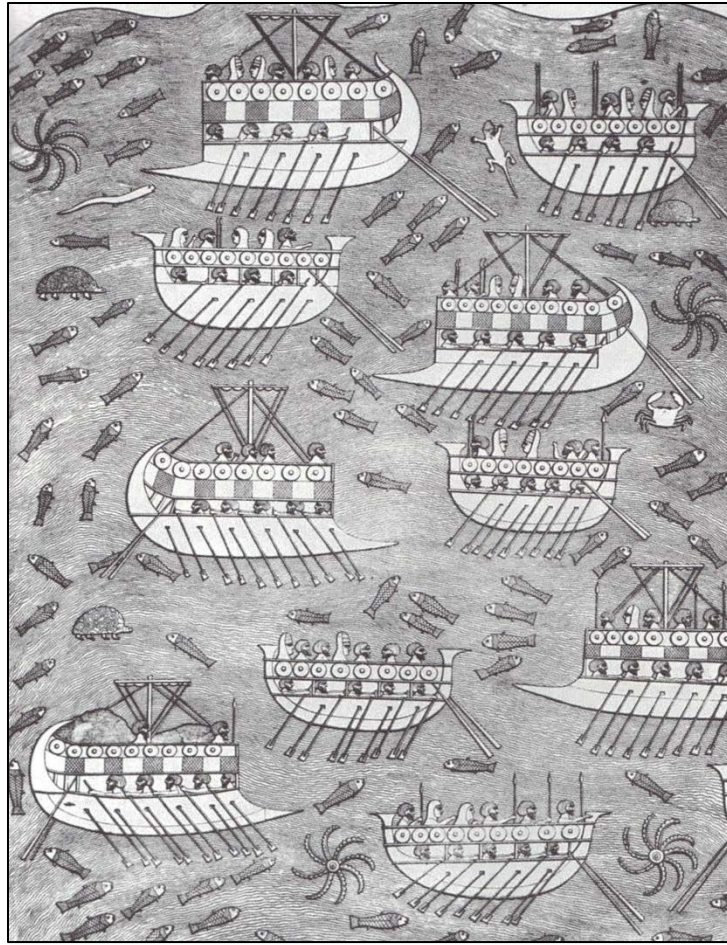


Fig. 30: Left half ship depictions from the Relief from the Palace of Sennacherib (Casson 1995, fig. 78).

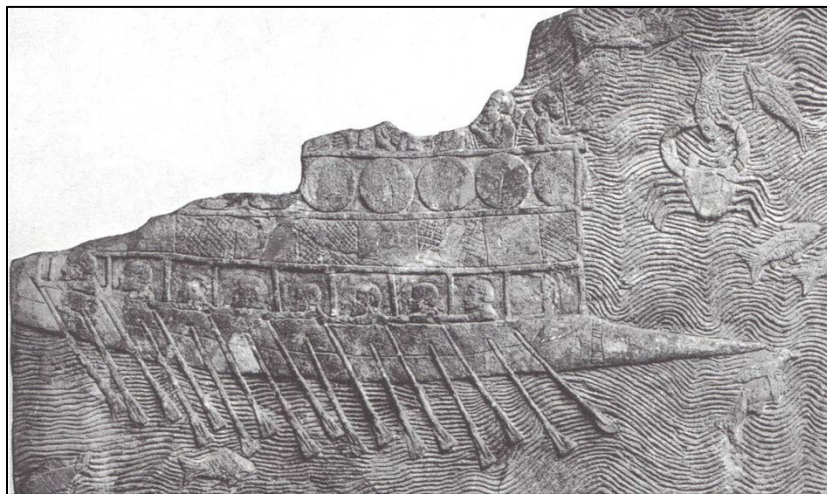


Fig. 31: Fragment from the Palace of Sennacherib Relief housed at the British Museum (Casson 1995, fig. 76).

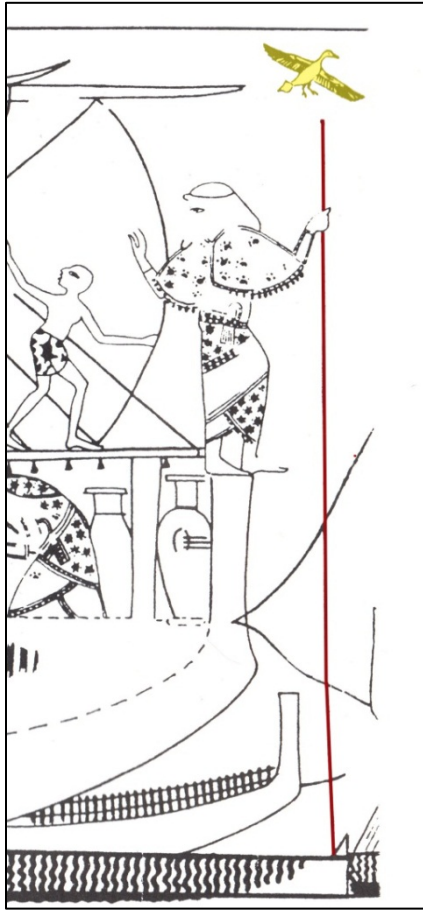


Fig. 32: Bird and depth line highlighted from Kenamun Relief (after Davies and Faulkner 1947, plate 8)

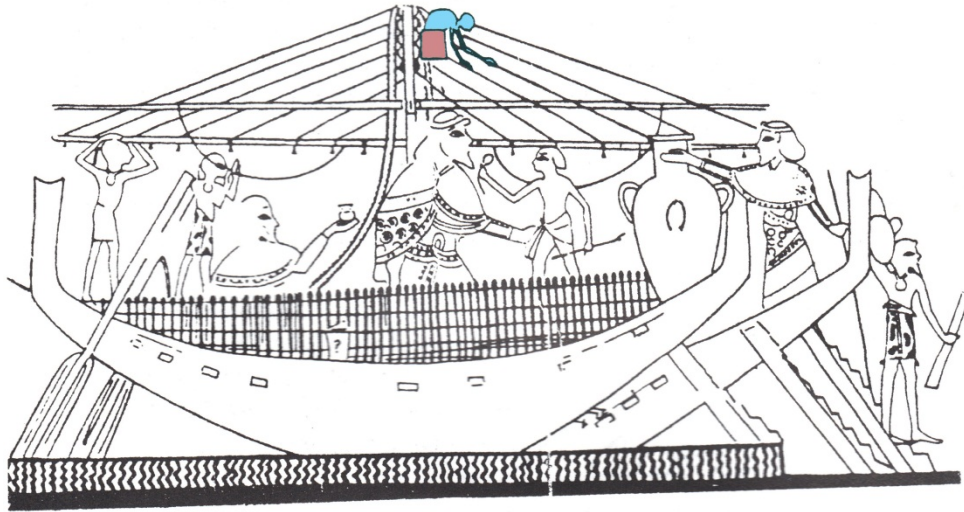


Fig. 33: Depiction from the Kenamun Relief showing a crow's nest (highlighted) (modified from Davies and Faulkner 1947, plate 8)

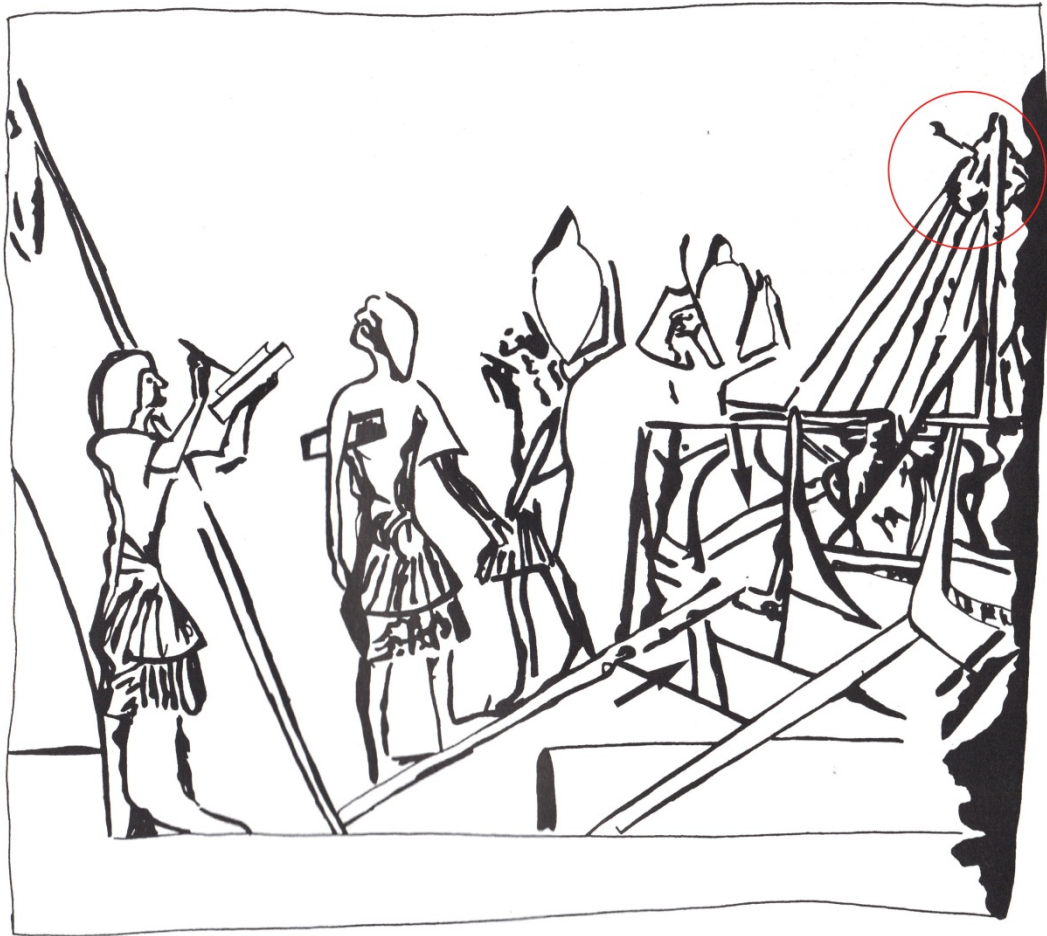


Fig. 34: Line drawing of a ship depiction from the tomb of Iniwia, crow's nest circled (after Landström 1970, 138 fig. 403).



Fig. 35: Khorsabad relief depicting riverine craft with a crow's nest (highlighted) (modified from Casson 1995, fig. 78).

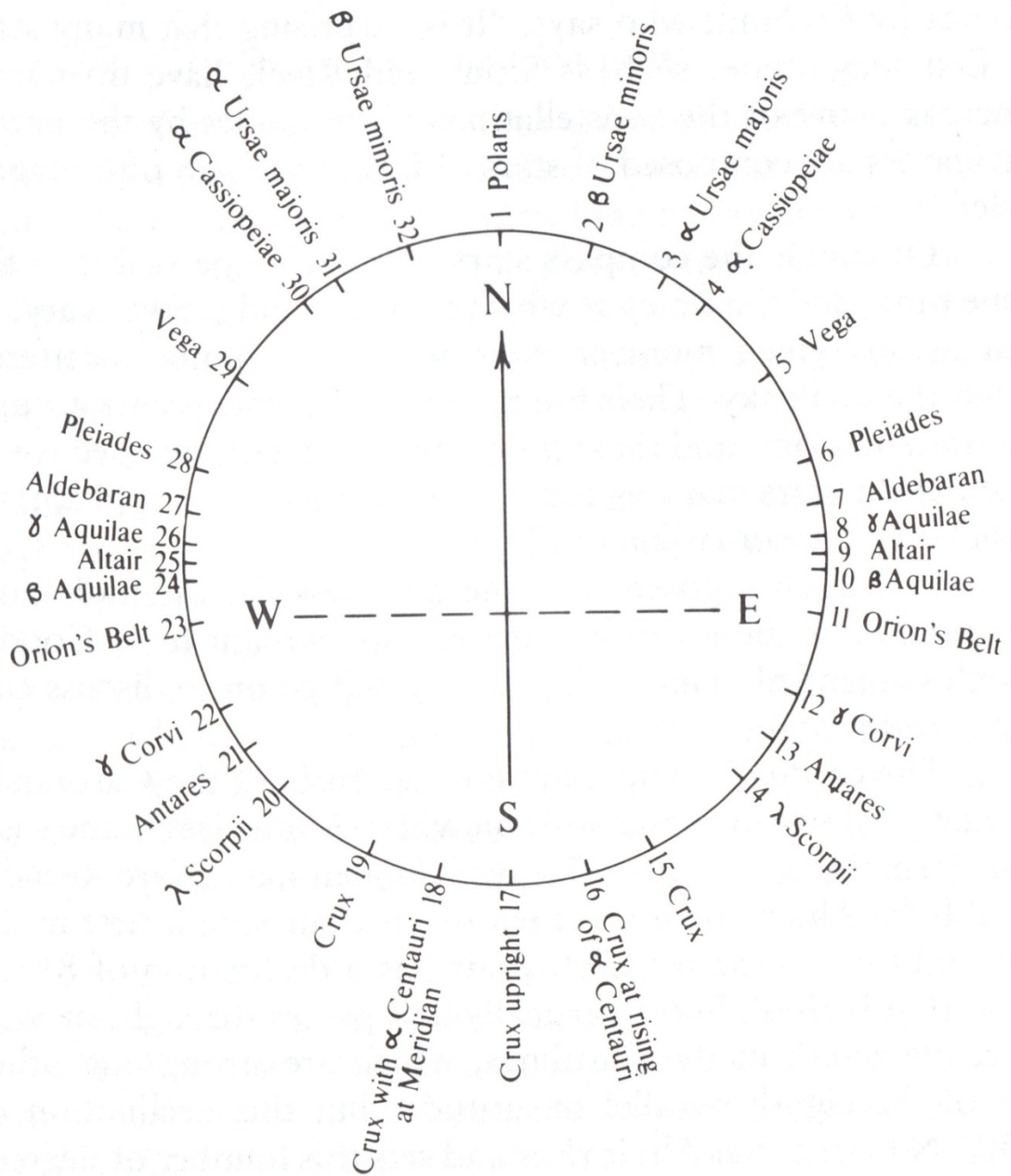


Fig. 36: Carolinian star compass in which the constellation rise and set points represent bearings (Lewis 1994, 104 fig. 16).

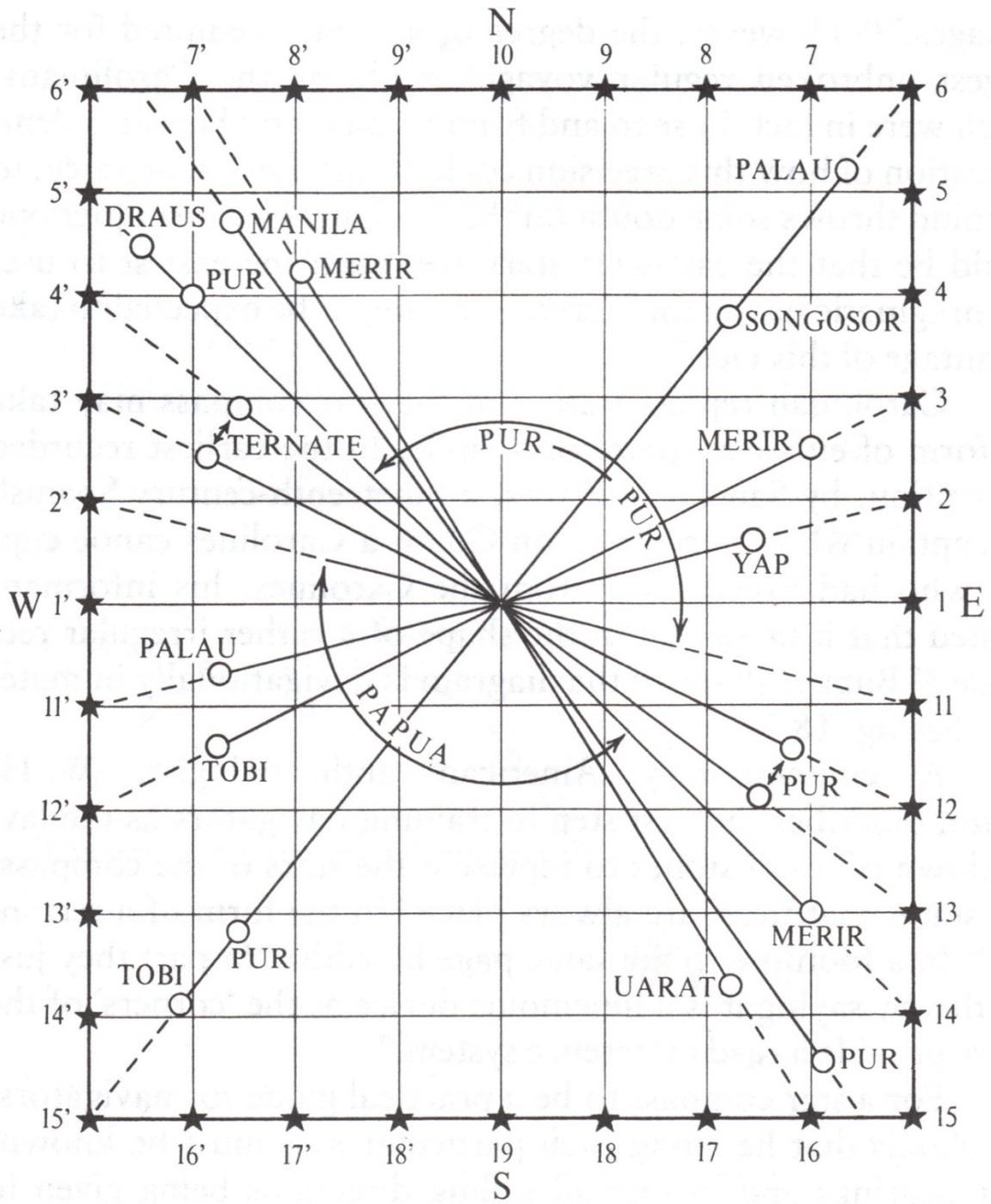


Fig. 37: Carolinian Sidereal Compass. The constellations are reference points for known islands (Lewis 1994, 108 fig. 18).

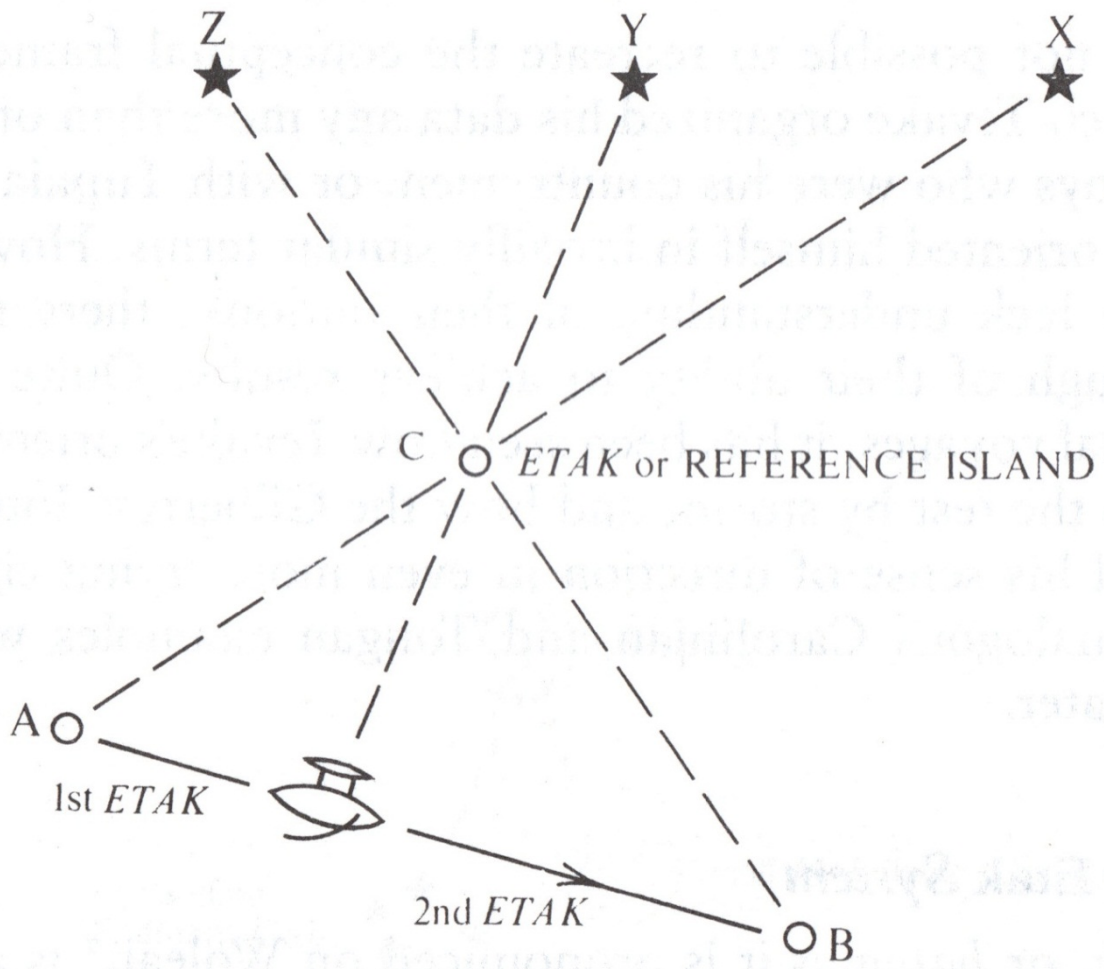


Fig. 38: Reference island, stars, and ship in the Etak system (Lewis 1994, 174 fig. 30).



Fig. 39: Map of the Eastern Mediterranean region showing primary Phoenician cities, states, and archaeological sites discussed in the text. Ca. eighth century B.C.E. (regions of influence are approximated).



Fig. 40: Sarcophagus of King Airam of Byblos (Beirut National Museum 2012, http://en.beirutnationalmuseum.org/?page_id=68).



Fig. 41: Close up of the relief from Airam's Sarcophagus depicting the king with a drooping lotus flower (Matfeld 2010, <http://www.bibleorigins.net/cherubthroneside.html>).

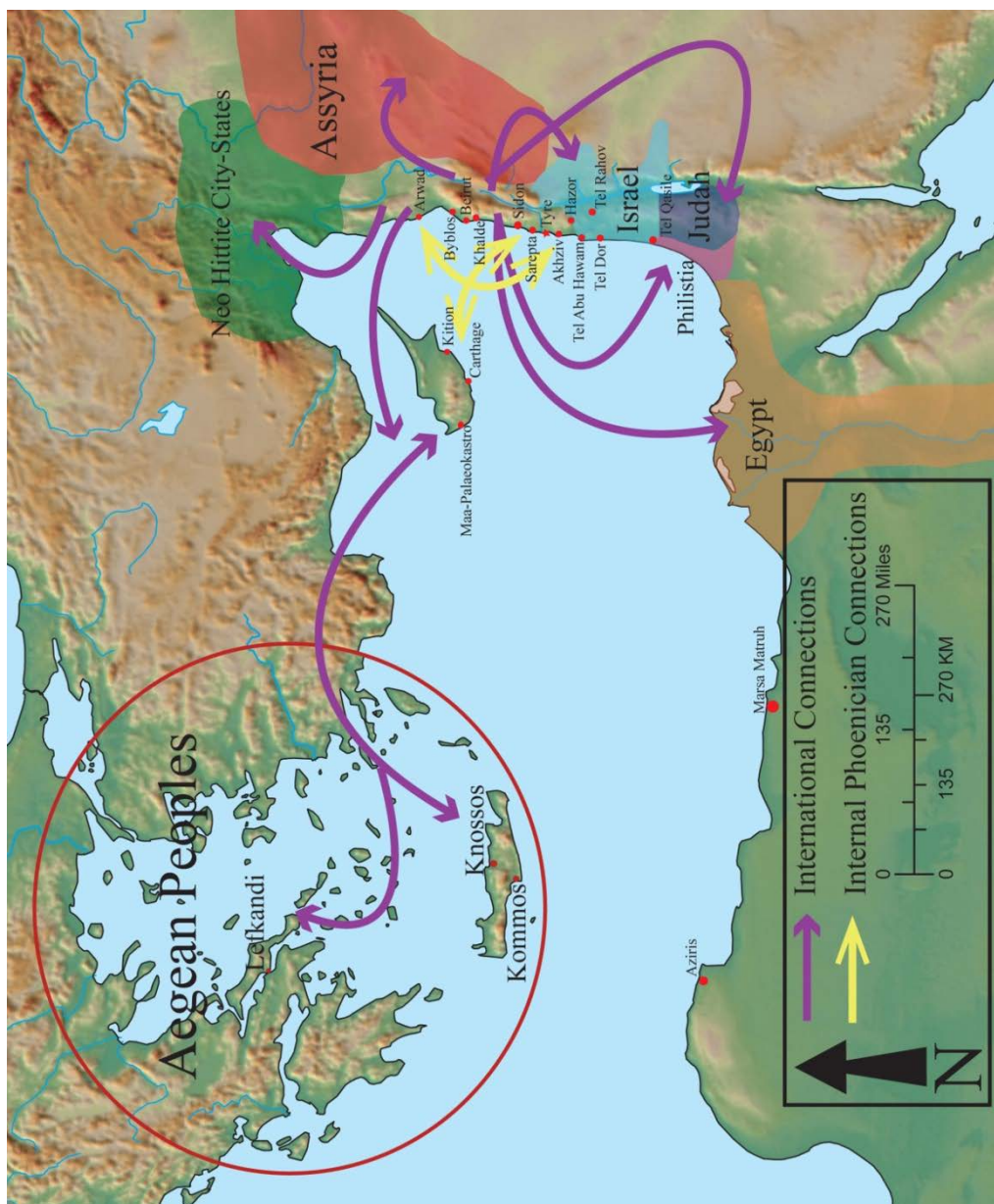


Fig. 42: Material and cultural connections proposed by the archaeological evidence between the Phoenician cities and neighboring states ca. eighth to sixth centuries B.C.E. Lines do not represent actual sailing routes



Fig. 43: The central Mediterranean Region and primary central Mediterranean colonies and sites discussed in the text.



Fig. 44: Proposed central Mediterranean material and cultural connections ca. eighth to sixth centuries B.C.E. Lines do not represent actual sailing routes.



Fig. 45: The western Mediterranean region and primary Phoenician colonies and Iberian sites discussed in the text.

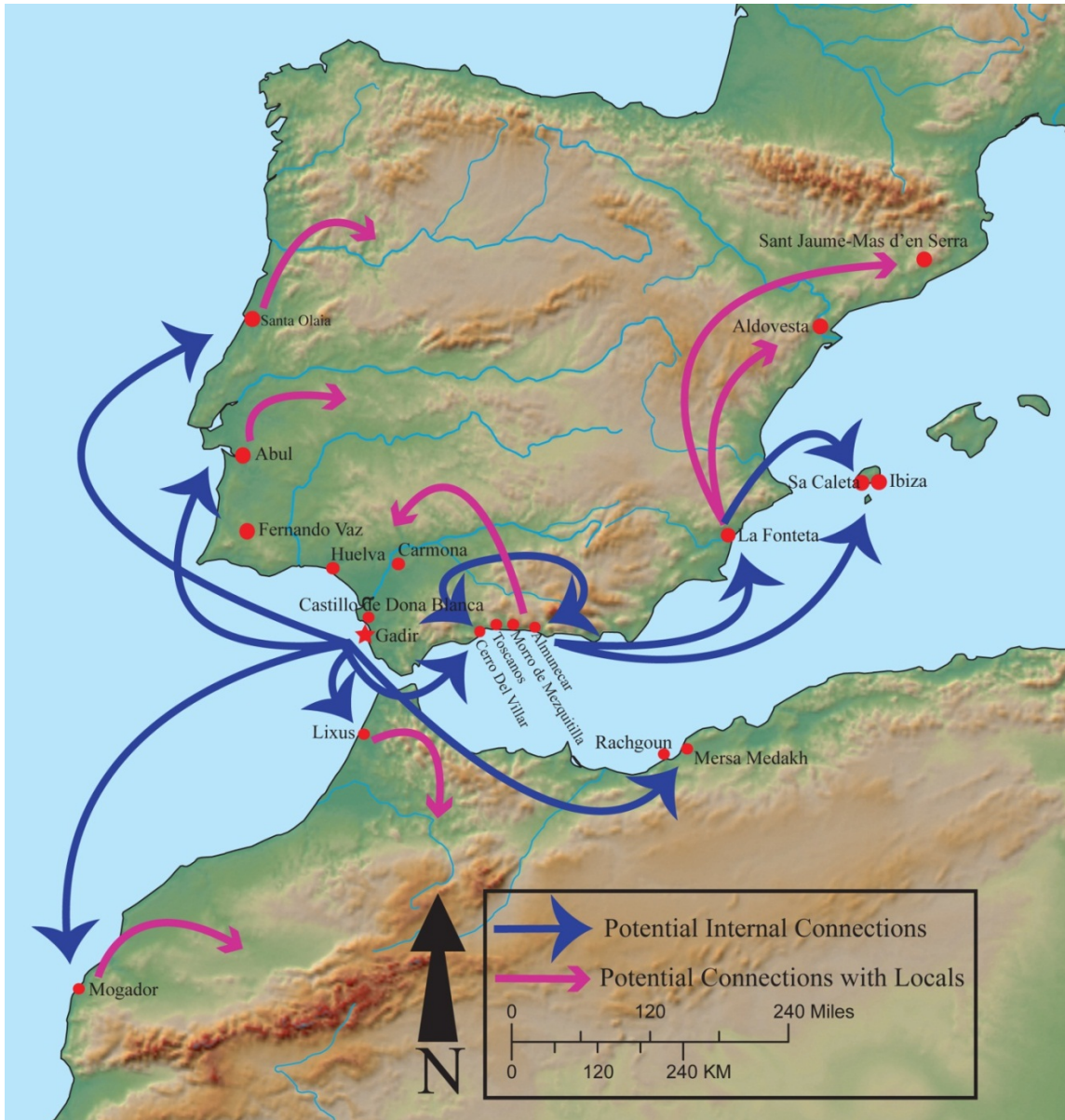


Fig. 46: Western Mediterranean material and cultural connections ca. eighth to sixth centuries B.C.E. Lines do not represent actual sailing routes.



Fig. 47: Proposed material and cultural connections between the eastern and central Mediterranean ca. eighth to sixth centuries B.C.E. Lines do not represent actual sailing routes.

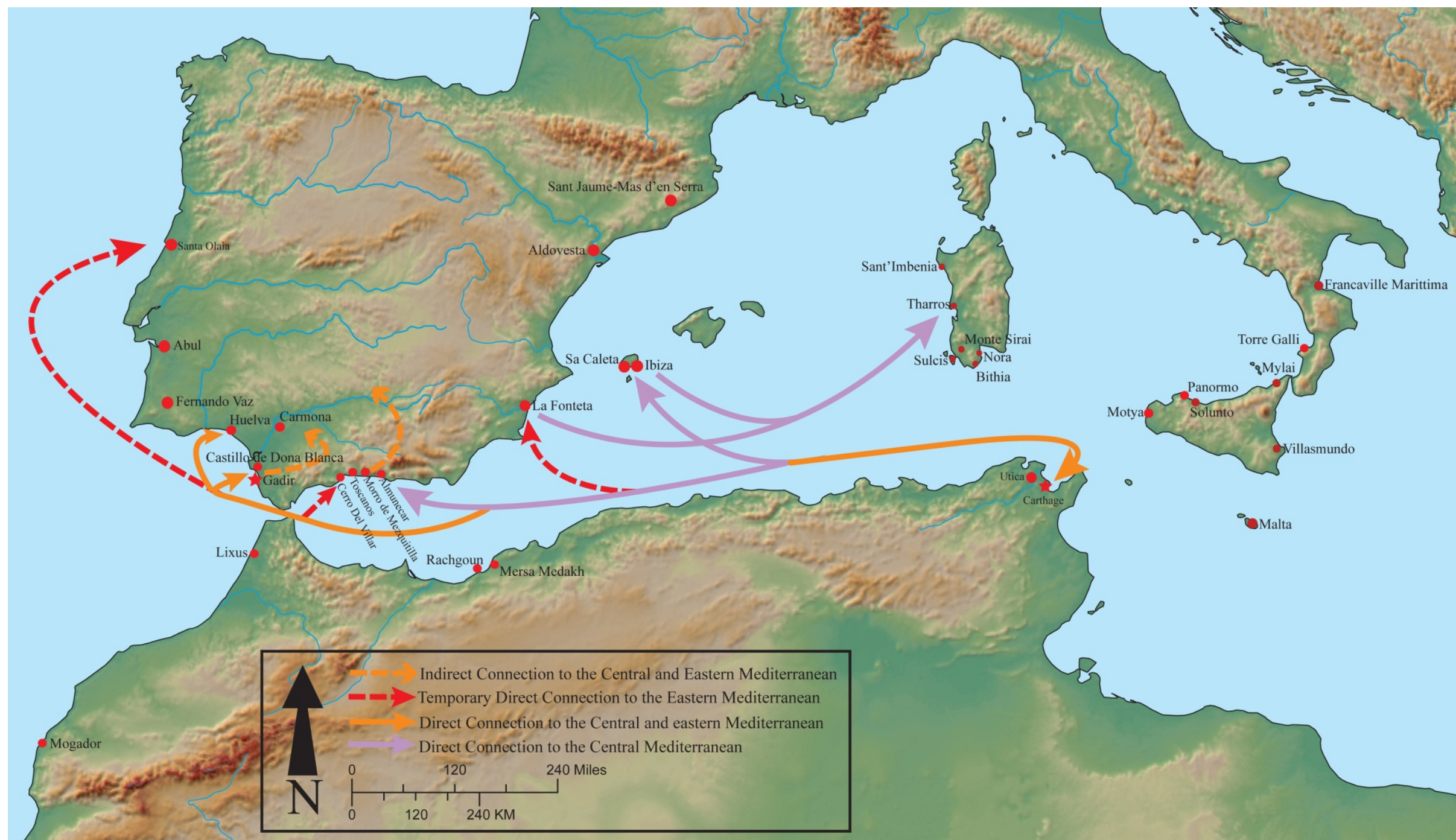


Fig. 48: Proposed material and cultural connections between the central/eastern Mediterranean and the western Mediterranean ca. eighth to sixth centuries B.C.E. Lines do not represent actual sailing routes.