THE UNIVERSITY OF CHICAGO

THE ISLAMIC MARITIME FRONTIER:
TRADE AND TRANSFORMATION ALONG THE COAST OF BILĀD AL-SHĀM (SYRIA-PALESTINE) DURING THE EARLY ISLAMIC PERIOD

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For Don Whitcomb

You taught me to navigate these waters, and we travelled together to distant shores.

I will take all that you taught me, though we'll journey together no more.

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Chapter 1 - Introduction

The conquest of Syria-Palestine in the seventh century CE transformed the coast of Bilād al-Shām into a maritime frontier which simultaneously divided and interlinked the Byzantine and Islamic worlds. Scholars such as Henri Pirenne have focused on the maritime frontier as a zone of conflict and division.[1] From this perspective, the Arab armies swept through the Near East, transforming the Mediterranean into a theater for naval conflict, halting trade, and turning the coast of Syria-Palestine into a depopulated no man's land.[2] In counterpoint to these perspectives, in this dissertation I will build the case that despite the conflict, the maritime frontier was a dynamic zone of connection between the two empires. Rather than a region in decline, it was a region in transition, marked by dramatic population shifts, new economic opportunities and avenues of exchange, and the rapid development of maritime infrastructure.

An accurate understanding of the early Islamic maritime frontier has been hindered by outdated interpretive paradigms, orientalist biases, difficulties with identifying and dating transitional ceramics, and a history of unequal archaeological excavation and data collection across the region, which has focused on and prioritized pre-Islamic phases. These problems continue to play out as the absence of evidence is used to confirm entrenched ideas of decline, while at the same time, those ideas hamstring the identification of new data. Emerging studies across Syria, Jordan, and Israel/Palestine have demonstrated far more continuity and innovation

[1] Pirenne, *Mohammed and Charlemagne*.

[2] Throughout this dissertation I will use the terms Arab and Muslim interchangeably, acknowledging that the early armies and fleets were comprised of diverse ethnic and religious groups. I will also refer to the Arab/Muslim expansion as the conquest, acknowledging that there is minimal archaeological evidence for a violent invasion.

than decline throughout the region.[3] While a far more nuanced and archaeologically supported picture of the interior has developed, the Syro-Palestinian coast continues to be understood through the outdated lenses of abandonment and decline for reasons that will be discussed and challenged in 1.2.

In light of these problems, the objective of this dissertation is to create a new, more multi-faceted understanding of the early Islamic maritime frontier in Bilād al-Shām through a detailed reevaluation of available literary and archaeological data for the region. I will begin this process by challenging and deconstructing existing frameworks that have emphasized narratives of decline, abandonment, and conflict along the Syro-Palestinian coast following the transition to Muslim rule. I will then use frontier theory to reassess the available archaeological and historical evidence to help reveal the complex social, political, economic, and environmental processes that comprised the maritime frontier.

Ultimately, this study seeks to demonstrate that the early Islamic maritime frontier functioned as both a barrier and a bridge between what would later be understood as the *dār al-Islām* (house of Islam) and the *dār al-ḥarb* (house of war).[4] On the one hand, the coast functioned as a fixed physical and political boundary that was defended by Islamic garrisons and fleets. On the other hand, it was an economic and cultural interface comprised of cross-cutting social networks that bridged geographical, social, and ideological borders. Rather than a region in decline, it was one in transition, and part of a Islamic empire that had undoubtably set its sights on the sea for political, military, and economic ambitions.

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[3] For instance, Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000; Walmsley, *Early Islamic Syria: An Archaeological Assessment*; Walmsley, "Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565-800"; Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*; Magness, *The Archaeology of the Early Islamic Settlement in Palestine*.

[4] The understanding of these terms as territories of Islam and war did not develop until the late eighth century.

1.1.1 Scope

This study will concentrate on the development and character of the maritime frontier of Bilād al-Shām (Greater Syria) during the first centuries following the conquest through the eighth century CE (Figure 1). During this period, the maritime frontier extended from North Africa to southern Turkey, encompassing all coastal regions under Islamic control that abutted the Mediterranean. While the whole of the maritime frontier was interconnected economically, politically, and militaristically, this dissertation primarily focuses on evidence pertaining to the coast of Bilād al-Shām, from southern Palestine in the south to northern Syria. This geographic constraint will allow me to make a more in-depth analysis of the tightly integrated ports and communities of Bilād al-Shām and the webs of connectivity that affected the recipient ports and communities of the *dār al-ḥarb*.

Chronologically, this dissertation will focus on the Byzantine-Islamic transition, namely the seventh and eighth centuries, when the region underwent a series of dramatic political, cultural, and economic changes. This timeframe encompasses the reigns of the Rāshidūn, Umayyad, and early ʻAbbāsid Dynasties. The reason for this constraint is twofold. Firstly, the dynamics of the maritime frontier during this period are not well understood compared to subsequent centuries. This is in part due to a variety of obstacles, including the prevalence of outdated paradigms, orientalist perspectives, and an inconsistency in the archaeological data—all of which will be discussed in the following section of this chapter. Secondly, the policies and approaches to the maritime frontier laid out by the early caliphs and governors established the foundation for subsequent dynasties. As such, clearly understanding this formative—yet misunderstood—period is crucial to interpreting later events.

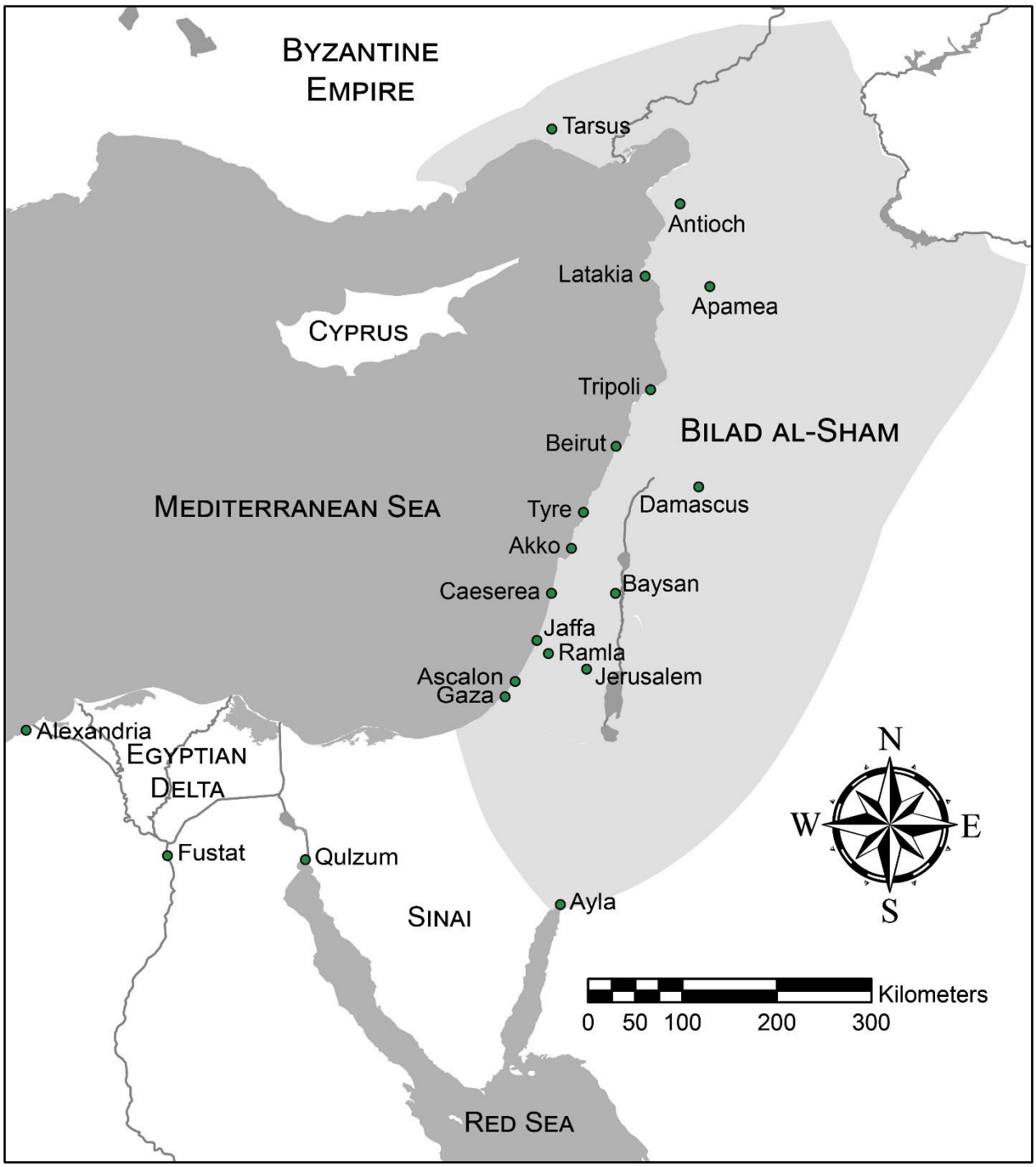

Figure 1: Bilād al-Shām and adjacent regions during the Early Islamic Era (by Morriss)

1.2 Obstacles to Analysis

The early Islamic maritime frontier is all too often understood as a zone of conflict, characterized by social and economic decline.[5] I will argue that the truth is far more nuanced—that the frontier was a dynamic zone shaped by new economic opportunities and a clear Muslim interest in the sea and seafaring. I believe that to date, a balanced understanding of the Syro-Palestinian maritime frontier has been hampered by a wide range of obstacles, including outdated frameworks and site interpretations, persistent orientalist biases, difficulties in differentiating and precisely dating transitional ceramics, and problematic and fragmentary archaeological evidence that would yield a misleading and skewed picture if taken at face value. To capture a better understanding of the frontier, it is necessary to first identify, critique, and deconstruct some of these viewpoints.

1.2.1 The Arab fear of the Sea

One of the fundamental problems affecting the interpretation of the maritime frontier and Muslim activities along the coast is a deeply rooted orientalist bias that portrays Islam as being culturally and intellectually "incompatible with the sea."[6] This racist characterization discounts Muslim involvement in maritime activities due to an underlying ethnic proclivity, which can be neatly summarized as an "Arab fear of the sea." The roots of this orientalist perspective are imbedded in the categorization of the Arabs as a 'desert people,' which is often supported by referencing a well-known account of Caliph 'Umar's (r. 634-44) reaction towards Muʿāwiya's

[5] Among the studies that have broadly characterized the Syro-Palestinian coast in terms of demographic and economic decline and conflict are: Kennedy, "Inherited Cities," 96–97; Wickham, "The Mediterranean around 800," 167–68; Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800*, 772, 774; Petersen, *The Towns of Palestine under Muslim Rule AD 600-1600*, 80.

[6] For instance, Xavier de Planhol, *L'Islam et la mer: la mosquée et le matelot: VIIe - XXe siècle* (Paris: Perrin, 2000), 453.

request to raid across the Mediterranean. ‘Umar purportedly held a great fear of the sea and consulted ‘Amr b. al-‘Āṣ (d. 664) who related, "Man at sea is an insect on a splinter, now engulfed, now scared to death."[7] The trope of an Arab fear and disinterest in the sea has crystallized around this brief correspondence and led to the frequent mischaracterization of Muslim and Arab interaction with the maritime sphere. Regardless of whether ‘Umar was personally apprehensive about seafaring, when read in detail, this account actually provides a compelling case for an active interest in maritime affairs by the then-governor, and future caliph, Muʿāwiya (r. 661-80)—an interest he would aggressively capitalize on once he ascended to power. [8]

There is a wealth of historical evidence attesting to Muslim and Arab interest in maritime activity, as well as skill in seafaring. Yet one of the most influential pioneers of watercraft study wrote, “Profound distrust of the unfamiliar sea was inherent in the Arab followers of Muhammed at the time when he launched his religious war upon the Eastern world. Had not he enunciated the dictum ‘He who twice embarks on the sea is truly an infidel?’ By this was implied a religious condemnation of travel by sea as entailing ceremonial impurity.”[9] Like much of J. Hornell’s work, this had a profound impact on later scholarship and discussions of seafaring.

References to seafaring appear in pre- and early Islamic/Arabian poetry, the Ḥadīth, and the Qur’ān, including the examples below.[10]

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[7] Hourani and Carswell, *Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times*, 54–55.

[8] On pre-Islamic Arabian maritime trade and the historical references for it, see Hourani and Carswell, 3–50. See also the discussion on pre-Islamic Arabian navigation by Fahmy, *Muslim Sea-Power in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 41–67.

[9] Hornell, *Water Transport: Origins and Early Evolution.*

[10] For a discussion of seafaring in early Arabic poetry and the Qur’ān, see Montgomery, “Salvation at Sea? Seafaring in Early Arabic Poetry,” 25–47.

The litters of the lady of the Mālik tribe, at the time of departure in the morning, looked like ships in Nawāsif, like 'adawlī ships or those of Ibn Yāmin, whom sailors sometimes turn obliquely and sometimes steer in the right course. [11]

When she [a camel] raises her long neck, it resembles the stern of a ship sailing up the billowy Tigris.[12]

It is the Lord Who steers the ships for you through the sea, so that you may seek His bounty. Surely He is ever Merciful to you.[13]

And among His signs are the ships like mountains sailing in the sea. If He wills, He can calm the wind, leaving the ships motionless on the water. Surely in this are signs for whoever is steadfast and grateful.[14]

These maritime references, amongst others, are evidence of a well-developed nautical vocabulary spanning back to *Jāhili* (pre-Islamic) Arabia. The Arab chroniclers and geographers describe the great sea battles of early Islam and allude to the character of ports and trade.[15] Moreover, the numerous references to seaborne battles in the conquest (*futūḥ)* narratives suggests that naval engagements were not only crucial to Muslim strategy, but that seafaring stories themselves were a vital component within the Muslim community's developing perceptions of the conquests.[16] The strategic value of the sea is underlined in the prophetic and juristic traditions as well, which accord a "double reward" for enlisting in the navy and recount

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[11] A verse from a pre-Islamic poem in the The Seven Hanging Odes. Ibn Yāmin was a famous shipbuilder from Bahrayn. *Sharh Al-Mu'allaqat as-Sab'*, 31; quoted by Fahmy, *Muslim Sea-Power in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 51.

[12] *Sharh Al-Mu'allaqat as-Sab'*, 37; Fahmy, *Muslim Sea-Power in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 51.

[13] Qur'ān 17:66.

[14] Qur'ān 42:32-33.

[15] For a summary of the Muslim and non-Muslim sources for references to seafaring, see Fahmy, *Muslim Sea-Power in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 1–40.

[16] For an example of how the conquest narratives were both allowed and expected to function within the Islamic community, see Conrad, "The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East," 317–401.

that "a martyr at sea is like two martyrs on land".[17] These attest to an active policy of encouragement and recruitment for *jihād*, or religious war, at sea, and will be discussed in Chapter 3.3.

Egyptian papyri provide direct evidence of the importance of the maritime connections to the region's new Muslim rulers, and serve as examples of the resources dedicated to the development of the navy.[18] Two collections of papyri, the early eighth century Aphrodito Papyri and the late seventh century archive of Flavius Papas, discuss the recruitment of sailors and skilled workmen for the shipyards in Fusṭāṭ (Babylon) and al-Qulzum (Clysma), the provisioning of the fleet in money and kind, as well as the shipment of shipbuilding materials such as acacia wood, iron nails, anchor cables, and various types of rope (discussed in Chapter 3). Moreover, many of these documents discuss the logistics and movement of people and resources from Egypt to Syria-Palestine, Africa, and Cyprus, alluding to the networks of maritime connectivity that persisted following the Muslim expansion.

This swift review of some of the available documentary and literary evidence demonstrates that the early Muslims maintained an active interest in the maritime sphere during and immediately following the conquest and refutes notions of a Muslim disinterest in or fear of the sea.

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[17] Khalilieh, *Islamic Maritime Law: An Introduction*, 2.

[18] For an overview of the Egyptian papyri, see Henry Bell, "The Aphrodito Papyri," *The Journal of Hellenic Studies* 28 (1908): 97–120; Bell, "Two Official Letters of the Arab Period."; Foss, "Egypt under Mu'awiya Part II: Middle Egypt, Fustat and Alexandria."; Fahmy, *Muslim Naval Organisation in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 1–9.

1.2.2 Biases in the Literary Sources

The literary sources have helped propagate a biased characterization of the Byzantine-Islamic transition and early centuries of Islamic rule in the eastern Mediterranean. Contemporary non-Muslim sources as well as the later Arab chroniclers, offer vivid narratives of destruction and abandonment along the Syro-Palestinian coast in the wake of the Persian and Muslim conquests of the seventh century.[19] This is in part due to the underlying militaristic bias in these early literary accounts and records of the conquest.[20] These accounts do not provide a neutral and accurate retelling of events, but instead were recorded with a political and ideological agenda to portray the Muslim expansion as a series of conquests by "Muslims" over "non-Muslims."[21] They were intended to "focus on the military aspects of the expansion, emphasizing recruitment of soldiers, battles, and the takeover of cities," while overlooking the social and cultural integration of the new Muslim populations into the local landscape.[22] Interpreting the nature of the expansion (*futūḥ*) narratives is complicated. As L. Conrad demonstrated in his analysis of the traditions recounting the conquest of Arwād (island off Tartus, Syria), the accounts are comprised of a series of *futūḥ* 'topoi' and 'schemata'.[23] These literary elements were woven together to create artificial composites, which were rapidly and successively elaborated and adapted. The resulting narratives were not intended to accurately recount the events of the battle,

[19] Al-Balādhurī is one of the earliest and most comprehensive sources for the conquest of al-Sham. al-Balādhurī, *Kitāb Futūḥ Al-Buldān*.

[20] For a discussion on this bias in the Muslim and non-Muslim sources and how it has encouraged the conventional violent conquest model, see Donner, "Visions of the Early Islamic Expansion: Between the Heroic and the Horrific."

[21] Donner, *Muhammad and the Believers at the Origins of Islam*, 119.

[22] Donner, 119.

[23] The concept of topoi and schemata was first developed by Albrecht Noth in his Quellenkritische Untersuchungen, which was later translated into English. See, Noth and Conrad, *The Early Arabic Historical Tradition*.

but rather were fashioned to satisfy the audience's (the early Muslim community's) conception of what a *futūḥ* narrative should look like.[24]

The uncritical use of the literary traditions surrounding the conquest has unfortunately resulted in the tendency to envision the coast as a depopulated backwater, where people lived in constant "dread of the Romaeans."[25] In reality, the Byzantine threat appears to have been inconsistent and intermittent. A review of the Islamic and Eastern Christian sources for conflicts along the Syro-Palestinian and Egyptian coasts indicates that there are significant lulls in Byzantine aggression (Table 1).[26] While raids and miliary engagement occurred and were a real threat, the coastal zone was not consumed by a constant state of conflict.

The characterization of a region or area as a 'no man's land' was a popular and effective literary trope that was employed across the Islamic land frontiers.[27] It imparted a degree of prestige upon leaders or individuals who settled, rebuilt, and defended this contested territory.[28] It is within this context of propaganda and legitimization that we must understand the efforts and building programs of various Islamic dynasties to repopulate, fortify, and Islamicize the coast. From settling the coast to building fortifications, many 'militarized' actions also had practical benefits. The settling of foreign populations in particular regions of the coast—like the Persians who Muʿāwiya settled along the coasts of ʿAkkā (Acre) and Ṣūr (Tyre)—may have been tied to efforts of sedentarizing potentially unruly tribal groups and resettling contentious regions with

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[24] Conrad, "The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East," 393; The concept of topoi and schemata was first developed by Albrecht Noth. See Noth and Conrad, *The Early Arabic Historical Tradition*.

[25] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma'rifat al-Aqalim*, 129.

[26] Raphael, *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*, 8. Raphael's analysis is based on the following Islamic sources, al-Tabari, Balādhurī, and al-Kindi, as well as the Eastern Christian account of Theophanes.

[27] Eger, *The Islamic-Byzantine Frontier: Interaction and Exchange Among Muslim and Christian Communities*, 8–9.

[28] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier," 39.

'loyal' clients.[29] The construction of forts and coastal monitoring networks not only served defensive agendas, but also permitted the early Muslim rulers with the means to control movement and trade along their maritime borders. It is essential to consider these actions—as they are recorded by the Arab chroniclers—within their intended literary context. Taking the narratives at face value overemphasizes the militaristic aspects of the frontier, and risks obscuring the underlying social and economic components that made the frontier a vital and dynamic zone.

Year (CE)	**Details**	**Source**
642	Byzantine raid along coast of Syria	Al-Tabari
645/6	Byzantine raid on Ashkelon and Caesarea	Balādhurī
666	Mardaites raid interior of Syria-Palestine	Theophanes
673	Byzantine raid on the Nile Delta	Al-Kindi
677/8	Mardaite invasion of Palestine	Theophanes
683/4	Byzantine reoccupation of Ascalon, Caesarea, and Acre. Coastal cities of Ascalon, Caesarea, Acre, and Tyre damaged.	Balādhurī
709	Byzantine raid at Damietta. Commander of Egyptian fleet captured	Al-Tabari
719	Byzantine raid against Lattakia. The city is destroyed.	Balādhurī
720	Byzantine raid along Egyptian coast	Al-Kindi
736	Byzantine raid along Egyptian coast	Al-Kindi
743/4	Byzantine raid along coast of Jund Dimashq	Al-Tabari
760	Byzantine raid at Damietta	Al-Tabari
852/3	Byzantine raid at Damietta	Al-Tabari
856	Byzantine raid at al-Faramā (Egypt)	Al-Tabari

Table 1: Recorded Byzantine raids against Syria-Palestine and Egypt (compiled by Raphael 2014, 8)

[29] Donner, *The Early Islamic Conquests*, 265–67.

1.2.3 Outdated historical paradigms

By its very nature, the Arab conquest of the Near East was an abrupt political transition. Within the course of a century, the early Islamic Empire had expanded across three continents, stretching from the Atlantic in the west to the Indus River in the east. For scholars of the late Roman and Byzantine Empires, the Arab conquest marks the end of antiquity and the beginning of the Middle Ages—a period of contraction and decline in Byzantine territory and Mediterranean trade. By positioning the conquest as an end to the classical world, and not a beginning in and of itself, scholarly conversations have been dominated by a focus on the end of what was, such as the traditional circuit of Roman-Byzantine commerce, as opposed to the new and developing institutions, such as the expanding Muslim trade networks.

One of the most influential and widely discussed of these 'decline' narratives of Late Antiquity is H. Pirenne's thesis of a rupture in Mediterranean trade following the Islamic expansion in the east. He argues that what had once been a Roman *Mare Nostrum* (*Our Sea*) was fragmented and transformed into a contested zone between warring powers that were culturally and politically opposed. Luxury goods and staples, like Gazan wine and grain no longer travelled along the trunk routes of the Roman Empire, but instead were redirected locally and regionally. It is generally thought that the fragmentation of Mediterranean connectivity and the dwindling of markets for many of these products which were traded between the east and west had profound economic and cultural repercussions for the communities that depended on this trade.[30]

[30] See for instance, Decker, "The End of the Holy Land Wine Trade."

Pirenne's work has been critiqued and qualified since its debut by both historians and archaeologists.[31] Despite such efforts Pirenne's "shadow over the field of early medieval studies has remained potent and continues to shape scholarly assessment of the late-antique economy."[32] This is certainly the case within the eastern Mediterranean, where 700 CE is widely understood as a terminus for many late antique ceramic forms despite mounting evidence that their production and circulation continued through the eighth and even ninth century.[33]

Ultimately, for Pirenne, the end of pan-Mediterranean unity marked the demise of the classical period. This contention is maintained even in revisionist studies of the late antique Mediterranean economy. For historians M. McCormick, C. Wickham, and J. Haldon, state-driven exchange not only tied the Roman Mediterranean together but was the main motor of the economy.[34] When this motor stalled in the seventh century, economic movement along the trunk routes declined, and the Roman trade pattern was replaced with a series of 'regional' networks characterized by short-distance coastal routes whose occasional overlap resulted in the interregional movement of goods. For Wickham in particular, the end of the "fiscally supported world-system" in the late seventh century resulted in a crisis along much of the Syro-Palestinian coast, "with urban depopulation and in some places rural abandonment after 700 or so, except perhaps for the port of Caesarea, which had good links with the interior."[35] In his view, "the end

[31] Havighurst, *The Pirenne Thesis: Analysis, Criticism, and Revision*; Hodges and Whitehouse, *Mohammed, Charlemagne & the Origins of Europe*.
[32] Effros, "The Enduring Attraction of the Pirenne Thesis," 199.
[33] Armstrong, "Trade in the East Mediterranean in the 8th Century."
[34] McCormick, *Origins of the European Economy*; Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800*; Haldon, "Commerce and Exchange in the Seventh and Eighth Centuries: Regional Trade and the Movement of Goods."
[35] Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800*, 774, 779; Wickham, "The Mediterranean around 800," 167.

of the Roman fiscal system meant the end of any systematic unification of the region at the level of exchange."[36]

There is no denying that the profound changes of the seventh century impacted Mediterranean connectivity and exchange. However, the predominant narratives focus primarily on the international, state-driven movements of people and goods while often marginalizing the smaller scale and often invisible activity of cabotage (coastal sailing) as well as the myriad connections that continued to integrate the Mediterranean even when the motor of the state failed. Another problem, as B. Effros raises in a recent paper, is that "although archaeological data have helped document some of the basic fissures in Pirenne's sweeping conclusions that were previously very difficult to document in detail, historians and archaeologists alike have too seldom applied them to opening up truly alternative vistas of the post-Roman period."[37] The work of P. Horden and N. Purcell, which considers this background activity and emphasizes the diverse ecology and lifeways that existed along even small stretches of Mediterranean coastlines, provides an alternative approach to tackling questions of trade, connectivity, and settlement along the Syro-Palestinian coast during Late Antiquity and the rise of Islam in the region.

The same 'decline'-focused historical frameworks have traditionally been applied to the interior regions of Syria-Palestine. However, several revisionist studies on inland sites in Bilād al-Shām have altered our perception of this supposedly bleak period of decline and abandonment.[38] G. Avni's work in Israel-Palestine demonstrates the importance of incorporating

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[36] Wickham, "The Mediterranean around 800," 167–68.
[37] Effros, "The Enduring Attraction of the Pirenne Thesis," 199.
[38] For instance, Magness, *The Archaeology of the Early Islamic Settlement in Palestine*; Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000; Walmsley, "Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565-800"; Walmsley, *Early Islamic Syria: An Archaeological Assessment*; Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*.

various geographic scales of data collected from regional surveys, salvage excavations, and archaeological projects. These studies have presented a positive account of the region following the conquest—one which includes a diversity of outcomes for settlements but is also characterized by broader patterns of urban and agricultural development and an expansion in economic infrastructure.

Comparatively, the Mediterranean coast has received less attention by early Islamic scholars.[39] Scholarship along the Syro-Palestinian coast has traditionally been dominated by researchers interested in classical and ancient antiquity. Accordingly, it has been—and continues to be—influenced by the intrinsic bias in the Arab chronicles and the seeming lack of archaeological data for the seventh and eighth centuries.[40] The use of old data and the reliance on literary sources has resulted in an overarching narrative of decline and abandonment along the Syro-Palestinian coast.[41] While H. Kennedy spearheaded the debate concerning the decline of the classical city, suggesting it had little to do with the Arab conquest, his conclusions for the coast have yet to be revisited. Relying on the archaeological data that was available to him at the time Kennedy surmised that: "the cities of the coast suffered the most from the new political circumstances as the Mediterranean became a war zone rather than a means of communication, though it must be remembered that the Persian invasions of the first decade of the seventh

[39] Discounting of course Whitcomb, "Qaysariya as an Early Islamic Settlement"; Hoffman and Pringle, *Ashkelon 8*; Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred"; Eger, "Ḥiṣn Al-Tīnāt on the Islamic-Byzantine Frontier: Synthesis and the 2005–2008 Survey andExcavation on the Cilician Plain (Turkey)"; Masarwa, "From a Word of God to Archaeological Monuments: A Historical-Archaeological Study of the Umayyad Ribats of Palestine"; Vorderstrasse, *Al-Mina: A Port of Antioch from Late Antiquity to the End of the Ottomans*; and the ongoing work of the Caesarea Coastal Archaeology Project, directed by Asa Eger and Beverly Goodman.

[40] Many late Roman ceramic forms continued to be produced well into the early Islamic period with little variation. As such, many seventh and eighth century ceramic assemblages have been dated too early, leaving the impression of a gap in the ceramic record.

[41] For instance, Petersen, *The Towns of Palestine under Muslim Rule AD 600-1600* who sees constriction and abandonment of coastal settlements a result of warfare. His analysis relies heavily on survey data from the 1980s which has yet been reexamined.

century had already disrupted much of the ancient commerce."[42] Citing the recorded transfers of foreign populations to the coast by Mu'āwiya, Kennedy suggests that, "although the sites were still inhabited, there was little or no continuity of population."[43]

This critique is not intended to discredit the foundational work of earlier scholars, but rather to draw attention to the inherent biases and gaps in the data that have had a detrimental impact on analyzing the Syro-Palestinian coast and identify those which deserve revisiting. The fundamental problem is many of these outdated and oversimplified narratives continue to be cited in scientific reports by scholars who are not specialists in the Islamic period. Moreover, they have been used to counter more recent revisionist views, such as that of A. Borrut, that have challenged the traditional narratives of decline along the Syro-Palestinian coast.[44]

A note on the conception of Late Antiquity

In addition to the many problems with the historical analysis of the sixth through eighth century, the terms that scholars use for the period can be problematic, coloring perceptions of this transitional phase, particularly when discussed from the perspective of Classical and Byzantine studies. In the wake of Pirenne, P. Brown coined the term Late Antiquity to describe the transitional period that spanned the late Roman and early Islamic periods.[45] The fluidity of the terminus date for the period of Late Antiquity—which can be taken to be the sixth, seventh,

[42] Kennedy, "Inherited Cities," 96.
[43] Kennedy, 96.
[44] For instance, Marriner, *Geoarchaeology of Lebanon's Ancient Harbours*, 220–21; Most recently, Gwiazda et al., "The Sidon's/Ṣaydā Northern Hinterland during the Early Byzantine-Early Islamic Transition," 172, 193. The authors' stated goal "is to present the changes and continuity of settlement processes in the region in the 7th-8th centuries in a broader context". Their use of old survey and excavation data for comparitive purposes, including that from Arqa and Khan Khalde, is problematic as is the dating of certain ceramic deposits by coins. Their conclusions of "a complete breakdown after the Arab conquest" among the settlements in Sidon's northern hinterland is suspect as is the conclusion that the region had "suddenly become a turbulent war zone."
[45] Brown, *The World of Late Antiquity [AD 150-750] from Marcus Aurelius to Muhammad*.

or late eighth centuries—exemplifies not only the disagreement among scholars of this transitional period but also their characterization of it. A terminus for Late Antiquity in the seventh century presumes abrupt cultural, social, and economic changes occurred—usually characterized by decline—following the transition to Muslim political rule. Kennedy challenged this narrative and instead argued that such changes were already apparent in the sixth century.[46] For Brown, who understood Late Antiquity as including the Umayyad Caliphate, 750 CE would be a good cutoff date for the period. Meanwhile, from a material culture perspective, a date of 800 CE would be an appropriate terminus date for the so-called period of Late Antiquity in the Near East when new ceramic styles emerge.[47] As A. Marcone aptly put it, the end date for Late Antiquity depends on which elements of rupture with the past one chooses to emphasize.[48]

1.2.4 Archaeological Problems

Though literary sources attest to the critical role the coast played during the formative years of Islam, the lack of archaeological data from the Syro-Palestinian coast for this period has left severe gaps in our understanding of settlements. As a result, discussions of the eastern Mediterranean littoral, of the fate of its settlements and ports, and of the nature of maritime trade tend to be understood through a lens of abandonment and decline. This, in part, reflects a lasting current of Pirenne's thesis of economic collapse within the Mediterranean following the Arab conquest. Coupled with the seeming lack of data for the seventh and eighth centuries has led many scholars to minimize and occasionally ignore all together the economic role of the

[46] Kennedy, "From Polis to Medina: Urban Change in Late Antique and Early Islamic Syria."
[47] This would mark the end of the Early Islamic I phase according to Whitcomb's archaeological periodization. Whitcomb, Donald, "Reassessing the Archaeology of Jordan of the Abbasid Period."
[48] Marcone 2008, 12.

Levantine coastal sites during the early Islamic period.[49] Those settlements that did survive the conquest are often thought to have done so on a reduced scale—diminutive versions of their classical selves. This certainly may have been the trajectory for some sites, but without a complete picture of the settlement patterns for this period it is difficult to understand the significance of such instances. Problematically, the narrative of decline is often corroborated by archaeological evidence that has itself been dated using faulty chronologies that have assumed a 700 CE terminus for production in the region. Until outdated frameworks and chronologies are challenged, this self-referential cycle will continue to impede interpretations of the coast during this critical period.

To address the limitation of the available data, I will consider here several of the primary underlying problems, including the difficulties of dating transitional ceramics, the preferential exploration of classical and biblical sites (especially along the coast), and uneven sampling throughout the coastal frontier zone.

Problems with Dating Ceramics

Ceramics provide one of the most reliable and universal ways for dating settlements and establishing site chronologies. However, there are several factors that make the ceramic chronologies for Syria-Palestine and its coast problematic. Until recently, the first century of Islamic political control was seemingly absent from the ceramic repertoire of the region. Sites that yielded Islamic pottery from stratified contexts were often misdated as there were no clear

[49] Picard, "Architecture, Institutions et Societes Portuaires Des Cites Maritimes Musulmanes de La Mediterranee Medievale, Bilan et Enjeux," 83; Kennedy, "Inherited Cities." Kennedy states that "the cities of the coast suffered most from the new political circumstances as the Mediterranean became a war zone rather than a means of communication, though it must be remembered that the Persian invasions of the first decade of the seventh century had already disrupted much of the ancient commerce."

ceramic typologies or chronologies.[50] Traditional dating of ceramics was based on the false assumption that ceramic styles followed political periods. According to this line of reasoning, changes in material culture would be evident in the seventh century following the conquest, and in the mid-eighth century after the transition to ‘Abbāsid rule. However, as Whitcomb noticed, “studies in patterns of change suggest a lag in material culture of at least two generations.”[51] This is because ceramic traditions rarely follow political periodizations, and the styles and technology of the sixth century often continued to be produced with little variance until the ninth century. As a result, many seventh and eighth century ceramics were understood as ‘Byzantine’ and dated a century too early, leaving an apparent gap in the ceramic record for the Umayyad period. An example of this is Fine Byzantine Ware (FBW) which was traditionally understood as belonging to the Byzantine period. However, subsequent studies of examples from stratified contexts later indicated that FBW continued to be produced through the ninth and tenth century.[52]

Well-stratified sequences of ceramics have certainly improved the typology and chronology of transitional and early Islamic types in recent years. As Avni notes, “these studies proved that the transition in pottery types from the Byzantine forms to the new Islamic forms occurred gradually in the second half of the eighth century and continued in the ninth century.”[53] Due to the lag in development of new styles of ceramics, it often lies with specialists to properly differentiate and date transitional and early Islamic ceramics.

As a result of the difficulties with differentiating the material culture of the seventh to ninth century, the first centuries of Islamic political rule are often invisible in early excavation

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[50] Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 32.
[51] Whitcomb, Donald, “Reassessing the Archaeology of Jordan of the Abbasid Period,” 386.
[52] Magness, *Jerusalem Ceramic Chronology*; Walmsley, *Early Islamic Syria: An Archaeological Assessment*, 52–53 The continuation of FBW into the early Islamic period led Walmsley to propose utilizing the name Fine Palestinian Ware (FPW) for the Islamic examples. .
[53] Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 32–33.

reports—because they are misattributed to an earlier period. The "compression of important diagnostic ceramic groups into earlier periods" has also impacted the identification of post-Umayyad sequences, which "has had a deleterious and long-lasting impact on accurately understanding the social history of early Islamic Syria-Palestine from an archaeological perspective."[54]

Difficulties in distinguishing and dating the ceramics of the seventh through ninth centuries have compounded the historical biases that are deeply rooted in the region. For instance, the apparent 'absence' of the late Roman/Byzantine repertoire of trade items following the conquest is interpreted as a collapse of the ancient trade cycle. Indeed, 700 CE is taken as a 'good' date for the end of late Roman shipping and interregional exchange in the eastern Mediterranean judging from the 'ceramic distributions.'[55] However, the chronologies of those ceramic distributions were often influenced by the historical record, and it is only recently that scholars have realized that many ceramics have been dated too early.[56] While the field has advanced significantly over the last two decades, the late seventh century is still referenced as a terminus or watershed in the literature and reports of the wider region because of these misunderstandings of the ceramic evidence. For instance, a recent analysis of sites in Sidon's northern hinterland concluded that by the early eighth century the area witnessed depopulation and a 'complete breakdown after the Arab conquest.'[57] The foundation of the argument, however, rests on outdated ideas of depopulation and militarization of the coast and old excavation data from several sites that has yet to be reexamined. Some settlements certainly

[54] Walmsley, *Early Islamic Syria: An Archaeological Assessment*, 55.
[55] McCormick, *Origins of the European Economy*, 111–12; Wickham, "The Mediterranean around 800," 163; Pieri, "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period," 49.
[56] See Magness, *The Archaeology of the Early Islamic Settlement in Palestine*; Armstrong, "Trade in the East Mediterranean in the 8th Century."
[57] Gwiazda et al., "The Sidon's/Ṣaydā Northern Hinterland during the Early Byzantine-Early Islamic Transition."

shrank or disappeared. However, rather than simply focusing on this as evidence of an overall pattern of abandonment and decline, we need to question what social and economic factors triggered communities to leave, and crucially, ask where did they relocate to and what was happening in other communities nearby? Many of the former Byzantine capitals shifted under early Muslim rule, causing sites like Caesarea and Scythopolis (Baysān) to lose some of their political importance. The foundation of new district capitals like Ramla in the *jund* (province) of Filasṭīn would have certainly drawn populations from nearby settlements, as people sought new economic opportunities. Thus, while adjacent settlements may have seemingly declined, it was likely more a consequence of the establishment and draw of new political centers than of wider patterns of economic and demographic decline.

Biases in Site Selection

Recent investigations of inland sites in Syria-Palestine have challenged the decline argument, but debates concerning the impact of the Muslim expansion and the end of antiquity continue, especially in reference to sites along the eastern Mediterranean coast. This seems in part due to a heavier focus on interior sites in the field of Islamic archaeology, whereas excavations along the coast are largely dominated by scholars of the ancient and Classical periods. For instance, the majority of archaeological work at Caesarea has been conducted by scholars interested in uncovering the monumental remains of the Roman port, while the post-classical history of the site is largely glossed over. Traces of the early Islamic town were excavated and published, and new work is currently underway that seeks to investigate the

transformation of the early Islamic settlement.[58] However, the signage and information presented at the Caesarea National Park is still primary focused on the pre-Islamic history of the site, with very few references to any Islamic remains.[59] Similarly, the site histories along the modern Lebanese coast are also heavily skewed toward the pre-Islamic remains. To date, most regional surveys and site summaries either end in the late seventh century or propose demographic and urban decline.[60] Focus has also been on the primary ports, while the intermediate coastal centers like Jenah, Khalde, and Khan Khalde have received less interest and reexamination.[61] One exception to this pattern has been the excavation and publication of several early Islamic shipwrecks off the coast of Israel/Palestine (see Chapter 4.5.3).

The Red Sea site of Ayla (Aqaba) provides a model case study for how Islamic era-focused excavations can help change the narrative surrounding a site. The thriving Roman-Byzantine coastal city of Aila appeared to have gradually declined following the conquest. However, excavations by the University of Chicago and Copenhagen University confirmed the presence of a vibrant early Islamic port (Ayla) that was established adjacent to the Byzantine city.[62] The research programs provide a strong counterpoint to excavations in Syria-Palestine,

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[58] Arnon, *Caesarea Maritima, the Late Periods (700-1291 CE)*; The Caesarea Coastal Archaeological Project.

[59] After the early Islamic town was excavated and published, it was covered by a grass lawn. There is one sign nearby that indicates that an Arab village once stood there.

[60] Gwiazda et al., "The Sidon's/Ṣaydā Northern Hinterland during the Early Byzantine-Early Islamic Transition"; Bartl, "Islamic Settlements in the Plain of Akkar/Northern Lebanon" In Bartl's survey in the Plain of Akkar in north Lebanon for instance, the identification of material from the 7th-10th century was "extremely difficult, if not impossible" due to the lack of comparative material available.

[61] Marriner, *Geoarchaeology of Lebanon's Ancient Harbours* for instance, favors Hugh Kennedy's view of decline after the mid-6th century and is skeptical of revised narratives of continuity. Paul Reynolds's work on the ceramics from Beirut has been influential in reconstructing connectivity within the wider region. Unfortunately, we do not have the same level of representation at other sites.

[62] Whitcomb, "Excavations in 'Aqaba: First Preliminary Report"; Whitcomb, *Aqaba, "Port of Palestine on the China Sea"*; Whitcomb, *Ayla, Art and Industry in the Islamic Port of Aqaba*; Melkawi, Amr, and Whitcomb, "The Excavation of Two Seventh Century Pottery Kilns at Aqaba"; Whitcomb, "The Misr of Ayla: New Evidence for the Early Islamic City"; Damgaard, "Modelling Mercantislism: An Archaeological Analysis of Red Sea Trade in the Early Islamic Period (650-1100 CE)."

demonstrating not only a flourishing continuity of settlement at the site following the conquest, but also a vast program of agricultural development and mining in the port's hinterland, and evidence for increasing maritime connectivity with far flung sites in the Red Sea and beyond.[63] Unfortunately, similar interest and attention has not been paid to the post-conquest levels at many of the Mediterranean ports and in their vicinity, hindering our understanding of settlement patterns and connectivity along the coast, especially during the seventh and eighth centuries. Hopefully, future Islamic era-focused excavations along the Syro-Palestinian coast will help reveal the lost history of the early Islamic ports.

The Uneven Distribution of Archaeological Investigations

A major impediment to developing a broader synthesis for the region of Bilād al-Shām is the uneven distribution and analysis of archaeological data. The data for Israel/Palestine is continuously expanding and readily available, which is a credit to the work of the Israel Antiquities Authority and the numerous academic institutions conducting excavations. While many of the biases discussed above have impacted the interpretation of the data, the broader scholarly approach has changed, and several studies have challenged the outdated paradigms that have plagued the field.[64]

While the coast of modern Israel from ʿAsqalān (Ashkelon) to ʿAkkā (Acre) has been comparatively well studied and published, there is less data for the seventh through ninth

[63] Morriss and Whitcomb, Donald, "The Umayyad Red Sea as an Islamic Mare Nostrum."

[64] Magness, *The Archaeology of the Early Islamic Settlement in Palestine*; Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*; Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000; Walmsley, "Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565-800"; Donald Whitcomb, "Islam and the Socio-Cultural Transition of Palestine – Early Islamic Period (638-1099 CE)"; Whitcomb, "Notes for an Archaeology of Muʿāwiya: Material Culture in the Transitional Period of Believers"; Whitcomb, "Qaysariya as an Early Islamic Settlement."

centuries from the Lebanese coast between Ṣūr (Tyre) and Ṭarāblus (Tripoli) (apart from Beirut), and that from Syria (Anṭartūs/Tartus to Lādhiqiyya/Latakia) is almost absent. The current political environment has, in some cases, halted worked and limited access to data. Moreover, because many studies have focused on more 'ancient' and Classical period deposits, many site histories, particularly along the coast, end in the mid to late seventh century following the Islamic expansion. While we cannot discount settlement shifts nor rely too heavily on literary sources that testify to significant maritime and naval activity under the Umayyads, the seeming absence of early Islamic remains from the Lebanese and Syrian coasts is suspect. Unfortunately, until serious work on the 'later' periods is undertaken throughout the wider region, it is impossible to understand how parts of the northern Syro-Palestinian coast adapted to the socio-political and economic changes that encompassed the late antique transition. Thus, the data is skewed toward southern Syria-Palestine, and it is therefore difficult to create a comprehensive and accurate account of the broader region. Moreover, many of the major Syro-Palestinian ports— Yāfā (Jaffa), ʿAkkā (Acre), Ṣūr (Tyre), Ṣaydā (Sidon), and Bayrūt (Beirut)—are now covered by modern development and inaccessible.[65] Even in Beirut where there is a relative abundance of data for the Byzantine-Islamic transition, this comes from limited soundings in the city, so our understanding is still very impressionistic.

[65] Islamic and Crusader deposits have been published from Jaffa, Acre, and Beirut. See Katherine Strange, "Islamic and Crusader Potter from Jaffa: A Collection of Whole and Reconstructed Vessels"; Burke, Burke, and Peilstöcker, *The History and Archaeology of Jaffa 2*; Stern, Shapiro, and Waksman, *'Akko I, the 1991-1998 Excavations*, 2012; Stern, Shapiro, and Waksman, *'Akko I, the 1991-1998 Excavations*, 2012; Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred"; Mikati and Perring, "From Metropolis to Ribat."

1.3 Approach/Methodology

The aim of this study is to challenge these obsolete frameworks and present a new one that permits the positive reading of evidence while also accounting for the variability one might expect for such a vast region. To provide a comprehensive understanding of the dynamics of the Islamic maritime frontier, this dissertation will draw on and integrate a range of archaeological datasets and historical sources. Due to the study's broad scope, it will rely primarily on the analysis of previously published material and artifact assemblages. While problems such as the uneven distribution of data and biased site selection cannot be entirely overcome without extensive new excavations from underrepresented areas of the region, this study seeks to breathe new life to old data by identifying evidence that challenges these problematic paradigms and biases. To confront notions of an 'Arab fear of the sea,' this study will identify evidence for the Muslim prioritization of ports, trade, and naval superiority. It will build the case that the early caliphs and governors of Bilād al-Shām strategically prioritized the sea and invested in maritime infrastructure and trade. To confront ideas of decline, this study will review the data for maritime exchange during the period. It will demonstrate that rather than being abandoned, trade was redirected. It adapted to the new political realities, laying the groundwork for a vibrant economic system. To challenge the characterization of the coast as a war-torn conflict zone and confront the militaristic biases in the literary sources, I will consider them in the context of their role in political and religious propaganda. I will suggest that the policies and institutions that have been primarily considered in terms of their military potential—such as the coastal fortifications known as *ribāṭs*—played numerous other roles in the religious, political, and economic spheres.

Overall, this dissertation seeks to show that rather than a zone of conflict characterized by decline and polarization between the Byzantine and Islamic empires, the reality along the

maritime frontier was far more complex. It was a zone governed by numerous political, economic, social, and religious processes. To better explore the coast's multifaceted nature, I will employ a framework derived from frontier theory to parse and analyze the components and processes that ultimately shaped the Syro-Palestinian maritime frontier.

1.3.1 What is Frontier Theory, and how can it be applied?

Frontier theory does not dictate a single methodological approach to analysis. Instead, it consists of a diverse set of methodologies that have been used to understand interactions between the varied political, cultural, environmental, and economic components that characterize frontier zones. Working beneath the broad umbrella of frontier theory, scholars have applied a variety of approaches and theoretical frameworks to border regions around the world and across time, from the US-Mexico border to the fluctuating boundaries between medieval states. Each frontier presents unique problems caused by complex historical, cultural, and environmental interactions, inviting a multiplicity of approaches. In essence, one could speak of a plurality of frontier theories.

The subject of 'frontier,' both in terms of academic inquiry and popular discourse, has a lengthy and colored history and remains at the forefront of current research. Frederick Jackson Turner's analysis of the American West may be considered an early foundational study on the subject.[66] For Turner, the American frontier was a wilderness waiting to be conquered, a meeting point between savagery and civilization. Nearly a century later, most scholars have moved

[66] Turner, *The Frontier in American History*.

beyond the somewhat problematic dualism of Turner's thesis, but frontiers and frontier theory remain at the forefront of research.[67]

One way that frontiers can be conceptualized is as boundaries or lines on a map differentiating and separating one area—such as a state—from another.[68] This perspective on frontiers, focusing on a clear line of demarcation, tends to emphasize differences and the contrast between regions. Accordingly, it is more suitable for separating legal entities, such as states whose jurisdictions begin or end at the frontier. It is less applicable when discussing areas of social or economic interaction, such as the Syro-Palestinian coast which was characterized by mixed populations and cross-cultural exchange.

An alternative—and more productive—way to view frontiers is as zones of interaction between neighboring political, cultural, or ethnic groups.[69] Studies like the one by K. Lightfoot and A. Martinez have challenged core-periphery models, demonstrating that, far from backwaters, frontiers were often the crucibles of cultural innovation and change.[70] The intermixing of groups, identities, and ideas transformed the frontier into a cosmopolitan area that often resulted in the blurring of political and cultural boundaries.

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[67] Most recently, Eger, *The Archaeology of Medieval Islamic Frontiers: From the Mediterranean to the Caspian Sea*; Randall, "Conceptualizing the Islamic-Byzantine Maritime Frontier"; Eger, *The Islamic-Byzantine Frontier: Interaction and Exchange Among Muslim and Christian Communities*; See also, Curta, "Introduction"; Mathisen and Sivan, *Shifting Frontiers in Late Antiquity*; Power and Standen, *Frontiers in Question: Eurasian Borderlands, 700-1700*; Berend, "Medievalists and the Notion of the Frontier."

[68] Amitai-Preiss, "Northern Syria between the Mongols and Mamluks: Political Boundary, Military Frontier, and Ethnic Affinities." Amitai-Preiss views the Mamluk-Mongol frontier in northern Syria as a clear political boundary, delineated by geography and emphasized by religious and ideological elements.

[69] Curta, "Introduction," 3; Mathisen and Sivan, *Shifting Frontiers in Late Antiquity*, 6; Brauer, "Boundaries and Frontiers in Medieval Muslim Geography"; Eger, *The Archaeology of Medieval Islamic Frontiers: From the Mediterranean to the Caspian Sea*; Ellenblum, "Were There Borders and Borderlines in the Middle Ages? The Example of the Latin Kingdom of Jerusalem."

[70] Lightfoot and Martinez, "Frontiers and Boundaries in Archaeological Perspective." Lightfoot and Martinez used their fur-trade outposts in western North America to reexamine colonialist perspectives that have inhibited our understanding of the dynamics along frontiers.

Several recent studies have applied frontier theory to the inland Islamic-Byzantine frontiers, and these serve as a useful departure point for discussing the coast and maritime frontier.[71] A. Eger's analysis of the Syro-Anatolian *thughūr* (frontiers) revealed a dynamic zone of cross-cultural exchange, consisting of multiple layers of both real and imagined interactions.[72] These interactions included the external competition for resources, internal relationships between the state and periphery, as well as ideological and military conflict. Eger demonstrated that, once stripped of its religious and political ideologies, the Islamic-Byzantine frontier was a region of "continuity, ecological subsistence and local economy."[73] Moreover, while the annual overland raids into Byzantine territory served a political and religious purpose, they were also closely tied to pastoral transhumance movements, the competition for resources, and trade.

Eger's analysis of the ideological nature of the inland frontier provides a relevant model for evaluating the coastal zone. Apocalyptic narratives and the importance placed on *jihād* were propagandistic measures initiated by the state to settle, control, and develop the northern frontier. As demonstrated by R. Haug, the political importance of maintaining the concept of the frontier and *jihād* remained at the forefront of caliphal efforts long after the northern frontier stabilized.[74] Indeed, the caliph's status as a *ghāzī* ruler, or frontier fighter, was a powerful legitimizing tool that was employed by several dynasties throughout the ages.[75] As will be seen in Chapter 3.3, similar ideology was employed along the maritime frontier to not only settle and defend the coast, but to establish political legitimacy and sacralize the land.

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[71] Eger, *The Archaeology of Medieval Islamic Frontiers: From the Mediterranean to the Caspian Sea*; Eger, *The Islamic-Byzantine Frontier: Interaction and Exchange Among Muslim and Christian Communities*; Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier"; Bonner, "The Naming of the Frontier: Awāṣim, Thughūr, and the Arab Geographers."
[72] Eger, "Frontier or Frontiers? Interaction and Exchange in Frontier Societies," 19–22.
[73] Eger, 311.
[74] Haug, "Frontiers and the State in Early Islamic History: Jihad Between Caliphs and Volunteers."
[75] Including the Ṣaffārids (r. 861-1003), the Ṭūlūnids (r. 868-905), and the Ghaznavids (r. 977-1186).

R. Amitai-Preiss's analysis of the Mamluk-Mongol frontier in northern Syria examines methods of border control that also have parallels along the coast.[76] These include the establishment of communications between the frontier and center through a system of watchtowers and signals, the creation of ideologies to emphasize the 'in-group' and the 'others', and the creation of a frontier wasteland for defense.[77] Amitai-Preiss also demonstrated the permeability of the highly militarized Mamluk-Mongol political frontier. Despite the conflict, trade and exchange and the movement of scholars, pilgrims, and spies characterized the interactions across this militarized zone. Amitai-Preiss argues that rulers needed to maintain a careful balance between defining the frontier and leaving enough slack to ensure that its inhabitants could pursue their livelihoods. As this dissertation will demonstrate, a similar phenomenon existed along the maritime frontier, with the early Islamic state encouraging economic development through settlement, infrastructure improvements, and trade, while also maintaining the impression of a secure maritime border.

While a great deal of research has been conducted on defining and unravelling Islamic land-based frontiers, including those of Syro-Anatolia and the Euphrates, less attention has been given to the Mediterranean maritime frontier.[78] The term is often employed very generally to the post-*Mare Nostrum*—when the Roman Mediterranean 'lake' was transformed into a contested sea between the warring Byzantine and Islamic powers. Several studies have advanced our understanding of the dynamic interactions and processes that unfolded across the various maritime frontiers of the eastern and western Mediterranean in the early and middle Islamic

[76] Amitai-Preiss, "Northern Syria between the Mongols and Mamluks: Political Boundary, Military Frontier, and Ethnic Affinities."

[77] Scorched-earth tactics along the coast were not common during the early Islamic period, but they were employed along the Egyptian and Syro-Palestinian coast by Salah al-Din and the Mamluks.

[78] See the recent work by Randall, "Conceptualizing the Islamic-Byzantine Maritime Frontier"; Randall, "Setting an Insular Table: Pottery, Identity, and Connectivity on Crete and Cyprus at the End of Antiquity."

periods, however, a clear and concise definition of what exactly constitutes a maritime frontier and how it differed from land-based frontiers is missing—a gap I shall turn to next.

1.3.2 The Problem of Maritime Frontiers

While maritime frontier zones share many aspects with their inland counterparts, their nature as a confluence of the land and sea creates numerous aspects that are unique among frontiers. Inland frontiers can be a geographical barrier or a permeable zone, but they always divide and connect to land. In this aspect, maritime frontiers are unique. Firstly, they mark the transition between sea and shore—two intrinsically different environments with their own set of variables. Secondly, as a zone, they contain both marine and terrestrial components.

The dual geography of the maritime frontier is key to understanding activity and subsistence within coastal zones. They are shaped by the prevailing winds, currents, and tides just as crucially as inland frontiers are defined by mountains, rivers, and zones of fertility or desert. These powerful forces of nature defined patterns of movement along the frontier, facilitating travel along some routes, while making others slow, dangerous, or impassable. Factors that impacted maritime travel also included the seasonal changes in the prevailing wind patterns as well as the regular breathings of the sea and land in the form of diurnal breezes. These weather phenomena created cyclical patterns that defined and constrained sailing, shipping, fishing, and raiding as much as spring and winter shaped agriculture inland. The winds, currents, and seasons combined to give maritime frontiers an innate momentum and directionality that does not exist for inland zones.

Yet, in contrast to these cyclical patterns, elements of the maritime frontier could also be highly variable. Conditions in the open sea are different than those nearer to shore and require

different forms of knowledge and techniques of travel and navigation. Ships could be subject to reefs and shoals, surprise storms, changes in wind, or doldrums. Visibility across stretches of the sea might be hampered by atmospheric phenomena throughout the year, including but not limited to storms, humidity, and dust.

The variable geography of coastlines also dictated local patterns of settlement, subsistence, and movement along the maritime frontier. Shallow coasts with shifting sands demanded different navigation techniques than rocky, mountainous shores. Regions with deep bays might create safe harbors for larger ships, while sandy stretches and broad mudflats might only allow shallow-drafted vessels to approach and beach. Reefs and submerged rocks created treacherous reaches for all vessels. River mouths played an important role as well, both as sources of fresh water, and creating places for vessels and goods to penetrate inland.

The diverse topography of coasts also affects visibility both from the sea and shore. For mariners, outlines of coasts and prominent features such as mountain peaks, city walls, and watchtowers from seaward become elements of the mental map of the maritime frontier, serving as waypoints, navigational markers, or expressions of culture or political power.[79] The landscape itself was as crucial to navigation as the stars.

As the maritime frontier was comprised of both sea and shore, movement along it required different means of technology. Ships that traverse the maritime frontier varied depending on their purpose—fishing, opportunistic tramping, long distance exchange, or warfare. In some instances, vessels from one region of the maritime frontier may be constructed according to different technological principles. Accordingly, the interaction of different cultures across this marine environment will often lead to the development and innovation of new

[79] Agius, *Seafaring in the Arabian Gulf and Oman: The People of the Dhow*, 176–77.

maritime technologies, such as hull shape or sail plan.[80] Different classes of ships will have their own prerequisites along the maritime frontier. Heavily manned warships, for instance, would require frequent stops along the shore for water and shelter and they would be better equipped to beach along sandy stretches of shore than bulky transport vessels requiring a harbor with facilities for mooring and unloading cargo. Private merchant ships with small crews might similarly hug the coast or embark on long distance open ocean voyages.

The interface between the sea and shore is at the heart of the maritime frontier. It is the divide between two environments, a transfer point of people, commodities, and knowledge. The maritime frontier provided its inhabitants access to both marine and terrestrial resources. Fishing was added to agricultural, pastoralism, and trade as a sustaining factor for communities. The dual nature of the frontier also dramatically impacted the mobility of the people who lived within it. Ports and villages linked terrestrial and maritime transportation networks. This gave coastal dwellers access to local and overseas commodities via maritime trade and linked them to inland sites through down-the-line exchange. These exchange networks were social as well as economic. Communities and individuals involved in maritime exchange will often develop social, cultural, and economic ties with peers or entities in local or distant parts of the maritime frontier thereby creating mechanisms for information to flow, as well as social insurance during times of hardship.

Maritime frontiers also formed physical boundaries between competing states and/or political powers. As R. Brauer argues, while Islamic maps give the impression of a permeable maritime frontier between the *dār al-Islām* and *dār al-ḥarb*, the seacoast was sharply defined

[80] Rieth, "Pour Une Approche Nilotique Des Origines (ve-Viie Siècle) de La Construction Navale «Sur Membrure Première » En Méditerranée."

and strictly controlled, with arriving passengers, Muslim and non-Muslim alike, expected to carry appropriate documentation, and often subjected to "highly invasive examination" by port authorities.[81] Establishing control over the coastal interface permitted degrees of control over the maritime sphere in terms of trade, movement of fleets, exchange of information, and defense. Naval prowess is the first mechanism of achieving control over the maritime frontier that comes to mind, however, states and political entities could employ a variety of political, economic, and ideological methods to secure dominion over the sea. These include, but are not limited to, settling populations (often foreign) along stretches of coast to populate and/or break local alliances, constructing fortifications along the coast for defense and control of the shore and maritime routes, the use of monumental architecture for expressions of power and authority, renovating coastal and inland infrastructure including ports, warehouses, roads, and customs stations to facilitate and control trade, and the use of political and religious propaganda.

1.3.3 Research Questions

This study will follow Eger's approach and treat the maritime frontier as a confluence of tightly interrelated and interacting layers, with political (administrative, political, military), cultural (religious, material culture), economic (resource extraction and processing, agricultural and industrial production, shipping), and geographic (topographic features, physical character, climate, natural resources) components. While each of these could be the subject of a study, this dissertation is primarily more concerned with creating a broad overview of how these layers interacted. To avoid getting lost in the sea of material or drawn down meanders, I will focus on

[81] Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," 33.

four primary questions to help guide analysis—while recognizing that there are many more that also need to be asked.

1. How did the early Arab rulers conquer and consolidate power along the Syro-Palestinian coast, and what did their policies and priorities tell us about their approach to the sea?
2. How did the maritime frontier compare to land-based frontiers, and how did the unique nature of the coast impact the Muslim approach to the frontier?
3. How did maritime trade transform during the Byzantine-Islamic transition, and what economic, social, and technological aspects drove the seventh and eighth century changes?
4. How does frontier theory help us form a more multi-faceted and complex view of the maritime frontier and the Islamic policies and institutions created to support it?

To approach these questions, Chapter 1 will begin by examining the political and ideological processes that unfolded along the maritime frontier and had a role in shaping its development and administration. Primarily relying on the primary literary sources, it will propose a new five-stage model for the conquest, revealing how Muslim policies and attitudes toward the maritime frontier evolved.

Chapter 3 will examine how the maritime frontier was perceived by the state, as well as the various methods that the early Muslim rulers used to exert control over the coastal region, including creating new administrative zones and positions focused on the shore, constructing and renovating economic and defensive infrastructure, creating a navy with a supportive network of arsenals and bases, and settling foreign populations in the coastal zone. This chapter will also

consider how the state employed religious ideology and political propaganda to sacralize the coast and transform it into both a religious boundary as well as a militarized border between the *dār al-Islām* and the *dār al-ḥarb*. Evidence will include the literary traditions of praise (*faḍā'il*) that developed around certain coastal centers, such as Ashkelon (ʿAsqalān) and Beirut (Bayrūt), as well as descriptions of the coastal *ribāṭ* and their role in *jihād*.

Chapter 1 shifts from the political, military, and religious institutions that shaped the Islamic maritime frontier to analyzing maritime trade and the economic structures that supported the region. At the outset, this chapter will look at the physical geography of the eastern Mediterranean and how the dynamic nature of the winds, currents, and coastal topography impacted the development of seafaring, trade, and connectivity along the Syro-Palestinian coast. The chapter will then examine the material evidence available for analyzing the state of maritime trade during the transitional period of the seventh and eighth centuries. It will outline the problems facing analysis as well as critique qualitative arguments about transformations in connectivity and exchange within the Mediterranean. I will propose a new interpretation of trade patterns that challenges the typical narratives of wholesale contraction and decline, and advocates for a more nuanced view that emphasizes the redirection of trade, the resilience of maritime networks, and continuity with long established trading patterns. And finally, this chapter will look at how transformations in maritime exchange, including the prominence of coastal sailing, may have impacted port infrastructure as well as the permeability along the maritime frontier.

One of the primary arguments of this dissertation is that we need to view the maritime frontier not simply as a military or political border, but as a complex zone of interaction that interwove religious, political, military, social, political, and economic layers. As a case study of

how this approach can yield new interpretations, Chapter 1 will reinterpret how the Palestinian *ribāṭs* (coastal forts) functioned as multi-component sites that unified these layers of the early Islamic frontier. Typically understood as military institutions, I will demonstrate how these coastal forts functioned as expressions of political power, focal points for religious ideology and sacralization, bastions for establishing control over the sea and coast, and centers of economic activity and cross-cultural interaction.

Chapter 1 will conclude this study by providing a new vision for the Islamic maritime frontier by demonstrating that it was a complex and dynamic zone, characterized by resilient trade networks and cross-cutting exchanges, and shaped by Muslim policies that actively sought to utilize and develop the coast. Acknowledging the limits of this study, I will conclude by looking ahead at priorities of future research and excavation, so that future scholars can continue to build a more nuanced and accurate image of a coastal zone that would be the stage for Muslim and Christian interaction through the centuries.

Chapter 2 - The Conquest and Consolidation of the Coast

The specifics of the Muslim conquest of the Syro-Palestinian coast are rarely explored in any detail in historical overviews of the region.[1] Apart from the occasional mention of certain strategic coastal cities like Caesarea (Qaysāriya), which resisted the Muslim forces for several years, the military campaigns are treated in broad strokes.[2] However, a study of the conquest narratives reveals that the early Muslim rulers carried out a complex and calculated plan to conquer and consolidate the Mediterranean littoral. A fine-grained approach to the literary sources provides insights into numerous phenomena, including new perspectives on the strategies underlying the conquest of the coast, the value that the early caliphs placed on maritime activity, the shifting priorities of the Muslim state, the reasons for the eventual location of arsenals, and how the system of administering and controlling the maritime frontier developed.[3] Building on the work of R. Mikati and others, I've dedicated this chapter to crafting a thorough and updated account of the conquest of the coast.

It is essential to keep in mind that the conquest and consolidation of the Syrian coast should not be perceived simply as a series of battles and political events, disarticulated from the lives and perceptions of the people that they affected. The conquest was a complex process that involved not only military and political activity, but also a broad range of interactions, from

[1] Mikati and Masarwa are the exception. Mikati's dissertation on early Islamic Beirut provides a thorough overview and analysis of the conquest of the coast based on her review of literary and biographical sources. Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred"; Masarwa, "From a Word of God to Archaeological Monuments: A Historical-Archaeological Study of the Umayyad Ribats of Palestine."

[2] For instance, Kennedy, "The Last Century of Byzantine Syria"; Petersen, *The Towns of Palestine under Muslim Rule AD 600-1600*; Taxel, "The Byzantine-Early Islamic Transition on the Palestinian Coastal Plain: A Re-Evaluation of the Archaeological Evidence."

[3] Though I use the term caliph (khalifa), I recognize that prior to 'Abd al-Malik, the standard term for the leaders of the Islamic state was *amīr al-mu'minīn*. See Donner, *Muhammad and the Believers at the Origins of Islam*, 98–99, 211.

negotiations with established communities, the integration of new populations, and the creation of new religious and political ideologies as well a myriad of other relations and exchanges. However, the first step in being able to discuss these complex transformations and interactions is to have a firmly established sequence of events. Therefore, this chapter will focus on using the Arab and, where possible, the Eastern Christian literary sources to establish a scaffolding upon which to base subsequent discussions (such as the changing ideological landscape and the process of sacralization discussed in Chapter 3.3 or the transformations in trade and cross-cultural exchange discussed Chapter 1).

The sequence of events proposed in this chapter will be grounded in the chronicles of al-Balādhurī (d. 892) and al-Ṭabarī (d. 923), which are the primary Arab sources for the conquest of Bilâd al-Shâm. I have also relied on R. Hoyland's translation of *Theophilus of Edessa* to incorporate relevant accounts from the Christian sources.[4] It should be emphasized that the Arab literary sources were compiled several centuries after the recorded events and are largely focused on the capitulations, sieges, and defense of the most important coastal cities, offering little in terms of the social and economic situation of these sites. Additionally, the accounts are often contradictory in terms of events and chronology.[5] Nonetheless, they provide a wealth of information regarding the early Muslim efforts to secure, fortify, and consolidate power along the Syro-Palestinian coast, including which cities and towns proved most difficult to conquer, and why the early Muslim rulers may have shifted the Byzantine provincial capitals of Tyre and Caesarea inland.

[4] Hoyland, *Theophilus of Edessa's Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*.
[5] Donner, *The Early Islamic Conquests*, 111.

While control of the coast is often considered to have been completed during the final phase of the conquest of Syria, the Arab chroniclers reveal that it was an ongoing and evolving process that began during the early stages of the expansion. To help illuminate the complex sequence of events, in which combined Muslim forces fought on multiple fronts and policies dramatically changed, I have organized the conquest and consolidation of the coast into five stages (see Table 2).

2.1Conditions prior to the conquest

While a comprehensive summary of conditions in Syria-Palestine prior to the conquest is beyond the scope of this dissertation, it is worthwhile to briefly consider the political situation of the region prior to the arrival of the Muslim forces. Scholars have sought to understand and account for the rapid success of the conquest and why Syria-Palestine fell so easily to the Arabs. Some have argued that the region had already begun a period of social, urban, and economic decline in Syria-Palestine and the eastern Mediterranean in general, whether because of the plague of 541-3 CE, the Persian invasions, or other phenomena.[6] Although such views have been directly challenged, the picture is neither clear nor fully settled upon.[7]

[6] For instance, Kennedy, "The Last Century of Byzantine Syria," 180–83; Foss, "The Persians in Asia Minor and the End of Antiquity."

[7] For challenges to a sixth century decline and the violence of the Persian invasions, see Magness, *The Archaeology of the Early Islamic Settlement in Palestine*, 195–214; Pentz, *The Invisible Conquest*; Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 13, 29–30; Walmsley, *Early Islamic Syria: An Archaeological Assessment*, 31–47 provides a nice summary of the debate.

Stage	Dates	Caliphs	Characteristics
1	632/34 to 640/41	Abū Bakr ‘Umar b. al-Khaṭṭāb	Primary Mediterranean ports captured. Certain coastal cities like Tripoli (Ṭarāblus), Caesarea, and Ashkelon continued to be centers of rebellion. A governor of the coast was appointed for the defense of Syria-Palestine’s coast. Garrisons were stationed and rotated along the coast.
2	644 to 692	‘Uthmān Mu‘āwiya Yazīd I Marwān I ‘Abd al-Malik	Muslim soldiers given land to permanently settle along the coast. Tripoli finally conquered and settled with a Jewish population and a garrison. Mu‘āwiya repairs infrastructure in Acre and Tyre and organizes the first naval raid against Cyprus. He then captures the island of Arwād, and leads raids against Kos, Rhodes, and Crete. Muslim fleet wins major victory against Byzantine fleet in the Battle of the Masts in 655. As caliph, Mu‘āwiya selects the Urdunn coast as the center of his naval program. The first arsenal is established at Acre in 669/70, and a new arsenal is built in Egypt.
3	693 to 717	Walīd I Sulaymān	Expansionist phase of the navy. Tripartite division of the fleets along the northern coast between Latakia (*jund* of Hims), Tripoli/Beirut (*jund* of Dimashq), and Acre (*jund* of Urdunn). Failed siege of Constantinople in 717/18
4	717 to 750	‘Umar II Yazīd II Hishām Walīd II Marwān II	End of the tripartite division of fleet along the northern coasts. The navy is brought to Tyre and the first ḥadīth scholar is appointed as commander of the fleet. This marks the initial appearance of the spiritual-military leader along the maritime frontier. Hishām moves arsenal from Acre to Tyre
5	750 to 9th century	‘Abbāsid and Ṭūlūnid caliphs	Sacralization of the coast through ideological and political propaganda. Religious scholars settle in coastal frontier cities. Caliphs rebuild fortifications and mosques along the coast and build up navy, seeking to claim the *ghāzī*-caliph identity.

Table 2: Five stages of the early Islamic Maritime Frontier

Ultimately, it seems that on the eve of the Arab conquest, the Byzantine Empire was in a precarious position, its armies weakened, and borders threatened by a twenty-five-year long war with the Sasanians. Syria first fell to the Sasanians in 611 CE, and by 617 Egypt was firmly under Persian control. It's possible that some of the inhabitants of these conquered areas may have welcomed the removal of an oppressive Byzantine yoke, though very little is likely to have changed in the overall day-to-day happenings of life. While a few cities such as Antioch, Apamea, and Jerusalem may have witnessed violence by the Persian forces, the shift to Sasanian political rule is largely indistinguishable in the archaeological record (much like the Islamic expansion of several decades later). Though the Byzantines managed to restore control over Syria in 629/30, it was short-lived, and in 633 Muslim forces invaded southern Syria.[8]

2.2 First Stage (632/34 to 640/41 CE): Initial Occupation of the Coast

After Muḥammad's consolidation of power in Arabia, the expansion into Syria was the next logical step for economic, religious, political, and strategic objectives.[9] The first Arab armies moved into southern Syria in 633 led by four commanders: ʻAmr b. al-ʻĀṣ, Yazīd b. Abī Sufyān, Shuraḥbīl ibn Ḥasana, and Abū ʻUbayda b. al-Jarrāḥ.[10] Once the countryside was firmly under their control, the early Muslim commanders focused their efforts on securing the most important towns, including Bostra (Buṣrā), Gaza (Ghazza), Pella (Fiḥl), Scythopolis (Baysān), Damascus (Dimashq), as well as Homs (Ḥimṣ) and Baalbek (Baʻlabakk).[11] Following decisive victories over the Byzantine army at several major battles between 634-36, the Muslim armies

[8] Donner, *The Early Islamic Conquests*, 99, 111.
[9] For the details and phases of the conquest into Syria, see Donner, *The Early Islamic Conquests*.
[10] Donner, 114.
[11] Donner, 112.

spent the next decade consolidating their power along the Mediterranean coast and throughout the countryside.

Due to the geographical complexity of Syria-Palestine and the need to pay and support the garrisons who were spread throughout the region, Caliph ‘Umar (r. 634-44) introduced a new administrative system between 637-639 in which al-Shām was laterally divided into four (and later five) provinces known as the *ajnād* (s. *jund*) (Figure 2).[12] From south the north, these included Filasṭīn, al-Urdunn, Dimashq, and Ḥimṣ.[13] A fifth *jund*, named after its capital city Qinnasrīn, was established under Yazīd I (r. 680-83) by carving out the northern half of *jund* Ḥimṣ.[14] Each *jund* had its own regional military center which functioned as a capital and was located in a strategically located and already established city: Ludd (Lod), Tabariyya (Tiberias), Damascus, and Ḥimṣ. The early establishment of this new provincial administrative system is supported by papyri documents from the Negev town of Nessana, which identify Nessana and other towns as under the administration of Gaza in the *jund* of Filasṭīn, as well as numerous copper coins that were minted in the various *ajnād*.[15]

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[12] Walmsley, “The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.,” 44–45.

[13] Scholars have debated the origins of the Umayyad ajnad, with some arguing that they were in fact Heraclius’s pre-conquest Byzantine themes. See for instance, Shahid, “The Umayyad Ajnād: Byzance Apres Byzance” I agree with Walmsley’s argument, supported by the 7th century Nessana papyri and numismatic evidence, that jund system was established after the conquest.

[14] Walmsley, “The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.,” 50.

[15] See Walmsley, “The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.” For the Nessana papyri, see; Kraemer, *Excavations at Nessana, Volume 3*.

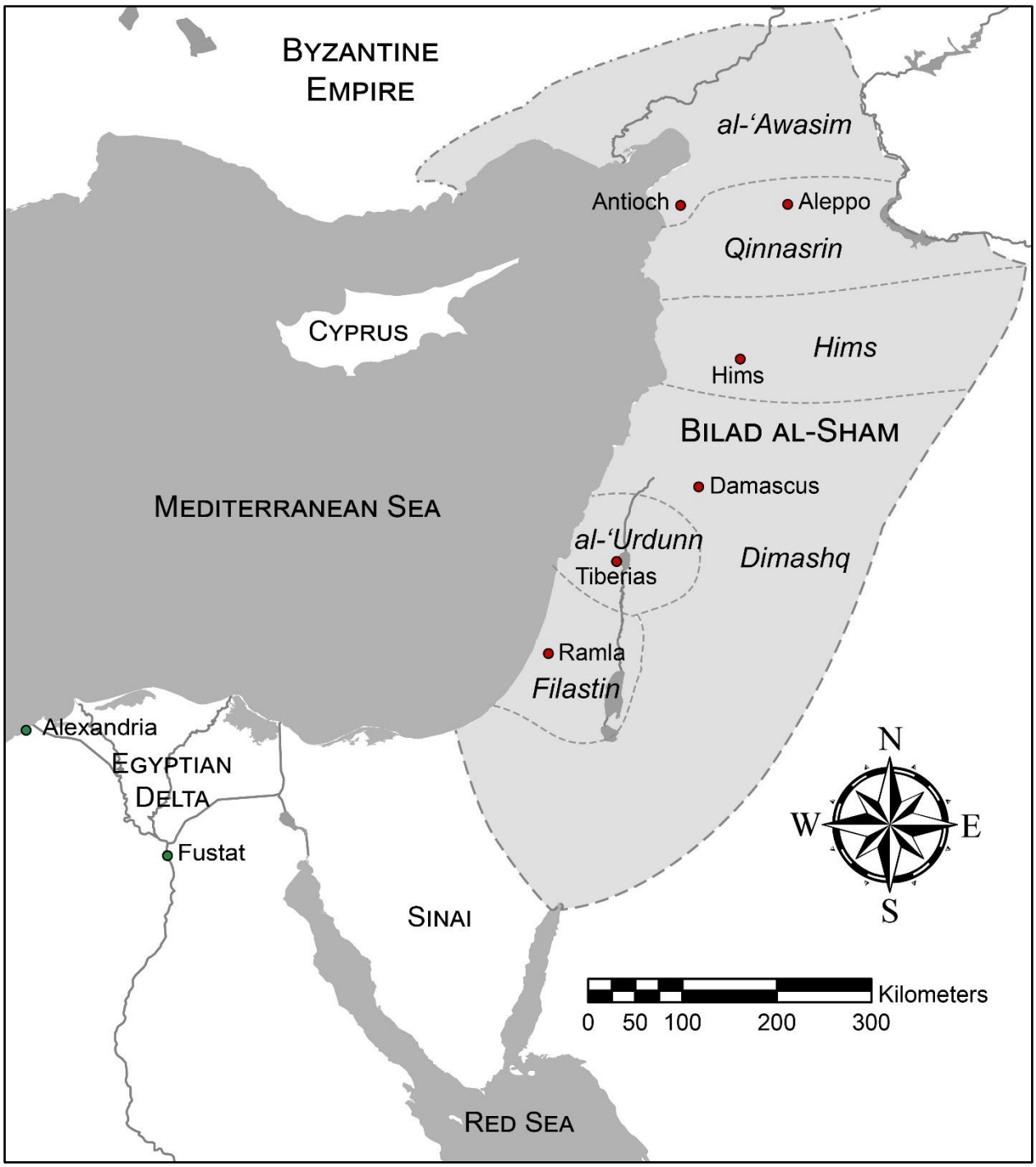

Figure 2: Administrative districts of Bilād al-Shām, and their provincial capitals (by Morriss)

The initial conquest of the Syro-Palestinian coast appears to have proceeded with limited instances of open conflict, with only the most strategic centers putting up resistance against the Muslim forces. Many settlements seem to have surrendered on peaceful terms, though that did not preclude some of them from participating in Byzantine counterattacks on occasion.[16]

When the time came to divert resources to the coast, Muslim commanders and their lieutenants focused on capturing the primary coastal settlements and stationed small Arab garrisons to guard them.[17] Up until this period, Byzantine control of the Mediterranean sea lanes was largely uncontested, and the ease with which the Byzantines were able to resupply certain ports, such as Tripoli (Ṭarāblus) and Caesarea (Qaysāriya), meant that it often took years for the Muslim forces to definitively conquer them.[18]

'Amr b. al-'Āṣ led the first concerted effort to secure the coast during the latter part of Abū Bakr's caliphate (r. 632-34), focusing his endeavors on southern Palestine (Jund Filasṭīn), where 'Amr may have held economic interests.[19] These initial coastal campaigns occurred in tandem with the conquest of the major inland towns of Palestine and Syria.[20] After capturing Gaza (Ghazza), 'Amr's forces moved north, taking Yavne (Yubnā) and Jaffa (Yāfā), both of which likely capitulated through treaty (*ṣulḥ*).[21] Shuraḥbīl, who was another leading commander, moved against northern Palestine and parts of jund Urdunn. Reports of the conquest of Urdunn's

[16] For instance, Ashkelon was taken early in Amr b. al-As' campaign along the Palestinian coast. However, it had to be reconquered by Mu'āwiya in 640-41 after its inhabitants had broken the terms of their truce. See, al- Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:142.

[17] See Donner, *The Early Islamic Conquests* for a detailed discussion of the first and second stages of the conquest of Syria.

[18] Donner, 154.

[19] See Lecker, "The Estates of 'Amr b. al-'Āṣ in Palestine: Notes on a New Negev Arabic Inscription";Amr may have seized the estate of 'Ajlān during the conquest of Palestine. See Blakely, "Ajlan." regarding the potential location and archaeological remains of Amr's estate.

[20] According to Donner's (*The Early Islamic Conquests*, 112) phasing of the conquest, this occurred during the second phase (634-36 CE), when Muslim forces besieged and occupied Bostra, Gaza, Fahl, Baysan, Damascus, and briefly Ḥimṣ and Ba'lbakk, and defeated the Byzantines during several decisive battles.

[21] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:138.

coast vary, including the accounts of seizing the critical ports of Acre (ʿAkkā) and Tyre (Ṣūr). One account names Shuraḥbīl as the commander who conquered Acre and Tyre. Another lists ‘Amr as the one who was directed to take the coast of Urdunn, while Yazīd b. Abī Sufyān and his brother Mu‘āwiya b. Abī Sufyān came to his aid.[22]

Significantly, during this early phase of the conquest, it seems that each commander was directed to a different province and given military authority over it.[23] Thus, ‘Amr held authority over Filasṭīn, Shuraḥbīl over Urdunn, Yazīd over Dimashq, and Abū ‘Ubayda over Ḥimṣ. During this initial period, it seems that the commanders operated independently, though they would come to the aid of each other in the event that Byzantine forces posed a significant threat.

This autonomous situation ended when Caliph Abū Bakr summoned commander Khalid b. al- Walīd from Iraq and appointed him as commander-in-chief of all the Syrian forces.[24] The details of this position are somewhat vague. It seems to have entailed the command of the troops of al-Shām’s provinces and may have been the equivalent of the governor of Syria (Syria-Palestine).[25] When ‘Umar b. al- Khaṭṭāb (r. 634-644) became caliph, he dismissed Khalid and appointed Abū ‘Ubayda to commander-in-chief.[26] The latter seems to have maintained this position until he succumbed to the plague of Amwas (Emmaus) in 639. Abū ‘Ubayda was replaced by Yazīd who also died from the plague later that year, so ‘Umar gave the position to Yazīd’s brother Mu‘āwiya. Significantly, the creation of a commander-in-chief in charge of all

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[22] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:116–17.
[23] al-Balādhurī, 1:116.
[24] Donner, *The Early Islamic Conquests*, 135; Though I use the term khalifa, or caliph, throughout, the term was not employed until ‘Abd al-Malik’s reign. All leaders before him used the term, amīr al-mu’minīn (Commander of the Believers). Donner suggests that the adoption of the title, khalifa, may have been tied to ‘Abd al-Malik’s desire to bolster the legitimacy of Umayyad rule following the Second Civil War. See Donner, *Muhammad and the Believers at the Origins of Islam*, 211.
[25] ‘Amr may have held this position briefly, prior to Khalid.
[26] Donner, *The Early Islamic Conquests*, 130; al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:116.

the Syrian forces suggests a new emphasis on coordination and may indicate the adoption of a new centralized strategy regarding the interior and coast. Indeed, sometime between 637 and 639 was when ‘Umar established the new provincial administrative structure of the ajnād, which facilitated the collection of revenue and resources that went to supporting the garrisons, many of whom were stationed and later settled along the coast.[27]

Caesarea (Qaysāriya) and Ashkelon (both in Filasṭīn) appear to have also been targets during this initial phase of the conquest and may have witnessed brief sieges led by ‘Amr and possibly Shuraḥbīl.[28] They were the primary Byzantine ports of Palestine at the time and held significant tactical and economic value. Caesarea was the Byzantine provincial capital, while Ashkelon maintained close commercial ties with Egypt. Ashkelon was also situated between Egypt and the northern Palestinian coast, making it a strategic naval base. Both Caesarea and Ashkelon were well-defended with city walls and seemingly well-supplied by Byzantine naval forces. As a result, both port cities proved more difficult to conquer and remained contentious areas for several years. After repeated attempts, Caesarea was finally captured in 640/1.

Efforts to secure the northern Syrian coast began only after Antioch surrendered by treaty in 638 CE, during the final phase of the conquest of Syria-Palestine between 637-647/8.[29] The coastal cities of Ḥimṣ were the first areas to be taken by the Muslim commander, Abū ‘Ubayda’s forces. Once Antioch was secured in 638, Abū ‘Ubayda sent one of his lieutenants, ‘Ubāda b. al-

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[27] Walmsley, “The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.,” 32–33.

[28] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:140, 142 relates several surviving accounts that Amr b. al-As was the first to lay siege on Caesarea in 634 CE. It seems he was unsuccessful, and the final capitulation of the city did not occur until 640/41. The final capture of Caesarea is also recorded by Theophanes the Confessor, Agapius, Michael the Syrian, and the Chronicle of 1234. For the translations, see Hoyland, *Theophilus of Edessa’s Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 123–24; Donner, *The Early Islamic Conquests*, 112, 154.

[29] For a summary of the conquest of Antioch, see De Giorgi and Eger, *Antioch*, 240.

Ṣāmit al-Anṣārī, south to Latakia (al-Lādhiqiyya). After a brief siege, the inhabitants of Latakia surrendered and ʻUbāda continued south, taking the coastal cities of the *jund* of Ḥimṣ, including Jabalah, Baldah (located two parsangs from Jabalah), and Anṭartūs.[30]

Intriguingly, Abū ʻUbayda posted garrisons in these coastal strongholds. They were charged with protecting the coast during the sailing season when Byzantine raids were most expected.[31] Although sailing during the winter was possible, the chances of inclement weather increased, making attacks less probable.[32] The establishment of these garrisons indicates that the coast of Ḥimṣ functioned as the primary line of defense and warning against the Byzantine raids during this early phase.

Subsequently, Muslim forces continued moving south. Commander Yazīd b. Abī Sufyān and his brother Muʻāwiya campaigned against the littoral of Jund Damascus, taking Sidon (Ṣaydā), Jubayl, Beirut, and in 639, ʻArqa when Yazīd was commander-in-chief.[33] Balādhurī relates that these cities were taken with ease and that many of their inhabitants were expelled. Though it is impossible to determine the veracity of this latter statement, it is plausible that some of the populations, including elites and those with close Byzantine ties, may have fled.

Tripoli remained among the most difficult of the Syrian ports to secure. It was well defended and supplied by sea, and though Muʻāwiya may have tested its defenses on several occasions, it was largely avoided until later years.[34] Once the most important coastal settlements of Damascus were secured, Caliph ʻUmar (r. 634-44) ordered Muʻāwiya to repair their

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[30] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:132–34.
[31] al-Balādhurī, 1:134.
[32] Interestingly, Bell and Crum (*Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:XXXII) found that many of the references to the annual raids in the Egyptian papyri, indicated that they departed during the winter.
[33] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:127–28. Yazīd may have participated in some of the campaigns. Arqa was conquered by Muʻāwiya in 639.
[34] al-Balādhurī, 1:128.

fortifications, station garrisons who could keep tabs on the inhabitants, and post watchmen who could signal for reinforcements in the event that there was a revolt or Byzantine forces were spotted.[35] Certain strategic sites along the coasts of Ḥimṣ and Filasṭīn also became foci for the defense against maritime raids. How exactly these centers functioned is not clear, but they may have been where garrisons were concentrated or where reinforcements from surrounding areas gathered when enemy ships were spotted.[36] At contentious cities like Tripoli, the garrisons and administrator who oversaw them were rotated annually—perhaps to stave off potential rebellions or the accrual of power.

'Umar's cautious policies—focused on refortification and garrisoning—are often contrasted with the more aggressive approach of his successor 'Uthmān, under whom the Islamic navy developed. However, it is plausible that there were simply not enough soldiers to guard every captured city, so the tactics at this stage were aimed at coastal monitoring and sending in reinforcements when the enemy arrived. We should not consider this cautious approach as evidence of a disinterest in the coast or navy. Rather, 'Umar's policies toward the maritime frontier were tactical—they recognized the importance and strategic value of the coast, but they were shaped by the tenuous position of the early Muslim forces and the very real and highly mobile Byzantine threat.[37] Shifting garrisons, coastal monitoring, and reactionary tactics were the most efficient way to protect a large expanse of hostile territory with limited manpower and ships.

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[35] al-Balādhurī, 1:128.

[36] al-Muqaddasi (*The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma'rifat al-Aqalim*, 148–49) describes such a system in the 10th century consisting of watchtowers and signals.

[37] This was no doubt compounded by the disastrous Red Sea expedition to Abyssinia in 641 CE. For more on this defeat, see Fahmy, *Muslim Sea-Power in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 74.

The final events of ‘Umar’s reign involved shoring up the sites in Jund Filasṭīn which had not yet been conquered or which had rebelled. Like Tripoli, Caesarea proved difficult to take. As the former Byzantine provincial capital, Caesarea had both strong defenses and Byzantine ties. Toward the end of 639 CE, ‘Umar instructed Yazīd to besiege Caesarea. After repeated attempts, Mu‘āwiya succeeded in capturing the town in 640-41, seven years after ‘Amr b. al-‘Āṣ first laid siege to it.[38] Additionally, Ashkelon, and possibly Jaffa, had to be reconquered by Mu‘āwiya in 640-41 after its inhabitants broke their terms of agreement and were reinforced by the Byzantines.[39] Once Ashkelon was subdued, however, Mu‘āwiya stationed a garrison and cavalry in the city and entrusted them with safeguarding the adjacent coast much like Abū ‘Ubayda had done with the coastal cities of Ḥimṣ.[40]

Scholars have questioned Balādhurī’s account of the siege of Caesarea and whether it really lasted seven years.[41] If we accept the traditions that ‘Amr b. al-‘Āṣ was the first to attack the Byzantine provincial capital in 634 and that it was not until the end of 639 that ‘Umar (r. 634-644) ordered governor Yazīd to conquer Caesarea, with it finally surrendering to Mu‘āwiya in 640/41 (AH 19), then seven years of on-and-off sieges is plausible.[42] As the capital of Byzantine Palaestina Prima, Caesarea was among the most difficult coastal cities to conquer due to its defensible position as well as the ease at which Byzantine forces could resupply the city by

[38] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:140–41; The final capture of Caesarea is also recorded by Theophanes the Confessor, Agapius, Michael the Syrian, and the Chronicle of 1234. For the translations, see Hoyland, *Theophilus of Edessa’s Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 123–24.
[39] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:142. Like Caesarea and Ascalon, al- Balādhurī (138) indicates that some traditions attribute Jaffa’s final conquest to Mu‘āwiya b. Abī Sufyān.
[40] al-Balādhurī, 1:142.
[41] For instance, Sharon (*Corpus Inscriptionum Arabicarum Palaestinae, (CIAP). Volume Six*, 21) considers the length of Caesarea’s siege as belonging “more to the realm of fantasy and folklore than facts.”
[42] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:140–41.

sea. As with Tripoli, the Muslims pursued a policy of encapsulation, first isolating a stronghold by subduing the surrounding territory, then squeezing it through direct attack and sieges.

In summary, during the early stages of the conquest of the coast, Muslim forces moved into the region and secured a large portion of the territory. The primary Mediterranean ports were priority targets, but Muslim forces met with heavy resistance in the Byzantine coastal strongholds of Tripoli, Caesarea, and Ashkelon. These cities were well-fortified and supplied from the sea, forcing Muslim commanders to divert their efforts to securing the surrounding regions and establish sieges. Ultimately, the major ports of each jund were conquered in the early years of the conquest, beginning with the *junds* of Filasṭīn and Urdunn and then Hims and Dimashq—though Caesarea and Tripoli remained hotbeds of resistance. The surviving enclaves of Byzantine coastal power forced the Muslim military to fight a war on multiple fronts.

2.2.1 Early Administration of the Coast

The patchwork nature of Muslim control over the Syro-Palestinian coast, coupled with the active conflicts with the Byzantines, resulted in an unstable frontier region, with logistical, political, and military problems very different than inland zones. To address the unique problems of the Syrian coast, ‘Umar established it as a separate administrative region—unique from the *ajnād* —that had its own governor— *amīr al-sāḥil*. According to al-Ṭabarī, the first commander to hold this position was ‘Abd Allāh b. Qays, who was appointed by ‘Umar in 638.[43] Curiously, the separation of the coast as a unique administrative zone is reminiscent of the inland border

[43] Juynboll, *History of Al-Ṭabarī, Volume 13*, 13:103, 106.

districts in Syria/Mesopotamia and al-Andalus, which according to Brauer, were given special administrative status and often taxation regimes that were distinct from the interior.[44]

Al-Ṭabarī provides additional details beyond those in Balādhurī's account concerning the administrative system as it stood in 638 CE. A governor was appointed over each *jund*, with Abū ʻUbayda in charge of Ḥimṣ, Yazīd b. Abī Sufyān in charge of Dimashq, Muʻāwiya in charge of Urdunn, and ʻAlqamah b. Mujazziz in charge of Filasṭīn.[45] Significantly, the commanders who conquered the individual *ajnād* seem to have been assigned the administrative title over them.[46] Though ʻAmr had led the initial siege of ʻFilasṭīn, he became governor of Egypt after heading the conquest of it. These commanders-turned-governors of al-Shām operated out of the provincial capital cities of Ḥimṣ, Dimashq, Tabariyya, and Ludd, and they drew on the land tax (*kharāj*) and requisitions from provincial communities to pay and feed the Arab garrisons. During this early phase, Walmsley suggests that the term *jund* may have been synonymous for both the province and the troops who were stationed and settled within it.[47] Moreover, as mentioned by Balādhurī, most of these governors were eventually promoted by the caliph to the position of commander-in-chief, or supreme governor, of Syria. This seems to have been the situation up until Muʻāwiya received the title after Yazīd died in 639 CE.

Intriguingly for this study in specific, al-Ṭabarī informs us that the coast was governed by ʻAbd Allāh b. Qays who held the title of *amīr al-sāḥil*. Though it is unclear what the duties of the

[44] Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," 16.

[45] Juynboll, 106. Though the term jund does not appear until the Abbasid period (see Legendre, "Aspects of Umayyad Administration"), coinage suggests that the ajnad structure was operational by the 670s (see Walmsley, "Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565-800," 322).

[46] These individuals are referred to as 'governors' in Ṭabarī's translation and also in Borrut, "L'espace Maritime Syrien Au Cours Des Premiers Siècles de l'Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli," 29.

[47] Walmsley, "The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.," 47.

amīr al-sāḥil were at this stage, it appears that he oversaw the troops that were garrisoned along the shore, and that he was responsible for the coasts' defense. Crucially, this suggests that the entire coast of Syria-Palestine was considered a unified military district. While the individual *ajnād* likely still administered their respective coastal territories for fiscal purposes, a special commander (*amīr al-sāḥil*) was responsible for their defense. Whether the coast of al-Shām was considered a *thaghr* (frontier) at this time is unclear.[48] However, Brauer attributes the use of the term *thaghr* for the northern inland frontier of al-Shām during the reign of 'Umar b. al-Khaṭṭāb (r. 634-644), so it is plausible that the coast may also have been understood as such at this early stage.[49]

Al-Ṭabarī also indicates that the granaries of Syria were administered by a certain 'Amr b. 'Abasah.[50] The fact that a special commander was assigned to the granaries highlights their strategic importance. The redistribution of foodstuffs around the newly conquered territories was paramount to the conquest efforts, and each district presumably had dedicated state granaries—many of them perhaps recommissioned infrastructure involved with the Byzantine fiscal system (*annona*). The early Arabic papyri from Egypt testify to a functioning administrative network as early as 642 CE for the collection and redistribution of taxes in kind and supplies.[51] The *ummah* (community) and the Muslim armies and fleets required provisions, and if the numerous receipts and documentation from Egypt are any indication, the shipment and storage of grain and other

[48] The literal meaning of thaghr is the fangs of a dog. However, its earliest usage was for boundaries or territory that was facing the enemy. See Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," 14–30; and Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier" for the northern Byzantine-Islamic thaghr.

[49] Brauer 1995, 18.

[50] Juynboll, *History of Al-Ṭabarī, Volume 13*, 13:106.

[51] Trombley, "Fiscal Documents from the Muslim Conquest of Egypt: Military Supplies and Administrative Dislocation, ca 639-644," 18.

supplies was no small feat.[52] The Syro-Palestinian ports played a critical role in the redistribution of supplies to the garrisons and armies, and many likely had guarded grain silos.[53] One can imagine that Byzantine raids against the Syrian ports were partly aimed at disabling this redistributive network.

An intriguing official Arab document from Nessana dated to ca. 685, highlights the extraordinary level of organization and paperwork involved in the collection, distribution, and policing of grain supplies and pay that were collected in Egypt and Syria-Palestine and intended for the Arab army. The document appears to be part of a daybook with various authorizations coming from the highest levels of the Arab administration, including the office of ʻAbd al-Malik in Damascus, ʻAbd al-ʻAzīz in Fusṭāṭ, and a certain Ḥassān b. Malik b. Bahdal who governed Palestine from 680-683.[54] Significantly, the individuals involved in the collection, redistribution, and safeguarding of these resources were all Arab officials. The famine that struck Arabia in 639 CE, which prompted ʻUmar to redirect grain stores from Syria and Egypt to Mecca and Medina, highlights the importance of the early redistributive network and the need for a special administrator to oversee its smooth operation.

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[52] Foss, "Egypt under Mu'awiya Part II: Middle Egypt, Fustat and Alexandria"; Bell, "Two Official Letters of the Arab Period"; Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, V."

[53] al- Balādhurī (*Kitāb Futūḥ Al-Buldān*, 1:134) relates that "Ḥimṣ is the seat of a large granary that receives wheat and oil from the cities of the coast and other places that were given out as fiefs for their holders and recorded for them as such in special books."

[54] Kraemer, *Excavations at Nessana, Volume 3*, 3:290–96.

2.3 Second Stage (644-692 CE): Consolidating control through permanent settlement and building a navy

Consolidating Control

The early Muslim state dramatically shifted its policies toward coastal administration and naval defense during ‘Uthmān’s caliphate (r. 644-56), seeking more permanent solutions than ‘Umar’s rotating garrisons. At the beginning of ‘Uthmān’s reign, Byzantine forces managed to restore control over several coastal cities.[55] This would have greatly improved the Byzantines’ ability to project power along the coast and may have increased the potential for local insurrection. Balādhurī records one such revolt in 645/6, in which a Byzantine fleet arrived in Alexandria and raided the nearby villages. ‘Amr and his forces subdued the raiders and, in the process, destroyed Alexandria’s city walls presumably to limit future rebellions. Balādhurī recounts that many of the city’s Greek inhabitants left and joined the Greeks elsewhere.[56] This event is also recorded in an Arabic account by Agapius (writing in the 940s) who relates that: “the Arabs attacked Alexandria, in which was Manuel, a patrician of the Romans. He and his men fled, taking to the sea, and they went (to the land of) the Romans. The Arabs conquered Alexandria and destroyed its wall: they took control of it and of the coast between Alexandria and Pelusium (al-Faramā).”[57]

The reemergent Byzantine influence seems to have prompted ‘Uthmān to explore long-term solutions for solidifying control over the littoral, including the permanent settlement of Muslim forces in these areas. For the first time, soldiers were offered land along the coast if they

[55] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:127. The coastal cities are not named.
[56] al-Balādhurī, 1:221–22.
[57] Agapius, 479. Translated by Hoyland, *Theophilus of Edessa’s Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 130, fn. 313.

chose to settle down permanently. Considering that the Muslims were a minority in a region with longstanding Byzantine economic and cultural ties—particularly along the coast—'Uthmān's settlement policy in these areas was both strategic and calculated. Not only was he increasing Muslim military presence, but by granting land, Muslim soldiers now had a stake in the territory, and would begin to integrate with the local economy.

Mu'āwiya, who was governor of Syria-Palestine at the time, took aggressive action to implement the new policies and to secure the maritime frontier of his domain. He marched against the coastal areas that had been reinforced by the Byzantines, restored control, repaired their fortifications, and granted land to warriors that formed the new coastal garrisons.[58] He targeted prominent ports and economic centers along the coast. As Muslim defenses were scattered during the early years of 'Uthmān's reign, seizing control of these potential hotbeds of rebellion and dissent was crucial to control of the region—particularly in the north. Tripoli had been largely avoided during the initial conquest of the Ḥimṣ and Dimashq coasts. The city was strongly defended and reinforced by the Byzantines, and though Mu'āwiya had tested its defenses early during his campaigns along this stretch of coast, it was not until 645-46 that his commander, Sufyān b. Mujib al-Azdī, finally managed to conquer it.[59] The port's inhabitants finally fled with the help of Byzantine reinforcements. However, without this withdrawal, it is uncertain how long the city could have held out.

In line with 'Uthmān's new settlement policy, Mu'āwiya settled a large Jewish population in Tripoli. One possibility is that this was necessary because many of the region's Christian and Byzantine-aligned inhabitants had fled. However, based on 'Uthmān's overall

[58] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:127.
[59] al-Balādhurī, 1:127–28.

agenda, it seems that this was a strategic decision to modify the demographics of the port and populate it with people who held no prior ties to the area or loyalty to the Byzantines. This is one of the first instances of settling foreign or ethnic populations along the coast by the Arabs.

While we do not hear of Muslim soldiers being settled in Tripoli, it seems that Muʿāwiya annually reinforced the city with troops and a tax administrator (*ʿāmil*) during the sailing season. This was undoubtedly due to the uptick in commerce and travel, as well as the threat of piracy and Byzantine raids that might disrupt these activities. There were economic benefits to securing the maritime corridors and nodes of trade, and the posting of garrisons and tax officials at key ports was certainly aimed at protecting these revenue-generating resources. Securing the maritime frontier remained a government prerogative in later centuries as indicated by the Ayyūbīd vizier Ibn Mammātī's (1149-1209) account:

> *In the month of Barmahāt (March/April)…which coincides with the beginning of the spring, commercial ships head for the Mediterranean Sea from the Egyptian districts, the Maghrib, and Byzantium. During this month [the government] looks after concentrating the garrisons in the protected frontiers, and preparing the victorious battleships to defend them.*[60]

Balādhurī relates that when the sailing season was closed, the administrator would remain with a small detachment to guard the city.[61] The tax administrator (*ʿāmil*) who was posted at Tripoli does not seem to be equivalent in his role to the governor of the coast (*amīr al-sāḥil*) but was probably an official who was subordinate to the latter. Balādhurī relates that Muʿāwiya would assign a new *ʿāmil* to Tripoli each year, presumably to ensure that the holders of this

[60] This account is from Ibn Mammātī's *Qawānīn al-Dawāwīn*, 247-48, cited and translated by Khalilieh, "The Ribât System and Its Role In Coastal Navigation," 218.
[61] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:127.

position did not get too comfortable and develop pro-Byzantine alliances.[62] This may have been the situation at other strategic centers along the coast during the early phase of the conquest. A similar strategy was employed by the early ʻAbbāsids along the northern Byzantine-Islamic frontier, which remained a center of Umayyad loyalty. Caliph al-Manṣūr (r.754-75) rotated the command of the yearly expeditions into Byzantine territory to prevent governors and commanders along the northern frontier from gaining too much power.[63]

The use of rotating of garrisons is a common occupation strategy and was used in Syria-Palestine even by the Egyptians in the Bronze Age, two millennia before. The Egyptians would post a modest number of officials and troops in a strategic center and when their tour of duty was complete, they would return home.[64] The Egyptian state also employed the tactic of billeting soldiers to make use of locally available resources and to avoid investing in infrastructure that might potentially be wrested from them.[65] The early Arab officials and troops in Egypt also relied on billeting as indicated by official requisitions to local officials.[66] While we do not have the same corpus of documentary evidence from Syria-Palestine, the official document from ca. 685 found at Nessana (discussed above) suggests that a similar administrative system was in place there and that the early Arab armies drew on resources from the local populace there. What is especially telling about the Egyptian and Nessana papyri is the extraordinary level of central organization that was in operating very early after the conquest.

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[62] According to al- Balādhurī (1:127–28), this policy continued until the reign of Abd al-Malik, when a Byzantine patrician was permitted to settle in the city and pay kharaj. He overthrew the city several years later, taking many Muslim and Jewish inhabitants prisoner and sailing to Byzantine territory. For a summary of this event, see Borrut, "L'espace Maritime Syrien Au Cours Des Premiers Siècles de l'Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli," 24.

[63] Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier," 28; Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*, 143.

[64] Morris, *Ancient Egyptian Imperialism*, 83.

[65] Morris, 150.

[66] Sijpesteijn, "The Arab Conquest of Egypt and the Beginning of Muslim Rule," 2007, 445.

Laying the Foundations for Muslim Naval Power

After shoring up control along the Dimashq coast, Muʻāwiya redirected his attention to the coast of Urdunn.[67] His activities represent the first steps in his broader plan of conquering Constantinople and the Mediterranean islands, and therefore represent a distinct transition in the Muslim approach to the maritime frontier—shifting from consolidation and control, to targeting lands in the heart of Byzantine territory.[68] In 647-48 he made repairs in Acre and Tyre, and in the following year he set sail from Acre and captured Cyprus.[69] The island of Cyprus maintained a strategic position between Syria and southern Anatolia, and control over it offered a greater level of protection for the Syrian coast as well as control over the primary trades routes (discussed further in Chapter 3). Due to the island's strategic position between Byzantine and Islamic lands, it was highly contested and prone to rebellion. According to Balādhurī, part of the capitulation agreement was that the Cypriots would pay a tribute tax to the Muslims (like they did to the Byzantines) and act as informants on the movement of enemy ships.[70]

Shortly after Muʻāwiya's naval forces invaded Cyprus, however, a Byzantine fleet moved into the region, threatening the shores of the junds of Ḥimṣ and Dimashq. As the Muslim naval forces were overextended, Muʻāwiya redirected the fleet to dismantle another strategic naval stronghold—the island of Arwād, just offshore of Anṭartūs. The most reliable account of the

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[67] The conquest of Urdunn's coast seems to have been largely uneventful in the eyes of the chroniclers, and Acre and Tyre appear to have been taken easily.

[68] Conrad ("The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East," 322) cites the conquest of Cyprus and Arwad as the first stage of Muʻāwiya's long-term goal of capturing Constantinople. However, Muʻāwiya's development of Acre and Tyre should be considered the beginnings of this naval strategy.

[69] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:152–53; The capture of Cyprus was also recorded by Theophanes, Agapius, Michael the Syrian, and Chronicle 1234. For translations, see Hoyland, *Theophilus of Edessa's Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 131–34; Borrut, "L'espace Maritime Syrien Au Cours Des Premiers Siècles de l'Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli," 14–16.

[70] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:152–53.

conquest of Arwād comes from an eastern Christian source, namely Theophilus of Edessa (ca. 749-50).[71] Mu‘āwiya’s campaign against the island does not seem to have been directed at the inhabitants, but rather at disabling its use as a potentially troublesome enemy naval base.[72] Accordingly, Mu‘āwiya offered the Arwādians safe passage to the mainland and the option of settling in Byzantine territory or in Syria-Palestine. It is intriguing that they chose to settle in Syria-Palestine over Byzantine-controlled territory. Perhaps we can speculate that they had more established social or economic ties along the Syro-Palestinian coast, and that Byzantine territory might have been outside of their network of connections and influence. After the island was evacuated, Muslim forces razed it to prevent the Byzantines from using it as a base. Agapius (writing in the 940s) provides a shortened account of this event, though indicates that Mu‘āwiya waited until winter had passed before launching the expedition in the spring.[73]

The Arab-Islamic tradition of Arwād was also preserved in Ibn Ibn A‘tham al-Kūfī’s *Kitāb al-Futūḥ* (858) and al-Wāqidī’s (d. 823) account as reported by al-Ṭabarī. While these records have been shown to be largely ahistorical, we do learn the name of the naval commander who led the campaign.[74] Junāda b. Abī Umayya seems to have been one of the first ‘commanders of maritime expeditions’—a position equivalent to an admiral and an important fixture of the

[71] Theophanes and Turtledove, *The chronicle of Theophanes*, 344; Hoyland, *Theophilus of Edessa’s Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 134–36.
[72] See Conrad, “The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East.”
[73] For a translation of Agapius’ account, see Hoyland, *Theophilus of Edessa’s Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 135.
[74] See Conrad, “The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East.”

early Islamic administration.[75] According to Ibn A'tham's sources, Junāda "directed the sea raiding against the Byzantines for Mu'āwiya."[76]

Balādhurī and the *Chronicle of 1234* (written by an anonymous Edessan chronicler) document a second naval expedition against Cyprus in 652/3 after the island's inhabitants provided ships to the Byzantines for a sea raid. In response, Mu'āwiya erected mosques on the island, as well as a city in which he settled a group of men from Ba'labakk who were paid special stipends.[77] Following the second expedition against Cyprus, Mu'āwiya also initiated successful raids against the islands of Kos, Rhodes, and Crete.[78] These successful naval operations may have encouraged Mu'āwiya to begin building up Syria and Egypt's naval forces with the ultimate goal of besieging Constantinople.

The famous Battle of Dhāt al-Ṣawārī, or Battle of the Masts, in 655 CE was the culmination of several years of preparation to control the southern Anatolian coast. Though the Muslim forces failed in capturing Constantinople, it was a major naval victory that resonated deeply within the Muslim community. At the time, Syria-Palestine did not have an official shipbuilding center (*dār al-ṣinā'a*) like Egypt had. While Mu'āwiya commanded the Syrian land forces, the Egyptian fleet was led by an admiral, 'Abd Allāh b. Sa'd Abī Sarḥ, who was in charge of 'the men from the maritime districts' (*ahl al-baḥr*).[79] The *ahl al-baḥr* were presumably

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[75] See Mikati, ("The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 43–53) for a discussion of this position.

[76] Conrad, "The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East," 358.

[77] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:153; According to Hoyland, *Theophilus of Edessa's Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 133, the general mentioned in Chronicle 1234 as partaking in this expedition was Abu l-A'war b. Sufyān al-Sulami. He was the governor of Jordan during the reign of Uthman and was a close ally of Mu'awiya.

[78] Cited and briefly discussed by Fahmy, *Muslim Sea-Power in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 84–85.

[79] al-Ṭabarī (Humphreys, *The History of Al-Ṭabarī. The Crisis of the Early Caliphate*, 15:74) relates that Abd Allah b. Sa'd Abi Sarh (who replaced Amr b. al-As as governor of the Egypt) was in command of the *ahl al-bahr*. The

Egyptian sailors rather than soldiers, and Ibn Sa‘d appears to have been an admiral, or early ‘commander of maritime expeditions’ (discussed below).

While one of the objectives of the Muslim naval build-up and campaigns may have been to seize Constantinople, we cannot discount the economic advantage that the fleets and control over southern Anatolia and the Mediterranean islands brought. Naval supremacy permitted control over the sea lanes and trade as well as security along the maritime frontier. The islands of Cyprus, Kos, Rhodes, and Crete were critical bases for exerting maritime power over the sea and adjacent coasts.

In general, during ‘Uthmān’s caliphate (644-56), the early Muslim state initially sought to shore up control of the coastal zone by settling it with soldiers as well as ostensibly loyal foreign populations. Subsequently, the state—and Mu‘āwiya in particular—moved to seize and refurbish strategic maritime assets, including the ports of Acre, Tyre, and Tripoli, and the islands of Cyprus, Arwād, Cos, Rhodes, and Crete. These assets allowed the Muslim fleets to exert control over the trade routes of the eastern and western Mediterranean and Aegean, as well as mitigate the Byzantine naval presence and even go on the offensive at sea, a process which culminated in 655 in the defeat of the Byzantine forces during the Battle of the Masts. It is clear from ‘Uthmān’s policies and investments of military strength, that he and his leaders appreciated the strategic importance of the coastal zone and understood that a strong maritime presence was key to the economic, political, and military control of the region. It is worth noting that ‘Uthmān and

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sailors of the fleet were Egyptian Christians, while the warriors on board were comprised of the Muslim garrisons from Egypt. The early Arab papyri from Egypt indicate that sailors were conscripted from both the coast and interior for the annual raids or other fleets (Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:XXXIV).

Mu‘āwiya were not only kinsmen but close allies, and this may have factored into the caliph’s support of latter’s naval aspirations.

Reorganization of the Navy under Mu‘āwiya

Maritime expeditions against the Byzantines ceased following the death of ‘Uthmān and throughout the Civil War (656-61 CE) that ensued. However, once Mu‘āwiya became caliph in 661, he resumed naval operations and laid the foundations for a strong Muslim navy. Moreover, he continued to settle Arab garrisons along the coast and at strategic centers like Antioch.[80] During his reign, the Urdunn coast became the center of Mu‘āwiya’s maritime and naval program. He continued the policy of resettlement as a means for establishing control over the region, and he settled Persians from Ba’albek, Ḥimṣ, and Antioch along the coasts of Urdunn, specifically in Tyre and Acre.[81] Curiously, al-Yaʿqūbī (d. 897) wrote that ‘Arqa was “a district [presumably he is meaning a district capital] of the Damascus Province on the seacoast. There is here an ancient city, inhabited by a population brought here from Persia.”[82] It is possible that Mu‘āwiya also settled foreign groups at strategic centers along the Dimashq coast as well. After all, ‘Arqa had been among the coastal cities of Dimashq that he had conquered in 639.

Following a Byzantine raid along the Syrian coast, Mu‘āwiya established the first Muslim arsenal at Acre in 669-70. To build his fleet, he brought in specialized artisans and

[80] De Giorgi and Eger, *Antioch,* 240–41 These soldiers received stipends at land around Antioch.

[81] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:117: A body of Persians were transplanted in the year 42 by Mu’awiya from Ba‘labakk, Hims and Antioch to the seacoasts of the Jordan, i.e., Tyre, Acre and other places; and he transplanted in the same year, or one year before or after, certain Asawirah (Persian cavalry) from al-Basrah and al-Kufah and certain Persians from Ba‘labakk and Hims to Antioch. One of the Persian leaders was Muslim ibn ’Abdallah, grandfather of ‘Abdallah ibn-Habib ibn-an-Nu‘man ibn-Muslim al-Antaki.

[82] Le Strange, *Palestine Under the Moslems,* 397–98.

carpenters to the Urdunn coast.[83] Some of these skilled craftsmen may have come from Egypt and represent another population transfer to the Syrian coast.[84]

It is fair to question why the Urdunn coast, and the ports of Acre and Tyre in particular, took such a prominent position in Mu‘āwiya’s plans for naval security. Were they better equipped and more strategically located midway along the coast or closer to Cyprus? Geography was probably a primary consideration. Recent wind and wave modelling along the Lebanese coast suggests that Tyre held a uniquely strategic location that permitted sailing both north and south in all seasons (see Chapter 4.1).[85] This coupled with its sheltered harbor made Tyre a prime naval base, and it is later described by al-Muqaddasi as an ideal port and the one that Ibn Ṭūlūn modeled his refurbishment of Acre after.[86] In contrast, the southern Palestinian coast is notorious for its lack of natural harbors and its dangerous shore while the coastline of the *ajnād* of Ḥimṣ and Damascus was closer to the enemy and therefore more vulnerable to attack and seizure.[87]

Additionally, it is possible that many of the harbors along the central coast were in some state of disrepair. Geoarchaeological work at Tyre, Sidon, and Beirut confirms the destructive impact of the 551 CE earthquake along the Lebanese coast.[88] It is likely that many of the ports

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[83] Borrut, “L’espace Maritime Syrien Au Cours Des Premiers Siècles de l’Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli,” 16.

[84] The early Arab papyri from Egypt mention the conscription of sailors and skilled craftsmen for the fleets. One can imagine that there were also shipbuilders in Syria-Palestine as well.

[85] El Safadi, “Wind and Wave Modelling for the Evaluation of the Maritime Accessibility and Protection Afforded by Ancient Harbours,” 358.

[86] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma’rifat al-Aqalim*, 181–82; Borrut, “Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles),” 27. Borrut points out that Strabo refers to Tyre as having a closed port.

[87] Donner, *The Early Islamic Conquests*, 153–54 The northern Lebanese and Syrian coastal mountains were also home to the Jarajima, who frequently shifted alliances between the Byzantines and Muslims. .

[88] Marriner, “Geoarchaeology of Phoenicia’s Buried Harbours: Beirut, Sidon and Tyre - 5000 Years of Human-Environment Interactions”; Marriner, Morhange, and Saghieh-Beydoun, “Geoarchaeology of Beirut’s Ancient Harbour, Phoenicia / Géoarchéologie Du Port Antique de Beyrouth, Phénicie.”

and coastal settlements between Tripoli and Tyre witnessed significant damage in the earthquake and subsequent tsunami that struck the area.[89]

The militaristic bias of the literary sources makes it easy to overlook the influence that trade and coastal resources would have had on Muslim priorities. Both Acre (Ar. ʻAkkā) and Tyre were important entrepots of trade during the Byzantine period, and the early Muslim rulers and commanders were certainly aware of this.[90] Ultimately, Muʻāwiya selected Acre over Tyre as the site of the Syrian arsenal and operations center for his navy. His choice might have been influenced by the ruined state of Tyre's harbor works, but also its prior role as the Byzantine provincial capital of Phoenice. One might suspect that the former capital may have still harbored some pro-Byzantine sentiments. Constructing the arsenal at Acre might have mitigated some of these factors.

Shortly after the arsenal at Acre was completed, Muʻāwiya appointed ʻAbd Allāh b. Qays al-Fazārī as the 'commander of maritime expeditions.'[91] ʻAbd Allāh b. Qays had previously held command over the Syrian coasts under ʻUmar. Once Muʻāwiya had his navy, however, it seems that Ibn Qays was promoted to commander, or admiral, of the Syrian fleet. Whether Ibn Qays

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[89] Saghieh-Beydoun, "Evidence of Earthquakes in the Current Excavations of Beirut City Centre"; Marriner, "Geoarchaeology of Phoenicia's Buried Harbours: Beirut, Sidon and Tyre - 5000 Years of Human-Environment Interactions". Geoarchaeological evidence for the 551 CE tsunami was also found off Caesarea. See Goodman-Tchernov and Dey, "Tsunamis and the Port of Caesarea Maritima over the Longue Duree: A Geoarchaeological Perspective."

[90] For instance, Hisham b. Abd al-Malik transferred the state arsenal from Acre to Tyre after one of the descendants of Abu Muʻayt refused to sell him a series of mills and storehouses at Acre (al-Balādhurī, *Kitab Futuh al-Buldan*, 1:117–18). Borrut ("Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles)," 26) attributes Hisham's relocation of the arsenal to Tyre to the caliph's own economic interests. Jashiyari mentions an inscription in one of the palaces at Acre in regard to one of Caliph Hisham's officials. See Sharon, *Corpus Inscriptionum Arabicarum Palaestinae, (CIAP)*, 6:30–31.

[91] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 45. Prior to Ibn Qays' promotion to admiral, Junāda held the position. According to Conrad ("The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East," 358–59) the sources relate that Junāda held this position into the reign of Yazīd (r. 680-83). However, this conflicts with what Mikati recounts from Ibn Asakir. The chronology and list of the naval commanders is at times contradictory and problematic.

also concomitantly served as the commander of the coast is unclear and, unfortunately, we do not hear of a named commander of the coast until ‘Abd al-Malik’s caliphate. Theophanes records a raid on Crete that took place ca. 669-71 and was led by Ibn Qays and a certain Faḍāla b. ʿUbayd al-Anṣārī.[92] In 672-3, Ibn Qays launched a fleet from the Dimashq coast that went on to raid Sicily.[93] This expedition may have followed a larger expedition to Constantinople ca. 672 led by Ibn Qays and general Muhammad b. ‘Abdallah al-Thaqafī.[94] According to Theophanes, Ibn Qays wintered in Cilicia and Lycia, while al-Thaqafī wintered in Smyrna, before sailing to Constantinople where they engaged with the Byzantines for the rest of the year. Theophanes states that the Muslim forces captured a town on the southern shore of the Sea of Marmara where they remained for seven years, continuing their assault on Constantinople each spring. Like the account of the seven-year siege of Caesarea, this timeframe might not be reflective of a continuous expedition, but rather a more general span of time in which attempts were made to take the Byzantine capital. Still, it is suggestive of an expanding Muslim presence in southern Anatolia.

Mu‘āwiya continued to expand his naval aspirations. In 673-74, he ordered the construction of a new arsenal on the island of Rawḍa (Fusṭāṭ) in Egypt, and in the following year he appointed a second ‘commander of maritime expeditions,’ ‘Abd Allāh b. Mikrāz b. al-Akhyaf al-Qurashī.[95] According to the Arab sources, Ibn Mikrāz commanded the fleet from Syria-

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[92] Theophanes, 354. See the translation and commentary in Hoyland, *Theophilus of Edessa’s Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 168, 164, fn. 418.

[93] Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 45.

[94] Recorded by Theophanes, Agapius, and Michael the Syrian. For translations of these accounts, see Hoyland, *Theophilus of Edessa’s Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 166-168. Hoyland attributes this campaign to that of Sufyān b. ’Awf in 672.

[95] Borrut, “L’espace Maritime Syrien Au Cours Des Premiers Siècles de l’Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli,” 16.

Palestine (*al-Shām*).[96] It is unclear if he and Ibn Qays shared this role, but they appear to have both held this position simultaneously. Ibn Mikrāz participated in Yazīd b. Mu‘āwiya’s expedition to Constantinople in 674-75, as well as a joint Syrian and Egyptian expedition in 708-09.[97] Subsequently, Mu‘āwiya appointed a third ‘commander of maritime expeditions,’ Mūsā b. Nuṣayr (d. 716-17), who may have been the first *mawlā* (non-Arab Muslim) to hold this position.[98] He later went on to lead the successful campaigns against al-Andalus during ‘Abd al-Malik’s reign.

Both during his reign as caliph, and prior to his ascension, Mu‘āwiya demonstrated a clear understanding of the importance of naval strategy and turning the nascent empire into a maritime-focused power. He fortified and settled the coast, while pouring resources into the ports of Acre and Tyre. These ports were given preference perhaps for strategic and economic reasons, and Acre became the base for Syria’s newly founded navy. Many of Mu‘āwiya’s efforts along the coast appear to have been motivated by his desire to establish control over the sea lanes and Mediterranean islands, and to conquer Constantinople. He can be credited with the elevation of maritime forces from a secondary endeavor to a centerpiece of Muslim policy. Mu‘āwiya may also be credited with establishing the ‘commander of maritime expeditions,’ which became an important fixture in the early Islamic administration. Every subsequent caliph up until al-Manṣūr (r. 754-75) appointed commanders to this position.[99]

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[96] Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 45.
[97] Mikati, 45.
[98] Mikati, 46. While the sailors of the earliest Muslim fleets appear to have been Egyptians who were conscripted into service, the fighters on board the ships were comprised of *muhajirun* (likely part of the Ansar and Quraysh) and *mawālī* (non-Arab converts). See Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:XXXIV.
[99] Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 54.

Second Civil War (680-92)

The Second Civil War was a tumultuous period that rocked the Muslim community and left the coasts susceptible to Byzantine attack. Like the First Civil War, Muslim naval activity was largely put on hold, and the Byzantines raided the coasts of Damascus, Urdunn, and Palestine. Balādhurī recounts how Caesarea was damaged, and its mosque destroyed.[100] Ashkelon was also attacked and suffered damage, and many of its inhabitants were expelled. In the north, the Byzantines allied with the Jarājima (Mardaites) and captured Tripoli ca. 688-89 CE. According to an anecdote preserved by Ibn ʻAsākir, ʻAbd al-Raḥmān b. Sulaym was serving as the governor of the Dimashq coast (*amīr al-sāḥil*) at the time of the attack. He had been appointed by ʻAbd al-Malik and was residing in Beirut. Upon receiving news of the attack, he rode by horse with reinforcements (*jamāʿa*) to Tripoli.[101] Though it is unclear, it seems from this passage that the governor of the coast at this time was no longer in charge of the entirety of the Syro-Palestinian coast. Instead, each jund may have had its own *amīr al-sāḥil,* or governor of the coast.

Acre and Tyre appear to have suffered damage during the Second Civil War, as they were among the coastal cities that ʻAbd al-Malik subsequently repaired. Balādhurī specifically mentions outer Acre regarding the repairs, indicating that the Byzantines targeted this area of the port facilities. It is plausible that the Syrian arsenal at Acre had been thus established in the old part of the city, which protrudes into the sea—outer Acre. Curiously, the 10th century Coptic bishop Severus ibn al-Muqaffaʻ, a compiler of the *History of the Coptic Patriarchs of Alexandria*, recounts that the Byzantine emperor Tiberius II (r. 698-705) "made war on the

[100] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:143.
[101] Ibn ʻAsakir, Dimashq, 34:403. Cited by Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 58.

coasts which the Muslims had taken and recovered them. He took many islands which the Muslims had ruled over and likewise restored Sicily."[102] It seems that during and following the second civil war, the Byzantines increased their attacks and efforts at reconquering the strategic bases and Mediterranean islands that afforded the Arabs naval power and control over the sea lanes. This highlights the persistent Byzantine threat against the early Islamic state and its maritime assets. It may also be why in the second half of his caliphate, 'Abd al-Malik (r. 685-705) appointed his first 'commander of maritime expeditions' (*ṣāḥib al-baḥr*), Khālid b. Kaysān, who was based in Acre.[103] We learn from al-Ṭabarī that during his time as commander, Ibn Kaysān was taken prisoner in 708-09 CE by the Byzantines and returned, presumably through ransom, to al-Walīd (I) b. 'Abd al-Malik (r. 705-15).[104] This suggests that Ibn Kaysān maintained his position as commander during the first years of al-Walīd's reign, possibly before al-Walīd instituted a new administrative division of the coast and fleet (see below).

In the midst of the Civil War, 'Abd al-Malik signed a peace treaty with the Byzantines in 685 CE, which established the island of Cyprus as a neutral territory, with the island's inhabitants paying taxes to both empires.[105] Due to its location between both empires, the island was a strategic naval center as well as an economic hub. This treaty aimed to neutralize the threat of the island being used for Byzantine incursions into Islamic territory while also securing a portion of the island's revenue.

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[102] Trombley, "Sawirus Ibn Al-Muqaffa and the Christians of Umayyad Egypt: War and Society in Documentary Context," 218.
[103] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 47.
[104] Hinds, *The History of Al-Ṭabarī: The Zenith of the Marwanid House*, 23:149–50.
[105] This peace agreement is recorded by Theophanes, Agapius, Michael the Syrian, and Chronicle 1234. For translations, see Hoyland, *Theophilus of Edessa's Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 180–82.

During this period, the Byzantines took advantage of the chaos of the Second Civil War to undermine Muslim naval assets in Syria. They appear to have targeted the most strategic ports and coastal settlements and inflicted significant damage along the entirety of the Syro-Palestinian coast as well as other Mediterranean assets. Though ʻAbd al-Malik allocated resources to rebuild and fortify the disabled Syro-Palestinian ports, the vulnerability of the coast during the war may have led to an increased desire to bolster the maritime defensive system, which brings us to the Third Stage of conquest and consolidation.

2.4 Third Stage (693-717 CE): Expansionism and conquest of Constantinople

Following the Second Civil War, Muslim policies and attitudes toward the Syrian coast entered a new phase that can be characterized by expansionism. During this period, there was a renewed and perhaps compounded interest in expanding the borders of the *dār al-Islām* and conquering Constantinople. Al-Walīd's caliphate is often considered the zenith of the Umayyad dynasty and was a period of general internal peace and territorial expansion in the east and west.[106] Though his caliphate achieved successes in al-Andalus, Transoxania, and Sind, his raids against Byzantine territory were largely unproductive. Still, his expansionist policy is easily recognized in his treatment of the Syrian coast and navy.

Al-Walīd was responsible for creating a new tripartite division of administration and naval defense along the Syro-Palestinian shore. The coasts of the provinces/*ajnād* of Ḥimṣ, Dimashq, and Urdunn were assigned naval bases, each under the direction of a commander of maritime expeditions. A fleet was stationed in Latakia (Ḥimṣ province), one in Tripoli and/or

[106] Jacobi, "Al-Walīd."

Beirut (Dimashq province), and one in Acre (Urdunn province), which at the time was still the location of the Syrian arsenal.[107]

The published papyri from Egypt provide insight into how the broader Muslim navy was organized at this time. The provinces of Egypt, Syria, and Africa each had their own fleets which took part in the annual raids, and sailors were conscripted from various classes of the population to partake in them.[108] One of the letters from Aphrodito testifies to Latakia's role as a naval base during this period. The brief record mentions four sailors who were conscripted from the Upper Egyptian town and sent to Latakia in 714 CE to join the maritime raid that year.[109] It is unclear whether the fleets stationed at Latakia, Tripoli/Beirut, and Acre were part of the larger Syrian fleet, or if they also were generally augmented by ships from the Egyptian and African fleets. Curiously, the Dimashq fleet and its commander seem to have alternated between Tripoli and Beirut, depending on the political situation. Tripoli was often the target of Byzantine attacks, and therefore the fleet would often retreat to Beirut.[110]

The province of Filasṭīn, however, was excluded from this reorganization of the coast and fleets. Though it is unclear exactly why, its distance from Byzantine territory may have been a factor. Curiously, the Palestinian ports are never really mentioned as strategic centers for naval activity. In part, geography probably played a role. The coastline south of the Carmel Range

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[107] Ibn 'Asākir, Dimashq, 66: 159. Cited and translated by Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 47–48. "The boats of the Muslims in Syria were scattered in the coast of Syria. One group of it was in Latakie in the coast of Ḥimṣ and leading it was Sufyān al-Fārisī and another group was in Tripoli, the coast of Damascus – or he said: in Beirut- and controlling it was my brother Abū Khurāsān, and what a man he was in his perfection and strength." Mikati 2013, 48 lists Suḥaym b. al-Muhājir as the commander who was based in Acre .

[108] Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:XXXIV–V. One of the recorded raids included 200 ships.

[109] Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, V," 91–92. The four individuals were "sent to the Orient (Syria) for the sailors of the acatia and dromonaria for the raid of the 12th indiction, who set out from Laodicea and returned in the present 13th indiction." Fahmy (*Muslim Naval Organisation in the Eastern Mediterranean From the Seventh to the Tenth Century AD*, 53) dates the 12th indiction to 714 CE.

[110] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 55.

generally lacks natural harbors and deepwater ports that could accommodate a sizable fleet. Caesarea is an exception to this with its artificial harbor, however, given that it was the former Byzantine provincial capital and the target of repeated maritime attacks, the early Muslim rulers may have deliberately kept it without a naval presence.

To reinforce the Muslim presence along the northernmost stretches of Syria's coast, al-Walīd not only stationed a fleet at Latakia, but also gave the land of Antioch's port Seleucia Pieria along the shore as fief (*qaṭī'a*) to some of the troops who were garrisoned in Antioch.[111] Balādhurī relates that they cultivated the land, and that al-Walīd also constructed a fort there.[112] This represents a continuation of the tactic of permanent settlement, first employed by 'Uthmān and Mu'āwiya. The policies of resettlement in the north and the redistribution of the fleet were part of al-Walīd's wider strategic plan to expand into and conquer Byzantine territory.

In 708-09, the Egyptian and Syrian fleets launched a joint maritime expedition against the Byzantines. Not much is recorded about it other than that it was during this event that Ibn Kaysān ('commander of maritime expeditions' appointed by 'Abd al-Malik and based in Acre) was captured by the Byzantines. Given the timing of this campaign it seems likely that al-Walīd's redivision of the coast and fleet occurred after this battle, because Ibn 'Asākir lists a different commander of expeditions who was based in Acre. Although Ibn Kaysān was successfully ransomed, he seems to have been replaced by Suḥaym b. al-Muhājir.

Walīd's successor, his brother Sulaymān b. 'Abd al-Malik (r. 715-17), forged ahead with al-Walīd's aspirations of conquering Constantinople and maritime policies. As such, he maintained the tripartite division of the coast and navy. In a departure from prior practice,

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[111] 241 De Giorgi and Eger, *Antioch* note that this is the only reference to the early Islamic use of the port, which was transferred to the Orontes delta town of Suwaydiya.
[112] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:148.

Sulaymān replaced the commanders of maritime expeditions with Arab men, instead of *mawālī* (non-Arab converts).[113] This was perhaps a precursor to to his campaign against Constantinople that would be continued under his successor ‘Umar II (discussed below).

In 717-18, after the accession of Umar II b ‘Abd al-‘Azīz (r. 717-20), a combined host of Muslim land and maritime forces besieged Constantinople. Ibn ‘Asākir mentions that the fleet consisted of a total of one thousand ships from Syria, Egypt, and North Africa.[114] The Syrian fleet arrived in September 717 and after engaging with the Byzantine forces, wintered along the Asiatic shore of the Bosporus. According to Theophanes the Confessor, the Egyptian fleet arrived in the spring of 718 with warships and four hundred transport vessels laden with corn.[115] They were soon joined by the African fleet, which brought further provisions and arms. Curiously, Theophanes specifies that the African ships were manned by Egyptian crews much like the Egyptian fleet, and it was these Egyptian crews that defected and alerted the Byzantines of their location. Whatever the specifics of the battle, the Muslim forces suffered a major defeat and lost much of their fleet. To make matters worse, the Byzantines attacked and destroyed Latakia—the northernmost naval base of the Syrian fleet—in 718-19 and took many of the Muslim inhabitants prisoner.[116] Most of these captives were likely soldiers, but we might also assume that some of them had brought their families to the port.[117]

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[113] Mikati (“The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 49–50) suggests these reappointments occurred in the months leading up to 715 when the maritime forces of the Constantinople expedition were being organized.

[114] Ibn ‘Asākir, Dimashq, 50: 159. Cited and translated by Mikati, 50.

[115] Trombley, “Sawirus Ibn Al-Muqaffa and the Christians of Umayyad Egypt: War and Society in Documentary Context,” 222–23.

[116] ‘Umar ibn ʿAbd al-ʿAzīz paid the ransom for their return. al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:133.

[117] The seizure of numerous Muslim prisoners might be an indicator that the Muslim presence along the coast was increasing following the settlement policies of ‘Uthman and Muʿāwiya, however, given the limited evidence, it is difficult to access with any certainty.

In sum, the third stage marked the zenith of Umayyad maritime power. It was characterized by an expansionist goal of capturing the Byzantine capital and establishing naval supremacy over the eastern Mediterranean and coastal Anatolia. The division of the African, Syrian, and Egyptian fleets between the naval bases at Acre, Beirut/Tripoli, and Latakia indicates a project of significant infrastructural development and settlement along the coasts of *junds* Urdunn, Dimashq, and Ḥimṣ, but also of a highly organized naval institution that involved the requisitioning of sailors, ships, and supplies from across the empire. The fact that the Byzantines targeted Latakia, destroying the port and taking many Muslim captives, highlights the threat that these naval centers posed to Byzantine trade and security. Ultimately, the failed siege of Constantinople was a major defeat that would change the course of Islamic maritime policy to come.

2.5 Fourth Stage (717-750 CE): End of the expansionist policy and beginning of the 'spiritual military leader'

The Muslim losses during the second siege of Constantinople in 717-18 CE marked a major turning point for the Umayyad dynasty and its ambitions. It inflicted not only a financial toll on the caliphate, but also a moral dilemma. The expansionist policy of al-Walīd was no longer tenable, and the borders of the caliphate began to solidify.

In response to the defeat, Caliph 'Umar (II) b. ʿAbd al-ʿAzīz (r. 717-20)—nicknamed "the Pious"—ended the tripartite division of the coast and navy. He removed the individual in command of the troops of the provincial fleets (of Syria, Egypt, and North Africa), who had been appointed by his predecessor Sulaymān, and gathered the ships of the provinces (*sufun al-ajnād*)

at Tyre.[118] ‘Umar II then appointed one commander over the fleets, who was a ḥadīth transmitter and an Arab. The appointment of al-Mukhāriq b. Maysara al-Ṭāʾī—who was a ḥadīth scholar and not a soldier—to this position, represented a break from the policies of his predecessors, and was a tradition that would continue through the remainder of the Umayyad caliphate.[119] This was the beginning of the spiritual-military leader along the maritime frontier.

The reign of Yazīd b. ʿAbd al-Malik (r. 720-24) was largely uneventful in terms of maritime activity. He appointed one ‘commander of maritime expeditions’ who remained in this role through the first years of Hishām b. ʿAbd al-Malik’s caliphate. During Hishām’s long reign (724-43), he relocated the Syrian arsenal from Acre to Tyre. Scholars often attribute personal commercial reasons as the impetus behind Hishām’s decision to move the arsenal, which is an important reminder of the economic priorities underlying Muslim decisions, despite the typical emphasis on conquest and military objectives.[120] Balādhurī recounts that Hishām desired to purchase several privately owned granaries (*arḥā*) and storehouses (*mustaghallāt*) in the port of Acre but was refused. In response, the caliph moved the arsenal to Tyre where he installed an inn (*funduḳ*) and a storehouse.[121] This brief account testifies to the existence of granaries, storehouses, and inns at the early Islamic ports. Moreover, it indicates that the early caliphs, among other Muslim individuals, owned revenue-generating real estate at these coastal centers. There might have also been additional or alternative reasons beyond personal interest. It is

[118] Ibn ‘Asākir, Dimashq, 14: 405. Cited by Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 51.
[119] Mikati, 51.
[120] Borrut, “Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles),” 30–31; Sharon, *Corpus Inscriptionum Arabicarum Palaestinae, (CIAP),* 6:31.
[121] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:117 Arḥā means mill, but Borrut (2001, 30) prefers to translate this term as granary according to the American translation of al-Tabari XIII, 106. The term can also mean entrepot. Mustaghallāt can mean anything from which one derives an income, and Borrut prefers storehouse/magazine here. .

perhaps significant that ‘Umar II had gathered the fleet at Tyre and not Acre after the losses at Constantinople. This might suggest that conditions at the port were problematic for staging a large fleet. It is also possible that after overhauling the policies of his predecessors, ‘Umar II wanted to start with a clean slate at Tyre.

Hishām appointed three successive commanders of maritime expeditions during his caliphate. The first appointee was demoted after a poor performance during a confrontation with Byzantine ships outside of Tyre.[122] The last appointee, al-Aswad b. Bilāl, was originally appointed as the governor of Beirut—a position that was largely unnoteworthy. According to his biography, al-Aswad was governor of Beirut when Byzantine ships raided the town and attacked a group of merchant ships that were anchored in the river of Beirut.[123] Taking several boats, Al-Aswad pursued the Byzantine marauders and defeated them. In response to his heroism, Hishām promoted Al-Aswad to the governor of maritime expeditions, and he went on to lead two maritime expeditions in 737 and 739.[124]

A further testament to his proficiency in naval matters, Al-Aswad retained his position under al-Walīd (II) b. Yazīd (r. 743-44) and later led an expedition against Cyprus. Ibn ‘Asākir recounts that al-Aswad gave the inhabitants the choice to either return to Syria with him or leave for Byzantine territory.[125] Of note, the ultimatum al-Aswad offered the Cypriots was very similar to the one Mu‘āwiya gave to the inhabitants of Arwād in 650.[126] This raises the question of

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[122] Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 52.

[123] This is one of the few accounts that preserves a hint of the economic activity that was going on at these coastal sites. It is particularly interesting, because it suggests that ships at the time were taking advantage of the river mouth in Beirut and not the harbor. This might be because Beirut’s harbor was damaged in the 551 earthquake and subsequent tsunami.

[124] Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 59.

[125] Ibn ‘Asākir, Dimashq, 9: 68. Cited and translated by Mikati, 53.

[126] See Conrad, “The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East.”

whether this was a typical occupation strategy or whether this was a literary device that was repeated in the conquest narratives.

During the subsequent caliphate of Marwān (II) b. Muhammad (r. 744-50), there was a rapid turnover of commanders of maritime expeditions, and the information regarding their tenures is limited.[127] Overall, Marwān II's reign appears to have been largely uneventful in terms of naval activity. However, he is reported to have made repairs in the ports of Acre and Tyre.[128] According to al-Jahshiyārī, the work was carried out by a certain Ziyād b. Abu al-Ward al-Ashja'ī, who was the secretary of Marwān.[129]

The fourth phase ended with the overthrow of the Umayyad dynasty in 750 CE. The overall period was characterized by military contraction, including the retreat and consolidation of the navy, and a renewed focus on defense. In the wake of the Muslim loss at Constantinople, the Umayyad Caliphs abandoned the aggressive maritime policies of their predecessors. The reduction in scope was accompanied by changes in the organization of the coast and the fleet. 'Umar II consolidated the fleet at Tyre under a single individual. Significantly, the first commander of the maritime expeditions during this period was a ḥadīth scholar as opposed to a military specialist; this was a precursor to the religious priority that would be the hallmark of the subsequent stage.

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[127] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 53.

[128] Sharon, *Corpus Inscriptionum Arabicarum Palaestinae (CIAP)*, 1:31; Borrut, "Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles)," 34. According to al-Jahshiyârî, the following inscription was written on the doors of these two ports: "[Here is] what the Commander of the Faithful Marwân ordered to repair and which was carried out by the hands of Ziyâd b. Abu al-Ward."

[129] al-Jahshiyārī, *Kitab Al-Wuzara' Wa-al-Kuttab*, 60, 1. 11 and 80, II. 12-13. Cited by; Sharon, *Corpus Inscriptionum Arabicarum Palaestinae (CIAP)*, 1:30–31.

2.6 Fifth Stage (ca. 750 – 9th/10th century): Sacralization of the coast, rising power of spiritual-military leaders, development of the 'maritime frontier' and '*ghāzī*' caliphs

The 'Abbāsid rise to power marked a stark departure from Umayyad policies for the coastal zone. During the revolution there was an influx of religious scholars and their families to Beirut, and presumably to other important coastal cities, like Ashkelon.[130] This was a time when the borders of the caliphate were hardening, and when the Syrian coast witnessed a spiritual boom. During this phase, religious scholars who had settled along both the inland and coastal frontiers grew in power and status, and their role as the spiritual leaders of the ummah crystalized.[131]

The 'Abbāsids shifted the center of political power from Damascus to Baghdad. However, the new dynasty did not neglect the Syrian coast.[132] When Caliph al-Manṣūr (r. 754-75) took power, he invested heavily in efforts to rebuild, fortify, and settle the coast.[133] These polices, in many ways, mirrored the actions of the Rāshidūn and early caliphs. It may be that Manṣūr and his successors undertook these activities not only as a strategy for coastal defense, but also as a way to portray themselves in the role of the legitimate ruler protecting their domains. It is crucial to keep in mind that the literary sources intentionally emphasized the tropes of constructing, fortifying, and settling the coast to portray the 'Abbāsid caliphs as proper *ghāzī* (frontier fighter) rulers and reflections of the great commanders from the glory days of the

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[130] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 53.

[131] For an in-depth examination of this process along the northern frontier, see Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*.

[132] See for instance, Borrut, "Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles)"; Borrut, "L'espace Maritime Syrien Au Cours Des Premiers Siècles de l'Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli"; Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred"; Picard, *Sea of the Caliphs: The Mediterranean in the Medieval Islamic World*.

[133] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:163.

conquest.[134] It is also worth noting that there were still Umayyad supporters, especially among the elite, who posed a threat to the ‘Abbāsids.[135] Construction and settlement efforts along the coast by al-Manṣūr may have been primarily focused on dislodging resistance. Regardless of the practical and propagandistic nature of these activities, these investments would have had a significant impact on the security and economy along the coast.

During the reign of Al-Mahdī (r. 775-85), the war against Byzantium became a primary concern of the ‘Abbāsid state and a prerogative of the caliph.[136] Al-Mahdī continued the process of coastal fortification and investment in infrastructure begun by his father. He is said to have completed work in the remaining cities and forts and strengthened the garrisons.[137] An inscription found in Ashkelon in 1883 mentions that al-Mahdi ordered the construction of a minaret and mosque in 771, directly attesting to the ‘Abbāsids’ investments along the coast, in what was gradually becoming an ideological frontier zone.[138]

It seems that during the initial years following the end of Umayyad rule, no one was assigned to the position of the commander of the maritime expeditions. We learn from Ibn ‘Asākir that Manṣūr (r. 754-75) reinstated this title during his reign and appointed seven people to the position over the course of his rule.[139] Although we do not know much about these individuals, one of them led a raid against Cyprus in 763.[140] Along the northern land frontier,

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[134] A *ghāzī* was an individual who partook in military expeditions or raids (*ghazw*).
[135] See Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*, Chp. 2 for a discussion of the resistance along the northern Syrian (land) frontier.
[136] Bonner, 69.
[137] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:163.
[138] Borrut, “Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles),” 35. There are earlier instances of commanders constructing mosques along the coast. For instance, al-Balādhurī (*Kitāb Futūḥ Al-Buldān*, 1:132–33, 143) recounts that Ubada ordered the construction of a congregational mosque at Latakia after capturing the city, while Abd al-Malik is said to have restored the mosque in Caesarea that was destroyed by Byzantine raids during the Second Civil War.
[139] Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 53.
[140] Ibn ‘Asākir, Dimashq, 26: 252. Cited by Mikati, 54.

Manṣūr rotated the commanders who led the annual expeditions into the Byzantine Empire. This was to prevent any one commander from gaining too much authority.[141] His appointment of seven commanders of the maritime expeditions over the course of his reign may reflect a similar strategy along the coast.

Ibn ʻAsākir also lists two governors of the coast who served successively for forty years.[142] Both were brothers and had connections to the famous Syrian jurist al-Awzāʿī. Al-Awzāʿī was one of the earliest scholar-ascetics that resided along the empire's frontiers. He translated ḥadīth, wrote on the law of war (*siyar*), and promoted the act of guarding the frontier (*ribāṭ*)—particularly along the coast.[143] Both of these ʻAbbāsid governors of the coast are mentioned as transmitters of ḥadīth, and both had connections to al-Awzāʿī (d. 774) who was based in Beirut. It is important to point out that the tradition of appointing a ḥadīth transmitter and not a soldier to this position can be traced back to ʻUmar II's reign—we might consider this appointment the genesis of the spiritual-military leader along the maritime frontier. It was during this period that al-Shām's coasts underwent a process of sacralization, and several of the coastal cities like Beirut became known as *ribāṭs*—places where the act of *ribāṭ*, or guarding the frontier, was performed (Chapter 4).[144]

Hārūn al-Rashīd (r. 786-809) continued his predecessors' policies by investing in the coastal cities, but also took a more active role in the defense of the coast. Perhaps to restore the caliph's position as the spiritual and military leader of the *ummah*, Harun personally led

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[141] Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*, 143; Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier," 28.
[142] Ibn ʻAsākir, *Dimashq*, 40: 475 and 11: 140-1. Cited by Mikati, 58.
[143] The first brother was the teacher of al-Awzāʿī's son. See Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*, 107–34 for a discussion of several important scholar-ascetics who resided along the northern frontier during the 'Abbasid period ; For al-Awzāʿī and the development of ribāṭ (n) along the coast, see Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred."
[144] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier."

invasions against the Byzantines, fashioning himself as the ultimate *ghāzī* caliph—though it is unclear if he directly participated in any of the maritime expeditions as he did with the overland raids.[145] This need to reclaim the potency of the caliph as the spiritual and military leader (*imām*) of the community was maintained through the centuries by various dynasties.[146]

Hārūn reorganized the inland frontiers of the ‘Abbāsid state, creating a new district known as the ‘Awāṣim.[147] According to some scholars, it was during Hārūn’s reorganization of the inland frontier that the coasts of Bilād al-Shām developed into an ideologically and politically charged maritime frontier (s. *thaghr al-baḥr*, pl. *thughūr baḥriyya*).[148] This process went hand in hand with the sacralization of the coast and the influx of religious scholars to certain coastal cities like Beirut (discussed further in 3.3). While the term *thughūr baḥriyya* first appears in Qudama b. Ja’far’s *Kitāb al-kharāj wa-ṣināʿat al-kitāba*, it is possible that the coastline of al-Shām was already understood as such early on in the conquest (see 3.1).

Several decades later, we learn that the Muslim fleet was reallocated under al-Mutawakkil (r. 847-61) to strengthen the security of the province. According to Balādhurī, in 861-62 CE Mutawakkil ordered ships and garrisons to be stationed at Acre and all along the Syrian coast.[149] Borrut suggests that this change in maritime policy may indicate there was a reorganization of the fleet, and that the arsenal may have been relocated back to Acre (the

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[145] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:163; Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*, 99 sees Hārūn as the first ghāzī-caliph.

[146] Including the Ṣaffārids (r. 861-1003), the Tūlūnids (r. 868-905), and the Ghaznavids (r. 977-1186).

[147] Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*, 85–87.

[148] This was first proposed by Borrut, “Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles),” 43; Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred.”

[149] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:118, 163.

‘Abbāsids had until that point kept the arsenal at Tyre).[150] Why the main arsenal kept shifting between Acre and Tyre is unclear. One wonders if it was strategically motivated, or due to caliphal preference. During Walīd I’s (r. 705-15) reorganization of the navy, the fleet assigned to the Damascus coast had alternated between Tripoli and Beirut, depending on the political situation. Perhaps Acre and Tyre operated similarly, and their status as chief arsenal was influenced by a variety of factors, including Byzantine activity and fluctuations in trade. Shifting the arsenal may have been a tactical response to political and economic threats within the empire, as opposed to being simply a reaction to the Byzantines. The arsenal may have been moved to increase military presence within areas prone to revolt. On the other hand, they may have been moved to disrupt local ties, preventing corruption and too much power falling into the hands of local elites. The arsenals represented concentrations of wealth and power, and by moving them, a caliph could rebalance local power, and reward elite families loyal to him. Caliph Hishām’s transfer of the arsenal from Acre to Tyre appears to have been primarily tied to personal economic interests. Other instances where the arsenal was transferred may also represent changing caliphal patronage as opposed to solely reflecting strategic concerns.

In 868, the Ṭūlūnid dynasty advanced into southern Syria. After seizing control of the territory, Ibn Ṭūlūn refortified the region and invested in maritime infrastructure, casting himself in the role of a *ghāzī* caliph, like the ‘Abbāsid caliphs before him. An inscription found offshore the theater in Caesarea attributes the construction of a *burj* (tower) or *thaghr* (frontier fortress) by Aḥmad b. Ṭūlūn, attesting to this activity (Table 3).[151] Al-Muqaddasi relates that Ibn Ṭūlūn

[150] Borrut, “L’espace Maritime Syrien Au Cours Des Premiers Siècles de l’Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli,” 19.

[151] Sharon, “Arabic Inscriptions from Caesarea Maritima: A Publication of the Corpus Inscriptionum Arabicarum Paleastinae,” 424–25.

rebuilt Acre (the location of the arsenal according to Borrut) and modeled it on that of Tyre—the ideal for a defensive port.[152] Despite the change in dynasty, the overall policy toward the coast was similar.

The fifth stage of maritime development was characterized by policies of rebuilding and fortifying the coast, as well as investing in local economic and maritime infrastructure. While in part this was associated with a broader policy of strengthening the maritime frontier, it played a double role in supporting the legitimacy of the Muslim rulers, casting them in the role of *ghāzī* caliphs. This was part of a broader process of sacralization, discussed in Chapter 3.3. It is during this period that we also see the coast reorganized under the mantle of a maritime frontier (*thughūr baḥriyya*), and it is the nature of this institution that we will turn to in the next chapter.

2.7 The Conquest in review

During the decades after the conquest of al-Shām, the early Muslim state was on the defensive. The coasts of Syria-Palestine were fortified, garrisoned, and settled in order to project control over this highly contested zone. The founding of the Islamic navy and the development of an expansionist maritime policy effectively transformed the nascent Islamic state into a *jihād* state.[153] The Muslims were able to extend their influence over the sea corridors and launch extensive maritime expeditions against distant Byzantine territories. This lasted until the failed siege of Constantinople in 717/18 CE. The end of the *jihād* state can be attributed to ‘Umar II

[152] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma’rifat al-Aqalim*, 181–82; Borrut, “Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles),” 36–37, 46.

[153] Blankinship, *The End of the Jihad State: The Reign of Hisham Ibn Abd al-Malik and the Collapse of the Umayyads*. Blankinship was the first to coin the term *jihād* state due to the expansionary warfare of the Umayyads. He attributes the end of the *jihād* state to the reign of Hisham (r. 724-743), though I am proposing that this ends with ‘Umar II.

when he ended the tripartite division along the coast and appointed the first religious scholar to be the commander of the navy. The appointment of this individual represents the beginning of the warrior-ascetic figure along the maritime frontier—a phenomenon that crystalized after the ʻAbbāsid overthrow of the Umayyads when frontier warfare assumed a new symbolic and ideologically focus. Even after the conquest slowed and the land borders of the Islamic Empire solidified, the maritime sphere remained a space to be conquered and exploited. Though beyond the scope of this dissertation, the efforts of the later Islamic dynasties including the Ṭūlūnids, Fatimids, Ayyubids, and Mamluks to conquer and defend the Syro-Palestinian coast are testament to the strategic, economic, and ideological importance of controlling the maritime frontier.

While the literary sources can provide a framework for understanding the events of the conquest, it is essential to keep in mind that they are, in part, propagandistic pieces, influenced by literary tropes (as discussed in Chapter 1.2.2). The ʻAbbāsid caliphs sought to portray themselves as proper *ghāzī* warriors, even during periods where the overall state policy was defensive, and raids were more symbolic in nature. From settling the coast to building fortifications, many 'militarized' actions also had practical benefits. The settling of foreign populations in particular regions of the coast—like the Persians who Muʻāwiya settled along Urdunn's coast—may have been tied to efforts of sedentarizing potentially unruly tribal groups and resettling contentious regions with 'loyal' clients.[154] The construction of forts and coastal monitoring networks not only served defensive agendas, but also permitted the early Muslim rulers with the means to control movement and trade along its maritime borders. It is essential to consider these actions—as they are recorded by the chroniclers—within their intended literary

[154] Donner, *The Early Islamic Conquests*, 265–67.

context. Taking the narratives at face value overemphasizes the militaristic aspects of the frontier, and risks obscuring the underlying social and economic components that made the frontier a vital and dynamic zone. As this chapter demonstrates, a close reading of the literary sources suggests that the Syro-Palestinian coast was neither abandoned nor neglected following the conquest. The early Muslim leaders directed vast amounts of resources and manpower into securing, defending, and developing the coast for strategic and economic purposes. The continued efforts by the Byzantines to reoccupy and destroy the Syro-Palestinian ports—Acre and Tyre especially—highlights not only the very real threat of Byzantine raids along the coast, but also the value that the Byzantines placed on these maritime centers. This becomes clear when we understand the coast and the early Islamic naval centers as springboards for further conquests across the Mediterranean, and most importantly for establishing dominance over the maritime trade corridors.

Table 3. Arabic inscriptions along the maritime frontier

Location	Date	Inscription	Notes	Discussion	Reference
Tell el-Samak (Jund Filasṭīn)	Late 7th to early 8th century	Pious declaration	Carved onto wall of Byzantine vaulted burial chamber		Taxel 2013, 80
Ashkelon	Fatimid	Dominion (possession) is Allāh's	Engraved on a sandstone slab embedded in a glacis below a city wall tower		Sharon 2008, 424
Yavne-Yam (Jund Filasṭīn)	Early 8th century	The longest and most significant inscription mentions a warrior who aspires for martyrdom (*shuhadā*). The other inscriptions are short prayers asking for Allāh's forgiveness.	Twelve inscriptions incised onto three marble columns, possibly belonging to a church	According to Fischer and Taxel, these inscriptions support the interpretation that the site was a *ribāṭ*.	Fischer and Taxel 2014, 234-36
Porphyreon (Jund Urdunn)	Late 7th to early 8th century	May God forgive…son of…(of the tribe of) al-Juhanī. Amen	Carved on a marble column fragment that may have originally stood in the Christian basilica nearby	According to the authors, the tribe's name is known from other epigraphical sources from the 7th and 8th centuries from northern Arabia. They draw comparison to the prayers found on the marble columns at Yavne-Yam (listed above), and suggest that this might be from a Muslim traveler or warrior.	Gwiazda et al. 2021, 188-90

(table 3 continued)

Location	Date	Inscription	Notes	Discussion	Reference
Caesarea (Jund Filasṭīn)	878-883	In the name of Allāh the Compassionate, the Merciful. Has ordered the construction of this blessed tower (?) (or frontier fortress) Aḥmad b. Ṭūlūn the servant of the Caliph (*amīr al-mu'minīn*), may Allāh grant him long life, (he built it) hoping for Allāh's reward, and this was at the end of Muḥarram [the year…]	Carved on a block of white marble that was originally part of a door post or a sarcophagus, broken on all sides. It was found in the sea near the Roman theater/early Islamic fort	Sharon indicates that the reading of Ibn Ṭūlūn's name is certain, however, the description of the building project is badly mutilated and could be read as either a *burj* (tower) or *thaghr* (frontier fort).	Sharon 1996, 424-26
Cnidus (Knidos)	716/17	O God, forgive 'Abd al-…	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church		Imbert 2013, 734
Cnidus (Knidos)	716/17	May God approve your action, Khaṭṭāb b. Ḥagar, originating from the al-'Amm tribal group [the Basra region of Iraq] and the Banū Sahr [Hijaz]! I wrote this text. The raid/expedition (*ġazwa*) of…in the year 716/17	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church	Imbert notes that the al-'Amm tribal group from the Tamīm originated from the region of Basra in lower Iraq. They joined the conquest during 'Umar b. al-Khaṭṭāb's reign. This individual also belonged to the Banū Sahr which originated in the Hijaz and came from the region of Kerak and the Balqā' in Jordan. Some settled along the Palestinian coast near Gaza.	Imbert 2013, 734-736

(table 3 continued)

Location	Date	Inscription	Notes	Discussion	Reference
Cnidus (Knidos)	Last decade of 7th century	O God, forgive Yazīd, al-Hanashī/Habashī, one of the companions of ‘Abd Allāh, of the troops (*ahl*) of Palestine! Amen, Lord of Moses, Lord of Ishmael, Lord of the worlds!	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church		Imbert 2013, 736-738
Cnidus (Knidos)	Last decade of 7th century	O God, forgive Sarāḥīl b. Rafi‘ al-‘Akkī of the troops (*ahl*) of Palestine.	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church	The nisba al-‘Akkī suggests this individual was from Acre	Imbert 2013, 738
Cnidus (Knidos)	Last decade of 7th century	O God, forgive…	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church		Imbert 2013, 738-40
Cnidus (Knidos)	Last decade of 7th century	May God forgive ‘Umar b….of the troops of (*ahl*) of Palestine…the sea	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church		Imbert 2013, 740
Cnidus (Knidos)	Last decade of 7th century	O God, Forgive Yazīd b. Sufyān al-‘Akki	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church	The nisba al-‘Akkī suggests this individual was from Acre	Imbert 2013, 740-43
Cnidus (Knidos)	Last decade of 7th century	b. Misk. Allāh O God, forgive ‘Abd	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church		Imbert 2013, 740-43
Cnidus (Knidos)	Last decade of 7th century	May my lord have mercy on Adwan b. Sammak/Simak…who read it (?)	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church	Imbert notes that the name Adwan is attested in a Jordanian graffito from the Umayyad period.	Imbert 2013, 743-44

(table 3 continued)

Location	Date	Inscription	Notes	Discussion	Reference
Cnidus (Knidos)	Last decade of 7th century	O God, forgive al-Walīd b….al- Ghadhmī then al-Ghurrī!	Engraved on the marble floor of the nave of a Byzantine (5th-6th century) church	Imbert notes that al-Ghadhmī may be a reference to the Banū Ghudham.	Imbert 2013, 745
Kos	718/19	…and they have… ʻAta b. Saʻd al-… …the infidels (*mušrikīn*) during the expedition (*ġazwa*) of…in the year 718/19. God's help and victory!	Engraved on a column in the church of Saint-Gabriel in the town of Kos	Imbert notes that the last line is a reuse of a Qur'ānic verse: *iḏā ǧā'a naṣr Allāh wa l-fatḥ*	Imbert 2013, 746-47
Kos	Last decade of 7th century	May God have mercy on Mahdi b. Rabiʻa al-Ruʻaynī then al-Bunanī, who is part of the troops (*ahl*) of Africa	Engraved on a column in the church of Saint-Gabriel in the town of Kos	Imbert notes that the nisba al-Ruʻaynī would indicate a Yemenite or Egyptian tribal origin.	Imbert 2013, 747-48
Kos	August-September 716	Al-Ḥakam b. al-Ḥakam trusts in God! In Muḥarram (August/September) of the year 716. Written by Maghluf.	Engraved on a column in the church of Saint-Gabriel in the town of Kos		Imbert 2013, 749-50
Kos	716/17 or 717/18	…in the year …and 90.	Engraved on a column in the church of Saint-Gabriel in the town of Kos	Imbert notes that the date could be 98 or 99 AH.	Imbert 2013, 750

Chapter 3 - The Conception, Administration, and Sacralization of the Maritime Frontier

The conquest and conflict along the coast of Bilād al-Shām (Syria-Palestine) created a unique frontier zone, shaped by a complex mix of interwoven political, military, religious, and economic processes. Although the coastal zone crossed numerous provinces (*jund*, pl. *ajnād*), it took on an independent identity as a sea frontier (*thughūr baḥriyya*), reflected in various forms of separate administration and governance over the centuries. It was a militarized zone—the main line of defense against Byzantine naval attacks and the launching point for the early Islamic maritime expeditions—but also a conduit for commerce and movement as well as a religious landscape. This chapter will begin to address the multifaceted aspects of the frontier by first exploring the ways in which the Muslims conceptualized the frontier zone, then examining the ways they sought to control it through administrative structures, including the development of maritime and coastal infrastructure, settlement policies, and the creation of ideology that sacralized Bilād al-Shām's coast and sea.

3.1 The *Thughūr Baḥriyya* (sea frontiers)

This dissertation treats the maritime frontier of Syria-Palestine as a defined unit of study, unique in many ways from other frontiers that bordered the emergent Islamic state. Likewise, the early Islamic state also viewed the coastal region as a conceptually unique and cohesive region, referring to it as the *thughūr baḥriyya* (sing. *thaghr al-baḥr*). It was in some ways, a liminal space—both its own separately administered zone, but part of other independent districts. As modern scholars will innately conceptualize the frontier in different ways from the contemporary administrators and people living along the coast, it is important to lay a foundation for our study

with a discussion of how the Muslims conceptualized it as a distinct region—and how those views changed over time.

Brauer's discussion of medieval frontiers as they were understood in Arab-Islamic cartography provides some insight into how they were perceived. Typically, boundaries in the early and middle Islamic periods tended to be vague transitions rather than sharp lines of demarcation, however, it could be argued that seacoasts and ports by their very nature were always sharply defined.[1] This is due to their unique nature as the interface of two distinctly different physical environments. The tenth century map of al-Shām and its coast by al-Iṣṭakhri reveals one way that the Arab geographers conceptualized the frontier zone, showing the sharp division between the coast and the *baḥr al-Rūm* ('Sea of the Greeks' or Mediterranean) (Figure 3). Rather than accurately depicting distance, the map is a schematic representation of the relationship between the sequence of important stops. Though the coast was a sharp boundary that was closely monitored and controlled by the state and the communities that dwelled along its shores, it was still accessible to merchants, pilgrims, and travelers.

It is important to observe that the early Muslim state did not perceive its domain ending at the water's edge but extending out into it. Despite the crisp division between sea and shore seen in al-Iṣṭakhri's map, the maritime frontier consisted of zones of both land and water. This is not just a modern projection based on frontier theory but was understood by the authorities who sought to control it, the sailors and travelers who faced heavy scrutiny in the customs posts at its ports, and the inhabitants whose lifeways spanned both environments. It is revealed in the special ways the coast was administered and the laws that governed the emergent state's jurisdiction over it.

[1] Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," 13, 33.

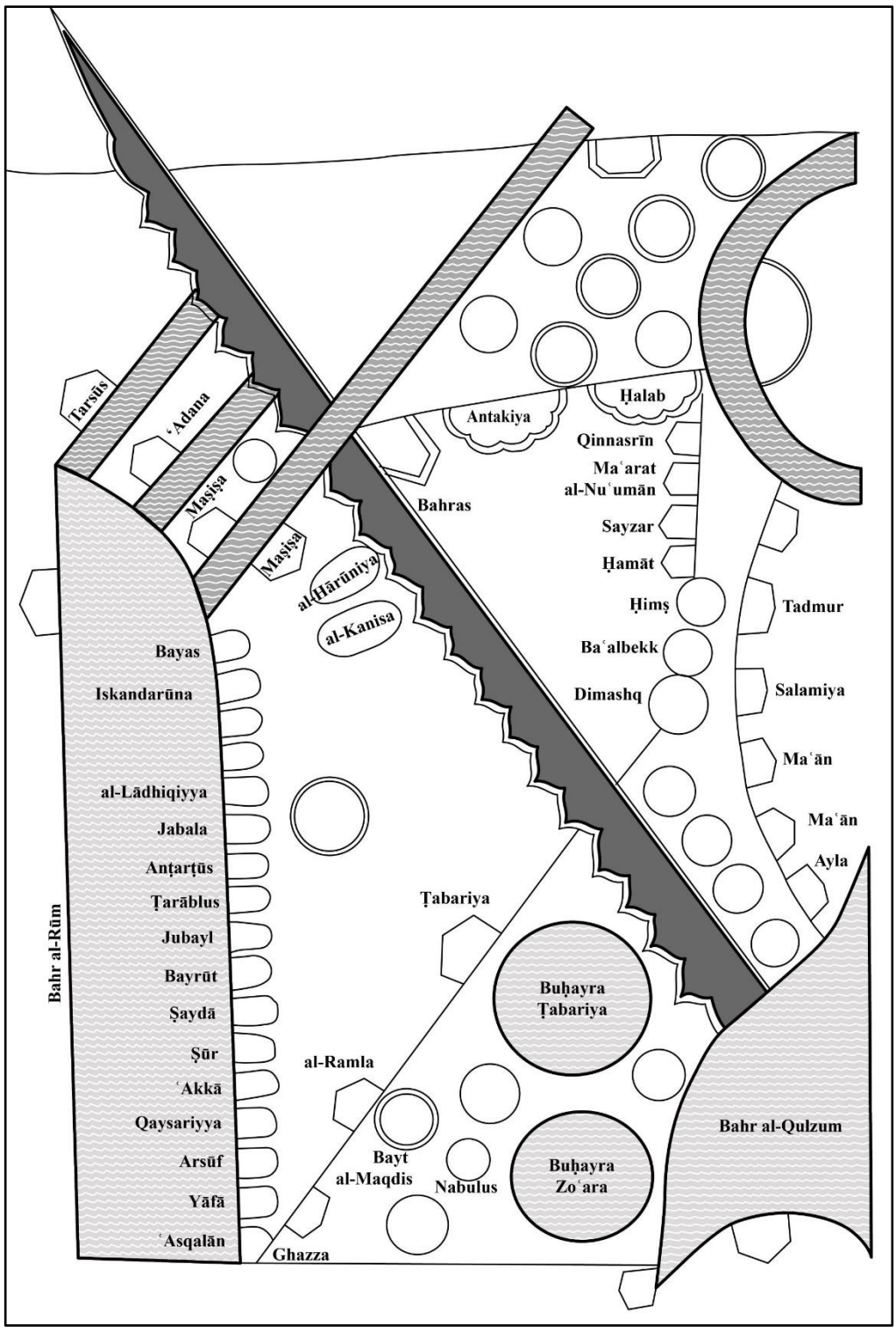

Figure 3: Tenth century map of al-Shām and its coast by al-Iṣṭakhri (tracing by Morriss, after al-Istakhri)

The terminology applied to the maritime frontier and the structure of its administration provides evidence for how the coastal zone was perceived, at least by the state. In its earliest use the term for frontier, *thaghr* (pl. *thughūr*) referred to a region or zone that abutted or faced the Byzantine lands, or the *Bilād al-Kufr* (land of unbelief).[2] The term *thughūr baḥriyya* (sea frontiers) was ultimately applied to the coasts that faced the enemy. It is unclear when the Syro-Palestinian coast first began to be imagined and specifically described as a maritime frontier (*thughūr baḥriyya*).[3] In al-Shām, the term *thaghr* designated a defensive and staging zone was employed as early as 'Umar b. 'Abd al- Khaṭṭāb's reign (r. 634-644 CE).[4] During his reign, the coast was understood as a separate zone that was administered differently than the inland areas. It is possible that the coast, which had already become a defensive staging zone, was also understood as a specialized type of *thaghr* at this early time.

It is not until the late ninth to early tenth century, that the coasts (*sawāḥil*) of Syria-Palestine are explicitly referred to as *thughūr baḥriyya* in Qudāma b. Jaʿfar's *Kitāb al-kharāj wa-ṣināʿat al-kitāba*. According to Qudāma's account, the shores of each district were considered components of the overall maritime frontier. A town in the thughūr might also be referred as a thaghr (singular) if it exercised a role in defending or guarding the frontier.[5] This was also true for coastal cities and ports along the maritime frontier (*thughūr baḥriyya*) of Syria-Palestine and Egypt, such as Alexandria, which was designated as *thaghr al-Iskandariyya*.[6] By Qudāma's time, the maritime frontiers of Syria-Palestine were the coasts of the *jund* of Ḥimṣ [including the ports

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[2] Brauer, 14, 67.
[3] Borrut, "Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles)," 43; Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred" Borrut and Mikati have suggested that it might be tied to Hārūn al-Rashīd's restructuring of the inland frontiers.
[4] Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," 18.
[5] Brauer, 25.
[6] b. Jaʿfar, *Qudāma b. Jaʿfar, Kitāb al-Kharāj Wa-Ṣināʿat al-Kitāba*, 188.

of Anṭartūs (Tartus), Buluniyās (Bāniyās), al-Lādhiqiyya (Latakia), Jabala (Jableh), and al-Hiryādha], the coasts of the *jund* of Damascus [including the ports of ʻArqa, Ṭarāblus (Tripoli), Jubayl (Byblos), Bayrūt (Beirut), Ṣaydā (Sidon), Ḥiṣn al-Ṣarafand, ʿAdnūn], the coasts of the *jund* of Urdunn [including the ports of Ṣūr (Tyre) and ʿAkkā (Acre)], and the coasts of the *jund* of Filasṭīn [including the ports of Qaysāriya (Caesarea), Arsūf (Apollonia), Yāfā (Jaffa), ʿAsqalān (Ashkelon), and Ghazza (Gaza)].[7]

3.1.1 Administration of the Coastal Zone

Several positions are mentioned in the literary sources regarding the administration of Syria-Palestine's coast and the *thughūr al-baḥriyya*. Though it is impossible to say with certainty what all these positions entailed, they are worth examining for insight into the organization and administration of the maritime frontier. Significantly, the administration of the frontier zone changed over time, suggesting changing perceptions as well as shifting political and economic priorities.

Following the Battle of Yarmūk in 636 CE, the region of Greater Syria was renamed Bilād al-Shām and ʻUmar b. al-Khaṭṭāb reorganized it into the four provinces (*arād* and later *ajnād*) of Ḥimṣ, Dimashq, al-Urdunn, and Filasṭīn (Figure 2).[8] A fifth province, Qinnasrīn, was created during Yazīd I's reign (690-683 CE).[9] The lateral division of the provinces, with each encompassing a section of the Mediterranean coast and its adjoining hinterland, was not

[7] Qudāma b. Jaʿfar, Kitāb al-Kharāj wa-ṣināʻat al-kitāba (Baghdad: Dār al-Rashīd lil-Nashr, 1981), 188. Cited and translated by Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 42.

[8] Legendre, "Aspects of Umayyad Administration," 135; Amitai-Preiss, "Kura and Iqlim Sources and Seals," 120–21; Walmsley, "The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.," 44–45.

[9] Amitai-Preiss, "Kura and Iqlim Sources and Seals," 121.

happenstance but strategic to the defense of the new Muslim state, ensuring that there were enough resources and manpower to defend against Byzantine attacks.[10] This land division also had economic benefits as it allowed the exploitation of all the resource zones of the region—sea, shoreline, agricultural hinterland, mountains, plains—and gave each province a degree of self-sufficiency and economic independence. Furthermore, resources could be funneled from inland areas to the shore or sea without having to cross provinces.

As the Syro-Palestinian ports were critical resources to both the Byzantine and early Islamic states and thus especially vulnerable to attack, the coastal regions of the *ajnād* were regarded as a distinct district that was administered by a separate governor—the governor of the coast (*amīr al-sāḥil*). Caliph ‘Umar is credited with the creation of this position in 638 CE. Individuals who held this prestigious title were always appointed directly by the caliph, and their role was to oversee the defense of al-Shām’s coast.[11] Unlike the *‘ummāl* (administrators) of the individual coastal towns, the governor of the coast dealt only with military matters that likely included the repair of fortifications, the stationing of garrisons in critical coastal towns like Ashkelon and Tripoli, and ensuring that the network of coastal watchtowers were manned. It is unclear where the *amīr al-sāḥil* resided, but he may have moved between the coastal district capitals as needed. During ‘Abd al-Malik’s reign (r. 685-705), the *amīr al-sāḥil* was stationed in Beirut.[12]

According to Qudāma, in the late ninth or early tenth century the coasts of the provinces of Filasṭīn, Urdunn, Dimashq, and Ḥimṣ were administered separately by a single governor.

[10] Walmsley, “The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.,” 155.
[11] Mikati, “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred,” 60.
[12] Mikati, 58.

Qudāma refers to this position as the *ṣāhib al-thughūr al-baḥriyya*, and he was responsible for the fleet, rather than the administration of the cities.[13] This late ninth to early tenth century organization and administration of the coast, now a frontier, harkens back to the days of ‘Umar when the coast was a separate district, governed by an *amīr al-sāḥil.* Though there had been no Syrian fleet in 638 when ‘Abd Allāh b. Qays was the first individual to be appointed as governor of the coast, he was later given the title of ‘commander of maritime expeditions’ once the fleet was established. This position—equivalent to an admiral—appears to be synonymous with the late ninth/early tenth century *ṣāhib al-thughūr al-baḥriyya*.

3.1.2 Administrative Centers

Each *jund* had a capital city and was further subdivided into districts and further into subunits known as *iqlīm*.[14] The administrators who governed these districts resided in the district capital (*kūra*) which functioned as a regional center and where taxes were collected from the towns and villages in its vicinity (Table 4). Noteworthy is that all the district capitals of Filasṭīn had served as Byzantine administrative centers prior to the conquest.[15] This demonstrates that even in instances where Byzantine cities like Caesarea and Scythopolis (Baysān) were stripped of their role as provincial capitals, these centers maintained a degree of administrative control as district capitals following the conquest.

In Egypt, local elites appear to have administered the *kūra*s early in the conquest, but they were later replaced by a new elite that spoke Arabic and did not seem to have prior ties to

[13] Mikati, 42.
[14] Amitai-Preiss, “Kura and Iqlim Sources and Seals,” 123.
[15] Walmsley, “The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.,” 85.

the *kūras* they came to administer.[16] The Egyptian papyrological material indicate that Greek and Coptic continued to be employed for administrative purposes alongside Arabic into the 9th century.[17] P. Sijpesteijn suggests that the early use of Arabic alongside the pre-Islamic languages served a largely symbolic purpose of conveying the religious and political power of the new Muslim state to its subjects. Though we do not have the same corpus of material for Syria-Palestine, the seventh century papyri from Nessana in the Negev suggest a similar practice of adopting and reworking the Byzantine administrative structures that were already in place. Overall, the transfer to Muslim political rule had minimal impact on the administrative function of regional cities. The Arabs may have adopted both the local administrative structure, and as in Egypt, retained the skilled bureaucrats that ran it, at least for a time.

We can glean some information regarding the hierarchy of the coastal towns along the maritime frontier of Syria-Palestine from the discovery of the *kūra* and *iqlīm* bulla-type seals that mention some of the *kūras* of Jund Filasṭīn. These seals are thought to have functioned as receipts for payment of the poll tax (*jizya*) by the villages of Bilād al-Shām.[18] From published examples, we learn that Gaza, Ashkelon, and Caesarea were important district capitals that collected taxes from their localities. One of these seals is particularly interesting as it mentions the coastal town of Arsūf as a *madīna* under the jurisdiction of *kūra* Caesarea.[19] These seals not only illuminate the administrative hierarchy of certain coastal towns, but also indicates that these centers continued to play an important role in the early Islamic period.

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[16] Legendre, "Aspects of Umayyad Administration," 146.
[17] Sijpesteijn, "The Arab Conquest of Egypt and the Beginning of Muslim Rule," 2007, 446.
[18] Amitai-Preiss, "Kura and Iqlim Sources and Seals," 127.
[19] Taxel, "Early Islamic Palestine: Toward a More Fine-Tuned Recognition of Settlement Patterns and Land Uses in Town and Country," 156.

The chance discovery of an early Islamic coin dated to the 740s/750s near the Lebanese site of ʻArqa lends insight into the administrative organization in Jund Dimashq.[20] Though ʻArqa is some five kilometers from the coast, it was in the hinterland of Tripoli and functioned as a district capital. During the later Umayyad and early ʻAbbāsid periods, it served as a mint for at least two copper coin issues. The finding of this coin indicates that ʻArqa belonged to the administrative district of Ba'labakk and that it was an important administrative center and local market.[21] This is noteworthy as scholars frequently rely on the 1978 publication of material from ʻArqa which attributes the abandonment of the site to the Arab conquest.[22] This demonstrates some of the problems plaguing the field and the uncritical reliance on old data.

Jund Filasṭīn	**Jund al-Urdunn**	**Jund Dimashq**	**Jund Ḥimṣ**
Ghazza (Gaza) [mint]	ʻAkkā (Acre)	Ṣaydā (Sidon)	Anṭartūs (Tartūs)
ʻAsqalān (Ashkelon) [mint]	Ṣūr (Tyre)	Bayrut (Beirut)	Baldah
Yubnā (Yavne) [mint]		Jubayl (Byblos)	Jabalah
Yāfā (Jaffa)		Ṭarāblus (Tripoli)	Al- Lādhiqiyya (Latakia)
Qaysāriya (Caesarea)		ʻArqa [mint]	

Table 4: District capitals (kūras) along the coast according to Balādhurī's Futūḥ

In summary, following the conquest of the major ports, the Syro-Palestinian coast was treated as a single administrative district under the command of an individual, the *amīr al-sāḥil*. Though the region was reorganized into a new administrative system (ajnād), most of the coastal

[20] Bartl, "Islamic Settlements in the Plain of Akkar/Northern Lebanon."
[21] Bartl, 33.
[22] For instance, Reynolds, "The Homs Survey (Syria): Contrasting Levantine Trends in the Regional Supply of Fine Wares, Amphorae and Kitchen Wares (Hellenistic to Early Arab Periods)," 63, fig. 10; Vokaer, "Pottery Production and Exchange in Late Antique Syria (Fourth-Eighth Century AD). A Study of Some Imported and Local Wares," 590, fig. 9; Gwiazda et al., "The Sidon's/Ṣaydā Northern Hinterland during the Early Byzantine-Early Islamic Transition," 190.

cities that had functioned as regional centers under the Byzantines continued to do so as *kūras* under the early Arab rulers. Rather than discarding what was there before, the Arabs retained and reimagined the political institutions along the Syro-Palestinian coast. This employment of local officials alongside Arab administrators, and the reclaiming of Byzantine administrative centers highlights the complex dynamics that occurred within the conquered regions. The use and adaptation of these institutions would have entangled the Muslims with their predecessors in the region, creating cross-cutting social ties, and blurring the lines between the Christian and Muslim world—if only for a time.

3.1.3 Maritime Laws and Duties

A complex system of maritime laws governed movement, exchange, and interactions along the Mediterranean frontier during the Byzantine and early Islamic periods. The first Islamic legal treatises on sea law appear in the early 10th century when maritime commerce and connectivity in the Mediterranean had achieved a far-reaching international nature. While similar codified documents are not available for the early Islamic period, the evidence suggests that the Muslims incorporated many aspects of the well-established Rhodian Sea Law—a collection of Byzantine maritime laws that was codified between 600 and 800 CE.[23] As the early Arab rulers relied on many of the political and administrative systems already in place, it is reasonable to assume that the Rhodian Sea Law was active in Islamic territories during the early centuries of Islam.[24]

[23] Khalilieh, *Islamic Maritime Law: An Introduction*, 11, 178.
[24] Khalilieh, 177–78.

We are fortunate to have detailed evidence for Islamic maritime law as it stood in the 10th century. It yields insights into the boundaries of territorial waters, the regulations that travelers and merchants faced at ports, and the laws concerning war and trade with the *dār al-ḥarb*. While it cannot be a proxy for earlier incarnations of the maritime law, it would have developed from them, and gives us an idea how the frontier zone may have operated.

Political control over the maritime zone seems to have depended on the degree of power that the state or governor could maintain over it. This was achieved in numerous ways, including but not limited to the construction of watchtowers, fortifications, and monumental architecture, the implementation of customs and taxes at key ports, and the use of naval fleets (discussed below). It is essential to recognize that these measures were not only aimed at securing territory and defending against Byzantine attacks, but crucially, they proclaimed Muslim sovereignty over the shore and its adjacent waters—and the lucrative trade that went along with it.

Stretches of the sea that were beyond the reach of the caliph were considered the high seas, or international waters as we understand it today. Movement and exchange along those uncontrolled areas of the sea was possible even in times of war. Outside of territorial waters, however, Muslim warships could engage enemy warships and transports only during times of war. According to Islamic maritime law, the coastal waters that fell under the purview of the state were determined by the distance at which the top of a ship's mast was visible from the shore.[25] Citing an account by al-Idrīsī of the Maghrib in 1154 CE in which a signal was sent when an enemy was spotted at a distance of six miles, Khalilieh proposes that six miles was the limit of maritime jurisdiction for this coast.[26] It is therefore reasonable to assume that the

[25] Khalilieh, 138.
[26] Khalilieh, 138.

territorial waters of the Syro-Palestinian maritime frontier were a factor of visibility and the state's ability to monitor the waters adjacent to the coast. This was made possible by a system of intervisible watchtowers, forts, and minarets (discussed below in Chapter 3.2.2) that allowed the state to monitor the sea and send signals along the coast. These prominent landmarks would have been visible from seaward to Muslim and non-Muslim travelers and merchants, allowing them to serve as visible projections of Muslim political power and clearly marking the boundary of official control.

In addition to the network of watchtowers and lookouts along the shore, fleets often patrolled stretches of the coast near critical ports and naval bases. Muslim ships were permitted to engage enemy ships that entered territorial waters with the intention of attacking coastal settlements and maritime installations.[27] Border control along maritime frontiers was more pronounced than land frontiers and could involve invasive examination as well as high customs charges. Passengers of all faiths and nationalities were required to carry the necessary documentation before crossing into Islamic territorial waters. Muslim passengers were expected to carry receipts from their place of departure indicating that they had paid the required religious dues (*zakāt*), while *dhimmis* (non-Muslim subjects who were granted special status and safety in return for paying a tax) had to prove payment of the poll tax (*jizya*).[28] Meanwhile, passengers from non-Muslim countries or the *dār al-ḥarb* who passed into the *dār al-Islām* had to obtain and possess a certificate of safety or protection (*amān*).[29] This certificate allowed foreign

[27] Khalilieh, 120.

[28] Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," 33; Khalilieh, *Islamic Maritime Law: An Introduction*, 85.

[29] Letters of amān for individuals are attested as early as the late Umayyad period (723-726 CE), while those given to groups for purposes of travel or trade from Muslim administrators of Egypt date to 651/52 CE and 722-734 CE. The institution of *amān* made diplomatic relations and trade between the Islamic and Christian world possible. See Schacht, "Amān."

merchants and travelers to conduct business and pass freely in Islamic territory. While any Muslim could grant *amān* to someone, only the *imām* (head of the Muslim community, or the caliph) was qualified to grant *amān* to groups of people, such as traders or populations from a territory.[30]

Trade with *ḥarbī* (enemy) merchants inside the *dār al-Islām* was encouraged; however, Islamic jurists were generally opposed to the idea of Muslims trading in the *dār al-ḥarb*.[31] Of course, that did not prevent merchants from trading in those areas. An intriguing exception is that military maritime law permitted naval warriors who were engaged in *jihād* to trade in the *dār al-ḥarb*.[32] The personal use of war vessels to transport private merchandise was prohibited, however, without permission from the admiral.

The early Islamic state used customs stations to control and monitor the movement of people and goods across the maritime frontier as well as to increase revenue. Although the conquest chronicles seldom discuss the specifics of commerce and exchange, the ports that housed the state arsenals and dockyards were likely also the official entrepots for trade. Customs officials followed strict protocols and their treatment of arriving passengers could be quite harsh. In addition to Islamic canonical taxes equaling a tenth or a fifth of one's cargo, other taxes included toll station fees, entry and exit permits, as well as gratuities for the officials and laborers in the port.[33] Everyone who passed through the port, whether from the hinterland or the sea, was subject to intense scrutiny and searched for contraband. Smugglers who were caught suffered strict penalties, including death.

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[30] Schacht.
[31] Khalilieh, *Islamic Maritime Law: An Introduction*, 126–27.
[32] Khalilieh, 117.
[33] Khalilieh, 82–86; Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," 33.

The description of Bishop Willibald's pilgrimage through the Holy Land in 723/24 – 726/27 CE provides a unique account of what it must have been like to travel across Syria-Palestine's maritime frontier during the reign of Hishām b. ʿAbd al-Malik (r. 724-43).[34] After departing from the eastern coast of Cyprus and reaching Tartūs (Anṭartūs), one of the district capitals (*kūras*) of Jund Hims, Willibald and his seven companions made their way overland to Hims. Along the way, the group was arrested and brought to the governor who accused them of being spies. During Willibald's time in prison, a merchant took pity on him and his companions, and though he could not afford to ransom them, he made sure they were fed, bathed, and brought to church and the market. Ultimately, it was a Spaniard with ties to Hishām's inner circle that arranged for Willibald and his group to meet with the caliph who then heard their case and gave them permits (*amān*) to travel. The group continued their pilgrimage, passing freely between the coast and its hinterland on numerous occasions over the years, visiting the coastal district capitals of Caesarea, Gaza, Jaffa, Tyre, Sidon, and Tripoli.

The narrative of Willibald's departure is particularly illuminating regarding the policing of Tyre and its adjacent coasts: "no one arriving there without a permit can pass through the district since it is a security area and sealed off."[35] Tyre and its district were regarded as a secure area, and only those who held travel permits (*amān*) could enter the port. This seems to have extended to Tyre's adjacent shores because those who landed along them without proper credentials were arrested and brought to Tyre. In contrast, Acre was not similarly policed, and Willibald and his companions were able to pass freely through the city on their journey northward. Tyre's strict security measures would be consistent with a state port where trade was

[34] Hoyland, *Seeing Islam as Others Saw It*, 223–26.
[35] Cited by Hoyland, 226.

controlled, and the navy was based. Curiously, Hishām moved the arsenal from Acre to Tyre at some point during his reign. If Willibald departed Tyre ca. 726/27 CE, this might suggest that the transfer of the arsenal to Tyre had occurred early in Hishām's reign.

Upon departing from Tyre, Willibald and his companions were thoroughly searched by the port authorities for contraband "and if they had found anything they would at once have had the death penalty inflicted upon them."[36] The harsh security measures that Willibald was subjected to during his travels correspond to many of the measures outlined in later Islamic maritime law.

Willibald's testimony reflects the dynamic nature of the maritime frontier. The shore was a defined and controlled barrier while simultaneously operating as a bridge between the sea and hinterland. Stretches of it were open, while others were closed and carefully guarded. Even in times of conflict, however, trade and travel between the *dār al-Islām* and the *dār al-ḥarb* persisted. Merchants, pilgrims, and spies frequently passed across the frontier despite the authorities' exacting measures to guard, control, and profit from it. Cargoes and passengers were often subjected to scrutiny and heavy taxes by local authorities, but that did little to curtail the black-market exchange and movement of goods, people, and information.

Rather than generate something entirely new, the Arab authorities adopted and adapted the established maritime laws of the Mediterranean to their own needs and purposes, especially as the conquests came to involve overseas territories. The unifying aspect of these laws was significant, and we might draw a comparison to 'Abd al-Malik's late seventh century coinage reform which created a unified and empire-wide currency that facilitated and encouraged trade. The adaptation of common sea laws—which would have been familiar to mariners that sailed

[36] Cited by Hoyland, 226.

with the Muslims and traders who visited the *dār al-Islām*—facilitated connectivity, cross-cultural interactions, and commercial exchange between regions during the first centuries following the conquest.

In addition to giving us insight into how commerce was conducted, the maritime laws regarding trade and customs illuminate the many different theaters for cross-cultural interaction along the frontier. The need for permits and the payment of taxes and duties created interactions between merchants and travelers and the state. In addition to typical interactions between foreign and Muslim merchants, the structure of maritime laws and trade along the frontier also created opportunities for interactions that subverted the state, such as between smugglers and the merchants and consumers who bought their goods. The laws governing trade by Muslim sailors in foreign lands also illuminates these cross-cutting economic interactions. Overall, the picture that emerges is not one of divided Muslim and Christian worlds as presented by those focused on conflict, but an entangled world, filled with cross-cultural, social, and economic interactions all along the maritime frontier.

3.2 Securing the Maritime Frontier

The Syro-Palestinian coast was a contentious area following the conquest. As demonstrated in Chapter 1, this was especially true during the first century following the Muslim expansion into the region. The chroniclers describe the coast as a no man's land, a region depopulated and ravaged by Byzantine naval attacks. While this characterization was in part a literary trope and propagandistic in nature (see Chapter 1.2.2), we cannot discount the fact that the coast was contested and that the threat of rebellion and Byzantine reconquest of major ports like Latakia, Tripoli, Caesarea, and Ashkelon was very real.

The early Muslim commanders clearly recognized that controlling key coastal centers was critical to their conquest efforts of the region, given their apparent strategic priorities. This is not surprising. Syria-Palestine's harbors and ports were vital access points to the coastal hinterland and interior as well as launching points for further conquests. While many of the coastal cities surrendered peacefully, several remained Byzantine strongholds for years. Even after the Muslims finally captured the problem ports of Tripoli, Caesarea, and ʿAsqalān, they remained hotbeds of resistance and were frequent targets of Byzantine attack. Almost immediately, the early Muslim leaders enacted a systematic strategy to secure the coast that included the overhaul of fortifications, the settlement of loyal populations in critical areas, and the creation of a navy.

3.2.1 Garrisoning the Coast

Throughout the conquest and occupation of the Syro-Palestinian coast (632/34 to 640/41 CE), Muslim leadership committed significant resources to repairing the fortifications in coastal centers and posting garrisons in them (see Chapter 2.2). The initial stage of securing the coast was implemented while Muʿāwiya was governor of Syria. After sending word to Caliph 'Umar about the condition of the coastal towns ca. 639 CE, Mu'āwiya was ordered to repair their fortifications, garrison them, and station guards in their towers to warn of enemy attack.[37] Garrisons were especially important at the problem cities, and those that were stationed at ʿAsqalān and Tripoli were responsible for guarding the coast during the sailing season.[38] Strategic coastal centers that overlooked a wide territory or stretch of coast were key sites that

[37] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:128.
[38] al-Balādhurī, 1:142, 127.

were garrisoned and manned so that in the event of a revolt or attack, reinforcements from the surrounding areas could be signaled.[39] Al-Awzā'ī (d. 774) provides a similar assessment of the coastal defense in Syria-Palestine.[40] In the summer, a guard of cavalry and foot soldiers was stationed along the coast, while during the winter months when most of the forces were at home, small groups manned the watchtowers and would signal for reinforcements if needed.

It is worth noting the organization of the garrisons along Egypt's coasts following the conquest as described by Ibn 'Abd al-Hakam (d. 870).[41] One quarter of the army was stationed in Alexandria and changed every six months with soldiers who were sent from al-Madīna by Caliph 'Umar (r. 634-44). Meanwhile, another quarter of the army was distributed along the Egyptian coast, while the remaining half was stationed in the capital of al- Fusṭāṭ. Curiously, it is only the garrisons at Alexandria that appear to be rotated biannually with foreign soldiers. This was likely in response to the rebellious nature of the former Byzantine capital. A similar policy appears to have been instituted in Syria-Palestine at the most contentious coastal cities, where garrisons and their administrator were rotated annually (see 2.2).

'Uthmān (r. 644-56) continued the policy of stationing troops along the coast. However, it appears that the need for garrisons required a more permanent solution. In response, he ordered Mu'āwiya to settle the garrisons by giving them land and houses and to construct mosques in these areas.[42] These new coastal settlements provided a lasting solution to expanding the state's authority over a contested area, not only militarily, but ideologically as well. Moreover, the construction of mosques reinforced ideas of community within the garrison settlements and

[39] al-Balādhurī, 1:128.
[40] Cited by El'ad, "The Coastal Cities of Palestine During the Early Middle Ages," 159.
[41] Cited by El'ad, 167, footnote 75.
[42] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:128.

served as potent religious and political symbols for the surrounding local populations. The process of renovating and constructing mosques became an essential component of Islamization, as well as a means for later dynasties to establish their legitimacy (discussed below).

Aside from garrisons, we also learn from the chroniclers that various imported populations were strategically settled in contentious regions along the Syro-Palestinian coast. In one case, Balādhurī reports Muʻāwiya relocated Persians from the interior and settled them in Acre and Tyre after he became caliph.[43] This was part of his plan to develop and secure the coast. Writing in the ninth century, al-Yaʿqūbī (d. 897) indicates that ʻArqa (located along the Dimashq coast) had also been settled with a population from Persia.[44] Persians also appear to have been settled in Beirut during the early Umayyad period, as indicated by the presence of Persian descendants in the biographical sources.[45] As Mikati notes, it is interesting that it was Persians and Jews and *not* local Byzantine populations that were transplanted to the coast.[46] This preference was certainly tied to security concerns, as the coastal cities were prone to revolt. The resettlement of these foreign and ethnic groups not only helped established communities that were not loyal to the Byzantines along a contentious area of the maritime frontier, but it also brought new social, cultural, and religious diversity to these areas.

[43] al-Balādhurī, 1:117.
[44] Le Strange, *Palestine Under the Moslems*, 397–98.
[45] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 28.
[46] Mikati, 27.

3.2.2 Fortifications and Watchtowers

While the archaeological evidence for the conquest is largely absent, the remnants of several coastal fortifications attest to these early Islamic efforts to secure the coast of Filasṭīn.[47] The discovery of a late seventh to early eighth century town wall at Arsūf could potentially be related to the defenses that ʻAbd al-Malik reportedly repaired following the Second Civil War.[48] ʻAbd al-Malik also repaired and garrisoned Caesarea following a Byzantine attack in 690 CE.[49] The only extant remains of a fortification at Caesarea that might be attributed to ʻAbd al-Malik's reign is the fortress (*fortezza*), constructed in the defunct Roman theater. The dating of the fortress is debated. K. Holum proposed a construction date somewhere between the late sixth and early seventh century, while Y. Porath and D. Whitcomb suggest a more likely late seventh or eighth century foundation.[50] While the 2022-23 excavations of the Caesarea Coastal Archaeological Project in the area directly south of the fort have identified early Islamic remains, the foundation date of the fort remains unconfirmed. The chance discovery of an Arabic inscription offshore might attest to the fort's original construction, or at the very least, a Ṭūlūnid reconstruction. The inscription, which is currently housed in the nearby museum of Kibbutz Sdot Yam describes the construction of a *burj* (tower) or *burj thaghr* (frontier fort) by Aḥmad b. Ṭūlūn in 878 CE (see Table 3).[51] Apart from this fort, the only other extant early Islamic

[47] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier."
[48] Roll, "Medieval Apollonia-Arsuf: A Fortified Coastal Town in the Levant of the Early Muslim and Crusader Periods," 599; Masarwa, "From a Word of God to Archaeological Monuments: A Historical-Archaeological Study of the Umayyad Ribats of Palestine," 39–41; Tal, "Apollonia-Arsuf Excavation Project."
[49] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:143.
[50] Holum, "Caesarea in Palestine: Shaping the Early Islamic Town," 178; Porath, "Caesarea – 1994–1999," 39; Whitcomb, "Qaysariya as an Early Islamic Settlement," 74.
[51] Sharon, "Arabic Inscriptions from Caesarea Maritima: A Publication of the Corpus Inscriptionum Arabicarum Paleastinae," 424–25; Sharon, *Corpus Inscriptionum Arabicarum Palaestinae*, 2:275–76.

fortifications at Caesarea are its city walls, which are frequently described as Crusader, though their earlier phases may date to the late ninth century and possibly earlier.[52]

Excavations suggest that the coastal forts at Ashdod-Yam (Qal'at al-Mīna), Yavne-Yam, and Ha-Bonim (Kafr Lām) were constructed in the mid to late seventh to early eighth century.[53] Arabic graffiti were identified on three marble columns at Yavne-Yam (see Table 3). The inscriptions date to the early eighth century and one mentions the name of an individual seeking martyrdom.[54] While we cannot know the exact context, these inscriptions, along with other seventh to eighth century examples that have been found at coastal sites in the provinces of Filasṭīn and Urdunn as well as on the islands of Kos and Knidos, may attest to the early efforts to garrison and guard the coast (see Table 3).[55]

Watchtowers—either as independent structures or integrated into city fortifications—served as an integral component of the coastal defense and communication network along the early Islamic maritime frontier. They were placed deliberately to form the basis of a far-reaching visual communication system that extended up and down the coastline, into the interior, and out to sea. We learn from Balādhurī that during the conquest, Muslim forces prioritized capturing and garrisoning settlements that offered vantage points for the surrounding areas. The preexisting fortifications at these sites were repaired and watchmen were posted in the towers. Upon sighting

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[52] Holum, "Caesarea in Palestine: Shaping the Early Islamic Town," 175; Mesqui, Martineau, and Barbé, *Césarée maritime*, 108. Mesqui proposes that they might date back to the end of the Umayyad or early 'Abbāsid period.

[53] Masarwa, "From a Word of God to Archaeological Monuments: A Historical-Archaeological Study of the Umayyad Ribats of Palestine," 20–21; Raphael, *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*; Fischer and Taxel, "Yavneh-Yam in the Byzantine–Early Islamic Transition: The Archaeological Remains and Their Socio-Political Implications"; Barbe, Lehrer, and Avissar, "Ha-Bonim," 2002; Barbe and Taxel, "Habonim-Kafr Lam: A Ribat of the Levantine Coastal Defensive System in the First Centuries of Islam."

[54] Fischer and Taxel, "Yavneh-Yam in the Byzantine–Early Islamic Transition: The Archaeological Remains and Their Socio-Political Implications," 234–36.

[55] Gwiazda et al., "The Sidon's/Ṣaydā Northern Hinterland during the Early Byzantine-Early Islamic Transition," 188–90.

enemy ships, the watchmen would light signal fires, and the signal would be relayed from tower to tower along the coast.[56]

Writing in the tenth century, al-Muqaddasī describes a network of coastal cities, forts, and watchtowers that were components of an inter-visible communication system that could send a light or smoke signal to the capital of Ramla within an hour. His list includes Gaza and its port, Ashkelon, Ashdod-Yam (fort), Yavne-Yam (fort), Jaffa, and Arsūf.[57] The watchtowers at Ashdod, Tel Mikhmoret, and Tel Michal may be correlated with the early defensive measures mentioned in the literary sources, however, their dating is tentative.[58]

While literary and geographical sources emphasize the strategic role that watchtowers held as a defensive alarm network, a secondary and equally important function was for monitoring general maritime activity. Even though exchange patterns shifted in the later seventh and eighth centuries as (discussed in Chapter 1), the Syro-Palestinian coast continued to be a vital maritime corridor. The integrated network of coastal watchtowers would have provided the early Muslim state with a means to project control over territorial waters and police shipping lanes. They would have helped alert the authorities to the activity of pirates and smugglers and made it possible to monitor the movement of travelers and merchants—this was both for the travelers' own security but also to ensure they docked at the proper ports and paid the appropriate duties. The collection of taxes at harbors and ports would have potentially been a lucrative revenue stream for the early Muslim state and elites, as would the business generated by the port. Caliph Hishām for instance, had revenue-generating investments at the port of Tyre.

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[56] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:128.
[57] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma'rifat al-Aqalim*, 148–49.
[58] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier," 43–44.

The following figures illustrate the functionality of the network of forts and watchtowers along the Filasṭīn coast. Tall towers would have also provided a distinct advantage in sighting ships along the coast. Based on digital elevation models (DEMs) of the coast, Figure 4 shows the viewsheds for observers standing on the ground at each of the coastal sites. Their sight lines would have been impeded and broken up by the surrounding topography. It should be noted that this map is illustrative only, and simply a rough approximation of what an observer would see. Local topography is complex and moving a few meters in one direction or another would change their view of the coast. However, the point of this figure is to generally illustrate how topography limits visibility.

Figure 5 presents a very different picture, showing the advantage that watchtowers provide when sighting ships (or fleets) at sea. This illustration assumes that the observer in each city is standing at the same location, however, now positioned atop a 15-meter-tall tower. While we unfortunately do not know the original height of many of the watchtowers and forts, we can estimate a range, based on extant ruins. We have recorded heights of an 8-meter (26 ft) wall at Ashdod, a 12-meter (40 ft) tower (presumed to be Crusader) at Borj Dor, a 12- to 15-meter-high wall at Kafr Lām, and comparable 15-meter (50 ft) Crusader walls at Arsūf. Regardless of the actual height of the towers at these locations, the advantage of sighting from atop an elevated observation platform would have been significant. They would have allowed observers to see ships much further out to sea and provided a largely uninterrupted view along the coast. Crucially, the overlapping viewsheds illustrate that adjacent coastal cities and watchtowers were generally intervisible tower-to-tower, which corresponds to their use as part of a signal network. It is also worth noting that watchtowers would have been inversely visible to ships at sea and would have served as prominent navigation markers and waypoints.

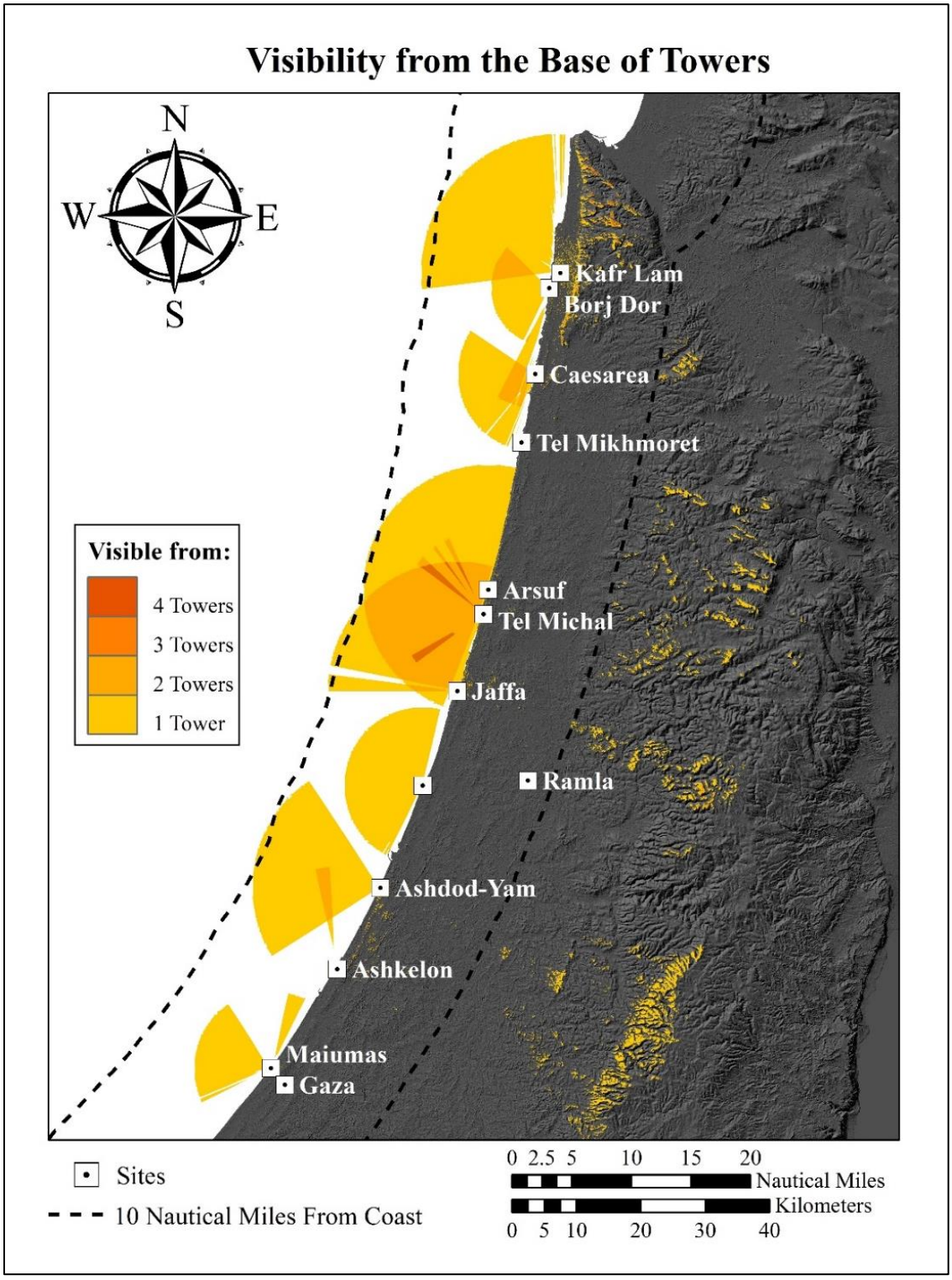

Figure 4: Viewshed from each coastal site, as seen by an observer standing on ground level (by Morriss)

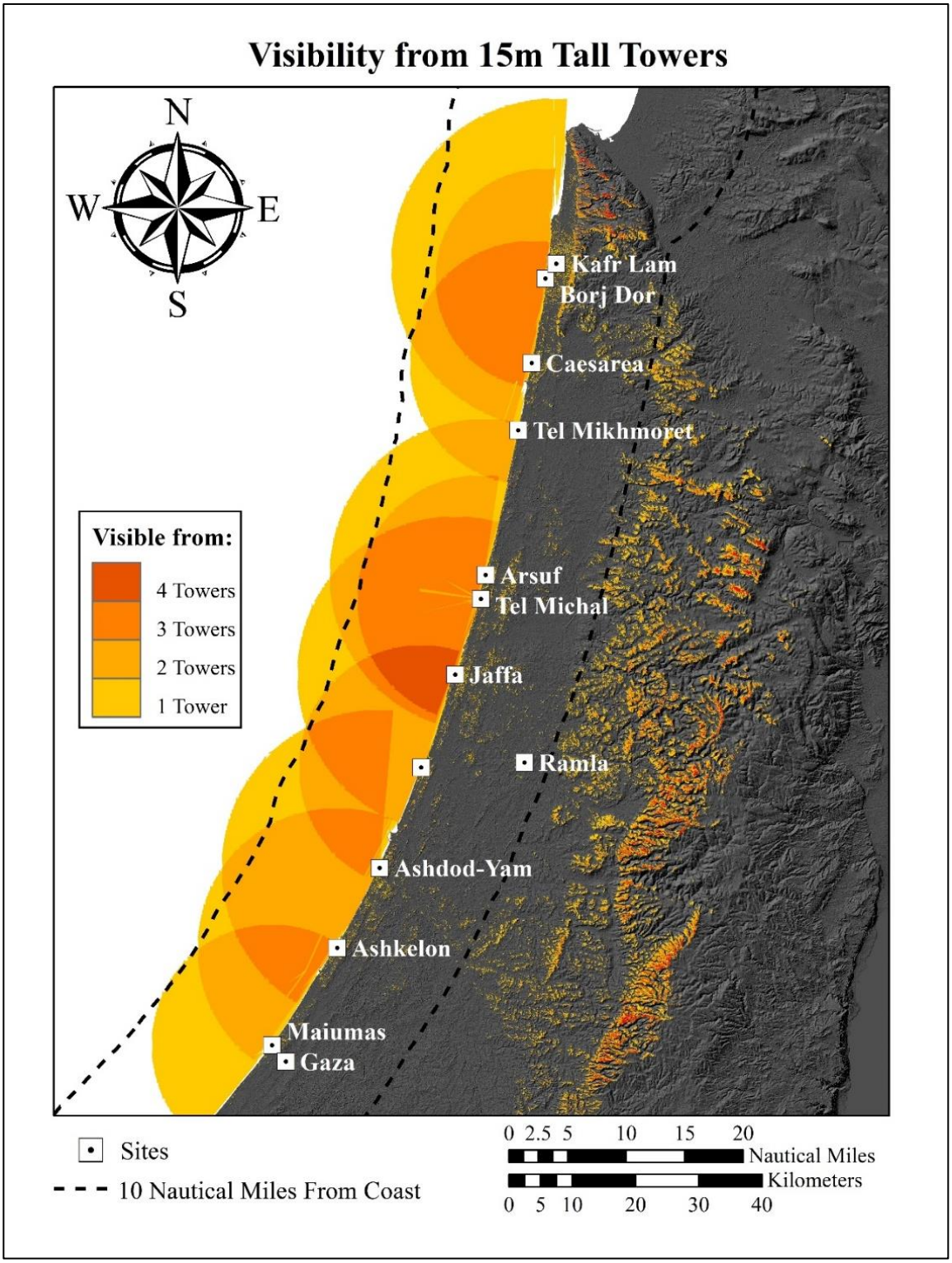

Figure 5: Viewshed seen from each site when standing on a 15-meter-tall tower (by Morriss)

In summary, the placement of the early Islamic coastal fortifications and watchtowers was closely connected to their function as maritime observation points, nodes of exchange, and coastal monitoring. While the defensive functions of these fortifications are frequently emphasized, the fact that these structures were founded at pre-existing anchorages and ports—i.e. chokepoints of trade—suggests that more attention to their potential economic functions is necessary. This will be expanded in Chapter 4.

3.2.3 The Navy

The founding of the early Islamic navy was no doubt tied to concerns of defense, but also to the aims of the conquest. Muʿāwiya seems to have understood the importance of having a navy early on. The fleets and naval bases from which they were launched, gave the early Muslim state the power to project control over the sea corridors and further the conquest efforts to the islands and distant shores of the Mediterranean. Fleets also provided the means to control trade and maintain critical supply lines for the Muslim armies, as well as cut off those of their enemies.

Muʿāwiya is credited with having founded the early Muslim navy. After his initial request to muster a naval fleet was rebuffed by Caliph ʻUmar, he finally received permission from Caliph ʻUthmān. Muʿāwiya began his program by making repairs at Acre and Tyre and organizing a fleet. In 648/49, Muʿāwiya launched the first Muslim maritime expedition from Acre and captured Cyprus.[59] The triumph challenged Byzantine hegemony over the sea, marking the end of Christian control over the Mediterranean and representing a large cognitive shift in how the sea would have been viewed. Moreover, the seizure of Cyprus was a strategic victory,

[59] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:117.

allowing the Muslims to secure a key hub in the Mediterranean network as well as an important base for securing the coast of al-Shām and launching raids further into Byzantine territory.

Dār al-ṣināʿa

The first Muslim fleet was constructed in Egypt's arsenal (*dār al-ṣināʿa*). According to Balādhurī, when the Byzantines sailed to coast in 669, the shipbuilding industry had been confined to Egypt.[60] As a result of the Byzantine threat, Muʿāwiya gave orders for "certain artisans and carpenters to be gathered and settled along the coast. As for the industry [arsenal] of the Jordan province it was all confined to Acre." Thus, Muʿāwiya is credited with the founding of the region's first arsenal at Acre in 669/70 CE.[61] A similar scenario unfolded in North Africa where Egyptian Coptic shipwrights were sent to the newly founded arsenal in Tunis in the late seventh or early eighth century.[62]

A collection of early eighth century papyri from Aphrodito, Egypt, provides crucial evidence for understanding the overall organization of the early Islamic fleets and Egypt's arsenals.[63] Egypt had two arsenals, one in Babylon and the other at al-Qulzum (Clysma) on the Red Sea, where there were docks and shipbuilding yards.[64] Both arsenals are mentioned frequently in the Aphrodito papyri and they were clearly important naval centers, each under the command of an Arab official.

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[60] al-Balādhurī, 1:117.
[61] Borrut, "L'espace Maritime Syrien Au Cours Des Premiers Siècles de l'Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli," 16.
[62] Lankila, "Saracen Maritime Raids in the Early Medieval Central Mediterranean and Their Impact on the Southern Italian Terraferma (650-1050)," 141.
[63] This is a corpus of letters from Arab governor Qurra b. Sharik to the pagarch of Aphrodito. Note that there is also a separate Aphrodito corpus of Dioscorus dated to the 6th century. Both are published together in P.Lond.IV.
[64] Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:xxxiii.

In addition to state arsenals, we also learn of naval bases from which fleets were launched. For instance, Alexandria and Latakia are mentioned in the papyri in connection with the departure of the annual maritime *koursa* (raids).[65] Acre, Beirut, Tripoli, and Latakia also functioned as naval bases during al-Walīd I's reign (705-15 CE) when fleets were stationed at each, and they too would have been equipped with shipyards and barracks for troops and sailors.

According to the Aphrodito papyri, the Muslim navy was comprised of four raiding fleets (*cursus*). Each was designated according to the province where they were stationed and from which they departed: Egyptian, Eastern (Syro-Palestinian), African, and 'raiding fleet of the sea'.[66] A fifth non-raiding fleet was responsible for guarding the mouths of the Nile against Byzantine attack. In addition to defense, this fleet would have likely also regulated the movement of goods and people across the fluvial frontier. It is worth mentioning that many of the sailors of the early Arab fleets were Egyptians who were conscripted for service. For instance, there is a reference in one of the papyri from Aphrodito of four sailors who were sent to Syria-Palestine to participate in a maritime expedition departing from Latakia.[67] These individuals were not necessarily sailors but were recruited from all over the country. Though we lack the documentary evidence from Syria-Palestine, we can assume that a similar scenario unfolded there, with locals serving on the Syrian fleet as part of their fiscal service.

While four of the early Muslim fleets were concerned with defense of the Mediterranean coast and its trade routes, it is uncertain to which province the 'raiding fleet of the sea' belonged. It appears to have been based in Egypt, and quite possibly it was for the Red Sea, given that one

[65] According to Lankila, the Greek term koursa was identical with the Arabic term ghazw. Lankila, "Saracen Maritime Raids in the Early Medieval Central Mediterranean and Their Impact on the Southern Italian Terraferma (650-1050)," 123.
[66] Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:xxxiii.
[67] Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, V," 91–92, 94; Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:xxxiii.

of the superintendents in charge of it was based in the dockyard at Babylon. Several Greek papyri mention the construction and maintenance of a special class of Egyptian warship known as the *karabos/karabion* at the Red Sea port of al-Qulzum. The term first appears in the seventh to eighth century papyri from Arsinoe and al-Fayyūm, and then in the Aphrodito papyri of ca. 709-715.[68] These galleys comprised a significant portion of Egypt's Mediterranean raiding fleet, and their use at al-Qulzum may be tied to the Red Sea fleet, indicating there was a need for warships and policing actions.

Some scholars have questioned the need for a fleet in the Red Sea in the early centuries of Islam.[69] However, the rapid rise in the wealth and power of the Hijaz and the new Muslim elite resulted in a resurgence of activity within the region. The early Arab state directed enormous resources to refurbishing al-Qulzum and the canal linking it with the Nile for the redirection of mass quantities of grain to the Hijaz each year. The influx of capital and increased connectivity within the northern Red Sea basin stimulated agriculture and mining activity, settlement, and trade in the region.[70] The warships of the Red Sea fleet were likely involved in safeguarding grain and pilgrimage ships, and potentially for military excursions further south in the Red Sea and beyond. The anonymous *Kitāb al-Zunūj* documents the Islamicization of the Somali coast under 'Umar in 642, and the subsequent visits by Umayyad and 'Abbāsid authorities, including 'Abd al-Malik in 695, to collect taxes from the coastal trading centers.[71] There is also a reference in one of the Aphrodito papyri that suggests the fleet from al-Qulzum

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[68] Pryor and Jeffreys, *The Age of the Dromon: The Byzantine Navy ca 500-1204,* 164–65 The term first appears in Egypt and then spreads in the Byzantine Empire. According to the papyri, they consisted of both monoremes and biremes, and were sometimes 'castellated.'

[69] See Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri,* IV:xxxiii.

[70] Morriss, "Persistent Pathways: The Roman Annona as a Model for the Economic Impact of the Early Islamic Grain Trade on the Red Sea"; Morriss and Whitcomb, Donald, "The Umayyad Red Sea as an Islamic Mare Nostrum."

[71] Tibi, "Arabia's Relations with East Africa as Reflected in Three Documents," 241.

may have sailed as far as the Persian Gulf. The document provides a list of requisitions related to the construction of warships at al-Qulzum, and among them are "supplies for sailors and skilled workmen of the ships at Clysma (al-Qulzum) (sent) to al-Ubullah and Jiddah."[72] Jiddah's port is along the Hijazi coast of the Red Sea, while al-Ubullah was the primary port at the head of Persian Gulf, prior to the founding of al-Basra. Given the presence of the fleet in the Red Sea, it is tempting to imagine that Egyptian ships supported the conquest efforts in Iraq.

The 'commander of maritime expeditions' oversaw the fleets, and in addition to coordinating the annual overseas raids into Byzantine territory, these admirals likely also had a role in guarding key ports and defending against seaborne attacks. On a more routine level, the fleets monitored the movement of trade and information, as well as assisted and guarded the redistribution of resources along the regional sea lanes.

The Role of Cyprus as a Naval Hub

Cyprus was highly contested between both the Byzantine and early Islamic states due to its strategic position for launching attacks on Egyptian, Syro-Palestinian, and Byzantine territory as well as its importance as an economic hub for trade. The strategic and economic importance of the island is reflected by the peace agreement signed between the Byzantines and early Islamic state in 685 CE, which established the island as a 'neutral' territory and divided the tax revenues between both empires.[73] The period in which the island existed 'betwixt the Greeks and Saracens' lasted until the tenth century and is sometimes referred to as the *condominium*—a

[72] Bell, "Translations of the Greek Aphrodito Papyri in the British Museum," 6.

[73] This peace agreement is recorded by Theophanes, Agapius, Michael the Syrian, and Chronicle 1234. For translations, see Hoyland, *Theophilus of Edessa's Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*, 180–82.

period of social, economic, and cultural decline on the island. Recent work which has focused on prioritizing the archaeological evidence has challenged the traditional literary-focused narratives of decline and abandonment on the island.[74] The evidence suggests that, rather than being a cultural and political barrier between the Byzantine and Islamic empires, the island became an epicenter of cultural, economic, and military interaction. Moreover, while the island appears to have been more politically and economically integrated in the 'Byzantine sphere,' it continued to be commercially oriented with Umayyad Syria-Palestine.

The peace agreement in 685 CE, which lasted until the tenth century, may have let the island serve as a staging ground for the Islamic fleets. According to the tenth century scholar Qudāma b. Jaʿfar, Cyprus served as a muster point for the Syrian and Egyptian fleets prior to raiding:

> *The quantity of raiding ships that participate in the raids of the troops of Syria what gathers from the ships of Syria and Egypt is around eighty to one hundred ships. If a raid is decided, then the governors of Egypt and Syria (aṣḥāb al-Shām wa-Miṣr) are ordered to prepare and muster for it. The ships gather in Cyprus. The collection of ships is called usṭūl just as the collection of armies on land is called al-muʿaskar. And the director (mudabbir) of all the matters related to the Syrian and Egyptian ships is the commander of the Syrian frontiers (ṣāḥib al-thughūr al-shāmiyya) and the amount of expenses (nafaqa) of the ships when they raid is around a hundred thousand dināṛs.*[75]

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[74] See especially Zavagno, *Cyprus Between Late Antiquity and the Early Middle Ages (ca. 600-800): And Island in Transition*; Randall, "Setting an Insular Table: Pottery, Identity, and Connectivity on Crete and Cyprus at the End of Antiquity."

[75] b. Jaʿfar, *Qudāma b. Jaʿfar, Kitāb al-Kharāj Wa-Ṣināʿat al-Kitāba*, 188; Translated by Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 42–43.

Effects of the Naval Program

The navy's impact was not just militaristic. Its development would have profoundly impacted other areas of the economy and connectivity across the maritime frontier. Significant resources must have been directed to the development of maritime infrastructure in Egypt, Syria-Palestine, and North Africa. We certainly know this was true for the Red Sea port of al-Qulzum which was refurbished and linked to the Nile through a newly dredged canal. There are numerous communications regarding shipbuilding supplies, skilled workers, sailors, food, and cash to support the fleet there.

The seventh and eighth century papyrological material from Egypt indicate that the state financed and subsidized the construction, maintenance, and manning of Egypt's fleets—and we might assume that the situation was similar in Syria-Palestine and North Africa. Requisitions for shipbuilding timber (acacia and sycamore), rope, anchor cables, and chains were demanded from pagarchies such as Aphrodito.[76] Lump and scrap iron was also sent out to districts to be refined and fashioned into nails for shipbuilding.[77] Aphrodito was also a district that was ordered to plant vines, acacias, and other trees for shipbuilding.[78] Timber for shipbuilding was a critical resource in all periods. Palm, acacia, and sycamore were collected from provinces in Egypt, and dedicated groves intended for naval shipbuilding were often guarded by the state, as indicated by al-

[76] Trombley, "Amr b. al-As' Refurbishment of Trajan's Canal: Red Sea Contacts in the Aphrodito and Apollononas Ano Papyri," 104 Lond. IV. 1433 (acacia beams and anchor cables); Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, V," 90–93, 96. Lond. IV. 1434 and 1435 (acacias, palm-fiber cables, and copper chains); Bell, "Translations of the Greek Aphrodito Papyri in the British Museum," 7 P. Lond. IV. 1449 (cable, anchors, and palm fiber); Morelli, *Griechische Texte: Documenti Greci per la Fiscalità e la Amministrazione dell'Egitto Arabo*, 15:232 No. 47 (branches and acacias).

[77] Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, Part II," 374–75 P. Lond. IV. 1369; Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, V," 89, 93 P. Lond. IV. 1434 and 1435; Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri* P. Lond. IV. 1390.

[78] Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri* P. Lond. IV. 1391.

Maqrizi.[79] In one letter dated to 710, the governor Qurrah b. Sharīk orders the pagarch of Aphrodito to plant trees intended for shipbuilding materials: "Order those of your district to plant a multitude of trees, vines, acacias and other trees…"[80] Since antiquity, coniferous wood was harvested from Syria and oak from Asia Minor. The early Muslim state would have no doubt collected wood from its territories in Syria-Palestine. The mid eighth through early twelfth century site of Ḥiṣn al-Tīnāt, located along the coast of eastern Cilicia, was founded for just that purpose.[81] Its harbor was used to ship harvested timber from the Amanus Mountains as attested by the early Islamic geographers.[82]

In addition to the required items for shipbuilding, the intensification in naval activity was followed by an increased demand for skilled workers.

> *We are constantly in need of carpenters and caulkers on account of maintenance of the small ships (carabi), light vessels (acatenaria), and messenger boats (dromonaria)…order throughout the city and villages, youths to train in the crafts. Entrust them to skilled and notable craftsmen who know suitably their craft…Preparing half of them to be cast for work in shipbuilding and half in caulking.*[83]

Demands for sailors, caulkers, carpenters, and sawyers for al-Qulzum—Egypt's Red Sea arsenal—are found throughout the eighth century papyri.[84] Districts would supply these

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[79] Grohmann, *Arabic Papyri in the Egyptian Library*, 5:74.
[80] P. Lond. IV 1391.
[81] Eger, "Ḥiṣn Al-Tīnāt on the Islamic-Byzantine Frontier: Synthesis and the 2005–2008 Survey andExcavation on the Cilician Plain (Turkey)."
[82] Grohmann, *Arabic Papyri in the Egyptian Library*, 5:72.
[83] Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri* P. Lond. IV. 1391. Letter from Kurrah ben Sharik to Basilius, A.D. 710.
[84] Trombley, "Amr b. al-As' Refurbishment of Trajan's Canal: Red Sea Contacts in the Aphrodito and Apollononas Ano Papyri," 103 P. Lond. IV. 1433 (sailors); Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, Part I," 271, 277 P. Lond. IV. 1336 (carpenter) and 1347 (supplies for sailors); Bell, "Translations of the Greek Aphrodito Papyri in the British Museum, V," 89, 93 P. Lond. IV. 1434 (two caulkers and one sailor) and P.

individuals and their provisions, while their pay would be financed through locally collected taxes. The need for specialized supplies and workers would have resulted in a high proficiency in the shipbuilding and maritime sectors.

The resources and manpower that were redirected from across the provinces to establish the early Muslim naval centers, build the navy, and man the fleets created new industries and stimulated the economy along the coast. Shipbuilding, in particular, had a wide-ranging effect on its dependent industries as well, including timber harvesting, ropemaking, metalworking, and textile production. These naval endeavors would have also promoted connectivity throughout the eastern Mediterranean, especially between Egypt and Syria-Palestine, both in terms of cross-cultural interaction, but also the exchange of information, technology, and maritime traditions.

Naval Intelligence and Negotiation

Information on the location and movement of enemy forces was especially critical to securing the maritime frontier. Both the Byzantines and Arabs employed bilingual merchants who spoke Greek and Arabic as informants. These individuals were often sent to enemy ports under the façade of traders, while their mission was to gather military intelligence. For instance, in the later tenth century Ibn Hawqal recounted that a Byzantine admiral sent merchants to the Syrian ports to investigate if the Muslims were informed of his planned expedition to Crete in 912 CE.[85] In the eighth century, Willibald and his companions were wrongfully imprisoned on the assumption that they were spies. Informants were a constant problem, and patrolling the movement of ships and travelers was an important aspect of coastal defense.

Lond. IV. 1435 (two caulker and one carpenter); Foss, "Egypt under Muʿāwiya Part I: Flavius Papas and Upper Egypt," 20 (provisions for eighteen caulkers).

[85] Christides, "The Raids of the Moslems of Crete in the Aegean Sea: Piracy and Conquest," 79–80.

Individuals with similar backgrounds may have also been employed by the Islamic state to facilitate the sanctioned ransoming of prisoners with the Byzantines. In his account of the Filasṭīn watch stations (*ribāṭat*) where ransoming occurred, Muqaddasī indicates that there were men in these places who spoke Greek and were involved in frequent trading ventures with the Byzantines.[86]

Muslim Warriors

The names and achievements of the commanders, governors, and caliphs who led the great land and sea battles against the Byzantines were forever preserved in the *futūḥ* literature for later generations. Their struggles and victories formed the backdrop for the early Islamic community's origin stories and provided the inspiration for later caliphs who sought to reclaim the virtue and glory of the early conquests. The names of the individuals who fought in the armies and manned the ships, however, are largely forgotten save for the few references preserved in official documents or the occasional inscriptions etched into stone. Some of the later have been found along the maritime frontier at coastal sites in Syria-Palestine as well as at Knidos and Kos (see Table 3). These inscriptions provide a unique bottom-up glimpse of the conquests from the perspectives of the Muslim soldiers who are all but absent from the histories.

Based on the names on the graffiti from Knidus and Kos, most of which appear to be associated with tribal groups that migrated during the expansion, we can say that the authors were Muslim Arabs.[87] Three of the graffiti from Knidus date to the last decade of the seventh

[86] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma'rifat al-Aqalim*, 148–49.

[87] Imbert, "Graffiti Arabes de Cnide et de Kos : Premières Traces Épigraphiques de La Conquête Musulmane En Mer Égée," 755.

century and were made by individuals who drew association with the *ahl al-Filasṭīn* (people of Filasṭīn). Imbert argues that the term *ahl* should be understood as troops or contingents who were based or enlisted in Palestine rather than the people or inhabitants of the region.[88] Curiously, one of these individuals incorporates the nisba al-'Akki after his name, suggesting that he was based at Acre, which at the time was the chief arsenal of Urdunn. Only one of the late seventh century graffiti from Kos employed the term ahl, but this one belonged to the troops (*ahl*) of Ifriqiya.

These extraordinary collections of graffiti are likely associated with the early Muslim maritime expeditions (*ghazw*) into the Aegean, including the fateful final siege of Constantinople in 717-18. Through these invocations we are given a glimpse of the identities of some of the Arab soldiers who joined the fleets of the early sea expeditions. These men hailed from various tribal groups and presumably comprised the forces of the Syro-Palestinian, Egyptian, and African fleets. They would have joined other individuals—including non-Muslim recruits like those conscripted from Aphrodito— who were drawn from around the nascent Islamic empire. Their unique journeys and experiences abroad were among the countless movements along the maritime frontier, highlighting how one of the many processes—raiding—that comprised this space brought diverse peoples together and established new connections between far flung regions.

[88] Imbert, 755.

Summary

The cross-cutting ties that emerge within frontier zones are evident in both the development of the Muslim navy as well as the garrisoning of the Syro-Palestinian coast. Coptic shipwrights were sent from Egypt to North Africa and Syria-Palestine to help establish the Muslim navy. Not only were they foreigners in a foreign land, but they were also agents of technology transfer, spreading new systems of ship construction and naval design. The navy itself was multi-ethnic, with men conscripted from across the empire to man the Arab ships. The resources required to construct the early Muslim fleets not only necessitated the import and redistribution of materials from various corners of the eastern Mediterranean, but also created a trickledown effect in other related industries. And finally, the settlement policies that resulted in the transplant of garrisons and foreign populations along the coast represent another theater for cross-cultural interaction, with Arab frontier fighters and loyal clients relocated to strongholds of Byzantine culture and sentiment. These settlers would have brought their own cultural practices, but would have had to interact, negotiate, and integrate into the broader culture of the coast.

3.3 Sacralization of the Coast

The maritime frontier was not just a militarized zone, but a sacred one—a religious landscape created through the efforts of caliphs, religious scholars, and members of the community. This process of *sacralization* began during the seventh and eighth centuries. It took many forms. Some aspects were physical, such as the carving of Islamic inscriptions on church columns, as well as the creation of mosques, shrines, graves and even religiously imbued

fortifications and cities, such as the *ribāṭāt* (coastal frontier fortresses) (discussed in Chapter 1).[1] Other components were literary in nature, such as the ḥadīth traditions known as the *faḍā'il al-shām* (virtues of Syria-Palestine) which established the sanctity of the early Islamic heartland. Still another component were the roles adopted by the Muslims, from caliphs characterizing themselves as *ghāzī* rulers, to soldiers taking on the role of religious frontier fighters (*mujāhidūn*), to citizens and volunteers who took part in the sacred act of guarding the frontier (*murābiṭūn* and *mutatawwi'a*).[2] The physical, written, and ideological components combined to transform the coast of Bilād al-Shām into a sacred Islamic territory.

One of the fundamental ideologies influencing the development of the coast was apocalypticism—the belief that the end of the world was near. Apocalyptic ideas were popular throughout the Near East and eastern Mediterranean in the sixth through eighth century and may have been a motivating factor behind the early conquest.[3] Early apocalyptic literature emphasized the sanctity of Jerusalem and Constantinople as well as the role these centers would play as loci for events that would ultimately trigger the End of Days.[4] Indeed, such eschatological notions of the Last Judgement inspired the iconography and decorative elements on the Dome of the Rock, one of the earliest extant monuments of early Islam.[5] The rapidity and success of the Arab armies probably confirmed this eschatological notion and led many to believe that God's divine will was behind them.

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[1] In addition to inscriptions left by individual *ghāzī*s, rulers also left visible Islamic inscriptions on coastal city fortifications. See the inscription from Ashkelon in Table 3, published by Sharon, "An Arabic Inscription Engraved with Crusader Shields," 424.

[2] For more on *ghāzī* caliphs, see Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*, 99–106; Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 159–61; Haug, "Frontiers and the State in Early Islamic History: Jihad Between Caliphs and Volunteers," 637–40.

[3] Donner, "Was Early Islam an Apocalyptic Movement?"; Shoemaker, *The Apocalypse of Empire*.

[4] Donner, "Was Early Islam an Apocalyptic Movement?"; Haug, "Frontiers and the State in Early Islamic History: Jihad Between Caliphs and Volunteers," 635.

[5] See Rosen-Ayalon, "The Early Islamic Monuments of the Haram Al-Sharif: An Iconographic Study."

By the eighth century, apocalyptic ideology, coupled with the success of the conquest, gave rise to the idea that *jihād*, in the sense of 'holy war,' was an incumbent duty for both the caliph and Muslim community.[6] Later caliphs sought the identity of a *ghāzī* ruler—the religious leader who led the Muslim community in the *jihād* against the enemy—to boost the legitimacy of their reign. Though M. Bonner attributes the conception of the ghāzī-caliph to the early 'Abbāsids, it is evident from the discussion above that the early commanders of the conquest and the Umayyad caliphs set the archetype for this identity through aggressive expansion, fortifying the coast, and even bringing the war directly to Constantinople. The image of the *ghāzī* ruler was adopted and developed by the 'Abbāsids, and subsequently employed by several Islamic dynasties throughout the ages, including the Ṣaffārids (r. 861-1003), the Tūlūnids (r. 868-905), and the Ghaznavids (r. 977-1186), despite changes in the political situation along the coast.[7]

To sustain this image, it was important for caliphs to be seen as taking action to defend the frontiers with fortifications and frontier fighters, and to lead the community in *jihād* against the Byzantines. Therefore, it was essential to maintain the impression of a politically and ideologically volatile maritime frontier to ensure their legitimacy—giving rise to some of the militarism seen in the *futūḥ* literature. By fortifying and settling garrisons along the coast, rulers propagated the notion that the coast needed protecting, making them doubly effective measures for establishing political legitimacy. It is essential, therefore, to see the efforts to fortify the coast and expand military infrastructure as, at least partially, propagandistic and ideological in nature.

The construction of mosques and other 'Islamic' architecture along the coast was also part of a process of establishing an ideological claim over the maritime frontier. It was under

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[6] Donner, "Qur'anicization of Religio-Political Discourse in the Umayyad Period," 85; Haug, "Frontiers and the State in Early Islamic History: Jihad Between Caliphs and Volunteers," 635.

[7] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier," 39.

‘Uthmān (r. 644-56) that Mu‘āwiya began a settlement policy along the coast for garrisons. In addition to assigning soldiers land to settle and farm, mosques were constructed. Though we do not have more specifics, there is reference to a mosque at Caesarea that was destroyed by the Byzantines during the Second Civil War, as recorded by Balādhurī. The act of constructing mosques along the maritime frontier was no doubt an important political and religious measure for caliphs and governors. Not only did it reinforce the identity of the early Muslim communities and set them apart, but it was a visible and powerful symbol of the new religious and political authority of the early Muslim state. Moreover, the construction and refurbishment of mosques, especially at important centers along the maritime frontier, imparted prestige, legitimacy, and religious authority to patrons who made these endowments. It is no wonder that ‘Abbāsid caliphs, including al-Mahdi (r. 775-85), incorporated mosque building in their fortification projects along the Syro-Palestinian coast (Chapter 2.6).

Religious and political propaganda played a central role in the process of “sacralizing” the Syro-Palestinian coast and transforming it into a sacred Islamic territory. During the seventh and eighth centuries, a genre of ḥadīth literature known as the *faḍā’il al-shām*, or the “virtues” or “excellencies” of Syria, was part of a discourse claiming that Bilād al-Shām was a sacred Islamic space. In some of these traditions, Greater Syria was portrayed as a holy land of Biblical prophets and shrines, and the predicted epicenter of the Final Judgement. The coastal frontiers were considered among the holiest of areas given the sheer number of tombs present.[8] As Paul Cobb so aptly put it, “in early Islamic Syria, sacred ground was literally underfoot. However, it was not always Islamic sacred ground, and it needed to possess a proven religious virtue, a

[8] Cobb, “Virtual Sacrality: Making Muslim Syria Sacred Before the Crusades,” 43–45.

faḍīla, to become accepted as such."[9] Accordingly, the early Muslims developed a literary tradition for Syria-Palestine that extolled the region's plentiful virtues and connected it to the broader sacred history and geography of the Muslim community.[10] In addition to proclaiming this newly conquered territory as Islamic, the *faḍā'il* literature also served a wider purpose of encouraging Arab fighters and Muslims to settle along the contested maritime frontier, complimenting the state's efforts to protect the ports and harbors, and occupy the region with Arabs and loyal clients.

As the coasts of Syria-Palestine transformed into a religiously charged space for defenders of the faith, ḥadīth of the eighth and ninth century circulated promoting the act of *ribāṭ*, or guarding the frontier, along the maritime frontiers of Syria-Palestine and Egypt.[11] Certain cities attained fame for their association with *ribāṭ*. One tradition ascribed to the Prophet states that, "whoever stays in one of [Syria's] cities, he is in a *ribāṭ*; whoever stays in one of its frontier-fortresses, he is on *jihād*."[12] Indeed, several of the coastal cities, including Beirut, Acre, Caesarea, and Ashkelon, developed *faḍā'il* traditions proclaiming their merits and praising individuals who spent time guarding or performing *ribāṭ* in them.[13] Some of these individuals included Muslim scholars, many of whom settled in Syria-Palestine's coastal cities and studied and transmitted the traditions relating to the conquest of the region. Among the coastal cities where these ascetic scholars settled were Gaza, Ashkelon, Jaffa, Arsūf, Caesarea, Acre, Tyre, Sidon, Beirut, Jubayl (Byblos), Tripoli, Jabala, Latakia, Antioch, al-Maṣṣīṣa, and Tarsūs.[14] Curiously, a similar phenomenon of religious propaganda developed along the Tunisian coast,

[9] Cobb, 53.
[10] Cobb, 52.
[11] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 94.
[12] Cobb, "Virtual Sacrality: Making Muslim Syria Sacred Before the Crusades," 43.
[13] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 94.
[14] El'ad, "The Coastal Cities of Palestine During the Early Middle Ages," 159.

with traditions attributed to the Prophet encouraging people to participate in the sacred duty of *ribāṭ* in places like Monastir and Sousse.[15]

A parallel effort was made to encourage Muslim participation in the navy, imbuing maritime service with religious connotation. One tradition states that, "a day at sea is equivalent to one month on land, and a martyr at sea is like two martyrs on land" and "those who perish while fighting at sea will receive double the compensation as those fighting on land."[16] The jurist al-Shaybāni (d. 805) noted that "any Muslim who takes part in a sea expedition would be doubly compensated and that once a soldier puts his foot on a ship all his sins are forgiven as if he were born anew."[17] Like the *faḍā'il* that encouraged the settlement of Muslims along the Syro-Palestinian coast, the traditions that accord a double reward for enlisting in the navy may have been constructed as a means of recruitment. In this way, the sea itself became a religiously charged, sacralized space. Indeed, the various Arabic inscriptions along the maritime frontier (see Table 3) found etched onto marble columns, headstones, and foundations by common *ghāzī* warriors and *ghāzī* caliphs alike not only bring the fervor of the conquests to life, but imbue the character of this sacred space and the desire of individuals of all backgrounds to stake a claim within it.

As territorial gains slowed and aspirations of capturing Constantinople ended with the failed siege of 717/18 CE, the policy along the maritime frontier shifted to a more defensive focus. 'Umar II (r. 717-20) ended the tripartite division of the navy between Latakia, Tripoli/Beirut, and Acre established by Walīd I (r. 705-15). This seems to have been in response

[15] Picard and Borrut, "Râbata, Ribât, Râbita : Une Institution à Reconsidérer," 58; El Bahi, "Les Ribats Aghlabides : Un Problème d'identification," 332.
[16] Khalilieh, *Islamic Maritime Law: An Introduction*, 2.
[17] Khalilieh, 2.

to the failed siege and the ensuing destruction of Latakia, in which the Byzantines took many Muslim inhabitants prisoner.[18] Although the later Umayyad, ʻAbbāsid, and even Tūlūnid caliphs maintained fleets and took credit for launching overseas raids, the zeal of the early conquest had cooled and priorities along the maritime frontier shifted as the inland borders of the early Islamic state solidified. With the shift from offense to defense, political and religious leaders had to adapt their ideology to the new dynamics of the frontier.

The act of defending the frontiers of Islam (verb: *ribāṭ*) became such a powerful legitimizing act, that the early ʻAbbāsid caliphs sought to reclaim it from religious leaders. Beginning in the second half of the eighth century, volunteer fighters (*mutatawwiʻa*) flocked to the inland and maritime frontiers to partake in the communal religious duty of defending the frontier.[19] Over time, ascetic religious scholars, many of whom like al-Awzāʿī resided in coastal *ribāṭs* like Beirut, gained religious and political authority along the frontiers. Small-scale raiding led by local spiritual and military leaders became the primary form of warfare, at least along the terrestrial frontiers, and by the ʻAbbāsid period, these raids were largely symbolic—highlighting the ideological aspects of the ʻfrontier.'[20]

These warrior-ascetics of the mid/late-eighth century initiated a process of privatizing *jihād* that would ultimately diminish the religious authority of the caliph.[21] Accordingly, Hārūn al-Rashīd's reconfiguration of the northern land frontier may have been motivated by a desire to

[18] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:133.
[19] Haug, "Frontiers and the State in Early Islamic History: Jihad Between Caliphs and Volunteers," 636.
[20] Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier," 32–33; Eger, *The Islamic-Byzantine Frontier: Interaction and Exchange Among Muslim and Christian Communities*, 237.
[21] See Tor, "Privatized Jihad and Public Order in the Pre-Seljuq Period: The Role of the Mutatawwi'a"; Haug, "Frontiers and the State in Early Islamic History: Jihad Between Caliphs and Volunteers."

unseat the local religious leaders who had risen in power and reassert caliphal control over the frontier and its defense.[22]

It is worth noting that the tradition of appointing a religious scholar—and not a soldier—to govern and defend the Syro-Palestinian coast began under ‘Umar II (r. 717-20) following the failed siege of Constantinople (2.5). Thus, we might trace the genesis of the spiritual-military leader—and the waning religious and political authority of the *ghāzī*-caliphs—to the events that played out along the maritime frontier during first quarter of the eighth century.

[22] See Bonner, “The Naming of the Frontier: Awāṣim, Thughūr, and the Arab Geographers.”

Chapter 4 - Maritime Exchange Along the Frontier

> *It is the duty of the mu'allim (captain) to remember the proper course to steer, and to know the sea and lands, the wind and the waves; the currents, the depths, the shallows; the moon and the stars, the years and the seasons; and the bays, and the points of land; the islands and coasts; the rocks and shores, the mountains and hills; each and every of them; and also to know where the prahu [vessel] may be at any time; with the whole of these the mu'allim should be well acquainted, in order that everything may go on prosperously, as well at sea as on land; and that the mu'allim may be free from fault.*[1]

Patterns of shipping and exchange in the eastern Mediterranean fundamentally changed following the Islamic conquest. The Roman-Byzantine fiscal redistribution system known as the *annona*—which had extracted and exported vast quantities of agricultural products from the provinces over the centuries—came to an end, and along with it, the long-distance trading networks that had characterized the Imperial Period. The eastern Mediterranean became more closely integrated, with trade shifting to cabotage and shorter interregional routes. Scholars who are focused on the broader Byzantine perspective have characterized these transformations as evidence for overall economic decline and stagnation throughout the region. However, this stance overlooks both the resilient nature of the maritime networks in the eastern Mediterranean as well as the opportunities created by the new political and economic reality.

To understand the maritime connections and activity that emerged following the conquest, it is first necessary to lay a solid foundation. This chapter will begin by looking at how

[1] Sir Stanford Rallies, "The Maritime Code of the Malays," Royal Asiatic Society of Great Britain and Ireland; Malayan Branch (1879), p. 67. Cited by Khalilieh, *Islamic Maritime Law: An Introduction*, 43.

physical geography (including currents, winds, and coastal topography) helped establish persistent maritime pathways and enduring ports. We will briefly examine how these pathways manifested in terms of Bronze Age trade routes, and then look more closely at the *annona* and trade as it stood just prior to the Byzantine-Islamic transition. I will discuss the differences between the various forms of trade—opportunistic tramping (sailing port to port in search of markets), cabotage (coastal sailing), and direct trade—as well as the impact of different scales of exchange and connectivity. Finally, I will look at the material evidence for maritime exchange and activity in Bilād al-Shām in the first centuries following the conquest, including maritime transport containers, imported fine ware, and local productions and attempt to characterize the new emergent patterns of exchange.

4.1 The Physical Geography of Bilād al-Shām

4.1.1 The Topography of the coast

Let us begin by looking at how the early Islamic maritime frontier was shaped by the geography of the region. The frontier zone stretched along the coast of Bilād al-Shām, sweeping down from southeastern Turkey in the north to Palestine and Egypt, changing dramatically along the way. As you travel southwards, the rugged mountains of the north give way to the flat, almost featureless coastline that begins from Haifa and continues to Egypt, where it meets the broad fertile plain of the Delta. Although the Syro-Palestinian coast shares aspects of the broader 'Mediterranean' ecology, the maritime frontier was comprised of a variety of diverse ecological zones that shaped how humans adapted, settled, supported themselves, and interacted throughout the region. Although the climate and coastline have evolved over the last millennia, overall, the

geography and climate of the eastern Mediterranean littoral during Late Antiquity was in many ways similar to today, which provides a helpful basis for discussion.[2]

At the far northern reaches of Bilād al-Shām, the Taurus and Amanus Mountains define the Bay of Iskanderun and abut the fertile Cilician Plain, which served as an important corridor between Anatolia and Syria.[3] These mountains provided niches for upland settlements that subsisted on a mixture of agriculture and pastoralism or were positioned to extract resources such as timber and mining. The complex topography of the north also aided mariners by serving as navigational landmarks, for which the southern Syro-Palestinian coast was sorely lacking.[4] The rivers that flowed down from these mountains into the Mediterranean carried rich alluvium, producing a fertile plain. Intensive cultivation, settlement, and timber harvesting in both the lowland and uplands during the Roman and late Roman periods led to significant erosion, which ultimately resulted in the migration of several of these rivers across the Plain of Issus and the expansion of coastal marshes. By the early Islamic period, much of the coastal plain in the northeastern Mediterranean was comprised of marshlands.[5] It is likely that a combination of factors including sedimentation, the migration of rivers, and the progradation of the coastline has transformed the ancient shoreline and obscured many of the coastal sites in this region.

The Amanus Mountains continue south to the mouth of the Orontes. From here the lofty peaks of the Lebanon Mountains hem in a narrow coastal strip stretching southward to the Jezreel Valley. This mountainous coastline restricted access to the interior and formed the backdrop for the important sites of Latakia (ancient Ugarit), Arwād, Byblos, Beirut, Sidon, and

[2] Horden and Purcell, *The Corrupting Sea*, 58.
[3] Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier," 195.
[4] Leidwanger, *Roman Seas: A Maritime Archaeology of Eastern Mediterranean Economies*, 28.
[5] Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier," 196–201, 339.

Tyre. The unique geography of this region has contributed to the view that settlement was concentrated in the few large cities that dotted the coast. However, recent work in the mountainous hinterlands have identified settlements whose livelihood of agriculture and animal husbandry was closely connected with the coast.[6] The timber resources of these regions made them important areas of shipbuilding and maritime activity throughout history.

South of the Jezreel Valley, Mount Carmel descends into the sea at Haifa creating a rocky peninsula and a stark transition in the geography of the coast. To ancient Egyptian navigators, it was referred to as the antelope's nose. The sandy plains stretching to the south of the Carmel Mountains (in modern Israel and Palestine) create a smooth, nearly straight coastline that is characterized by a shallow, sandy shore that lacks natural harbors and promontories. This long, smooth stretch of sand is partly the product of the counterclockwise Mediterranean currents which deposit vast amounts of sand from North Africa, Egypt, and northern Sinai. Due to the nature of this coastline, sailors took advantage of available river mouths, lagoons, and anchorages created by the offshore *kurkar* (limestone) reefs.

4.1.2 The locations of ports

Due to the sandy stretches of coast, evolving mudflats, and shifting rivers, the coastline of Bilād al-Shām lacks natural deepwater harbors like those found along the coasts of the northern Mediterranean. However, this did little to inhibit the flow of goods, people, and information throughout history. Coastal communities adapted to the limited opportunities afforded by the natural landscape by constructing artificial harbors such as those at Arsūf,

[6] For instance, the studies of Waliszewski and Wicenciak, "Chhim, Lebanon: A Roman and Late Antique Village in the Sidon Hinterland"; Frankel, "Some Oil Presses from Western Galilee."

Caesarea, Acre, Tyre, and Sidon, or relying on and modifying natural features such reefs, islets, or limestone outcroppings to create anchorages such as at Ashkelon, Jaffa, Yavne-Yam, and Tantura (Dor).

Most of the major ports of Bilād al-Shām were constructed along or adjacent to waterways.[7] This is not surprising, as they provided potential safe anchorages and, crucially, access to fresh water. Wherever possible, mariners and coastal settlers made use of inlets, river mouths (Jaffa, Beirut, and ʻArqa), waterways (al-Mina), and natural lagoons (Tantura and Ḥiṣn al-Tīnāt) as anchorages. The value of these natural refuges cannot likely be overstated, and it is probable that their locations were memorized by every coastal pilot.

This was true in the north as well. Early Islamic geographers mention several harbors along the Cilician Plain, though rather than along the shore, most all of these were located further inland along rivers. They are described as riverine ports during the late Roman period, and they would have presumably still had access to the Mediterranean during the tenth century when the Arab geographers treated them as coastal sites, despite their inland position.[8]

The lack of natural anchorages and the resulting investments in harbor infrastructure are one of the reasons the primary ports and anchorages of the Bronze Age continued to be occupied and used throughout the Islamic period and beyond (including Ashkelon, Jaffa, Acre, Tyre, Sidon, Byblos, Beirut, Tripoli, Arwād, Ugarit/Latakia). Indeed, following the conquest, the Muslims seem to have primarily reused or refurbished the preexisting harbor infrastructure along the coast. It is possible that in some cases, renovations would have been extensive.

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[7] El Safadi, "Bronze Age and Iron Age Levantine Harbours: An Evaluation of Their Maritime Accessibility and Protection."

[8] Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier," 224.

Archaeological and geoarchaeological evidence suggests that the stretch of coast between Tripoli and Tyre was heavily impacted by the 551 CE earthquake, with the ports of Tripoli, Beirut, Sidon, and Tyre witnessing severe structural damage.[9] Mu'āwiya and later caliphs like Hishām directed efforts to rebuild Acre and Tyre which housed the Syrian arsenal at various times.

4.1.3 Winds and currents

The predominant northwest-to-southeast winds paired with a counterclockwise-flowing current framed the overarching sailing patterns of the eastern Mediterranean and ultimately shaped trade and travel along the frontier. On a macro scale, the prevailing winds made travel from the north to south comparatively simple and fast.[10] Meanwhile, the Mediterranean's counterclockwise current assisted vessels sailing northward against these prevailing winds along the Syro-Palestinian coast and then westward along Asia Minor.

Ships hugging the coast could also take advantage of the localized currents and the cycle of diurnal onshore and offshore breezes, driven by the heating and cooling of the land each day.[11] These onshore and offshore breezes dictated when vessels could depart, and often ships might be stuck in port for days until a favorable wind arose. The exploitation of coastal breezes also carried its own risk, however, as they could become unpredictable and violent.[12] Periods of utter calm could be interrupted by intense winds that could dash a ship to pieces upon the shore. Thus, while the prevailing winds and currents were predictable phenomena across the wider basin, on a

[9] Marriner, *Geoarchaeology of Lebanon's Ancient Harbours*; Mikati and Perring, "From Metropolis to Ribat"; Marriner, Morhange, and Saghieh-Beydoun, "Geoarchaeology of Beirut's Ancient Harbour, Phoenicia / Géoarchéologie Du Port Antique de Beyrouth, Phénicie."
[10] Pryor, *Geography, Technology, and War*, 89.
[11] Pryor, 37, 90.
[12] El Safadi, "Wind and Wave Modelling for the Evaluation of the Maritime Accessibility and Protection Afforded by Ancient Harbours"; Davis, "Navigation in the Ancient Eastern Mediterranean"; Davis, "Commercial Navigation in the Greek and Roman World."

micro level, the natural topography of coastlines and the localized wind patterns created variable and potentially unpredictable conditions.

The winds and currents of the Mediterranean changed with the seasons, creating an annual rhythm to trade and travel that persisted through the millennia. Powerful seasonal winds like the *simoom* of the Levant and the *khamsin* of Egypt would pick up vast amounts of Saharan dust and reduce visibility at sea in the spring.[13] Historic traveler's accounts of the Syro-Palestinian coast attest to the vulnerability of ships when exposed to these highly variable winds. For instance, ships on their way from Jaffa to Acre (or vice versa)—a journey of approximately eighty-seven nautical miles—were often forced to put in at one of the intermediary ports due to contrary weather.[14]

During the winter months, which spanned November through March, fierce storms, strong northerly winds, and reduced visibility due to overcast skies and fog made sailing risky. For these reasons, the vast majority of commercial shipping and state driven redistribution, such as the Roman and Byzantine *annona* shipments, were completed before the sea was closed for the winter.[15] The Geniza documents from Egypt indicate that the practice of closing the sea from November to March was still in effect in the eleventh and twelfth centuries.[16]

While the number of ships at sea may have ebbed during winter, the closing of the sea in the winter was never absolute. Grain ships might be sent on the cusp of winter if the need was urgent. Merchants might also gamble with the weather for a high profit that might be made

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[13] Davis, "Commercial Navigation in the Greek and Roman World," 38.

[14] Wachsmann and Raveh, "A Concise Nautical History of Dor/Tantura" literary accounts dated between the 12th century B.C.E. and the 19th century C.E. of instances where ships sailing along the coast were forced to take shelter at Tanturah (Dor).

[15] Pryor, *Geography, Technology, and War*, 87–88; McCormick, *Origins of the European Economy*, 458–68.

[16] Pryor, *Geography, Technology, and War*, 88.

overseas. Despite these intrepid voyagers, it is likely that the proportion of sea traffic was significantly reduced in the winter months.

The closing of the sea also affected naval operations, at least to an extent. The threat of Byzantine sea attacks along the northern Syro-Palestinian coast may have been less pronounced when the seas were rough. For instance, after conquering and garrisoning the coastal cities of Latakia, Jabala, and Anṭartūs, Abū ʻUbayda put the garrisons in charge of guarding the coast until "the sea was closed," perhaps gambling that the Byzantines would not risk a naval attack during those months (see Chapter 2.2).[17]

In contrast, the Muslim fleets seem to have been less reticent to strike to the north. The Aphrodito papyri, for instance, indicate that many of the Umayyad maritime expeditions were launched in the winter months.[18] This might, in part, be influenced by the cyclical patterns of the Nile River flood which coincided with the winter closing of the sea. Floodwaters reached their height at Cairo in October, began to fall through November and December, and reached their lowest levels between March and May. Like the seasonal weather patterns in the Mediterranean, the annual flood shaped movement and life along the Nile. Planting occurred immediately after inundation, making the summer months a busy time for agriculture. Following harvest, the grain would be stored until the Nile rose far enough for grain transports to navigate the river, making the winter months a time of shipping.[19] The flood would have similarly impacted the navy. Ships built and repaired during the dry season at the Babylon arsenal could be launched during the winter inundation and sent down river to partake in raids, reinforce coastal defenses, and protect

[17] al-Balādhurī, *Kitāb Futūḥ Al-Buldān*, 1:134.
[18] Bell and Crum, *Greek Papyri in the British Museum: The Aphrodito Papyri*, IV:xxxii.
[19] See Cooper, "Egypt's Nile - Red Sea Canals: Chronology, Location, Seasonality and Function."

grain convoys. Thus, despite the risks of winter navigation, it may have been a logistically optimal time for the Egyptian fleet and their supply ships to embark.

4.2 Trade Patterns Over the Long Durée

Although the currents of Mediterranean connectivity ebbed and flowed throughout the ages, the physiographic conditions of the basin established a series of preferable sea routes and cyclical patterns across the wider region. Many of these sea routes date back to the Bronze and Early Iron Age. As such, it is worthwhile to consider the blueprint established by these early mariners before considering the developments of Late Antiquity. Scholars studying Bronze Age maritime trade have identified several key routes within the eastern Mediterranean, which I will briefly survey below.[20]

1. From Egypt to Ugarit (Latakia) sailing along the Levantine coast
2. From Ugarit (Latakia) northward along the Levantine coast to Cilicia and the southern coast of Anatolia
3. From northern Syria to/from the Aegean via Cyprus OR along the southern coast of Anatolia
4. From northern Syria to Cyprus, then southward to Egypt

The sea route along the Syro-Palestinian coast was established during the Bronze Age and served throughout history as one of the primary trunk routes for maritime trade in the eastern Mediterranean.[21] This route began at the Nile Delta and continued northwards, following the sequence of Syro-Palestinian ports. The continuous occupation of these coastal sites throughout

[20] Wachsmann, *Seagoing Ships and Seamanship in the Bronze Age Levant*, 295–97; Knapp, *Seafaring and Seafarers in the Bronze Age Eastern Mediterranean*, 180.

[21] Tartaron, "Geography Matters: Defining Maritime Small Worlds of the Aegean Bronze Age," 182; El Safadi, "Wind and Wave Modelling for the Evaluation of the Maritime Accessibility and Protection Afforded by Ancient Harbours"; Wachsmann, *Seagoing Ships and Seamanship in the Bronze Age Levant*, 295; Davis, "Commercial Navigation in the Greek and Roman World," 37, 95.

history testifies to their unique position in local geography and trading networks. They would have been well-known to the ancient mariners who relied on them as both waypoints for trade, resupply, and shelter, and used them as prominent geographic landmarks for positioning their craft.

This trade route persisted through the Roman and Middle Ages. Ships that left Alexandria for the western Mediterranean followed the coastal route along Syria-Palestine before travelling westward along the Anatolian coast.[22] However, it should be emphasizd that these are generalized patterns, and ships were sailing directly west from Egypt to North Africa and Crete since the Bronze Age. The eleventh century Geniza documents give us some sense of how long voyages could take. A southward trip from Acre to the northeastern Nile Delta could take up to four days, while one from Alexandria to Tripoli could take eight days.[23] Mariners could take advantage of the counterclockwise current to travel north along the Syro-Palestinian coast, while the daily cycle of land and sea breezes aided ships sailing south to Egypt or to the West.[24]

Acting as a central hub in the eastern Mediterranean, Cyprus was integrated into the trading spheres of Egypt, Syria-Palestine, and southern Anatolia throughout the Bronze Age and into the Islamic period and beyond.[25] Due to the seasonal and local wind regimes, the island served as an important stopover for ships sailing in almost all directions. During the summer months, the strong prevailing winds made travel from Alexandria to Cyprus difficult, so ships would often first sail to Syro-Palestinian coast before crossing to Cyprus. Outside of the winter months, open-sea crossings from much of the Syro-Palestinian coast to Cyprus was possible,

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[22] Pryor, *Geography, Technology, and War*, 95.
[23] Whitewright, "The Potential Performance of Ancient Mediterranean Sailing Rigs," 13.
[24] Pryor, *Geography, Technology, and War*, 15, 95.
[25] Knapp, *Seafaring and Seafarers in the Bronze Age Eastern Mediterranean*, 181.

though seasonal winds could make it difficult for ships sailing a northwesterly route.[26] For instance, crossing to Cyprus from Acre or Beirut against the summer *meltemi* wind could be very dangerous.[27] Therefore, the northerly ports between Tripoli and Latakia would have been preferential points of departure. This supports why both sites were used as naval bases during the Umayyad efforts to besiege Constantinople. Ships departing Cyprus for Syria-Palestine could easily use the prevailing winds to cross to Latakia, Tripoli, or Beirut. Indeed, during the Crusader period, ships tended to sail direct from Cyprus to Tripoli or Beirut.[28]

Favorable wind conditions made sea crossings from southern Anatolia to Cyprus relatively safe and quick (within one day) throughout most of the year.[29] This of course factored into the important role that the island played for the Byzantine empire and its efforts to attack Egypt and the Syro-Palestinian coast as well as its attempts to control trade.

Tyre was situated in a unique location along the coast, making it possible to sail north and south from it throughout the year.[30] For these reasons, it was among the most strategic ports along the Syro-Palestinian coast during the Iron Age when it was the trading center of Phoenicia. These environmental factors remained consistent over the centuries, and the ease of operating out of Tyre no doubt contributed to its selection as one of the prime naval centers of Syria's early Islamic fleet.

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[26] Knapp, 182.
[27] Pryor, *Geography, Technology, and War*, 95.
[28] Pryor, 95.
[29] Knapp, *Seafaring and Seafarers in the Bronze Age Eastern Mediterranean*, 183.
[30] El Safadi, "Bronze Age and Iron Age Levantine Harbours: An Evaluation of Their Maritime Accessibility and Protection," 101–2; El Safadi, "Wind and Wave Modelling for the Evaluation of the Maritime Accessibility and Protection Afforded by Ancient Harbours," 358.

Sailors vs. the sea

While the physical geography of the eastern Mediterranean impacted what routes were possible and preferable, it did not always dictate the pathways that mariners chose to get from one point to another. Human agency was always a key factor in determining which routes, safe harbors, and markets were chosen at any one time. A captain might take an atypical route for a variety of reasons, driven by the market, cargo or passengers, their intuition about the seas and weather, the distribution of their social network, the capabilities of their ship and crew, and simply out of necessity.

It is useful to identify the primary shipping lanes, but it would be misleading to assume that these routes were static or fixed. The true picture would have been far more complex and consisted of a multitude of possible pathways that might vary each time depending on a myriad of factors including weather, the market, politics, social connections, or a mariner's preference for one route or anchorage over another.

4.2.2 Inland Routes

Though this discussion has largely focused on the maritime routes that connected the Syro-Palestinian ports, it is important to speak briefly about the inland roads which played a crucial complimentary role. Information and commodities were exchanged between port and hinterland along long-established paths and roads. The *Via Maris* was the main coastal road of the Classical period that linked Antioch with Alexandria and provided an overland link between the maritime cities and their inland counterparts via secondary roadways. The fifth century C.E. Peutinger Map illustrates the connections that many of these coastal cities had with the Via Maris and the Roman road network (Figure 6).

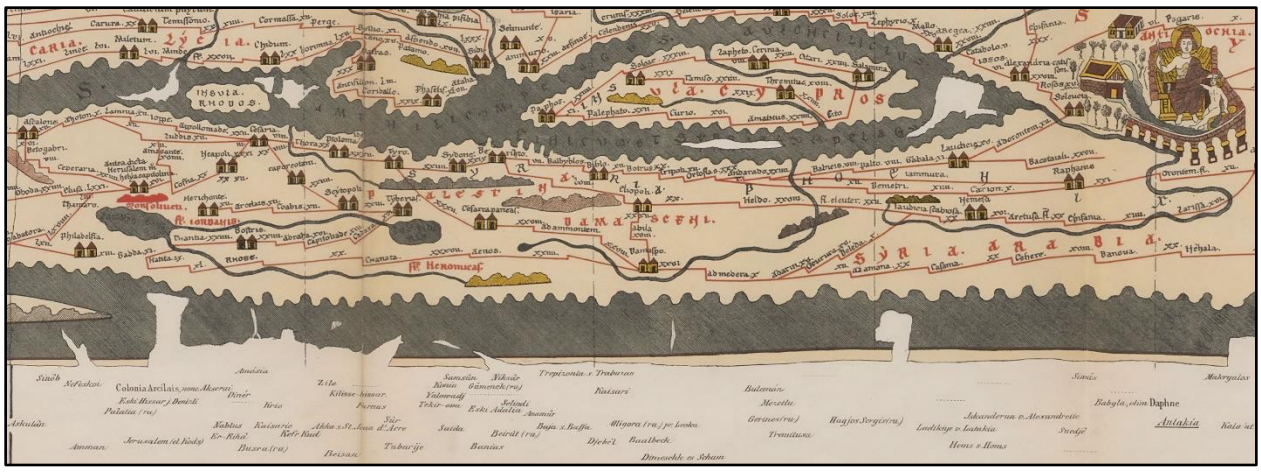

Figure 6: The Roman Road Network, from Ashkelon to Antioch, as depicted in a section of Peutinger Map (from Miller 1887)[31]

During the early Islamic period, the coastal road remained an important artery for the movement of goods and people. Beginning at al-Raqqa, the road continued westward, passing by Aleppo before reaching the coast.[32] The road then continued south, passing by all the major Syro-Palestinian ports, and integrating them within a unified communication and travel corridor that was vital to political and economic connectivity within the region. In addition to this primary north-south artery, numerous secondary roads connected the ports with the interior. A letter from Nessana dated to 685 CE, mentions construction work along one such road connecting Caesarea with the inland city of Baysān (Scythopolis).[33] Waystations like the one at Horvat Mesad, located along the road from the port of Jaffa to Jerusalem, could have played a role in controlling and safeguarding traffic along these routes (discussed in Chapter 5.2.2).[34]

[31] Konrad, *Die Weltkarte Des Castorius: Genannt Die Peutingersche Tafel*.
[32] Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000, 300–301.
[33] Kraemer, *Excavations at Nessana, Volume 3*, 3:209–11.
[34] Fischer, *Ḥorvat Meṣad*.

The Post Road (*Tarīq al-Barīd*) was another major road network linking the capital of Damascus with northern Syria, the Jazīra (north-west Mesopotamia), Irāq, and Egypt during the Umayyad period. In Bilād al-Shām, the post road crossed through the northern provinces of Hims and Qinnasrīn. Heading southward from Damascus, the route passed through the provincial capitals of Tabariya and Ramla, before following the coast to Egypt.[35] Between Tabariya and Ramla there were twelve waystations, spaced at intervals of roughly 10 km. Walmsley identifies one of these waystations at Khan al-Tuggar.[36] Based on papyrological evidence, Sijpesteign indicates that the postal road was already operating in 669 CE.[37]

These primary and secondary roads comprised what Bonner referred collectively as the "superhighway, a product both of the initial movement of conquest and of the ensuing large-scale movement of persons and goods."[38] These routes not only facilitated the passage of troops and personnel and the collection of taxes, but for merchants, travelers, and pilgrims they were the key arteries of trade and travel between the coast and interior. It is no wonder the Umayyad caliphs invested heavily in constructing and refurbishing these road networks.

4.2.3 Categories of Trade

Now that we have briefly explored the predominant maritime and terrestrial pathways that existed in the eastern Mediterranean, we should consider the various forms of trade that moved along them. The terminology of trade is often muddled, leading to misunderstandings

[35] Ramla was founded by Sulaymān b. 'Abd al-Malik in 716 CE, so the post road must have passed elsewhere, perhaps near Ludd or Amwas.
[36] Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000, 300.
[37] Sijpesteijn, "The Arab Conquest of Egypt and the Beginning of Muslim Rule," 2007, 445.
[38] Bonner, "In Search of the Early Islamic Economy," 22.

between scholars and mischaracterizations of the underlying economic and sailing systems.[39] The difference between coastal tramping and cabotage is at the heart of problem, particularly when scholars use them interchangeably.[40]

Tramping trade involves ships sailing from port to port, in search of a market for a portion of their cargo, as well as purchasing new wares to sell further down the line.[41] Wilson describes it as "speculative, opportunistic, and relatively small-scale."[42] Arnauld characterizes tramping as "often a quest for higher and less certain profits" and suggests that it fits better with higher intrinsic value cargos and increased assumption of risk. However, tramping might also be seen as an agile response to shifting markets, available cargoes, and new opportunities. It required specialized knowledge of the local currents, coast, and available anchorages, and shippers came to know their routes and markets intimately.

Alternately, cabotage—essentially meaning sailing cape to cape—can be characterized as a pre-planned form of coastal trade with an intended destination for the cargo. Rather than sailing in search for markets, shippers headed straight to a predetermined destination, making stopovers at ports and anchorages along the way as necessary. There is also a geographic aspect to the term. While cabotage refers to trade that follows the coast within the territorial waters of a state, grand cabotage refers to international commerce that follows the coast.[43]

These forms of coastal navigation contrast with direct trade between principal ports and emporia. This form of commerce typically required sailing out of sight of land on the open

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[39] Arnaud, "Ancient Sailing-Routes and Trade Patterns: The Impact of Human Factors," 60; Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 53.
[40] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 53.
[41] Arnaud, "Ancient Sailing-Routes and Trade Patterns: The Impact of Human Factors," 60.
[42] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 53.
[43] Arnaud, "Ancient Sailing-Routes and Trade Patterns: The Impact of Human Factors," 60.

ocean, sailing continuously at night, and stellar navigation, and thus, a completely different skillset than navigating by coastal currents and landmarks. Direct trade also required significant foreknowledge of distant ports. Wilson notes that it implied "organized, often regular traffic, and relatively good information about markets at the other end, often facilitated by agents or diaspora trading communities." Mariners began plying the waters of the deep ocean during the Bronze Age, traveling the maritime routes that connected Egypt, Cyprus, and the Aegean with the Levant. Direct trade rapidly expanded during the Iron Age with the birth of Phoenician and Greek maritime networks that spanned the entire Mediterranean, and even penetrated the Atlantic and Black Sea.

The different forms of navigation favored different forms of sailing technology as well. Open-water commerce favored deep-hulled vessels with large holds, strong hulls, and significant lateral resistance. The large, deep-hulled vessels commissioned during the Roman period could not enter shallow harbors, limiting the ports they could use.[44] Goods would have to be redistributed to other ports by smaller ships or inland trading networks. Coastal sailing favored shallow-drafted vessels that could beach and pass over submerged obstacles, as well as sailing rigs—like the lateen sail—that increased their agility and ability to use the coastal winds. Ultimately, transformations in the nature of trade stimulated changes in ship and harbor technology during Late Antiquity and the early Islamic period, discussed below in Chapter 4.3.2.

4.2.4 The Scale of Trade

The different forms of trade—be it direct deepwater crossings, coastal cabotage, or opportunistic tramping—are fundamentally entangled with the different geographic scales of

[44] Arnaud, 61.

trade. Local and international exchange would have been conducted by different groups of mariners, and required specialized ships, navigational techniques, and economic knowledge that were appropriate to the scope and region.

In his assessment of patterns of connectivity in the Bronze Age Aegean, Tartaron makes a strong case for the necessity of understanding and exploring nuances of interactions at these different geographical scales of trade.[45] He identifies four broad 'spheres of interaction': the coastscape, the maritime small world, the regional (or intra-cultural), and the interregional (or inter-cultural), which will provide a useful framework for our discussion in this chapter. Tartaron notes that the boundaries of these zones were both fuzzy and highly dynamic, and that larger scale geographical networks and political events often intersected and transformed the nature of local and microregional exchange.[46]

1) The smallest of these spheres of interaction is the coastscape, which we can imagine as a harbor town and its surroundings. It is comprised of the local shoreline and visual seascape, the settlement and adjacent land exploited by the community, the connective routes into the interior, and the waters used by the maritime community on a daily basis for economic and social purposes.[47] If we apply Tartaron's framework to early Islamic Caesarea, for instance, its coastscape would include the city's shoreline and offshore waters, the communities within its immediate agricultural hinterland, and the inland sites of Baysān and Fihl (Pella) which were linked to it by secondary roads.

[45] Tartaron, *Maritime Networks in the Mycenaean World*; Tartaron, "Geography Matters: Defining Maritime Small Worlds of the Aegean Bronze Age."
[46] Tartaron, "Geography Matters: Defining Maritime Small Worlds of the Aegean Bronze Age," 72.
[47] Tartaron, 73.

2) Next in scale are maritime small worlds—microregions of closely connected communities and coastscapes. They are shaped by habitual face-to-face interaction, with shared cultural, linguistic, economic, and social ties.[48] We can imagine the Nile Delta as a small world, combining the coastscapes of Alexandria, Damietta, Rosetta, and Tinnis, along with the inland Delta waterways and their respective down-the-line harbor towns.

3) Regional (or intra-cultural) networks were created by a move beyond the 'safe and familiar' into longer distance travel. This was the domain of merchants and sailors who had specialized knowledge of navigation, coastal and open-sea routes, landing places, and social ties to individuals along the way or at the final destination. These interactions, however, still took place largely within a cultural sphere, and merchants would likely share familiar language, religious practices, and cultural norms.[49] As an example, Tartaron proposed the maritime networks enmeshing Crete, the islands of the Aegean, and Greece. For Egypt, the maritime small worlds of the Delta, Upper Nile, Lower Nile, and Red Sea would comprise an intra-cultural/regional sphere of interaction. The southern coast of Syria-Palestine, from Gaza to Beirut similarly might comprise its own regional, or intra-cultural, interaction sphere.

4) Finally, the largest scale of maritime interaction spheres are interregional (inter-cultural) networks that link different states and culture groups. Interaction in this sphere was characterized by long-distance movements, often state-sponsored or undertaken by merchants, which linked distant regions.[50] Syro-Palestinian shippers who ventured to Cyprus or the Nile Delta traversed this interregional maritime zone, as did the Egyptian fleets that partook in the annual cursus that departed North Africa and Syria-Palestine.

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[48] Tartaron, 73.
[49] Tartaron, 75.
[50] Tartaron, 76.

Based on Tartaron's framework, Knapp identifies six spheres of interaction in the eastern Mediterranean for the Bronze Age (Figure 7).[51] We will see shortly that they are indeed very similar to those that emerge following the Muslim conquest.

1. Egypt and central-southern Syria-Palestine
2. The Syro-Palestinian ports (south to north)
3. Syria-Palestine and Cyprus
4. Cyprus and Egypt
5. North Syria and southern coastal Anatolia (and Cyprus)
6. Western coastal Anatolia and the Aegean

[51] Tartaron, *Maritime Networks in the Mycenaean World*; Tartaron, "Geography Matters: Defining Maritime Small Worlds of the Aegean Bronze Age"; Knapp, *Seafaring and Seafarers in the Bronze Age Eastern Mediterranean*, 181.

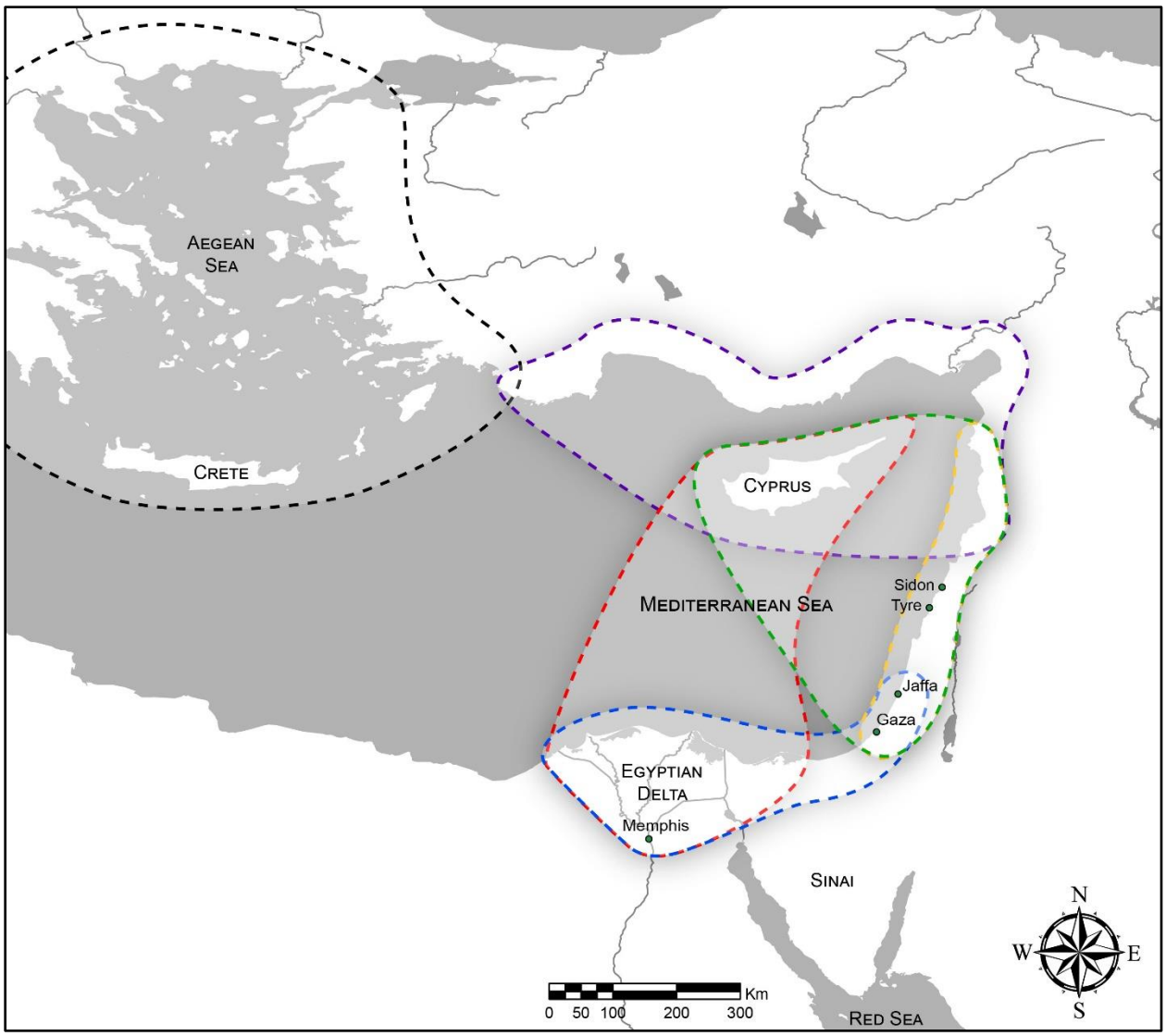

Figure 7: Bronze Age spheres of interaction in the Eastern Mediterranean, (by Morriss, based on Knapp 2018)

4.2.5 Importance of regional trade

Interregional trade receives the most attention in the literature, not only because cross-cultural interaction is a compelling topic of research, but foreign materials are easily identified in the archaeological record and exotic long-distance trade was probably more likely to be described in literary sources than the mundane background of local exchange. When scholars discuss the decline of trade in Late Antiquity, it is largely this type they are writing about. However, the importance of *intra*-regional trade and even the 'background noise,' low-level exchange within maritime small worlds should not be overlooked. While mobility in Late Antiquity and the Islamic period was probably greater than in the Bronze Age, it is probable that the majority of coastal dwellers rarely traveled more than a few dozen kilometers from their home. Local connections created vibrant small-scale networks buzzing with activity—fishing, farming, local travel, and the production and exchange of goods at local markets—and this activity was no less important or vibrant than that conducted on an international scale. [52]

Tartaron suggests that the resulting local networks of maritime small worlds, forged on frequent interaction and familiar social and kinship ties, would have had a resilience that larger maritime networks did not. International, long-distance trade structures like the Roman grain trade were artificially configured and propped up by government investment, which made them susceptible to changing political fortunes. Local networks were easier to maintain and more likely to persist despite changing conditions because of the shorter distances involved, the strength of their social networks, and subsistence-level trade.[53]

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[52] Tartaron, "Geography Matters: Defining Maritime Small Worlds of the Aegean Bronze Age," 66.
[53] Tartaron, 66.

4.2.6 The Problem of Shipwrecks

Before we discuss the nature of trade in the Byzantine and Islamic periods, it is worth considering one crucial category of evidence—shipwrecks—which are provided as data for many models of trade. A tantalizing source of evidence, shipwrecks are often the result of a catastrophic wrecking event, in which the ship and its entire cargo and crew were lost all at once. In addition to providing information about the nature, origin, and quantity of its cargo, the assemblage from a shipwreck can provide data about the ship's structure, where it was built, the nationality of its crew, its destination, and the way it was loaded. The recently excavated Ma'agan Mikhael B shipwreck in Israel is a perfect example. Dated to the mid seventh to mid eighth century, the 23-meter-long lateen-rigged merchant vessel was constructed of walnut (*juglans regia*) and fir (*Abies* sp) which likely originated in Anatolia.[54] The cargo consisted of raw glass and cullet from Egypt and Palestine and several late survivals of late Roman amphorae (maritime transport containers) that contained a rich variety of foodstuffs including, olives, dates, figs, grapes, fish (likely from the Galilee), pine nuts, and walnuts.[55] Remarkably, the amphorae that comprised the cargo were arranged in groupings according to their type and production region, indicating the loading pattern of the hull. The trade contacts represented in the assemblage included Egypt—where the vessel made a stop prior to its sinking—southern Palestine, and Cyprus, with two Christian production centers involved as indicated by the inscriptions on several of the amphorae. In addition to the Christian symbols, there were several

[54] Cohen and Cvikel, "Rigging of the Ma'agan Mikhael B Shipwreck (7th–8th Centuries AD)."
[55] Natan et al., "Maritime Trade in Early Islamic-Period Glass"; Creisher et al., "The Amphorae of the Ma'agan Mikhael B Shipwreck: Preliminary Report," 114–15.

Arabic inscriptions that were carved and painted on the amphorae, which have been interpreted as blessings for the merchandise or journey or a form of state taxation or recording.[56]

Although shipwrecks are often treated as time capsules, they are not. The evidence that remains is shaped by numerous anthropogenic and environmental site formation processes.[57] During the wrecking process, the crew may dump cargo as well as masts and the ship's equipment overboard. Lightweight materials will float away as flotsam and jetsam. The crew, locals, or salvers might return later and recover goods and materials from the wreck. Once submerged, perishable goods and wooden hulls will degrade and can completely disappear in most maritime environments. These components include equipment like rope and sails, organic containers such as sacks, boxes, and barrels, perishable goods such as fruit, grain, and cloth, as well as personal items and the remains of the crew themselves. Except in rare environments, the ship itself will be eaten away by marine organisms and the actions of the waves. Ultimately, what remains of a shipwreck is only that which was not discarded, destroyed, salvaged, degraded, or spread by the ocean—providing very intriguing but skewed information about the vessel and its cargo and crew.

Given the thousands of shipwrecks discovered since the dawn of underwater archaeology, scholars have sought to draw information not only from their remains but from their frequency and distribution as well—though doing so is fraught with numerous problems. When evaluating Mediterranean trade over the longue durée, scholars often cite Parker's 1992 shipwreck distribution graph. Parker's original dataset is comprised of 1,189 known shipwrecks spanning the Bronze Age up until 1500 CE. According to the graph, the following trends can be observed:

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[56] Creisher et al., "The Amphorae of the Ma'agan Mikhael B Shipwreck: Preliminary Report," 111–12.
[57] Gibbs, "Cultural Site Formation Processes in Maritime Archaeology: Disaster Response, Salvage and Muckelroy 30 Years On"; Oxley and Keith, "Introduction: Site Formation Processes of Submerged Shipwrecks."

a marked rise in the number of known shipwrecks between 600 to 100 BC, followed by a progressive drop in the second through fourth century CE, and then a small rise in the sixth century CE before another sharp drop in the seventh through ninth centuries. Though there is a small rise in the number of shipwrecks beginning in the tenth century, the numbers never again reach the sixth century level.

Many scholars have assumed a direct correlation between shipwreck numbers and the intensity of maritime trade—more ships at sea should correlate with more shipwrecks. McCormick, for instance, suggests that there was a Mediterranean-wide drop in the number of ships operating by 700 CE, corresponding to the end of subsidized shipping (the *annona*), which in his opinion ushered in the end of the late Roman shipping system: "Things got worse for non-military shipping between the seventh and eighth century, if we can judge from the near silence of the seabed."[58]

Though Parker may not have intended his model to be used to draw conclusions about the intensity of maritime shipping, it continues to be cited in support of arguments for a decline and collapse in maritime trade beginning in the seventh century. Most scholars who rely on Parker's study acknowledge the limitations of the dataset. For instance, McCormick recognizes that it does not represent all discernible shipwrecks and is not a representative sample of all ships that were sailing in any one period.[59] Pieri urges caution when interpreting the data from Parker's model.[60] Wilson provides the most illuminating case for the flaws in the shipwreck data, arguing

[58] McCormick, *Origins of the European Economy*, 108, 111–13.
[59] McCormick, "Movements and Markets in the First Millenium: Information, Containers, and Shipwrecks."
[60] Pieri, "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period," 39–40.

that the probability of any voyage ending in a shipwreck is *not* the same in all periods, and that shipwrecks are *not* equally visible (in the archaeological record) in all periods.[61]

And yet, despite these qualifications, Parker's graph continues to be employed, often with the addition of new data, to provide an updated version of largely the same narrative. McCormick adds new shipwrecks to Parker's model, using it to support his conclusions about trade patterns between the eastern and western Mediterranean, with his analysis ending in 700 CE when shipwrecks apparently fall off. While Pieri cautioned against interpreting Parker's data, he too still employs it to draw conclusions about declining trade.[62]

As a reflector of trade, the Parker shipwreck distribution is not only flawed, but fundamentally misleading. While changes in connectivity were already underway in the seventh century, the extreme drop off depicted in shipwreck graphs is not necessarily representative of the reality of Mediterranean shipping and provides a false impression of the economy for several reasons. Firstly, not all regions of the Mediterranean have been equally surveyed. For instance, the Syrian coast remains largely under studied compared to the Turkish or Israeli coasts.[63] Even if the Mediterranean could be systematically surveyed, the diverse geomorphology of even small stretches of coastline would skew the data. The southern Levantine coast, for instance, is characterized by meters-deep shifting sand beds that can obscure or reveal entire shipwrecks after large storms. While this has often led to excellent preservation of hull remains and portions of perishable cargoes, it also means that many shipwrecks are still buried and undiscoverable.[64] Wrecks deposited along rocky coasts or in high energy environments, on the other hand, might

[61] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 36.
[62] Pieri, "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period," 39–40.
[63] For a summary of the known Syrian shipwrecks, see Kampbell, "Shipwrecks of the Syrian Coast."
[64] Take for instance the recently excavated Ma'agan Mikhael B shipwreck in Israel.

not survive at all—pulled apart and scattered by the waves or degraded by marine conditions. Secondly, the bias of Classical remains that impacts terrestrial sites has also hindered the identification and study of post-Classical shipwrecks. The disparity between early Islamic and Classical shipwreck numbers may be more of a reflection of research interest than an actual drop or decline in shipwrecks.[65] Thirdly, this situation is compounded by the diversity of imitations and survivals of late Roman amphorae—the primary means for dating shipwrecks—whose dating is both complex and far from understood. While classical scholars often take the late seventh century as the cut-off date for many of the popular late Roman amphorae, recent work has demonstrated that variants of the LRA's 1, 2, 4, 5/6 continued to be produced in various regions and used well into the early Islamic period.

Fourth, cargoes play a critical role in shipwreck detection. Ships are subject to a myriad of site formation processes, and 'invisible' cargoes such as slaves, textiles, barrels of wine, or other perishable goods rarely survive in marine environments if they are not immediately covered by sediments. As such, shipwrecks are generally identified through remote sensing and visual surveys as mounds of amphorae or stone cargoes on the seabed. This means that the shipwreck graphs compiled by Parker (and others) are graphs of only the known, or visible, cargoes comprised primarily of amphorae and stone. Accordingly, Parker's distribution might more accurately be understood as *the distribution of amphora usage as maritime transport containers* as opposed to a measure of shipping.[66]

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[65] For instance, one of the driving research interests of the Institute of Nautical Archaeology was to document the evolution of ship construction, leading researchers to seek early (Classical) vessels in search of the earliest examples of frame-first construction.

[66] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 37.

It is understood that amphora usage began a slow but steady decline around the seventh century, being replaced by perishable containers such as barrels and sacks.[67] Barrels are depicted on Roman reliefs in the first through third centuries and are mentioned in late third and early fourth century Roman tariffs.[68] While Egypt continued to produce amphorae well into the twelfth century, barrels had replaced the amphora in the central and western Mediterranean by the second half of the first millennium for transporting both liquid and some solid goods.[69] That perishable containers like barrels and sacks were also regularly used in the eastern Mediterranean is indicated in the eleventh century Geniza documents. Oil, wine, and certain precious goods were transported in skins and leather bags.[70] Walmsley notes that the decreasing use of amphorae has given a false impression of commerce and exchange in the early Islamic period, however, this view is not widely accepted or considered, despite its crucial implications.[71]

Another problem with shipwreck distribution graphs is that they do not account for changing patterns in maritime trade. Though the degree to which Mediterranean shipping was tied to the Byzantine fiscal system is debated, the end of the *annona* (discussed in more depth below) certainly had lasting repercussions in shipping and connectivity. It is generally accepted that when the Byzantine redistributive system collapsed in the eastern Mediterranean, trade contracted to a regional level.[72] In other words, the long-distance centralized movement of

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[67] Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000, 329; Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 37; Morrison and Sodini, "The Sixth Century Economy," 206–7.

[68] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 37.

[69] Wilson, 37.

[70] Khalilieh, *Islamic Maritime Law: An Introduction*, 79.

[71] Walmsley, "Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565-800," 329; Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000, 328–29.

[72] Morrison and Sodini, "The Sixth Century Economy," 220; Wickham, "The Mediterranean around 800"; Loseby, "The Mediterranean Economy."

goods, or 'le grand commerce,' between a few places ended, and was replaced with the small-scale movements of local and regional shippers moving a variety of goods between a multitude of minor centers of production and consumption.[73] This type of local and regional exchange was primarily conducted through coastal sailing, and while direct open-sea navigation did not cease entirely, it was the exception rather than the norm.[74] When goods did move interregionally, it is thought to have occurred in stages across overlapping regional networks, as opposed to single, long distance routes.[75] It is worth considering how changing shipping patterns affected shipwreck visibility. For instance, if shipping was conducted primarily by local sailors who held an intimate knowledge of the anchorages and navigational hazards of certain stretches of coastline, then the risk of wrecking may have decreased. Therefore, the lack of visibility of shipwrecks in the early Islamic period may also be related to the changes in shipping patterns, whereby coastal sailing and localized knowledge meant less shipwrecks.

In summary, the Parker distribution of shipwrecks is a valuable dataset if it is approached critically. The shipwreck graphs that are so often cited are not a representative sample of shipwrecks, nor of sailing ships, and accordingly should not be used to draw comparisons between the scale of maritime trade during the Roman and early Islamic periods. While the conclusion that there was a strong increase in shipping during the Roman period is probably an accurate assessment, the dataset becomes less precise for subsequent periods because it does not account for shipping changes, the adoption of perishable transport containers, and shipwreck selection bias. Furthermore, it should not be used for drawing fine-grained conclusions on a

[73] McCormick, *Origins of the European Economy*, 117.
[74] McCormick, 117–19; Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 54.
[75] Haldon, "Commerce and Exchange in the Seventh and Eighth Centuries: Regional Trade and the Movement of Goods," 103.

century-to-century basis, both due to the imprecision in dating and because we do not know the rate at which transformations in maritime shipping occurred.

4.3 Roman Trade

While direct trade and long-distance open ocean voyages had been occurring since the Bronze Age, they reached a zenith during the Roman period, buoyed by advances in naval technology, maritime insurance, private and state investment, and a complex system of international trading networks. Models of ancient trade in the Mediterranean are often binary, either postulating the dominance of direct trade, or alternately, systems of cabotage—though Arnaud questions the appropriateness of such a reductive comparison.[76] Maritime trade was by its nature complex, with multiple levels of transport and redistribution, as well as coexisting and competing interactions.

Arnauld proposes that the predominant pattern during the Classical period was a shift to direct trade, with increasingly large ships carrying high volume, low value goods. Based on the evidence of shipwrecks, Wilson argues that most Greek and Roman period ships were loaded at a single port. This would theoretically be true not only of homogenous cargoes, but of mixed cargoes as well, which he argues would represent diverse materials consolidated at the port for shipment or redistribution.[77] While he may be correct, it is worth noting that there were many ways mixed cargoes could be assembled, and that it is difficult to categorically rule out that a ship loaded and offloaded portions of its cargo along the way.

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[76] Arnaud, "Ancient Sailing-Routes and Trade Patterns: The Impact of Human Factors," 59.
[77] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 54.

Overall, however, the pattern that emerges from the documentary and archaeological evidence suggests that during the Roman period, large merchant ships transported bulk cargoes between major ports and emporia in direct, interregional trade. These goods were then redistributed down-the-line to secondary destinations by smaller vessels, carrying mixed cargos.

4.3.1 The Annona System

One of the driving engines at the heart of Mediterranean trade during the Roman and Byzantine periods was the *annona*—the fiscal system which supplied the Roman Empire and its armies with a steady supply of grain and other staples, extracted from its conquered territories. This complex system involved the collection, transport, and redistribution of vast quantities of grain, as well as wine and oil from far-flung regions across the Mediterranean. A popular view among economic histories of the Mediterranean is that the Byzantine empire's loss of its eastern provinces and the end *annona* were the root causes of a collapse in Mediterranean trade patterns. This notion hinges on the argument that commerce was tied to, or at least propelled by the state's hand.[78] Thus, before analyzing the transformations that occurred in connectivity and trade between the Byzantine and Islamic periods, it is first necessary to address the *annona* and the degree to which its cessation may have driven some of these developments.

Egypt, Syria-Palestine, northern Iraq, and Cilicia were the primary regions from which the late Roman state drew the bulk of its revenue.[79] While a portion of production was collected as taxes by the state for the *annona*, the remaining surplus could be traded locally and abroad by

[78] Proponents of this view include McCormick, *Origins of the European Economy*; Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800*; Haldon, "Commerce and Exchange in the Seventh and Eighth Centuries: Regional Trade and the Movement of Goods."

[79] Commito, "The Cities of Southern Asia Minor in the Sixth Century," 129; Haldon, "Greater Syria in the Seventh Century: Context and Background," 1.

farmers and merchants. Beginning in the mid-fourth century, the rise of Constantinople resulted in an upsurge of commercial activity in the east. The new Roman capital exerted an enormous pull on resources from its eastern Mediterranean provinces, and stimulated the productivity of these regions. Areas that benefitted the most were those which specialized in the production of surplus goods, such as wine, oil, and grain for export, like Palestine, southeastern Anatolia, northern Syria, and Egypt.[80] For instance, during the sixth century, an estimated 1200 – 1800 ships were required to transport the roughly 160,000 metric tons of Egypt's grain supplies to Constantinople each year.[81] As briefly mentioned earlier, the Mediterranean sailing season operated at its height from spring to autumn, and state-driven exchange operated largely within this window to reduce the chances of wrecking. However, it would not be unusual for the Egyptian grain fleets to sometimes sail during the winter months (November – March), especially since bulk transport on the Nile was not possible until mid to late summer.[82] It is estimated that Egyptian ships could complete two roundtrips to Rome in a year, while those sailing to Constantinople might make three.[83] Smaller ships that followed coastal routes would have been especially advantageous for winter sailings, as they could navigate shallows better and seek shelter more easily.

The shippers who manned the *annona* fleets each year were known as *navicularii*, and their duties to the state changed over the centuries. In the fourth century CE, their service to the

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[80] Pieri, "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period," 31.

[81] McCormick, *Origins of the European Economy*, 109 These numbers are based on Justininian's Edict which mentions the annual import of some 8 million units (McCormick understands these to be artabae) of grain from Alexandria. ; Morony, "Economic Boundaries?," 177 Morony cites this as 160,000 metric tons of grain each year. However, Mayerson's (2007) discussion of Edict 13 suggests that the 8 million units are Roman solidi and not artabae. This would change the total tonnage. Mayerson, "The Case for 8,000,000 Modii in Justinian's Edict 13.8."

[82] Beresford, *The Ancient Sailing Season*, 351:32–36; McCormick, *Origins of the European Economy*, 98.

[83] Erdkamp, *Annona (Grain)*; McCormick, *Origins of the European Economy*, 106.

state was not only obligatory but also hereditary and tied to specific districts where they lived.[84] This changed in the sixth century, however, when the state shifted to hiring private shipowners to transport the *annona* cargoes.[85] Incentives were given to entice shippers to perform this service, including the right to trade their own cargoes duty-free after unloading their *annona* shipments.[86] These 'piggybacking' shipments increased the access in the east to overseas imports, leading to the popularity of commodities like African Red Slipped Ware.

While the fiscal system is frequently understood as the primary driver of exchange and connectivity in the Roman Mediterranean, it is important to understand that the *annona* comprised only a fraction of Rome and Constantinople's total grain imports each year, and that it was intended to feed only a limited portion of the cities' populations.[87] The rest of the populations' food demand was supplied by private shipowners who sold their cargoes on the open markets. One might imagine that contingents of local ships might have travelled alongside the *annona* fleets, many of them seeking to arrive early to fetch the best prices. The consistent movement of both state and private grain ships over the same routes year after year created a 'gravitational pull' on shipping.[88] Merchants and sailors adhered to known routes, ports, and markets, following familiar sailing patterns, and utilizing well-established mercantile networks. The diversity of late Roman amphorae and the regional fine wares that sought to imitate and

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[84] McCormick, *Origins of the European Economy*, 88–89.

[85] Sirks, *Food for Rome: The Legal Structure of the Transportation and Processing of Supplies for the Imperial Distributions in Rome and Constantinople*, 210, 231–32.

[86] Loseby, "The Mediterranean Economy," 629 In 393, the navicularii were granted exemption from tolls and sales tax if they were trading on their own account . That said, the state also legislated to limit the shipment of private cargo alongside *annona* shipments, probably to prevent overloading. Shippers were also prohibited from trading government cargo on their own account. These regulations likely arose because such practices were commonplace. For more on this, see ; Sirks, *Food for Rome: The Legal Structure of the Transportation and Processing of Supplies for the Imperial Distributions in Rome and Constantinople*, 202, 230.

[87] Sirks, *Food for Rome: The Legal Structure of the Transportation and Processing of Supplies for the Imperial Distributions in Rome and Constantinople*, 234, 355 The empire's armies were also supplied by the *annona*.

[88] McCormick, *Origins of the European Economy*, 90.

compete with the popular African Red Slipped wares, highlight the robust commercial networks that existed alongside the state's redistributive system.

4.3.2 Harbor and Ship Design

The thriving Roman exchange networks and mass transport of high volume, low value cargoes by large fleets spurred changes in ship and harbor design. While small ships of under 75 tons were common in all periods before and after the Roman period, a noticeable increase in size is apparent in the shipwrecks from the period between 100 BC and 300 CE, with cargo capacities ranging from 100 to over 350 tons.[89] This may reflect both the intensity and volume of trade during this time, as well as certain state incentives that encouraged the construction of larger tonnage vessels. For instance, in the late second century, private shipowners who could put in service a ship of 340 tons at the state's disposal were exempted from civic obligations (*munera*).[90] This exemption would have benefitted only the wealthiest landowners who could afford such endeavors to avoid the heavy financial burdens of the *munera.*

The increase in size of ships was mirrored by a necessary increase in port infrastructure. While the practice of beaching small and medium ships was used to a degree in all periods, there was a noted increase in the construction of artificial harbors and port facilities between 200 BC and 300 CE.[91] The monumental harbors of Carthage, Ostia, and Portus attest to the high volume of traffic and the immense resources that Rome invested in shipping foodstuffs.[92] Constantinople also invested in port infrastructure, and facilities were developed on the island of Tenedos to

[89] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 39.
[90] Wilson, 40.
[91] Wilson, 46.
[92] McCormick, *Origins of the European Economy*, 86, 91.

accommodate grain ships when weather prevented entry to the Hellespont.[93] The Roman technology of hydraulic concrete permitted the construction of breakwaters and moles in high energy areas that had previously been inaccessible. This technology spread across the Mediterranean, and the monumental harbor of Sebastos at Caesarea with its breakwaters and large outer harbor are testament to this innovation and engineering genius. The maintenance of these grand harbors required enormous efforts including dredging. Evidence for dredging is indicated in the harbor deposits at Tyre, and written sources refer to the constant need to dredge the harbors of Side in Pamphylia (southern Anatolia) as well as Seleucea, the riverine port of Antioch.[94]

Ship sizes declined in the later Imperial Period as merchant strategies and the regulations underlying the *annona* and trade changed. The massive grain carriers that plied the Mediterranean in the Imperial period were no longer common by the 4th century. Merchants moved to using fleets of smaller ships to transport cargo, distributing their risk, rather than putting all their eggs in one basket. Smaller ships were cheaper to build, easier to maneuver, and also faster to unload. Private shippers with smaller vessels could complete their obligations to the state efficiently without having to spend too much time at port, freeing them to conduct their own commercial ventures on the side. The archaeological evidence also suggests that these smaller ships could be owned by individuals of modest means, as well as by churches or monasteries.[95]

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[93] Sirks, *Food for Rome: The Legal Structure of the Transportation and Processing of Supplies for the Imperial Distributions in Rome and Constantinople*, 210.

[94] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 51.

[95] For example, the Yassiada I shipwreck (ca. 625 C.E.) is thought to represent a Monastic ship that was provisioning the Byzantine army with wine. The Tantura E shipwreck (7th-9th century) represents a small coaster or fishing boat that was carrying items collected from Egypt, Cyprus, and Syria-Palestine. The general picture

The gradual disappearance of the square sail in favor of the lateen rig went hand in hand with the decrease in size of ships.[96] These vessels, with their lateen sails, increased maneuverability, and shallow drafts, were well-adapted to the fluctuating winds, shallow shores, and risk of piracy which characterized the coastal routes.

The transformation in ship technology and shipping strategies led to changes in infrastructure as well. The upkeep and dredging that artificial harbors required meant they ultimately became impractical. While many of the grand Classical ports continued to be used through the Byzantine and early Islamic periods, less effort was made to maintain them. Many are presumed to have silted in or been reduced in area by the seventh century.[97] While the 'decline' of the Classical ports is often attributed to a reduction in trade, it should be more accurately understood as a combined result of changes in the state's fiscal policies, the disappearance of large ships that necessitated deep-water harbors, and the lack of financial investment both by the state and local elites in maintaining infrastructure. Moreover, it is important to keep in mind that monumental harbors like Caesarea were the exceptions rather than the norm, and while the breakwaters and jetties were necessary for the large Imperial grain ships, most Mediterranean shippers were accustomed to beaching and anchoring offshore, as has been the practice for most of history.

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presented by the available shipwrecks dated between the 5th and 11th century are of privately owned vessels that were engaged in cabotage and often carrying cargoes owned by several individuals.

[96] Wilson, "Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000," 45; Whitewright, "Sailing and Sailing Rigs in the Ancient Mediterranean: Implications of Continuity, Variation and Change in Propulsion Technology."

[97] This is true for the Lebanese ports. See Marriner, "Geoarchaeology of Phoenicia's Buried Harbours: Beirut, Sidon and Tyre - 5000 Years of Human-Environment Interactions"; Marriner, Morhange, and Saghieh-Beydoun, "Geoarchaeology of Beirut's Ancient Harbour, Phoenicia / Géoarchéologie Du Port Antique de Beyrouth, Phénicie"; Marriner, *Geoarchaeology of Lebanon's Ancient Harbours*.

4.4 Transformations in trade

4.4.1 End of the Annona

The Persian conquest of Syria-Palestine and Egypt beginning in 615 CE disrupted the state-sponsored grain shipments to Constantinople.[98] By the time the Arab armies conquered these regions, the Byzantine state's fiscal redistributive system in the eastern Mediterranean had effectively collapsed. The loss of nearly three quarters of its most lucrative territory was a monumental economic blow for the empire, forcing the capital to rely on grain imports from regions in the Aegean and Black Sea.

The cessation of the *annona*, coupled with the already ongoing changes in shipping, profoundly transformed trade in the Mediterranean, creating a domino effect that impacted ports, ship design, trade networks, and the commerce that traveled along with the annual shipments of grain. Typically, scholars refer to these changes in near-catastrophic terms, characterizing it as an end to international trade in the eastern Mediterranean and the impetus for economic decline. Wickham for instance proposes that "the Levantine coast seems to have gone into crisis, with urban depopulation and in some places rural abandonment after 700 or so, except perhaps for the port of Caesarea, which had good links to the interior."[99] Decker argues "there is little to suggest that the Umayyad and 'Abbāsid trade was anywhere near as brisk as its late antique predecessor. This trade had fallen under the double-blows of Persian and Arab invasions which disrupted maritime traffic, merchant networks, and at least on some occasions drove elite landowners to flight."[100] Ultimately, Decker suggests that "the Arab authorities hastened the unraveling of the trading networks via which eastern wine and other goods circulated by removing populations

[98] McCormick, *Origins of the European Economy*, 110.
[99] Wickham, "The Mediterranean around 800," 167.
[100] Decker, "The End of the Holy Land Wine Trade," 112.

from the cities of the seacoast, a quarter from which they feared Byzantine raids, and replacing the open ports and harbor cities with defensive *ribāṭs*."

These assertions not only mischaracterize the situation in Bilād al-Shām, but also represent an entrenched Byzantine bias. Viewed through the Classical lens, the conquest represented an end, but from the Islamic standpoint, it was a beginning. Rather than characterize the seventh and eighth centuries in reductive terms of decline and retraction, we should speak of it in terms of profound transformation, which does not have a positive or negative context. This creates the research space to focus on changes, and crucially, new economic opportunities, as explored below.

4.5 Evidence for trade in Bilād al-Shām

Now that we have set out the foundations and patterns of trade in Late Antiquity, we can examine the evidence for exchange in the early Islamic period. The distribution of ceramic forms across the coastal zone of Bilād al-Shām can provide insights into trade along the maritime frontier, though the evidence is not without significant problems, as described in full in Chapter 1.2.4. These problems stem from the fact that Islamic period sites have not been as well explored or as accurately dated as those from the Classical period and Iron Age. While there is a comparative wealth of data from southern al-Shām, Syria has not been as thoroughly surveyed, creating large lacunas in the data for the north. These problems make it difficult to justify any form of quantitative assessment at this time. Moreover, establishing a timeline for transformation is also difficult, as the dates for some ceramic forms have been influenced by outdated chronologies and the assumption of widespread regional abandonment and decline, which has led excavators to frequently assume a 700 CE century terminus for a number of ceramic forms

and coastal settlements. These are then cited in further literature, creating a self-perpetuating cycle that continues to impede interpretations of the coast during this critical period.

Ultimately, late Roman ceramics carry a disproportionate weight in comparison to early Islamic forms in terms of their identification, accurate dating, and reporting. While the sudden disappearance or gradual tapering off of certain late Roman forms is usually interpreted through the lenses of economic decline, reduction in trade, and decreasing connectivity, I will argue that it is partially the product of shifting demand, changing forms of transport, the growth of new production zones, and the rising popularity of new regional forms. I will look at both maritime transport containers (amphorae), which provide evidence for the flow of goods, as well as a few examples of fine ware and cooking ware, which provide glimpses into changing tastes and the rise of localized production.

4.5.1 Evidence from Maritime Transport Containers

Amphorae are one of the primary sources of evidence used to discuss maritime trade. These durable maritime transport containers are widely recognizable in the archaeological record and their study over the years has led to the identification of numerous classes and productions. They occur at a variety of sites, including the workshops where they were produced, warehouses, shipwrecks, and at consumption sites in contexts relating to their use and discard. Certain classes, such as the Beirut amphora, the Agora M 334 of Acre, and the Sinopean 'carrot' amphorae, are specific to certain cities and their territories.[101] However, others such as the Late Roman Amphora (LRA) 1, LRA 3, LRA 4, and LRA 5 were widely imitated in several regions

[101] Reynolds, "The Oil Supply in the Roman East: Identifying Modes of Production, Containers and Contents in the Eastern Empire," 307.

and workshops, and it is only through analysis of their fabric that their place of manufacture can be determined.

The contents of some well-known amphora classes are often assumed in the literature—such as oil and wine being transported in the amphorae associated with agricultural production zones like Gaza and North Syria. These assessments should be taken with some caution, however, as amphorae were often reused, and it is sometimes only through the preserved contents (fish products, fruit pits, etc.) or residues that the contents can be accurately identified.

Roman amphorae will often bear stamps, graffiti, or painted labels on their handles, shoulders, or stoppers which can aid in identifying their origin, contents, and sometimes the individuals involved in the manufacture and distribution of the containers.[102] This practice continued in the early Islamic period. The Umayyad and Mamluk period kilns discovered at the monastery of Nabi Samwil (Palestine) located on the road from Jerusalem to the coast produced distinctive storage jars with Arabic blessings stamped on their handle. Examples of these jars have been found in eighth through mid-tenth century contexts in Jerusalem, Ramla, Caesarea, Acre, and Egypt.[103] Similarly, the Egyptian bag-shaped amphorae (LRA 5) that were recently discovered on the mid-seventh to mid-eighth century Ma‘agan Mikhael B shipwreck in Israel all bore Arabic inscriptions, many in the form of blessings, while some of the LRA 2C amphorae on board had dipinti of a large cruciform monogram that likely tied them to a monastic production center.[104]

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[102] Peña, “Amphorae, Roman.”

[103] Gascoigne and Pyke, “Nebi Samwil-Type Jars in Medieval Egypt: Characterisation of an Imported Ceramic Vessel”; Arnon, *Caesarea Maritima, the Late Periods (700-1291 CE)*, 39, 42; Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 148 The jars appear to have stored oil and wine. Those that were exported to Egypt appear to be later forms.

[104] Creisher et al., “The Amphorae of the Ma‘agan Mikhael B Shipwreck: Preliminary Report,” 108, 110.

Between the fourth and seventh centuries, Late Roman Amphorae (LRA) 1-7 were thought to have been the primary transport containers in the eastern Mediterranean, with LRAs 1-5 being the most common classes circulating interregionally in this broad area (Table 5).[105] Since the typology of LRA 1-7 was first developed by Riley, over a hundred new amphora types have been identified.[106] Late variants, or survivals, of many of the LRA 1-7 amphorae continued to be produced in a variety of regions well into the early Islamic period. Still, it is not uncommon to see the terminus dates for LRAs 1, 2, and 4 in mid-seventh century, as shown in Table 5.

LRA 1 are generally thought to have contained either wine or olive oil from the regions of Cilicia and Cyprus. Reynolds, however, is inclined to believe that LRA 1 primarily were used to transport wine. The fact that the known LRA 1 workshops are all in coastal locations suggests that animal skins were probably used to transport wine down to the coast from inland estates—though these perishable containers would have left no evidence behind.[107] LRA 1 survivals continued to be produced into the eighth and ninth century, with evidence that they were also manufactured in smaller workshops around the Aegean.[108] A recent study on a collection of amphorae sherds from Ḥiṣn al-Tīnāt identified fragments of what may be LRA 1 amphorae that were manufactured in the wider environs of the site during the early Islamic period. The study suggests that the coastal waystation relied primarily on the regional supply of amphorae and

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[105] Tomber, "Polarising and Integrating the Late Roman Economy: The Role of Late Roman Amphorae 1-7," 155, 159.

[106] Riley, "New Light on Relations between the Eastern Mediterranean and Carthage in the Vandal and Byzantine Periods: The Evidence from the University of Michigan Excavations," 111–22; Pieri, "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period," 28.

[107] Reynolds, "The Oil Supply in the Roman East: Identifying Modes of Production, Containers and Contents in the Eastern Empire," 315.

[108] Creisher et al., "The Amphorae of the Ma'agan Mikhael B Shipwreck: Preliminary Report," 106–8; Reynolds, "Pottery and the Economy in 8th Century Beirut: An Umayyad Pottery Assemblage from the Roman Imperial Baths (BEY 045)," 726; Danys-Lasek, "Pottery from Deir El-Naqlun (6th–12th Century). Preliminary Report from Polish Excavations in 2010 and 2011."

ceramic products. However, there is also evidence for more far-flung connections including potentially Egypt and the Black Sea.[109]

While Syria was a major producer of olive oil and possibly wine, it is unclear what type of container was used to distribute it, as no LRA 1 production sites have been found in the region.[110] Reynolds suggests that the North Syrian Amphorae, which are common at inland Syrian sites and continued to be produced into the ninth century, may have carried both oil and wine, but were not exported to the coast. Therefore, it remains unclear what type of containers were used to export the oil and wine of Syria, and Reynolds raises the possibility of the use of barrels or large globular glass vessels for oil.[111] This is worth bearing in mind when considering the evidence for trade from this region. As barrels are perishable and glass could be recycled, there would be little evidence for their use or the trade they were involved in. Alternately, Syria's olive oil may not have been exported at all but marketed locally.[112]

Although they do not seem to have been used for export, is worth briefly discussing the North Syrian Amphora (NSA) as they provide insights into the inland exchange networks in Syria after the conquest. The NSA 2 was the latest form of these regional storage jars, with evidence for their production near Apamea between the seventh and ninth centuries.[113] These jars, along with their more short-lived form, NSA 1 (produced between early and late seventh century) were traded along the interior of northern Syria, but do not appear to have been used for overseas exports.

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[109] Bes, "Early and Middle Islamic Amphorae from the Tüpraş Field Excavations."
[110] Reynolds, "The Oil Supply in the Roman East: Identifying Modes of Production, Containers and Contents in the Eastern Empire," 315.
[111] Reynolds, 317–18. Globular glass vessels, known as carboys, were found in two 551 CE quake deposits in Beirut. ; Morrison and Sodini, "The Sixth Century Economy," 206 suggest that wine may have been transported in barrels as early as the 6th century.
[112] Morony, "Economic Boundaries?," 176.
[113] Pieri, *Le commerce du vin oriental à l'époque byzantine, Ve-VIIe siècles*, 589.

Type	Traditional Dating	Origin	Primary Content
LRA 1	Mid-3rd – mid-7th	Cilicia Cyprus	Wine Olive oil
LRA 2	4th – first half of 7th	Chios Knidos Argolid	Olive oil Wine
LRA 3	4th – 6th	West Asia Minor	Unknown
LRA 4	4th – 7th ('ending with Arab conquests')	Coastal southern Palestine (Ashdod and territories of Ashkelon and Gaza)	Wine
LRA 5	1st – c. 750 (and 'throughout 'Abbāsid period')	Palestine North Egypt (late 5th c. on) Egypt & Jordan ('Abbāsid production)	Wine Oil Figs Fish sauce
LRA 6	Early 3rd – 8th (and 'beyond')	Beth Shean (Palestine)	Wine
LRA 7	Late 4th – 7th/8th	Egypt	Wine

Table 5: Lare Roman Amphorae 1-7. Content taken from the University of Southampton's (2014) Roman Amphorae: a digital resource. York: Archaeology Data Service. https://doi.org/10.5284/1028192

The continued production and circulation of the NSA 2 type through the ninth century suggests the maintenance and possible expansion of the earlier inland trade networks during the Islamic period. Curiously, Reynolds identified the presence of organics in the fabrics of several of the NSA 2, which he suggests may indicate the presence or settlement of Egyptian potters in the region.[114] If so, it would be tempting to draw a connection between these foreign potters and the activity along the northern Byzantine-Islamic frontier. One might imagine that the movement of soldiers and armies would have stimulated the demand for a variety of provisions and foodstuffs from the region.

[114] Reynolds, "The Homs Survey (Syria): Contrasting Levantine Trends in the Regional Supply of Fine Wares, Amphorae and Kitchen Wares (Hellenistic to Early Arab Periods)," 62 According to Reynolds, the addition of organics is characteristic of Egyptian pottery.

LRA 2 were produced in various centers in the Peloponnese and Aegean between the fourth century and first half of the seventh century. They are thought to have primarily been used to transport wine and olive oil, and it was in these containers, and not LRA 1, that oil was imported to Constantinople.[115] Later evolutions of the form (LRA 2A-2C) are known, and while the seventh century form is often referred to as LRA 2/13 or LRA 13, it may be more correct to refer to this form as LRA 2C, following Pieri's typology.[116] LRA 2C comprised a portion of the early seventh century Yassi Ada cargo. They were originally produced only in Byzantine territories, but appear to have been reproduced in Umayyad Egypt, presumably in monastic workshops.[117] Cyprus was also a production center for LRA 2C, as indicated by analysis of two recently recovered examples from the mid-seventh to mid-eighth century Maagan Mikhael shipwreck.[118] Four of these amphorae had painted dipinti of a large cruciform monogram, which was commonly used by the church and monasteries in the eighth century, while one had a painted Arabic inscription in the form of a blessing.[119]

The sixth century witnessed a growth in the Palestinian wine production, which was exported throughout the Mediterranean.[120] LRA 4, known as the Gaza or Ashkelon jars, are thought to have been produced in the region between Gaza and Yavne and to have exclusively contained wine from the Gaza-Ashkelon hinterland. The Islamic conquest and the loss of connectivity with overseas markets are often cited for the decline in the Gaza wine industry and

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[115] Reynolds, "The Oil Supply in the Roman East: Identifying Modes of Production, Containers and Contents in the Eastern Empire," 318.
[116] Reynolds, "Amphorae in Beirut from the Umayyads to the Crusaders: A Guide to Trends in Local and Imported Products," 93; Reynolds, "The Oil Supply in the Roman East: Identifying Modes of Production, Containers and Contents in the Eastern Empire," 332; Pieri, *Le commerce du vin oriental à l'époque byzantine, Ve-VIIe siècles*.
[117] Reynolds, "Amphorae in Beirut from the Umayyads to the Crusaders: A Guide to Trends in Local and Imported Products," 94.
[118] Creisher et al. 2019, 108.
[119] Creisher et al., "The Amphorae of the Ma'agan Mikhael B Shipwreck: Preliminary Report," 112.
[120] Morony, "Economic Boundaries?," 176.

the gradual disappearance of the LRA 4 containers.[121] However, there is emerging evidence that LRA 4 survivals continued to be produced as far north as Tel Aviv well into the early Islamic period. The discovery of kiln waste alongside LRA 4 fragments dated from the seventh to eighth centuries at the site of Ono located in Tel Aviv's hinterland suggests that the production of these vessels, at least in the early Islamic period, extended further north than is generally assumed.[122] Furthermore, a recently published complex of thirteen early Islamic kilns located south of Tel Yavne was producing LRA 4 amphorae, LRA 5 and 6 bag-shaped jars, as well as an Umayyad variety used in the eighth to tenth centuries. The discovery of these kilns indicates that despite assumptions of declining use, production of the Gaza type jars continued uninterrupted at the site from the Byzantine period through the early Islamic period.[123] It is unclear what the contents of these later variants were and whether they were exported or used locally.

LRA 5, also commonly referred to as bag-shaped jars, were produced in both Palestine, and later also in Egypt.[124] Their contents varied and included wine, oil, figs, and fish sauce. According to Reynolds, the Umayyad Egyptian LRA 5 imitations, much like the Egyptian LRA 2C, may have also been produced in monastic workshops.[125] Three Egyptian variants of LRA 5 comprised the main cargo of the mid-seventh to mid-eighth century Maʻagan Mikhael shipwreck. The examples of the most prevalent variant had Arabic inscriptions including blessings that were incised into the body after firing, including the *bismillah* (in the name of

[121] See for instance, Decker, "The End of the Holy Land Wine Trade."
[122] Kogan-Zehavi, "Ono: Final Report."
[123] Nadav-Ziv et al., "Tel Yavne, Areas B and D: Preliminary Report."
[124] Two partially restored amphorae from Ḥiṣn al-Tīnāt were identified as potential Egyptian LRA 5s dated to the ninth-tenth century. One had traces of organic tempering. If these are, in fact, Egyptian productions, this would suggest that northern Syria was more closely tied into the southeastern Mediterranean exchange networks than previously thought. See Bes, "Early and Middle Islamic Amphorae from the Tüpraş Field Excavations."
[125] Reynolds, "Amphorae in Beirut from the Umayyads to the Crusaders: A Guide to Trends in Local and Imported Products," 94.

God) and *ʿal-sinad* (our support). They have been interpreted as either graffiti carved by the crew or merchants as blessings, or as a form of state regulation for taxation or recording purposes.[126]

LRA 6 is another type of Palestinian bag-shaped jar that was produced in Beth Shean (Baysān) and is thought to have contained wine. Due to the similarities in form to certain Egyptian productions, some amphorae are designated as LRA 5/6. Examples of both Beth Shean and Egyptian (Kom Abou Billou workshop) LRA 5/6 were discovered in the 750 CE destruction deposit at Fusṭāṭ, indicating the continued production of these containers through the Umayyad period.[127]

In addition to grain, Egypt was also a large producer of wine which was transported in the LRA 7 amphora. While scholars have suggested that LRA 7 were intended primarily for local Egyptian consumption, examples have been found at Caesarea and Beirut, as well as further north at Apamea and Qusair al-Saila (near Resafa) in Syria, and Cilicia/Pamphylia.[128] As in Palestine, Egyptian wine production expanded in the sixth century and was exported to Constantinople through the second quarter of the seventh century.[129] LRA 7 continued to be manufactured at a variety of Egyptian production centers (primarily in Middle Egypt) through the Umayyad period, as indicated by their discovery in the 750 CE deposits at Fusṭāṭ.[130]

While the Late Roman Amphorae 1-7 are the most frequently discussed in terms of late antique trade, this is because they are the most widely recognized amphorae that were traded

[126] Creisher et al., "The Amphorae of the Maʿagan Mikhael B Shipwreck: Preliminary Report," 112. The Arabic inscriptions are apparently written in the Hiri style.
[127] Gayraud and Treglia, "Amphores, Ceramiques Culinaires et Ceramiques Communes Omeyyades d'un Niveau d'incendie a Fustat-Istabl Antar (Le Caire, Egypte)," 365–67.
[128] Adan-Bayewitz, "The Pottery from the Late Byzantine Building and Its Implications (Stratum 4)"; Reynolds, "Amphorae in Beirut from the Umayyads to the Crusaders: A Guide to Trends in Local and Imported Products," 91, 93; Vokaer, "Late Roman Amphorae from Apamea, Syria," 783; Turker, "Roman and Early Byzantine Amphorae from the Archaeological Survey in Pamphylia and Tracheia Cilicia."
[129] Banaji, *Agrarian Change in Late Antiquity: Gold, Labour, and Aristocratic Dominance*, 18–19, 159.
[130] Gayraud and Treglia, "Amphores, Ceramiques Culinaires et Ceramiques Communes Omeyyades d'un Niveau d'incendie a Fustat-Istabl Antar (Le Caire, Egypte)," 466.

regionally and interregionally. It is worth noting, however, that they comprise only a small portion of the available containers that were in use at the time.[131] Moreover, the archaeological record is largely silent on the role that perishable transport containers, such as barrels and skins, would have played in the changing economy. This of course leaves us with a skewed basis for understanding trade following the transition to Muslim political rule in the 7th century.

Fortunately, the dating of the LRA continues to expand with new excavations and data. It is now clear that various imitations and late 'survivals' of many of the late Roman classes were produced and used well into the eighth and ninth centuries and possibly later. This is certainly the case with the LRA 1 and 2, which appear in eighth and ninth century contexts.[132] Recently, kilns with in-situ Gaza jars (LRA 4) suggest that survivals of this class also continued to be produced well beyond their presumed seventh century end (discussed above). Despite new data, however, scholars continue to rely on the traditional dating of LRA taken from Peacock and Williams's 1991 amphorae reference book, which has not been updated since its original publication.[133] As a result, the seventh century, and more specifically the Islamic conquest (at least for the Gaza wine jars), has become entrenched in scholarship as the terminal date of production for most of the Late Roman Amphora classes (Table 5).[134] The picture is much the same for many classes of late Roman fine ware and tableware, which are discussed in Chapter 4.5.2 below.

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[131] See Reynolds, "Levantine Amphorae from Cilicia to Gaza: A Typology and Analysis of Regional Production Trends from the 1st to 7th Centuries" typology of amphorae classes from Cilicia to Gaza; For Egypt see Dixneuf, *Amphores Égyptiennes. Production, Typologie, Contenu et Diffusion (IIIe Siècle Avant J.-C.-IXe Siècle Après J.-C.)*, fig. 181; Reynolds, "Amphorae in Beirut from the Umayyads to the Crusaders: A Guide to Trends in Local and Imported Products," 98.

[132] Armstrong, "Trade in the East Mediterranean in the 8th Century"; suggests that the military supply of LRA 1 and 2 within Byzantine territories may have continued into the 8th and 9th centuries. Reynolds, "Amphorae in Beirut from the Umayyads to the Crusaders: A Guide to Trends in Local and Imported Products," 94.

[133] Peacock and Williams, *Amphorae and the Roman Economy : An Introductory Guide*.

[134] The data in this table was compiled from the University of Southampton (2014) *Roman Amphorae: a digital resource*. York: Archaeology Data Service. https://doi.org/10.5284/1028192

Another problem related to dating is that many amphora classes remain unidentified, and later imitations and survivals are often lumped with earlier forms, leading to misrepresentations in interpretation. The provenances of each amphora type are varied (Table 5), and recent studies have demonstrated the profusion of local and regional production centers for the latest variants and survivals of many of these forms, such as LRA 1 and 2. Moreover, single production centers could produce a variety of amphora classes and variants as indicated by the kiln complex at Yavne in Palestine that was producing several types of bag-shaped jars, as well as Gaza jars from the seventh through the ninth century.[135]

Due to the diversity of amphora types and their variants in Late Antiquity, it is often only through petrographic analysis that scholars can distinguish the various workshops and regions where vessels were produced.[136] For instance, recent petrography on 26 samples from the LRA 1 amphorae that comprised a portion of the seventh century Yassiada ship's cargo identified a wide variety of fabrics suggestive of multiple centers of production in eastern Cilicia or northwest Syria, the southeast Aegean, and possibly also Cyprus.[137] The production of certain classes could also be spread over a vast area within a region as indicated by the LRA 4 (Gaza jar) kiln waste found at Ono, near Tel Aviv.[138]

The contents of amphorae could also be quite diverse and the reuse of containers for different products further complicates the picture. Though many LR amphorae, such as Gaza jars

[135] Thirteen kilns that operated throughout the early Islamic period were excavated just south of Tel Yavne. Pottery found in an intact firebox included bag-shaped jars (similar to zir jars, but smaller), Gaza jars, southern and northern bag-shaped jars, and a zir-type jar. Near the opening of another kiln, a juglet containing a hoard of seven Abbasid dinars, the latest being a single worn dinar of al-Mutawakkil (847-861 CE). See Nadav-Ziv et al., "Tel Yavne, Areas B and D: Preliminary Report."

[136] Petrography is a technique that examines the mineralogical and microstructural composition of ceramics under a microscope to aid in identifying the provenance and technology of artifacts.

[137] Leidwanger, "A Preliminary Archaeometric Analysis of the Late Roman 1 Amphoras from the Cargo of the Seventh-Century Yassiada Shipwreck, Turkey," 901.

[138] The kiln at Ono in Tel Aviv's hinterland, included Gaza jar fragments dated to the 7th-8th centuries. See Kogan-Zehavi, "Ono: Final Report."

and LRA 1, are thought to have exclusively held wine and olive oil, studies have shown that amphorae were frequently reused and often with different contents.[139] This means that while certain classes, like the Egyptian bag-shaped jars (LRA 5 imitation) might have initially been used to transport wine, they could have been used to transport other commodities during secondary use, such as fish products or grain. The secondary use of amphorae can, therefore, complicate our understanding of the origins of cargoes. Moreover, their uses and contents might have varied depending on whether they were intended for local or overseas transport.[140] Containers for olive oil or wine could also be used *locally* to store agricultural produce like figs or grapes. Thus, the durability of amphorae and their ability to be reused means that their use life could potentially extend far beyond their initial production period and place of origin, complicating assessments of their dating and function.

Summary

The end of the state-driven *annona* and the rise of the early Islamic state are still largely considered the terminal points in scholarship for the Roman, or 'ancient' maritime economy. The seventh century, or more specifically 700 CE, is entrenched in the literature and minds of many scholars as the end date and decline of the late Roman amphorae. Many of the early published dates need reassessment and redating.

From the data at hand, it appears that many survivals and imitations of the late Roman amphora classes continued to be produced and distributed through the early Islamic period,

[139] For instance the LRA 5 on the Maagan Mikhael B and the LRA 1 on the Yassiada. Creisher et al., "The Amphorae of the Ma'agan Mikhael B Shipwreck: Preliminary Report," 117; Leidwanger, "A Preliminary Archaeometric Analysis of the Late Roman 1 Amphoras from the Cargo of the Seventh-Century Yassiada Shipwreck, Turkey," 898.

[140] Pieri, "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period," 43; Leidwanger, *Roman Seas: A Maritime Archaeology of Eastern Mediterranean Economies*.

including LRA 1, 2, 4, 5/6, and 7. In particular, the prevalence of Egyptian imitations of popular amphorae (LRA 2C/LRA 13, LRA 5, LRA 6) that were circulating interregionally during the 7th and 8th centuries represents an intensification of production, and suggests a broadening of economic activity in this region rather than a contraction.

D. Pieri and J. Leidwanger have argued that the diversity of late Roman amphora variants and regional imitations in the eastern Mediterranean during Late Antiquity are markers for both a highly competitive market and the integration of the economy prior to the conquest.[141] This argument should also hold true for the diversity of early Islamic production centers across Cyprus, Egypt, and Palestine for the LRA 2C/LRA 13, LRA 5, LRA 6, and possibly also LRA 4 forms. Given the wide distribution and predominance of these forms, it is probable that many of these production centers have yet to be identified. These regions also continued to maintain longer-distance connections with Cilicia and the Aegean through the eighth century. Overall, the evidence suggests that in the wake of the prior trade patterns, a developing and increasingly integrated economy had emerged in the southeastern Mediterranean by the late seventh and early eighth century.

4.5.2 Fine Tableware and Cooking Pots as Markers for Trade

Let us turn from shipping containers to ceramics used in domestic contexts. While it is beyond the scope of this dissertation to go over all the regional and local types of ceramic production, it is worth noting several regional varieties that can yield insights into the

[141] Pieri, "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period," 43.

connectivity along the maritime frontier and its hinterland during the seventh and eighth centuries. These include several imported and locally produced fine wares and cooking wares.

Imported Wares

Mass-produced tablewares such as African Red Slip Ware (ARS), Phocaean Red Slip Ware (LRC), and Egyptian Red Slip Ware (ERS) were often a revenue-generating form of ballast that accompanied shipments of grain or valuable lightweight items such as textiles or spices.[142] While many of the forms imitate one another, their fabrics are identifiable, making them excellent markers for connectivity and exchange. African Red Slip Ware, or ARS, was one of the most widely distributed fine wares in the late Roman Mediterranean, with production beginning in the third century CE. ARS travelled eastward from Tunisia alongside *annona* cargoes bound for Constantinople, and its wide distribution at coastal and inland sites around the Mediterranean indicates its popular demand.[143] Though the seemingly abrupt end of ARS in the east is often attributed to the Arab conquest, these wares continue to be imported into Syria-Palestine through the seventh century, with examples found as far inland as Busra (Bostra), Jerash, Amman, and Umm al-Rasas.[144] In northern Syria, ARS was not as popular as Phocaean and Cypriot/south Anatolian red slipped wares which are predominant, suggesting an northwesterly orientation toward closer markets and trading networks in Anatolia and the Aegean.[145]

Other regional red slipped wares produced in Phocaea (on the Aegean coast of Anatolia), Cyprus, Egypt, and Jerusalem (Fine Byzantine Ware) sought to imitate and compete with the

[142] Armstrong, "Trade in the East Mediterranean in the 8th Century," 158.
[143] Morrison and Sodini, "The Sixth Century Economy," 210.
[144] Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000, 321.
[145] Uscatescu, "Report on the Levant Pottery (5th-9th Century AD)," 551.

African wares. Phocaean Red Slip ware (PRS) dominated the market in the northern Aegean, Constantinople, and Asia Minor but was also exported to the eastern Mediterranean from the fourth through seventh centuries.[146] Changes in connectivity, supply, and taste impacted the market for Phocaean Red Slip in the northern Mediterranean and Aegean. Ultimately, PRS was superseded by Glazed White Wares that were produced in the region of Constantinople and which dominated the market there but had a more limited distribution.[147]

Cypriot Red Slip ware (CRS) was another class of fine tableware, also imitating ARS, that was exported around the eastern Mediterranean. It is more commonly known as Late Roman D (LRD) on Levantine sites. While it was initially thought to be of Cypriot origin, it appears that there were also production centers in southern Asia Minor. Unlike ARS and PRS, Cypriot ware (specifically Form 9) continued to be produced and exported around the eastern Mediterranean through the eighth and possibly ninth century.[148]

Quantities of African and Phocaean red slipped wares taper off at eastern Mediterranean sites in the seventh century, and other regional forms begin filling the demand for slipped ware.[149] It is important to recognize that the decline of these imports was not just a response to the disruption of the east-west trading routes, but also a response to changing tastes and the emergence of new forms. Egyptian manufacturers took advantage of the new opportunities created by the changing economics, intensifying production and the export of their products. Egyptian Red Slip wares (ERS), which were produced in Aswan and the Nile Delta, become increasingly common in the seventh century at sites that had previously been dominated by

[146] Morony, "Economic Boundaries?," 177; Bar-Nathan and Atrash, *IAA Reports 48*, 2:284; Morrison and Sodini, "The Sixth Century Economy," 210.
[147] Loseby, "The Mediterranean Economy," 633.
[148] Armstrong, "Trade in the East Mediterranean in the 8th Century."
[149] Loseby, "The Mediterranean Economy," 620; Oked, "Patterns of the Transport Amphorae at Ostrakine during the 6th and 7th Centuries," 171.

imported African, Cypriot, and Aegean forms. Ultimately, it appears that ERS supplanted other imported forms, perhaps because the Egyptian vessels were not only equivalent in quality to the western productions but were also cheaper to produce and transport.[150] Beginning in the seventh century, production of Egyptian ceramics intensified and came to dominate the fine ware assemblages in Egypt and the southern Levantine coast. Although Egyptian productions were popular in the markets of the southeastern Mediterranean, Cypriot/southern Anatolian products (CRS/LRD Form 9) continued to be imported regularly to coastal sites and to inland Syria, Palestine, and to some extent Jordan through the seventh and eighth centuries.[151]

Inland/Regional Fine Ware Productions

Local producers in Syria-Palestine also took advantage of the changing distribution networks and began crafting imitations and new forms of fine ware to compete with the overseas imports. These include Jerash Bowls, which were distributed throughout middle and northern Jordan during the sixth through mid-late seventh century;[152] Red Painted Ware (RPW) which were produced in Jerash and possibly Amman in second quarter of the eighth through ninth century;[153] and Fine Byzantine/Palestinian Ware (FBW/FPW) which were produced in the Jerusalem area in the mid-sixth through the tenth century.[154] Most of these fine ware productions derived their initial form from the popular African, Phocaean, and Cypriot/Asia Minor red

[150] Oked, "Patterns of the Transport Amphorae at Ostrakine during the 6th and 7th Centuries," 171.
[151] Armstrong, "Trade in the East Mediterranean in the 8th Century," 171–72; Uscatescu, "Report on the Levant Pottery (5th-9th Century AD)," 551; Reynolds, "Transport Amphorae of the 1st - 7th Centuries: Early Roman and Byzantine Periods," 105. Reynolds, however, states that Cypriot table wares were rarely exported into north Syria with the exception of Antioch.
[152] Watson 1991, 226.
[153] Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000, 322.
[154] Walmsley, 322; Magness, *Jerusalem Ceramic Chronology*, 193.

slipped wares that were popular and circulating in the eastern Mediterranean. Early Islamic potters refined some of these styles. Beginning in the eighth century, the repertoire of FBW expanded, now with more delicate walls and painted decorations of geometric shapes, floral and zoomorphic motifs, and Kufic inscriptions.[155] Not only are these local productions examples of agile local producers taking advantage of new market opportunities, but their distribution provides evidence for the regional inland trade networks operating during the sixth through late eighth centuries, as well as the extent of their overlap and interaction.

Jerash Bowls and RPW had a broad regional distribution that was largely confined to the interior routes of middle and northern Jordan. These popular fine wares moved along inland routes within a range of 150 km, but curiously, they are rarely found along the coast. FBW had a broader distribution throughout Palestine and Jordan up through the ninth and possibly tenth century.[156] When Red Slipped imports tapered off, FBW appears to have filled the demand, and may have outcompeted the Jerash Bowls, which disappear in the mid-late seventh century. Walmsley tracked the distribution of the FBW and proposed that it primarily moved north and south along the state-run route from Egypt to Damascus, with a maximum distance of 120 km.[157] However, unlike the Jerash bowls and Red Painted Ware, BFW was also exported to the coast as indicated by its presence at Caesarea, Acre, Ashdod-Yam, and Jaffa.[158] At Caesarea, it is regularly found beginning in the late sixth to mid seventh century up through the ninth

[155] Taxel, Lester, and ʿad, "Two Rare Early Abbasid Paint-Decorated Ceramic Bowls from El-Khirba/Nes Ziyyona, Israel," 275.
[156] Walmsley, "Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?," 2000, 322.
[157] Walmsley, 324.
[158] Arnon, *Caesarea Maritima, the Late Periods (700-1291 CE)*; Raphael, *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*; Hoffman and Pringle, *Ashkelon 8*.

century.[159] The distribution of FBW shows that it was a regional export that was widely traded throughout southern Syria-Palestine during the late antique and early Islamic periods. Though it is found along the coast at several primary and secondary ports, it does not seem to have been traded north beyond Acre, one indication of a boundary of a regional interaction sphere.

In terms of fine ware, we can classify Syria as part of a different regional interaction sphere. The regional fine ware productions of southern Palestine and Jordan do not appear to have reached the north. Unlike Palestine and Jordan, Syria had no significant local productions of fine ware in Late Antiquity and instead relied on the Mediterranean networks to supply these items.[160] Phocaean Red Slipped Ware (LRC) dominated the fine ware imports to Syria and are found at Antioch and along Syria's coast (Arsuz, Ras al-Basit, Ras Ibn Hani, Amrit), as well as inland at sites as far as al-Resafa.[161] African (ARS), which dominated the markets of Beirut and the Palestinian coast and hinterland, is rare in Syria, suggesting that the region was more oriented toward the Aegean and Asia Minor markets in the sixth and seventh centuries. Curiously, the ninth century splashed wares at Antioch's port of al-Mina suggest that northern al-Sham was also less oriented toward the southern markets of Palestine and Egypt, and instead was more tied into the eastern networks of Iraq and Khurasan.[162] Unfortunately, the material prior to the mid eighth century from al-Mina is lacking. This is also the case with many sites in Syria and along its coast, where the earliest Islamic centuries are seemingly absent.[163]

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[159] Arnon, *Caesarea Maritima, the Late Periods (700-1291 CE)*, 30. The later examples have a different form.

[160] Vokaer, "Pottery Production and Exchange in Late Antique Syria (Fourth-Eighth Century AD). A Study of Some Imported and Local Wares," 569. Vokaer notes that Eastern Sigillata A (ESA), which was produced in the Antioch region, ceased in the 3rd century.

[161] Reynolds, "Transport Amphorae of the 1st - 7th Centuries: Early Roman and Byzantine Periods," 105 Data from the coast is based on Reynold's personal observation.

[162] Vorderstrasse, *Al-Mina: A Port of Antioch from Late Antiquity to the End of the Ottomans*, 76–78.

[163] This absence is likely due to problems with dating longer-lived late Roman fine wares which make up the pre-glazed Umayyad period fine ware.

It is worth noting the sixth century inscription from Antioch's port of Seleucia Pieria, which provides a contrasting picture of Syria's late antique trading partners. The inscription suggests that Antioch's riverine port received ships from Phoenicia, Cyprus, Cilicia, as well as Palestine and Egypt.[164] These maritime connections are supported by the presence of sixth to seventh century red wares and Coptic pottery at Antioch, as well as the imported amphorae from sixth and seventh century contexts at Apamea, which was connected to the Mediterranean trade networks via the Orontes and Antioch.[165]

Rather than evidence of absence, the apparent gaps in the archaeological data for post-conquest Syria may be attributed to the lack of Islamic-focused excavations, the difficulty in dating transitional ceramics and, as Magness demonstrated with the material she reexamined from Dehes, the overreliance on coins and inscriptions for dating occupations.[166] As a case in point, it is worth noting that the coins on board the mid-seventh to mid-eighth century Ma'agan Mikhael shipwreck were dated to 364-375 CE.[167] This serves as a cautionary case for using coins to date material culture as coins could still be valued centuries after their minting.

At least two local Syrian workshops took advantage of the changing market and supply of fine ware in the seventh century and began producing imitations of African Red Slip ware, Phocaean Red Slipped ware, and Cypriot Red Slipped ware/Late Roman D.[168] These local imitations were made in the typical Brittle Ware fabric common to the region. Their production and distribution in northern Syria competed with the imported fine wares and they seem to have

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[164] Morrison and Sodini, "The Sixth Century Economy," 208.
[165] Magness, *The Archaeology of the Early Islamic Settlement in Palestine*, 208; Vokaer, "Late Roman Amphorae from Apamea, Syria."
[166] Magness, *The Archaeology of the Early Islamic Settlement in Palestine*, 205–6.
[167] Cohen and Cvikel, "Ma'agan Mikhael B, Israel," 199.
[168] Vokaer, "Pottery Production and Exchange in Late Antique Syria (Fourth-Eighth Century AD). A Study of Some Imported and Local Wares," 589. Vokaer identifies these workshops as Workshop 1 and Workshop 4.

filled the local demand when the wider Mediterranean market for red slipped wares dropped. Due to the limited publication of these fine ware imitations, it remains difficult to identify how long they were produced. In Dehes, they disappear in the ninth century.[169] The publication of post-seventh century pottery from Syria and the coast is lacking which further complicates the picture of trade and connectivity in the region.

Regional Cooking Ware

Syria also produced a standardized regional cooking ware, known commonly as Brittle Ware, at several production centers from the Roman (ca. 1st century) through the early Islamic period (ca. tenth century).[170] The common Brittle Ware cooking set of the sixth and seventh centuries included a tall-necked globular cooking pot, a hemispherical casserole, and a jug.[171] Similar cooking ware forms were also produced in northern Palestine (Workshop X), Beirut and its vicinity (CW 34), and Cyprus (Paphos and Dhiorios). However, the Brittle Ware workshops appear to have largely monopolized the production and distribution of common ware in northern Syria, southern Anatolia, and the Euphrates region.[172] This supports the tentative picture presented by the fine ware assemblages—that Syria was a separate regional interaction sphere in terms of ceramics.

We must exercise caution when drawing conclusions about connectivity from these assemblages. Though demand for certain products may have been met by local and regional productions, this does not necessarily mean that Syria and Palestine were not economically and

[169] Vokaer, 590.
[170] Vokaer, "Cooking in a Perfect Pot. Shapes, Fabrics and Function of Cooking Ware in Late Antique Syria," 115; Vokaer, "Byzantine Cooking Ware Imports in Syria: The 'Workshop X,'" 213. The latest survivals take the form of the Mamluk glazed cooking pots.
[171] Vokaer, "Cooking in a Perfect Pot. Shapes, Fabrics and Function of Cooking Ware in Late Antique Syria," 116.
[172] Vokaer, "Byzantine Cooking Ware Imports in Syria: The 'Workshop X,'" 213–14.

culturally connected through other means. The Roman roads that connected southern and northern Syria-Palestine and their coastlines would have witnessed an increase in traffic during the mid-seventh through eighth centuries with the conquest and resettlement efforts of the early Muslim state. Communication and exchange between Syria and Palestine would have certainly been facilitated by the movement of troops and supplies along what Bonner coined as the early Islamic 'superhighway.' Intriguingly, in the mid to late eighth century, a new form of neckless cooking pot appears in Syria.[173] Its shape, decoration, and the presence of two ledge handles suggest that it derives its form from the soft-stone (steatite) cooking pots that were exported from Arabia and which were common in southern Syria-Palestine.[174] Considering the apparent insularity of Syrian ceramic traditions, the popularity and wide distribution of these locally produced but uniquely Arabian-inspired pots throughout the north may signal the spread and innovation of cultural forms across the inland and maritime frontiers and importantly, the Arabization of the broader region. The flow of people and goods to the frontier regions, had the consequence of integrating northern and southern Syria-Palestine and facilitating the spread of certain cultural markers like the steatite-inspired neckless pots.

Brittle Ware ultimately reached a truly interregional scale of distribution across the Islamic Empire by the 'Abbāsid period, with examples of the neckless cooking pot found in Tarsus and Iraq (Samarra, Tulul al-Ukhaidir, and Abu Sarifa).[175] Scholars have noted that the distribution of Brittle Ware is heavily concentrated in the interior of Syria.[176] While this may be largely true for earlier periods, the Syrian ports have been underexplored and the published data

[173] Vokaer, "Cooking in a Perfect Pot. Shapes, Fabrics and Function of Cooking Ware in Late Antique Syria," 116.
[174] Vokaer, "Pottery Production and Exchange in Late Antique Syria (Fourth-Eighth Century AD). A Study of Some Imported and Local Wares," 580.
[175] Vokaer, 585.
[176] Vokaer, 587, 598.

is very limited.[177] Moreover, the discovery of a unique form of Brittle Ware in a 700-750 CE deposit at Beirut (identified as such only through fabric analysis), indicates that these largely 'inland' regional wares did reach the coast and were traded to neighboring regions.[178] This is supported by the discovery of early Islamic Brittle Ware at Kinet Hoyuk as well as later Brittle Ware forms (neckless cooking pot) in 'Abbāsid period contexts at al-Mina (Antioch's port) and Tarsus.[179] The development and spread of this Arabian-inspired form attests to the development and expansion of maritime and inland exchange networks during the Umayyad and 'Abbāsid periods.

One final production center worth mentioning as evidence for Cyprus's continued connectivity with Syria-Palestine and southern Anatolia during the early Islamic period is Dhiorios. Located in northwestern Cyprus, Dhiorios was a major production site for various common cooking wares, many of which shared the same form as those produced in Syria-Palestine.[180] Fourteen kilns were excavated at the site, and the complex appears to have been operating through the eighth century. This is further supported by the fact that one of the excavated kilns was a new type of kiln that could be reused and which first appears in the Levant in the eighth century.[181] Dhiorios kiln products seems to have circulated around the eastern Mediterranean, with examples found not only at sites on Cyprus but also on the coast of Cilicia,

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[177] Vokaer, "Pottery Production and Exchange in Late Antique Syria (Fourth-Eighth Century AD). A Study of Some Imported and Local Wares" references the Byzantine material that has been published from Ras Ibn Hani and Ras al-Bassit.

[178] Reynolds and Waksman, "Beirut Cooking Wares, 2nd to 7th Centuries: Local Forms and North Palestinian Imports," 63 briefly mention this deposit. .

[179] Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier," 206; Vorderstrasse, *Al-Mina: A Port of Antioch from Late Antiquity to the End of the Ottomans*, 74; Reynolds and Waksman, "Beirut Cooking Wares, 2nd to 7th Centuries: Local Forms and North Palestinian Imports," 65 note that Tarsus had its own cooking ware that dominated the Bay of Iskanderun and was occasionally exported.

[180] Vokaer, "Cooking in a Perfect Pot. Shapes, Fabrics and Function of Cooking Ware in Late Antique Syria," 118.

[181] Armstrong, "Trade in the East Mediterranean in the 8th Century," 165.

Beirut, Caesarea, and on a shipwreck in the Adriatic.[182] Though these products have not been documented in Syria, it is likely that the distribution of Dhiorios products is underrepresented due to the similarity of its forms to other production centers. The production and export of these Cypriot products attests to the continued economic links between the island, Palestine, and coastal Anatolia during the seventh and eighth centuries.

4.5.3 Byzantine and Early Islamic Shipwrecks

It is worth briefly noting a collection of shipwrecks discovered along the southern coast of Bilād al-Shām which were carrying many of the amphorae, tablewares, and cooking wares discussed above. While the distribution of known early Islamic shipwrecks along the Syro-Palestinian coast is heavily concentrated in the south, we can still gain insights into transformations in maritime connectivity from these unique assemblages. The following is a brief discussion of the cargoes and shipboard assemblages of five shipwrecks that were excavated off the Palestinian coast—four in Dor/Tantura Lagoon and one offshore of Ma'agan Mikhael—and dated between the sixth through ninth centuries.

The Dor 2001/1 shipwreck, dated to the sixth century, sank with a cargo of construction stones.[183] Hundreds of pottery sherds were found above the wreck but were not necessarily *in situ*. Nonetheless, they consisted of African Red Slip ware (ARS), Cypriot Red Slip ware (CRS), cooking pots, and amphorae, including Gaza jars (LRA 4), bag-shaped jars (LRA 5/6), and LRA

[182] Armstrong, 166.
[183] Kahanov and Mor, "The Dor 2001/1 Byzantine Shipwreck, Israel."

1. Apart from the ARS, analysis of the ceramic materials indicates their origins in the eastern Mediterranean, Cyprus, and along the Levantine coast.[184]

The Dor 2006 shipwreck, dated between the mid sixth and the first half of the seventh century, also sank in Tantura Lagoon. The ceramics associated with the shipwreck included Cypriot (or Southern Anatolian) Red Slip ware (CRS/LRD Forms 9B and C), Phocaean Red Slip ware (LRC/PRS), globular cooking pots (and their lids), a jug, a spouted strainer jug, and amphorae, including Gaza jars (LRA 4) and LRA 1.[185] Petrographic and chemical analysis of several samples indicates that one of the cooking pots is from a non-Levantine origin (possibly Cyprus), the LRA 1 are not of Levantine origin (probably southwest Anatolia, Antioch, or Cyprus), the juglet is from the Levant, and one of the cooking pot lids comes from Egypt. Ten bricks were also recovered from the shipwreck, likely associated with an onboard cooking installation, and analysis indicates an Egyptian provenance for them. Other non-ceramic finds included an open limestone bowl and two Byzantine *Minima* (*Nummi*) coins that were minted between 450 and 550 CE.[186] The ceramic finds do not comprise the cargo of the Dor 2006, but rather they represent the shipboard items used by the crew. The cargo of the shipwreck is unknown, but it may have consisted of marble slabs.[187] Like the Dor 2001/1 shipwreck, the ceramic assemblage from Dor 2006 testifies to maritime connections with the Aegean, Cyprus, Syria-Palestine, and Egypt during the sixth and seventh century.

Tantura F is thought to have been a small coasting vessel that was possibly en route from Egypt.[188] The shipwreck is dated between the mid seventh and the end of the eighth century. The

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[184] Kahanov and Mor, 60–61.
[185] Barkan et al., "The 'Dor 2006' Shipwreck: The Ceramic Material," 119–30.
[186] Barkan et al., 132.
[187] Barkan et al., 137.
[188] Barkai and Kahanov, "The Tantura F Shipwreck, Israel."

ceramics were found *in situ* in the hull and consisted of various bag-shaped amphorae (containing *Tilapia* fishbones), LRA 2 variants, LRA 13 variants, a white-slipped jug with a trefoil rim, several juglets, and a casserole lid. Petrographic and chemical analysis of the bag-shaped amphorae indicate that they were produced with Nile Delta silt, while the latest LRA 2's (LRA 2C) were produced in either Cyprus or southern Anatolia.[189] Tantura F confirms the conclusions drawn from the other two shipwrecks above, and attests to the maritime networks between Egypt, Syria-Palestine, Cyprus, and southern Anatolia during the early Islamic period.

The final shipwreck from our period excavated at Tantura is the Tantura E, which was dated between the seventh and ninth centuries based on radiocarbon dating and ceramic typology. The *in situ* finds included amphora sherds and one intact, white-painted bag-shaped amphora dated to the Umayyad period, with parallels found at Pella, Jerash, Hippos Sussita.[190] A ceramic disc and several brick fragments likely belonged to an onboard stove. Analysis suggests that the raw material of the disc came from Cyprus, while the clay from the bricks originated in the Nile Delta.[191] Based on the Nilotic origin of the clay bricks, a possible Egyptian origin for the ship was proposed. The primary tree species used in the hull originated from western Turkey, Syria, or Cyprus, suggesting that timber would have been imported.[192] The diverse origins of materials and ceramic remains from the four Tantura wrecks indicate the close integration of the maritime trade routes that connected Syria-Palestine with Egypt, Cyprus, and southern Anatolia from the sixth through ninth centuries.

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[189] Barkai, Kahanov, and Avissar, "The Tantura F Shipwreck: The Ceramic Material," 98–99.
[190] Israeli and Kahanov, "The 7th-9th Century Tantura E Shipwreck, Israel: Construction and Reconstruction.," 382.
[191] Israeli and Kahanov, 381–82.
[192] Israeli and Kahanov, 386.

The Ma‘agan Mikhael B is the most recently excavated early Islamic era shipwreck discovered off the coast of Palestine. The ship sank off Ma‘agan Mikhael, south of Tantura, and is dated between the second half of the seventh century and the beginning of the eighth century. In addition to cooking wares and tablewares, eight types of amphorae were identified onboard, with four types (LRA 2/LRA 13 and three LRA 5 variants) belonging to the cargo, and four others (LRA 1, LRA 4, and two unidentified amphorae) that may have comprised secondary trade items or the crew's provisions.[193] Twenty-four incised and painted inscriptions were found on intact and broken amphorae. Two types of Christian monograms painted on several of the LRA 2/LRA 13 and LRA 5 amphorae have been interpreted as potential indications of at least two separate Christian production centers. Several Arabic inscriptions were also found inscribed on the smaller LRA 5 amphorae, while two amphorae (an LRA 2/LRA 13 and an unidentified type) had painted inscriptions, including the *bismillāh* (in the name of God) and *‘al-sinad* (our support).[194] Petrographic analysis revealed that the cargo assemblage included amphorae that originated in Egypt, Cyprus, and southern Palestine. This shipwreck provides further evidence of the robust trading networks that connected the southeastern Mediterranean during the early Islamic period. Moreover, the presence of Christian and Muslim inscriptions on the cargo attests to the cross-cultural exchanges and interactions that accompanied trading ventures along the maritime frontier.

In summary, the patterns of connectivity drawn from the above sixth through ninth century shipwreck assemblages correspond to several wider patterns detected from terrestrial sites: 1.) African and Phocaean Red Slip wares became less prevalent in the eastern

[193] Creisher et al., "The Amphorae of the Ma‘agan Mikhael B Shipwreck: Preliminary Report," 105–6.
[194] Creisher et al., 111–12.

Mediterranean during the early Islamic period, and 2.) southern Syria-Palestine remained closely connected with Egypt, Cyprus, and southern Anatolia following the conquest.

4.6 Conclusion

By the end of the seventh century, the patterns of shipping and exchange in the eastern Mediterranean had fundamentally changed.[195] The long-distance and state sponsored trading networks that had characterized the Roman-Byzantine period transformed into closer-knit interregional networks characterized by cabotage. For Wickham and others who see the Byzantine fiscal system as the primary driver of exchange, its retraction following the Arab conquest implied a broader retraction of the economic ties that unified the region. Some have suggested that the eastern Mediterranean became largely self-sufficient, relying more on local rather than imported products.[196] Studies taking up these positions often portray the shift from direct, long-distance sailing to cabotage and speculative tramping in a negative light, and as an indicator for a less vibrant and integrated economy. Along a similar line, scholars have argued that the Syro-Palestinian coast suffered depopulation and abandonment because of declining trade and the militarization of the maritime frontier.[197]

This paradigm of economic decline in the wake of the *annona* fails to capture both the complexity and resilience of maritime networks in the region. The evidence presented above enables us to reframe the post conquest changes in terms of transformation, resilience, and redirection. We can draw the following conclusions:

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[195] Wickham, "The Mediterranean around 800"; Loseby, "The Mediterranean Economy"; McCormick, *Origins of the European Economy*, 569; Haldon, "Greater Syria in the Seventh Century: Context and Background," 10.
[196] Morony, "Economic Boundaries?," 178; Morrison and Sodini, "The Sixth Century Economy," 189.
[197] Wickham, "The Mediterranean around 800," 167.

1) Egypt emerged as a driving economic influence in the region. The slackening of trade and imports from the west created new markets for Egyptian products which began to dominate the imported assemblages at coastal and inland sites in Palestine, Lebanon, and Cyprus. These products included Egyptian Red Slipped wares and numerous imitations of popular amphorae including, LRA 2C/LRA 13, LRA 5, LRA 6.

2) We see evidence for the growing number of variants and production areas in Cyprus, southern Anatolia, Egypt, and Palestine for several of the late Roman amphorae (LRA 2C/LRA 13, LRA 5, LRA 6, and possibly also LRA 4 forms) that continued to circulate interregionally during the seventh and eighth centuries and later. The abundance of imitations and production centers can be interpreted as evidence for a highly competitive market within the wider eastern Mediterranean.

3) The agricultural surpluses that sustained Constantinople and the Roman-Byzantine fiscal system did not simply disappear but became an important source of wealth for the nascent Islamic empire. When the Byzantine state lost Syria-Palestine and Egypt, their bountiful agricultural productions were redistributed internally, and crucially, redirected in bulk to the Hijaz. The significant wealth represented by these surpluses spurred the rising affluence of the Muslim elite, fueled the growth of the agricultural industries in Bilād al-Shām, Egypt, and Arabia, and resulted in new and vibrant networks of exchange.[198]

4) Local producers capitalized on new opportunities in markets previously dominated by subsidized imports. The late seventh and early eighth century reduction in imports of African and Aegean fine wares into Syria-Palestine opened the market for local and regional productions.

[198] Morriss, "Persistent Pathways: The Roman Annona as a Model for the Economic Impact of the Early Islamic Grain Trade on the Red Sea."

With the end of Roman state-driven exchange, local producers took advantage of the new market opportunities and intensified the manufacture of high-quality imitations and local variants. Egyptian Red Slipped wares became increasingly prevalent in southern Bilād al-Shām, replacing ARS and other fine wares as the dominant import and penetrating inland regions through the eighth and ninth centuries. Within Syria-Palestine, the production of several independent fine wares continued, filling the local and regional demand for these products.

The distribution of these products leaves us with impressions of the *regional* interaction spheres in which they circulated. Fine Byzantine Ware, which was produced in the Jerusalem area, circulated throughout the southern-central Bilād al-Shām (Gaza to Beirut) regional interaction sphere. Meanwhile, Syrian Brittle Ware appears to have moved largely within the northern Bilād al-Shām (Tripoli to al-Mina) regional sphere during the Umayyad period. Beginning in the second half of the 8th century, certain forms began to circulate *interregionally* between northern Bilād al-Shām (Tripoli to al-Mina) and southern Anatolia.

The apparent geographical division between the ceramic industries of northern and southern Bilād al-Shām suggests there was little interregional exchange or movement of these productions. Rather than evidence for reduction in connectivity and regional insularity, it may imply that local producers successfully outcompeted imports and were able to monopolize their local and regional spheres. This is a testament to their production quality and perhaps a level of economic 'integration' within their regional distribution networks.

5) In addition to administrative and cultural boundaries, the patterns of ceramic production, distribution, and import help us define the presence of several *regional interaction spheres* along the maritime frontier (Figure 8). These included the Egyptian Delta, southern-central Bilād al-Shām (Gaza to Beirut), northern Bilād al-Shām (Tripoli to al-Mina), Cyprus, and

southern Anatolia. These regional interaction spheres were defined by geographic boundaries, shared culture and language, and patterns of ceramic production and consumption.

- The Egyptian Delta
- Southern-central Bilād al-Shām (Gaza to Beirut)
- Northern Bilād al-Shām (Tripoli to al-Mina)
- Cyprus
- Southern Anatolia

6) While some productions primarily circulated at the intra-regional level, this should not be seen as evidence of insularity or diminished economic integration between north Syria, Palestine, and the wider eastern Mediterranean. Markets and trade function at different scales, and while domestic ceramics seem to have been largely traded *intra-regionally*, other *interregional* connections brought the territories together. Moreover, trade was not the only driver of interregional economic integration. During the seventh and eighth centuries, an influx of supplies, soldiers (and their families), and merchants moved along the interior routes and maritime frontier of Syria-Palestine, which ultimately helped tie the regions together economically and socially. As Michael Bonner aptly put it, "the military apparatus of the early Islamic state linked individual markets to one another while connecting the imperial heartland with its peripheries more directly on a larger scale than had happened earlier in the Roman, Byzantine, and (quite likely) Sasanian empires."[199]

There is certainly evidence—albeit limited—for the spread of populations and material culture along the routes, or 'superhighway' described by Bonner. Taxel has argued that the presence of Egyptian coarse wares along the Palestinian coast may be evidence for the settlement of Egyptians along the maritime frontier. Meanwhile, Reynolds identified a distinctly Egyptian

[199] Bonner, "In Search of the Early Islamic Economy," 23.

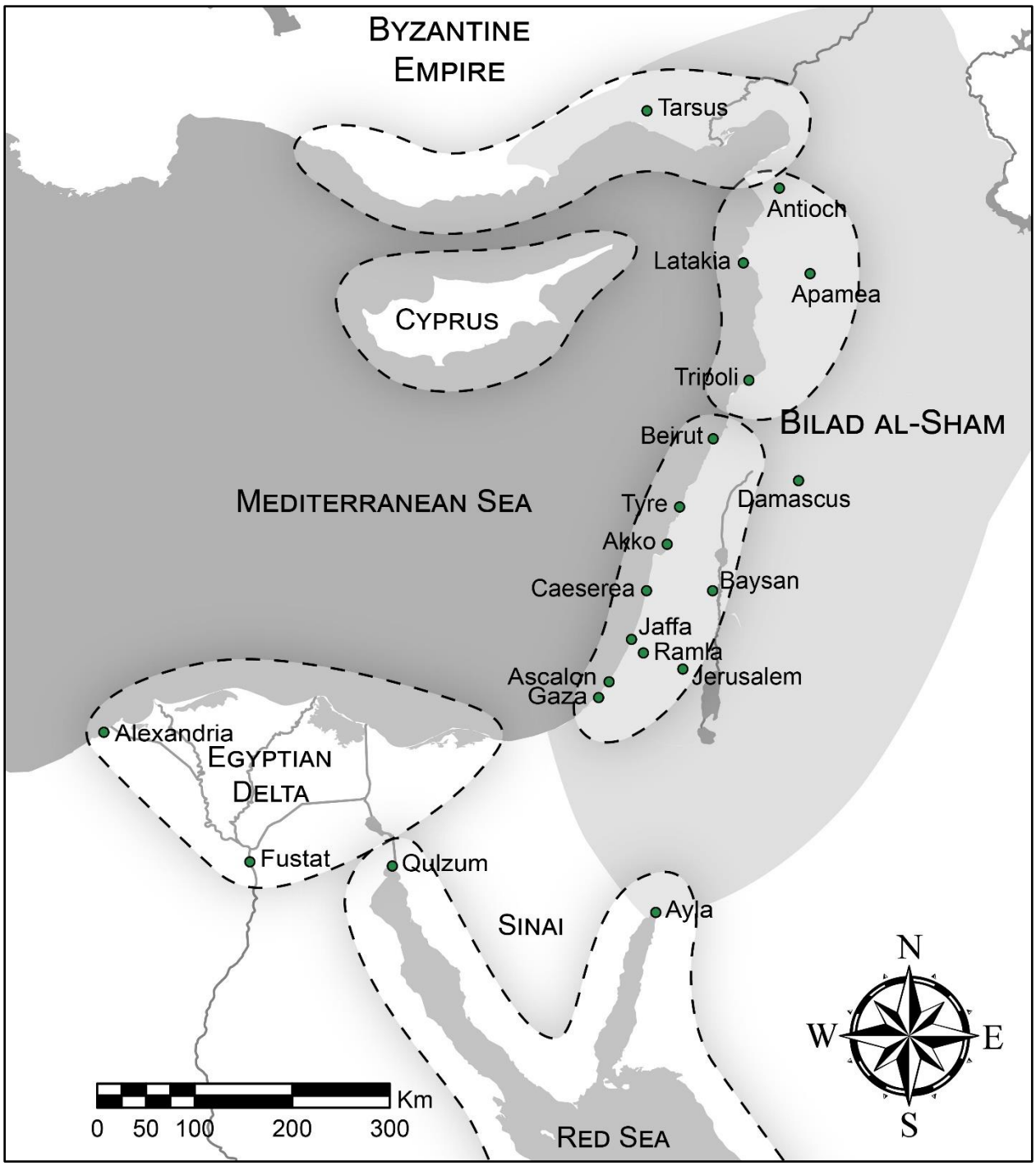

Figure 8: Regional maritime interaction spheres in the Eastern Mediterranean during the early Islamic period (by Morriss)

practice of ceramic production in Syria as a potential indicator of Egyptian potters settled in the frontier region. Finally, the popularity of Arabian steatite-inspired Brittle Ware cooking pots in Syria, Cilicia, and northern Mesopotamia in the mid to late eighth century can be attributed to the constant traffic along the military highways and sea routes during the Umayyad period. Such activity connected Bilād al-Shām economically and culturally and facilitated the spread of ideas, technology, and innovations. What emerges is a picture of a dynamic economy functioning at different geographic scales, shaped both by *intra-regional* production and trade of fine wares, cooking pots, and storage jars but integrated by a larger *interregional* network of exchange running along the maritime pathways and overland routes.

7) In the wake of the *annona* and the Byzantine withdrawal from the region, a new pattern of *interregional* exchange emerged. Egyptian products dominate the imported assemblages at coastal and inland sites in Palestine and Lebanon, indicating a strongly connected interregional network between Egypt and southern-central Bilād al-Shām. Cyprus appears to have been more closely integrated with Egypt and southern-central Bilād al-Shām, while northern Syria in the mid-eighth century begins expanding its interregional ties southward with Beirut, northward with Cilicia, and eastward with Iraq. From this evidence, we can identify the presence of several *interregional interaction spheres* (Figure 9), encompassing:

- Egypt and the southern-central Bilād al-Shām (Gaza to Beirut)
- Northern ports of Bilād al-Shām (Tripoli to al-Mina) and southern Anatolia
- Cyprus and the southern-central ports of Bilād al-Shām (Gaza to Beirut)
- Cyprus and Egypt
- Cyprus and southern Anatolia

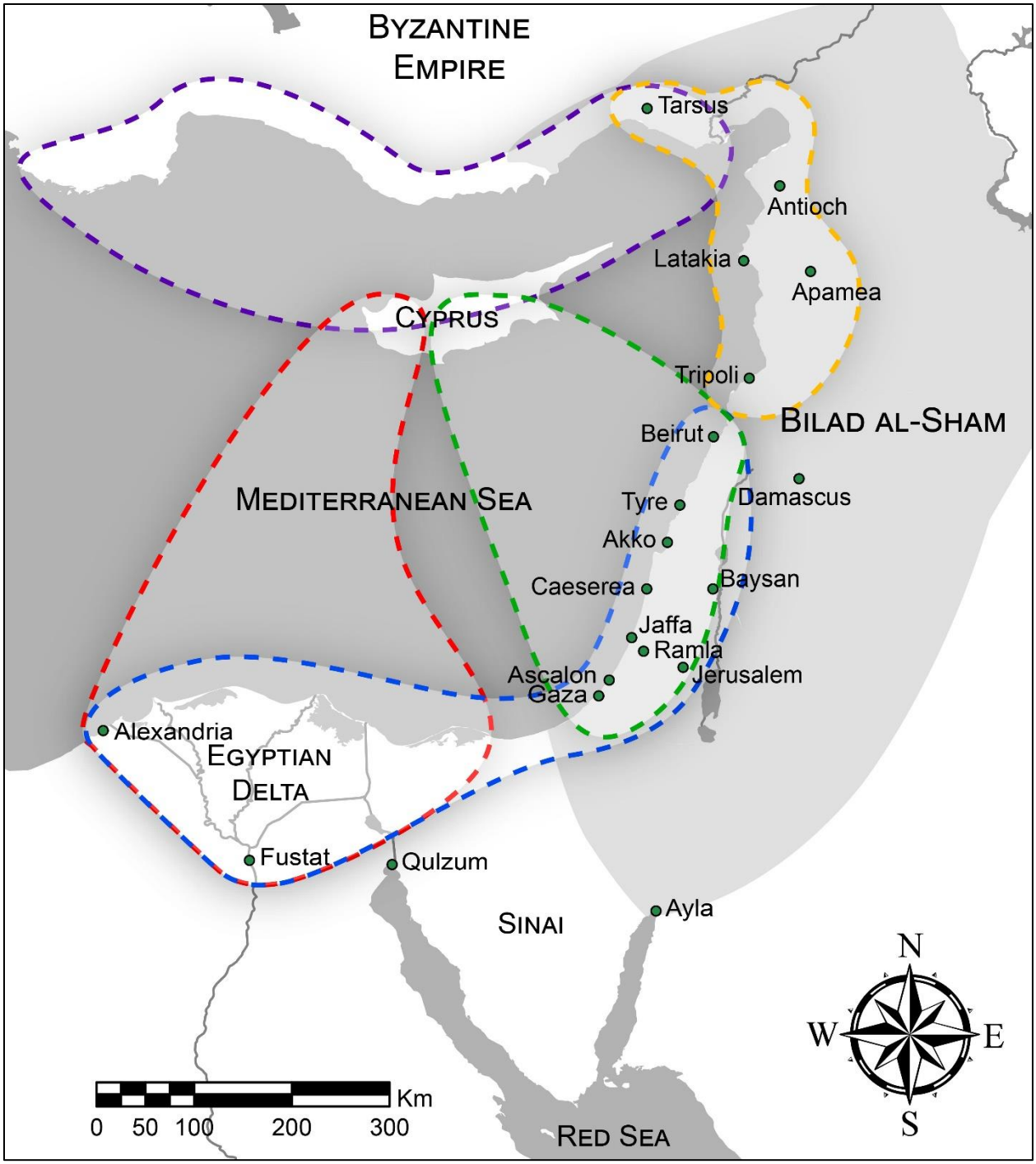

Figure 9: Interregional interaction spheres in the Eastern Mediterranean during the early Islamic period (by Morriss)

While the above exchange networks might appear 'regional' in comparison to the extensive Mediterranean-spanning exchange networks of the Roman Imperial period, describing them as such minimizes the cross-cutting nature of this trade. The trading networks that integrated Egypt, the southern Levant, northern Levant, Anatolia, and Cyprus were still international in nature, bridging clear cultural, linguistic, economic, and geographic boundaries. By rejecting the characterization of the eastern Mediterranean as an insular region, and by acknowledging that trade in this period was truly *interregional*, we acknowledge the complexity of interactions that occurred, the necessity for specialized sailing knowledge, and the need to establish far-flung social networks across cultural boundaries.

Intriguingly, the regional and interregional interaction spheres laid out here are similar in many ways to the six spheres of interaction that Knapp identified in the eastern Mediterranean for the Bronze Age (see Chapter 4.2.4). While they represent the interactions of very different cultural and economic systems, in some ways one could think of the return to dominance of the routes linking Egypt, southern Syria-Palestine, northern Syria-Palestine, Cyprus, and southern Anatolia as the re-emergence of the persistent rhythms of the Mediterranean. In part, these patterns are the products of the geography discussed at the beginning of the chapter, including the predominant currents and winds driving maritime travel, the persistent nature of the dominant regional ports over the millennia, and the geographic distribution of important resources, from grain to oil to timber.

However, we can also imagine that the reemergence of these regional routes was linked to the persistent background activity of tramping, fishing, and micro-regional exchange that typifies maritime small worlds and was occurring throughout Late Antiquity, yet which is almost entirely invisible in the archaeological record. It is striking that in describing this persistent buzz

of background activity, Tartaron remarks that it "is no surprise that these links can persist even during periods of external domination and revert to familiar patterns once released from external control."[200] This is exactly what we see in the eastern Mediterranean following the cessation of the *annona* and the foundation of the early Islamic state. Rather than goods syphoned along subsidized routes to Rome and Constantinople, the robust network linking Egypt, Cyprus, southern and northern Syria-Palestine, and coastal Anatolia reemerged, stimulated by a rise in local products as producers redirected their goods, took advantage of new opportunities, and participated in evolving markets.

[200] Tartaron, "Geography Matters: Defining Maritime Small Worlds of the Aegean Bronze Age," 72.

Chapter 5 - *Ribāṭ*: A Case Study for the Multi-Component Nature of the Maritime Frontier

So far, this dissertation has explored the political, military, religious, geographic, and economic aspects of the Islamic maritime frontier, examining each independently. However, these phenomena did not exist in isolation but were instead intricately entangled. To investigate how these entanglements functioned in practicality, this chapter will present the Palestinian *ribāṭs* (*ribāṭāt*) as a case study. These multi-functional sites were important components of both the Islamic maritime frontier and the sacralization of the Syro-Palestinian coast. Most discussions of the *ribāṭs* tend to focus on their military and religious role as presented by the tenth century geographical sources. However, they functioned beyond the bounds of frontier warfare, also serving as navigation aids, waystations for trade, and potential nuclei for settlements and agriculture.[1] Moreover, these imposing structures would have served as visual reminders of the wealth, power, and legitimacy of the new Muslim elite. Embodying the multi-component aspects of the frontier, *ribāṭs* provide a perfect lens to understand the complex and intertwined processes that unfolded along the Syro-Palestinian coast.

5.1What were *ribāṭs*?

There is no unequivocal definition of the term ribāṭ as its meaning and use developed over time and place. In the context of the maritime frontier and coast, *ribāṭs* are generally understood as structures, whether it be a watchtower, fort, or fortified city. When scholars

[1] This chapter is developed from Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier."

discuss the Palestinian *ribāṭs*, they are generally referring to a series of sites identified by al-Muqaddasī in the tenth century CE:[2]

> *This capital [Ramla] has watch stations (ribāṭ) along the sea coast where the men under arms assemble. The warships and galleys [shalandiyyat and shawani] of the Romaeans [Byzantines] pull into them, bringing with them captives taken from the Muslims, for the ransom at the rate of three for one hundred dinars. At each of these stations are men who know their language, since they have missions to them, and trade with them in provisions of all kinds. The alarm is sounded when the Romaean [Byzantine] ships come into sight: if it be night a beacon is lighted at the station, and if it be by day they make a smoke. From each coastal station to the capital is a series of lofty towers in each of which is stationed a company of men. As soon as the beacon is lighted at the coastal station, it is then done at the next one, and then in turn at the others, so there is scarcely an hour before the capital is under levy. Drums are beaten at the tower calling people to their respective watch stations (ribāṭ). They move out in force, under arms, and the young men of the countryside assemble. Then the ransoming begins. They will exchange man for man, or offer money or jewelry until they ransom all the captives that have been brought. The watch stations (ribāṭ) in this district [Palestine] at which the ransoming occurs are: Ghazza [Gaza], Mimas [Miaumas], ʿAsqalān [Ashkelon], Mahuz-Azdod [Ashdod-Yam], Mahuz-Yubnā [Yavne-Yam], Yafa [Jaffa], and Arsūf.*

According to this account, these seven sites are understood as components of an extensive network of fortified places along the Palestinian coast where pious individuals took part in the communal duty of defending the frontier (*ribāṭ*) and where the ransoming of captives occurred. Scholars have often assumed a direct correlation between the Umayyad-period fortifications at Ashdod-Yam (Qal'at al-Mīna), Yavne-Yam, Arsūf, and Ha-Bonim (Kafr Lām)

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[2] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma'rifat al-Aqalim*, 148–49.

and the *ribāṭ* mentioned in al-Muqaddasī's account (Figure 10).[3] However, doing so back-projects a tenth century military-spiritual system onto earlier remains, without acknowledging that the meaning and practice of *ribāṭ* had greatly changed during that time span.

5.1.1 Terminology of ribāṭ

The roots of the term *ribāṭ* can be traced back to the Qur'ān, where it is a verbal noun used in the context of preparing for war.[4] The root r-b-ṭ means "to attach" or "to link" in a literal sense and "to strengthen (the heart)" in a figurative sense.[5] In its earliest use, *ribāṭ* meant "to gather horses and be ready for combat." Therefore, the term's initial meaning does not imply a specific type of construction or fortification, but instead preparing for battle. Over the course of the 8th century, the term acquired an expanded meaning that involved the act of guarding the frontiers of the dār al-Islām.[6] Indeed it was at this time that the term appeared in ḥadīth that praised the pious *murābiṭūn* (frontier fighters) who resided in the coastal cities like Beirut and Ashkelon and encouraged others to take part in this sacred duty.[7]

[3] For instance Khalilieh, "The Ribât System and Its Role In Coastal Navigation"; Khalilieh, "The 'ribaṭ' of Arsūf and the Coastal Defence System in Early Islamic Palestine"; Masarwa, "From a Word of God to Archaeological Monuments: A Historical-Archaeological Study of the Umayyad Ribats of Palestine"; Masarwa, "Early Islamic Military Architecture: The Birth of Ribats on the Palestinian Coast"; Barbe, Lehrer, and Avissar, "Ha-Bonim," 2008; Fischer and Taxel, "Yavneh-Yam in the Byzantine–Early Islamic Transition: The Archaeological Remains and Their Socio-Political Implications."
[4] Donner, "Qur'anicization of Religio-Political Discourse in the Umayyad Period," 89.
[5] Chabbi and Rabbat, "Ribāṭ."
[6] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 82.
[7] Khalilieh, "The 'ribaṭ' of Arsūf and the Coastal Defence System in Early Islamic Palestine," 173.

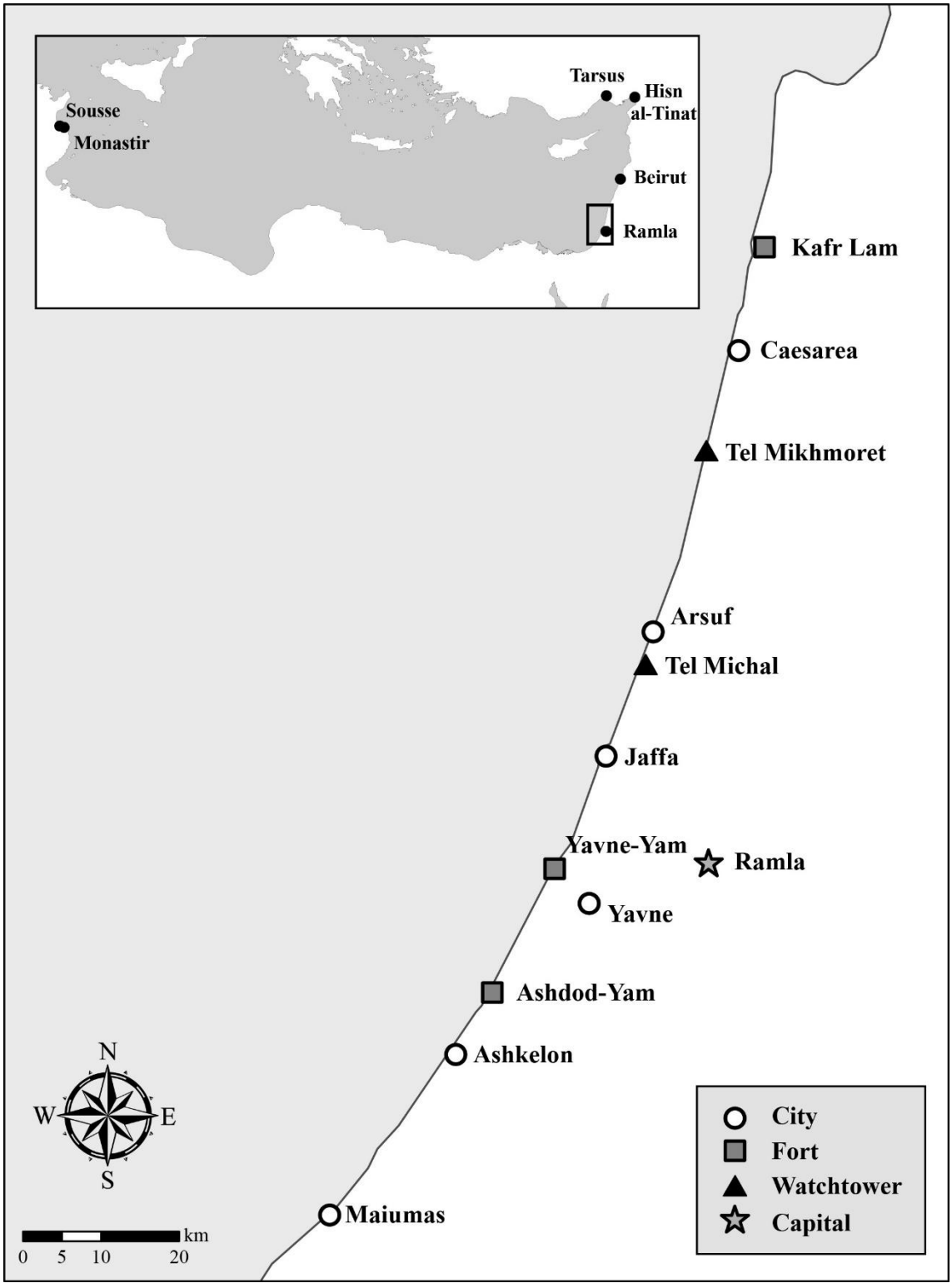

Figure 10. Map of the Palestinian ribāṭs and sites mentioned in this chapter (by Morriss)

The evolution of the term, from its initial meaning of 'making preparations for war' to the sacred act of 'guarding the frontier,' was part of a wider pattern of 'Qur'ānicization' that began under the Umayyads and continued under the 'Abbāsids. Through the process of Qur'ānicization, institutions were assigned Qur'ānic terms to give them a good Islamic pedigree.[8] The term *jihād* underwent a parallel development in the eighth century, with its use in juridical texts appearing in the context of a communal and caliphal duty of pursuing 'Holy war' against the enemy.[9] Thus, *jihād* became closely intertwined with the frontiers and with *ribāṭ*.[10]

The use of the term continued to evolve, and by the tenth century *ribāṭ* came to designate physical places and structures where the act of guarding the frontier was performed. The designation of sites as *ribāṭ*, no matter their form, function, or original designation (*qal'a*, *miṣr*, *burj*, *ḥiṣn*, *qasr*, etc.), imparted upon these places a degree of merit that stemmed back to the Qur'ān and the Prophet. Moreover, many *ribāṭs* were inhabited and frequented by ḥadīth scholars and ascetics, giving them even greater notoriety, and further entwining the military and religious aspects of the sites.[11]

Among the *ribāṭs* mentioned by al-Muqaddasī, all had either been preexisting coastal cities or established atop prior Roman and Byzantine sites during the seventh and eighth centuries. Since the terminology of *ribāṭ as a place* did not arise until the late ninth to tenth century, we can assume that the early Umayyad coastal constructions that are often conflated with al-Muqaddasī's *ribāṭs* were not initially conceived specifically as purpose-built *ribāṭs*.

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[8] Donner, "Qur'anicization of Religio-Political Discourse in the Umayyad Period," 89; Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 68.
[9] Donner, "Qur'anicization of Religio-Political Discourse in the Umayyad Period," 85.
[10] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier," 37.
[11] El'ad, "The Coastal Cities of Palestine During the Early Middle Ages," 157–59; Picard and Borrut, "Râbata, Ribât, Râbita : Une Institution à Reconsidérer," 45; Khalilieh, "The 'ribaṭ' of Arsūf and the Coastal Defence System in Early Islamic Palestine," 173–77.

Instead, it was only through the process of frontier formation and sacralization of the Syro-Palestinian coast that these sites eventually *acquired* the designation of being *ribāṭs*.

The emergence of the Palestinian *ribāṭs* should be conceived as an outgrowth of the broader process of ideological development and transformation that occurred along the maritime frontier between the seventh to tenth centuries (see 3.3). Our understanding of these sites is entangled with the sacralization of the coast, religious teachings and political propaganda, as well as the changing nature of conflict with the Byzantines. Importantly, *ribāṭs* both shaped the emerging maritime frontier and were shaped by the frontier.

5.1.2 How have ribāṭs been understood in the past?

Several important studies have examined the Palestinian *ribāṭs* and their role in the defense and monitoring of the coast.[12] Analysis, however, has been hindered by many of the same obstacles already presented in Chapter 1.2. These include the limited nature of the archaeological evidence, an uncritical use of the literary sources, the correlation of tenth century descriptions with the remains of earlier periods, and a tendency to directly equate *ribāṭs* and forts.[13] It is essential to keep in mind that the sites al-Muqaddasī describes as *ribāṭs* were not built as *ribāṭs* but were instead extant places that *acquired* the designation of being *ribāṭs*.

Compared to the coasts of the *junds* of Urdunn, Dimashq, and Hims, there is considerably more evidence attesting to the early Islamic efforts to fortify the Filasṭīn coast. These include the late seventh century town wall at Arsūf, the fortezza at Caesarea, the late seventh to early eighth

[12] Khalilieh, "The Ribât System and Its Role In Coastal Navigation"; Khalilieh, "The 'ribaṭ' of Arsūf and the Coastal Defence System in Early Islamic Palestine"; Masarwa, "Early Islamic Military Architecture: The Birth of Ribats on the Palestinian Coast"; Masarwa, "Transforming the Mediterranean from a Highway into a Frontier: The Coastal Cities of Palesting During the Byzantine and Early Islamic Periods."

[13] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier."

century forts at Ashdod-Yam (Qal'at al-Mīna), Yavne-Yam, and Ha-Bonim (Kafr Lām), and the 'early Islamic' watchtowers (*manār*) at Ashdod, Tel Mikhmoret, and Tel Michal. Problematically, most studies have focused on these fortified structures without much regard to their surroundings. As such, these forts are treated as isolated features that are disconnected from their immediate context. Instead, it would be beneficial to explore how the sites of Ashdod-Yam, Yavne-Yam, and Kafr Lām were situated within the wider landscape, if they had adjacent infrastructure, and how their inhabitants supported themselves.

Understanding how the early Islamic fortified sites were situated within the wider coastal landscape would help determine how these settlements developed and changed over time after being founded in the seventh and eighth centuries. Thirteenth century Arab and Frankish sources attest to later occupations at some of these sites. For instance, Kafr Lām is referred to as both a town and an estate and there are archaeological remains of a Crusader period church along the fort's southwestern corner tower.[14] Ashdod-Yam is also described as an agricultural estate in the Crusader period.[15] It is therefore evident that the functions of these structures evolved, and thus we cannot assume that their roles in the tenth century were equivalent to those in the seventh/eighth or thirteenth centuries. The tendency to back-project the system described by al-Muqaddasī in the tenth century onto seventh and early eighth century sites is problematic. While it is convenient to correlate archaeological remains with literary sources, the assumption that earlier defensive architecture was part of an equivalent coastal defense system in the tenth century is unsubstantiated. Methods of coastal defense and communications during the Umayyad and 'Abbāsid periods *may* have been comparable to those in the tenth century. However, it is

[14] Barbe, Lehrer, and Avissar, "Ha-Bonim," 2008, 1753, 1755.
[15] Raphael, *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*, 14–15, 20.

also possible that the early Islamic system of fortifications was administered, organized, and conceived differently than the later system of *ribāṭs*, which were augmented by religious scholars and volunteer fighters.

This back-projection has its foundations in a deep assumption—that the role of the sites that became *ribāṭs* did not change. The political and ideological context of the coast shifted dramatically between the seventh and tenth centuries CE as it was transformed into a sacred landscape whose inhabitants engaged in the meritorious acts of 'holy war' (section 3.3). It would be erroneous to assume that the function, meaning, and impact of the coastal forts did not also undergo a similar transformation in their purpose and conceptualization over the centuries.[16]

A fundamental problem preventing a broader understanding of *ribāṭs* is the one-to-one correlation between *ribāṭs* and forts.[17] In part, the stems from the overemphasis on their defensive role both in scholarly analysis and the literary sources. Moreover, it derives from the fact that the fort at Ashdod-Yam is the best-preserved site mentioned by al-Muqaddasī, and thus has been used as the model for all Palestinian *ribāṭs*. This has been supported by the fact that its architectural plan is also comparable to the Tunisian forts at Sousse and Monastir which are considered among the earliest North African *ribāṭs* (Figure 11). The similarities between Ashdod-Yam and the structural layout and organization of the Tunisian *ribāṭs* has led scholars to suggest that there was an architectural model for *ribāṭs*.[18] Along this line of reasoning, the extant remains at Yavne-Yam and Kafr Lām have also been assumed to be *ribāṭs*.

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[16] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier," 41.

[17] Recognized by Picard and Borrut, "Râbata, Ribât, Râbita : Une Institution à Reconsidérer," 35; Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 107–8.

[18] For instance Khalilieh, "The Ribât System and Its Role In Coastal Navigation"; Khalilieh, "The 'ribaṭ' of Arsūf and the Coastal Defence System in Early Islamic Palestine"; Masarwa, "From a Word of God to Archaeological Monuments: A Historical-Archaeological Study of the Umayyad Ribats of Palestine"; Masarwa, "Early Islamic

However, the similarities in architectural plan between the Tunisian and Palestinian *ribāṭs* is not because they were *ribāṭs* but rather because they were constructed according to the common model of forts.[19] A parallel phenomenon may be noticed with the Umayyad *qusūr*, also known as the 'desert castles,' which share architectural similarities with Roman and Byzantine castra and late antique military architecture. There was no standard model for a *ribāṭ* because it was a term for extant sites and structures that became *places for ribāṭ* (verbal noun), and subsequently received the *designation of being ribāṭ* (noun). In this way, coastal cities like Ashkelon were later understood as *ribāṭs*. The Tunisian and Palestinian *ribāṭs* share an architectural plan because they were forts that were ultimately designated as places for *ribāṭ*, but not all forts (such as Yavne-Yam and Kafr Lām) would have necessarily received that designation.

Military Architecture: The Birth of Ribats on the Palestinian Coast"; Barbe, Lehrer, and Avissar, "Ha-Bonim," 2008.

[19] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier," 41–43.

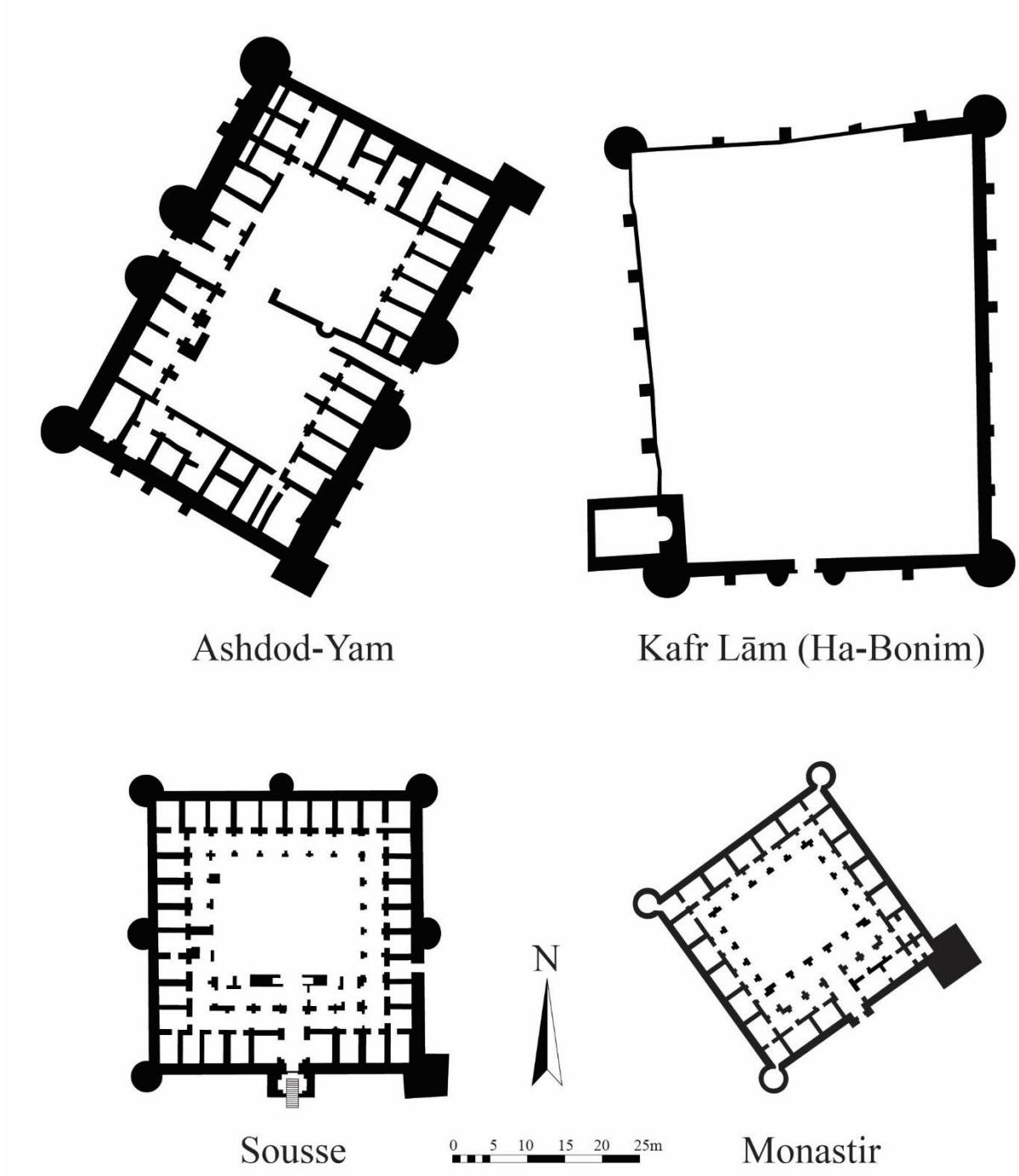

Figure 11. Plans of Palestinian and Tunisian ribāṭs (from Morriss 2021)

5.2 Understanding *ribāṭ* as multicomponent sites

The close connection of the *ribāṭs* with the coastal frontier has naturally led to a discourse heavily focused on their role in *jihād* and defense. It is essential to move beyond this myopic perspective to examine other ways *ribāṭ* were integrated into the social, economic, and political fabric of the Palestinian coast. To draw attention to some of the potential roles that *ribāṭs* played beyond defense, we can draw comparisons with other early Islamic, and even Roman, institutions, including the Roman *limes*, ʻAbbāsid waystations, the *qusūr*, and the Tunisian *ribāṭs*.

The Roman *limes* system was a network of outposts established throughout the border provinces of the empire. Although it was altogether different from the *ribāṭs*—culturally, geographically and chronologically—it provides an apt parallel for the economic and administrative role that frontier fortifications served in controlling, monitoring, and safeguarding corridors of communication, travel, and exchange. Similarly, ʻAbbāsid waystations discovered along the Anatolian Byzantine-Islamic frontier provide an example of efforts to control cross-border interactions and exploit local resources. Another important comparative model are the Umayyad *qusūr*, popularly known as desert castles. Although they exhibit elements of late antique military architecture, they did not have a military role. Moreover, *qusūr* fulfilled several functions, as waystations, agricultural estates, the nuclei for settlements, and expressions of political power.[20]

Finally, the Tunisian *ribāṭs* also provide a closely related comparison to the Palestinian *ribāṭs*, though it is essential to keep in mind that they were established under different circumstances in a different culture area. The Ifrīqiyan coast is dotted with fortifications from

[20] Morriss, 47.

many periods. Only a small portion of the Tunisian *ribāṭs* have been precisely dated, with most falling within a chronological framework spanning the late eighth to early eleventh century.[21] The *ribāṭ* of Sousse was among the earliest of these constructions, with Monastir built along a similar plan in 796 CE.[22] The Aghlabids continued fortifying the coast throughout the ninth century, intensifying efforts in response to increased Byzantine attacks. Ultimately, ʻAbbāsid and Aghlabid coastal fortifications along the Ifrīqiyan coast followed similar trajectories as their Palestinian counterparts, beginning as military institutions and then gradually developing into ascetic retreats along an ideologically charged coastal frontier. As such, the Tunisian *ribāṭs* may offer insights into how coastal fortifications and *ribāṭs* encouraged the settlement and agricultural development along the maritime frontier.[23] Ultimately, these case studies may help elucidate some of the potential roles that *ribāṭs* may have had, as well as the myriad of economic, political, cultural, and ideological activities that characterized the Islamic maritime frontier.

5.2.1 Role in sacralization

In addition to their presumed military functions, the religious role of the *ribāṭ* is the most frequently acknowledged additional function. During the seventh and eighth centuries, as the genre of ḥadīth known as the *faḍā'il al-shām* (the "virtues" or "excellencies" of Syria) became popular, many of the coastal cities became centers of religious study and loci for *ribāṭ*. These were places to which scholars and individuals could retreat or visit to partake in the sacred act of

[21] Hassen, "Les Ribat Du Sahel S'Ifriqiya: Peuplement et Évolution Du Territoire Au Moyen Âge," 153; El Bahi, "Les Ribats Aghlabides : Un Problème d'identification."
[22] Fenwick, "Early Medieval Urbanism in Ifriqiya and the Emergence of the Islamic City," 216.
[23] Morriss, "Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier," 45–46.

guarding the frontier.[24] As noted above, they were not purpose-built structures, but fortified sites and cities that ultimately acquired the designation of being places of *ribāṭ*.

The Tunisian *ribāṭs* provide the clearest parallel to those in Bilād al-Shām. In the ninth century, the Ifrīqiyan coast became associated with the religious and social practice of *ribāṭ*, with certain structures housing *murābiṭūn* (frontier fighters).[25] Up until the tenth century, places that sheltered murābiṭūn were identified using a term indicating what type of structure they were, followed by the adjective *ribāṭ*, to indicate their function – for instance, Qasr al-Ribāṭ, Ḥiṣn al-Ribāṭ, Mahris al-Ribāṭ, and Madīnat al-Ribāṭ.[26] The emphasis on various edifices where people performed *ribāṭ* – including *qasr* (fortified place), *qasaba* (fort), and *maḥras* (watchtower) – indicate that it was not a specific structure that made a *ribāṭ*, but rather it was the act of *ribāṭ* that gave a structure its significance.[27] This division between the religious role and structure of the site is an important concept to consider when examining the fortifications along the Syro-Palestinian coast.

Like the early Islamic Palestinian fortifications, those in Tunisia evolved from their initial functions as military institutions engaged in guarding the coast. However, within the context of local and political circumstances, as well as the developing ideologies of *jihād* and *ribāṭ*, certain sites gradually adopted cultural and social functions characteristic of the better-known *ribāṭ* of the tenth century. Even when *ribāṭs* were transformed into Sufi convents in later centuries, they maintained their original vocation as an Islamic military institution.[28]

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[24] Mikati, "The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred," 94.
[25] El Bahi, "Les Ribats Aghlabides : Un Problème d'identification," 327.
[26] Picard and Borrut, "Râbata, Ribât, Râbita : Une Institution à Reconsidérer," 39; El Bahi, "Les Ribats Aghlabides : Un Problème d'identification," 323.
[27] Hassen, "Les Ribat Du Sahel S'Ifriqiya: Peuplement et Évolution Du Territoire Au Moyen Âge," 154.
[28] Chabbi and Rabbat, "Ribāṭ."

Like the Tunisian *ribāṭs*, those in Bilād al-Shām played an important role in sacralizing the maritime frontier and transforming it into a sacred Islamic territory. As physical loci of religious and political propaganda, they became deeply entangled with this process of transformation. The *ribāṭ* both emerged as an institution due to the sacralization of the coast, but it also simultaneously helped to perpetuate the process of sacralization.

The discovery of three inscribed marble columns at Yavne-Yam have been used to support the argument that it was a *ribāṭ*. Likely the *in situ* remains of a church, the columns have twelve Arabic inscriptions that were incised into them while they were still upright.[29] The longest of these inscriptions reads: 'O Allāh! Be pleased with / Bashâr b. Bulayd / al-Fiḥr, and grant him / martyrdom in your cause'.[30] These inscriptions are evidence of how both the physical and cognitive landscape were transformed and reshaped during the process of sacralization. It should be noted that similar inscriptions on columns and in churches have also been found at sites along the Syro-Palestinian coast that have not been identified as *ribāṭs*, as well as on the islands of Kos and Knidos (see 3.2.3 and Table 3).

5.2.2 Role as economic waystations

As the Palestinian *ribāṭs* developed along the maritime frontier, they were closely related to the monitoring, control, and development of coastal resources and trade. The *limes Arabicus* and the 'Abbāsid waystations of Syria-Palestine may provide parallels for how coastal

[29] Fischer and Taxel, "Yavneh-Yam in the Byzantine–Early Islamic Transition: The Archaeological Remains and Their Socio-Political Implications," 234.
[30] Fischer and Taxel, 236.

fortifications and *ribāṭs* functioned in relation to economic activity, movement, and networks.[31] The *limes* formed a Roman administrative zone and network of forts spanning southern Palestine and northern Syria. Historically, it has been assumed that the forts of the *limes* were established as part of a defensive network designed to guard the eastern frontier from nomadic and Persian incursions.[32] Beginning in the 1980s, scholars began to question this interpretation, and the portrayal of the *limes* as a militarized frontier barrier was shown to be a literary construct and effective means of propaganda.[33] New interpretations now suggest that the Roman *limes* system comprised a wide geographic zone of interaction, punctuated by forts that functioned as centers of economic, cultural, and military activity.[34] Rather than defending the empire from 'barbarian invasions,' the construction of forts primarily facilitated the policing of roads, the movement of people and goods, and the collection of taxes.[35] Some served local needs, such as guarding roads and serving as places of refuge for adjacent settlements further demonstrating that not all fortified structures had a military function.[36] It's worth noting that the roles of individual forts did not remain static, but changed over time as they witnessed later occupations.[37]

The functions of the fortified structures along the Islamic maritime frontier should be similarly reevaluated. The Palestinian forts and *ribāṭs* were adjacent to river mouths, anchorages, and the coastal roads, and were therefore well positioned to monitor movement along the key coastal corridors and control trade and access to natural resources. This is directly supported by

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[31] The Umayyad qusūr, popularly known as the 'desert castles', may have also been strategically positioned to facilitate movement along the primary north-south artery of Syria-Palestine.
[32] Magness, *The Archaeology of the Early Islamic Settlement in Palestine*, 112.
[33] Berend, "Medievalists and the Notion of the Frontier," 60; Curta, "Introduction," 2.
[34] Curta, "Introduction," 3.
[35] Magness, *The Archaeology of the Early Islamic Settlement in Palestine*, 129; Berend, "Medievalists and the Notion of the Frontier," 60–61.
[36] Magness, *The Archaeology of the Early Islamic Settlement in Palestine*, 125, 127–28.
[37] Magness, 125, 129.

the pottery and artifact assemblages from Yavne-Yam, Ashdod-Yam, and Kafr Lām—all of which place these coastal forts into the wider regional and interregional trade networks discussed in 4.2.4. Umayyad and Fatimid bronze and glass weights from Ashdod-Yam attest to the day-to-day economic exchanges that took place along the shore of the maritime frontier. Inscriptions at Yavne-Yam attest to presence of transitory frontier fighters, while a cross pendant at Ashod-Yam indicates that pilgrims may have also passed by these centers.

The early Islamic fort at Kafr Lām provides an interesting case in point. The site is typically identified as a *ribāṭ* based on its similarity to Ashdod-Yam. However, this categorization is based on the false assumption that *ribāṭs* had a specific architectural plan (the typical plan for all forts). Kafr Lām, however, is never referred to as such by al-Muqaddasī or others. While most of the fortifications identified as *ribāṭs* are located along the shore, Kafr Lām is positioned on a natural kurkar ridge nearly 1 km from the sea. Its location does not match the pattern of the other *ribāṭs*, which are located directly along the shore. Rather, Kafr Lām may have served as a fortified waystation along the coastal road, strategically positioned to monitor, safeguard, and tax the overland traffic between the ports of Caesarea, Dor, and Acre.[38] In addition to its location, a supplemental piece of evidence for this hypothesis is that Arab geographer Yāqūt al-Ḥamawī attributes Kafr Lām's construction to Hishām b. 'Abd al-Malik (r. 724 – 743 CE), who was involved in a wide variety of economic ventures and development projects (Table 6). These included developing markets and establishing what may be considered the typological Islamic sūq—an enclosure with gates and permanent shops and a base for levying

[38] See most recently, Barbe and Taxel, "Habonim-Kafr Lam: A Ribat of the Levantine Coastal Defensive System in the First Centuries of Islam." The authors very generally cite the ceramics typical to the 8th centruy onwards, including white-painted storage jars, as well as 'Abbasid coins found inside and outside of the fort.

taxes.[39] It is possible that, as a prominent waystation, Kafr Lām may have shared some of these functions. Certainly, its monumental architecture and position on a ridge above the road would have made it a striking symbol of Umayyad political authority to all who traveled along the major artery.

Parallels might be drawn with two other early Islamic road stations in *jund* Filistin that were constructed over preexisting structures—Khan al-Tuggar and Horvat Mesad (Khirbet Qasr). The complex at Khan al-Tuggar may have monitored traffic along the Post Road route between Tabariya and Ramla, while also functioning as a rest stop and center for exchange. The complex consists of two structures: a square fort (61 x 71 m) and a larger rectangular fortification (115 x 77 m) with an interior well and mosque.[40] The site was surveyed in the 1980s, and similarities were drawn between the plan and architectural features of the square fort and the Umayyad palace at Khirbet al-Minya. The larger rectangular structure was interpreted as a later construction, possibly after the square fort went out of use—it is worth bearing in mind, however, that this was a preliminary interpretation and without excavation we cannot precisely know the phasing of these structures.

The waystation at Horvat Mesad (Khirbet Qasr) provides another useful comparand. The fort is located along the road connecting Jaffa to Jerusalem and probably functioned as a police station, guaranteeing the safety of travelers and pilgrims.[41] The site remained in use from the seventh through ninth centuries, with evidence of "an elaborate building, probably a khan" that had an entrance hall with plastered seats along the walls, and a courtyard with two aisles along

[39] Bianquis et al., "Sūḳ."
[40] Gal, "Khan Et-Tuggar: A New Look at a 'Western Survey' Entry."
[41] Fischer, *Ḥorvat Meṣad*, 286–87.

it.[42] The excavators also identified a Muslim cemetery along the eastern side of the site, with evidence of use during the eighth and ninth centuries.[43] The three Umayyad milestones that were found along this road were likely erected under al-Walīd (r. 705-715 CE) and indicate the importance of the Jaffa to Jerusalem route and caliphal investments in its maintenance.[44] Kafr Lām, Khan al-Tuggar, and Horvat Mesad are examples of early Islamic fortified waystations that could safeguard, monitor, and control movement and trade along the important roads along the coast and between the ports and the interior (Figure 12 and Figure 13).

A final example of how fortifications functioned as components within broader economic networks is the late eighth to early ninth century waystation at Ḥiṣn al-Tīnāt along the Syrian coast. The site was strategically located along the main coastal road and within the estuary of the Tüm Çay river, which provided access to lucrative timber reserves in the Amanus Mountains. Ḥiṣn al-Tïnât functioned both as a frontier fort and a port that was involved in the exploitation and shipment of timber resources.[45] The *thaghr* of Tarsus, though not a waystation but a city, may have similarly been founded due its strategic location for raiding Byzantine territory, as well as the access it provided to the rich mining and timber resources in the Taurus Mountains.[46]

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[42] Fischer, 44–47.
[43] Fischer, 56–60.
[44] Sela, "Medieval Arabic Sources on the Jaffa–Jerusalem Roads"; Cited by Amitai-Preiss, "Umayyad and Later Period Coins," 239.
[45] Eger, "Ḥiṣn Al-Tïnāt on the Islamic-Byzantine Frontier: Synthesis and the 2005–2008 Survey andExcavation on the Cilician Plain (Turkey)," 49.
[46] Eger, *The Islamic-Byzantine Frontier: Interaction and Exchange Among Muslim and Christian Communities*, 257–58.

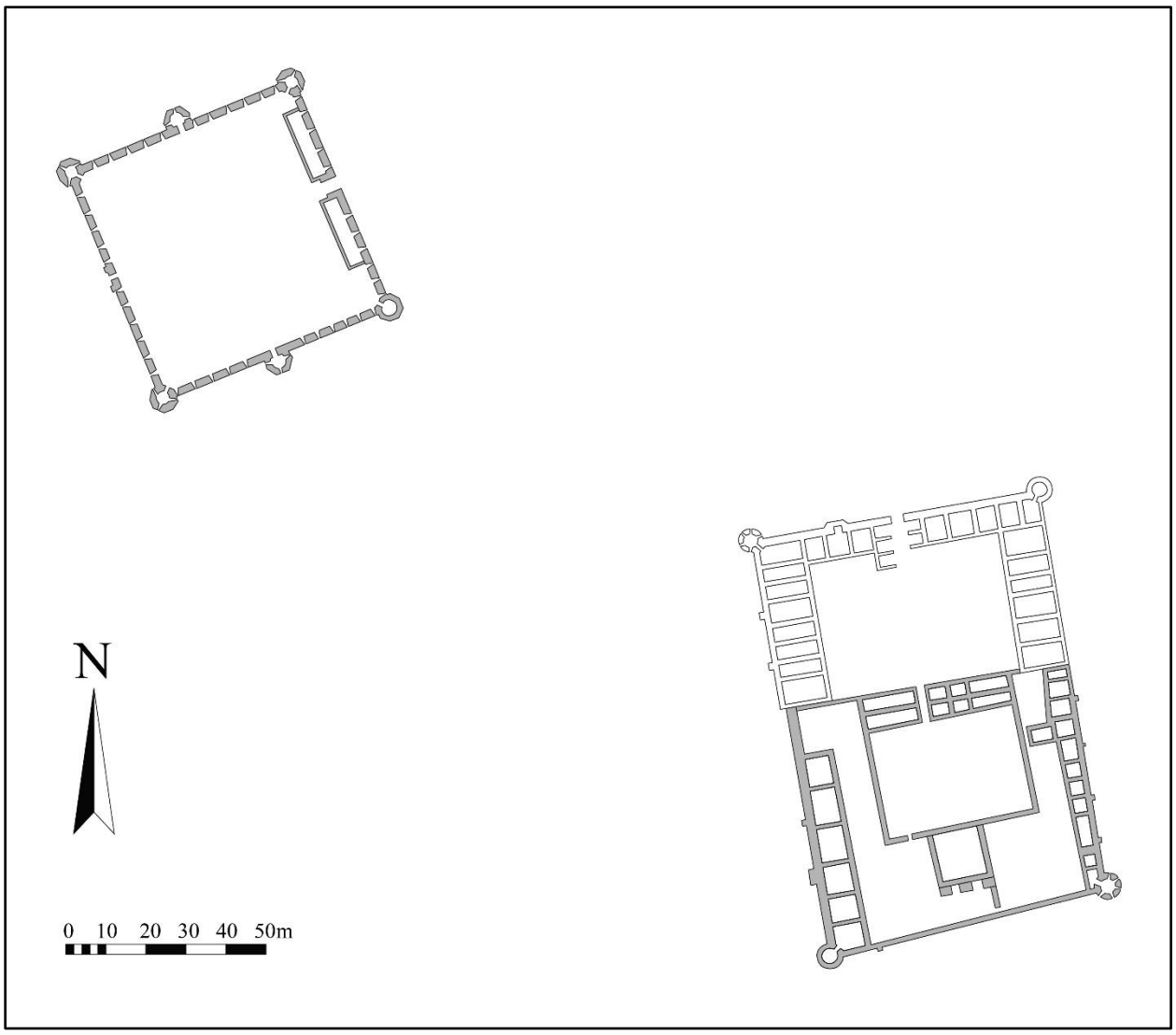

Figure 12: Plan of Khan al-Tuggar (by Morriss, after Gal 1985: figures 3, 4, and 5).

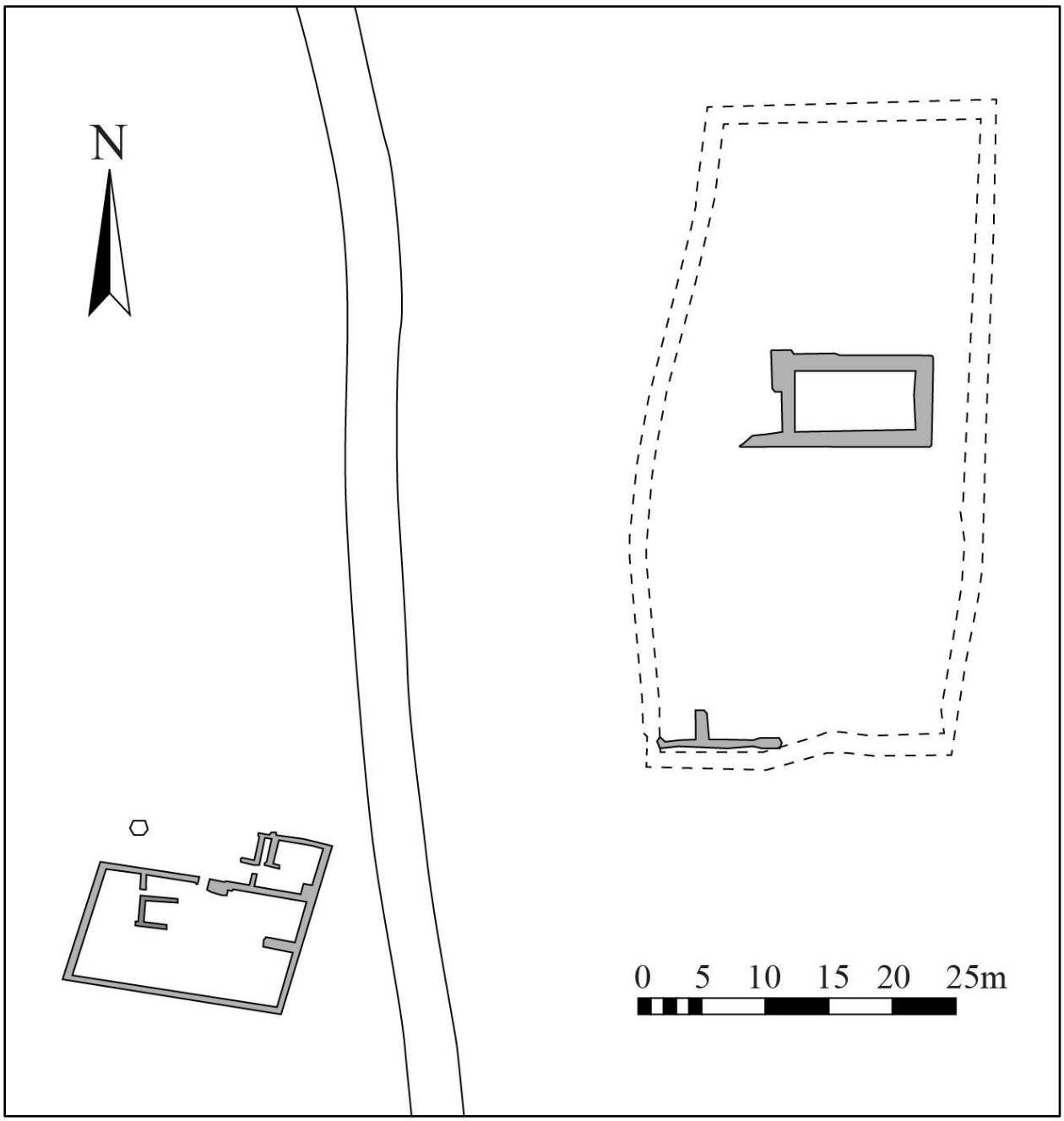

Figure 13: Plan of Horvat Mesad, showing Early Islamic period structures and extent of Roman remains (by Morriss, after Fischer 2012: figures 1.11 and 2.3a).

The ‘Abbāsid waystations like Ḥiṣn al-Tīnāt have been interpreted as “a new system designed to promote settlement and sedentarization, and also build and protect the economic infrastructure of movement across the frontier”.[47] In this regard, the ‘Abbāsid waystations appear to be part of a policy similar to the one employed by the early caliphs and Umayyads to fortify, resettle, and develop the Syro-Palestinian coast.

While the economic role of the *ribāṭ* is not widely discussed, economic activities were also carried out at these centers. Excavations at Yavne-Yam uncovered both an industrial complex of plastered pools as well as a commercial complex for processing and storing agricultural products that may have been intended for shipment.[48] The pottery assemblages from these complexes consist of the typical repertoire of late antique forms that continued through the Umayyad period, including red slipped wares from Cyprus and/or Southern Anatolia (CRS/LRD Form 9), Egyptian red slipped wares, local and possibly imported bag-shaped amphorae (LRA 5 and 6), globular Aegean amphorae, Fine Byzantine Ware (FBW), local and Cypriot cooking pots, as well as Coptic painted jugs. The seventh through eighth and ninth century ceramic assemblages from Yavne-Yam place the site within the wider eastern Mediterranean and Aegean interregional trade networks described in 4.2.4. Moreover, two Fatimid glass weights, with parallels to an example found at nearby Ashdod-Yam, attest to continued economic activity at this coastal fort.

Located south of Yavne-Yam, Ashdod-Yam was also tied into the intraregional and interregional maritime exchange networks. This is supported by the large collection of glass

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[47] Eger, “Ḥiṣn, Ribāṭ, Thaghr or Qaṣr? Semantics and Systems of Frontier Fortifications in the Early Islamic Period,” 445.

[48] See Fischer and Taxel, “Yavneh-Yam in the Byzantine–Early Islamic Transition: The Archaeological Remains and Their Socio-Political Implications” for a discussion on the finds.

vessels dated to the Umayyad, ‘Abbāsid, and Fatimid period found at the site, with the latest examples having parallels on the 1025 CE Serce Limani shipwreck, which may have in fact stopped at a port along the Syro-Palestinian coast.[49] Direct evidence for economic and commercial transactions at the site comes from two glass weights as well as two groups of bronze scale weights—an Umayyad dirham series and an eleventh through thirteenth century dinar series—that were commonly used for weighing coins and bullion, as well as luxury goods such as spices and precious and semi-precious stones.[50] The Umayyad glass weight was used to weigh dinars and dirhams and is inscribed with: “amīr al-mu’minīn [?] Sulayman b. ‘Abd al-Malik, manufactured at Ramla from the *ard* of Filastin.”[51] A Fatimid glass weight, with parallels to those found at Yavne-Yam, bore the inscription: Aḥmad al-Imām Abū al-Qāsim al-Must’alī amīr al-mu’minīn.”[52]

Al-Muqaddasī alludes to another type of economic activity that took place at the Palestinian *ribāṭs*—the ransoming of captives. The exchange of captives and prisoners of war by raiders and traders alike was a lucrative business that leaves little trace in the archaeological record. Captives could be sold into slavery, ransomed back to communities, or even gifted back to states as part of diplomatic exchanges.[53] In his account of the ransoming activities in southern Bilād al-Shām, al-Muqaddasī indicates that they were conducted at the following Palestinian *ribāṭs*: Gaza, Mimas (Gaza’s port), Ashkelon, Ashdod-Yam, Yavne-Yam, Jaffa, and Arsūf. We

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[49] Raphael, *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*, 63–74.
[50] Raphael, 59, 63.
[51] Note the use of ard instead of jund. For a discussion on ard, see Legendre, “Aspects of Umayyad Administration.”
[52] Raphael, *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*, 63 A pair of Fatimid glass weights were apparently also found at Yavne-Yam.
[53] For a discussion on the lucrative captive and slave trade see, Durak, “Commerce and Networks of Exchange between the Byzantine Empire and the Islamic Near East from the Early Ninth Century to the Arrival of the Crusaders,” 292–303; Lankila, “Saracen Maritime Raids in the Early Medieval Central Mediterranean and Their Impact on the Southern Italian Terraferma (650-1050),” 210–31.

might assume that these seven coastal cities and forts were the state designated centers for such exchanges between the Byzantines and local communities.[54] Moreover, al-Muqaddasī indicates that: *At each of these stations are men who know their language, since they have missions to them, and trade with them in provisions of all kinds.*[55] These men sound very much like merchants. With their economic and social connections often spanning the *dār al-Islām* and *dār al-ḥarb*, merchants were uniquely positioned to assume side roles as diplomats, spies, or as negotiators for cross cultural transactions, such as official ransoming.

Overall, we can envision the early Islamic *ribāṭs*, and fortifications in general, as part of a broader economic network, protecting and linking both terrestrial and maritime corridors of exchange. A great deal of wealth flowed with goods, agricultural products, and pilgrims that travelled along the roads and maritime pathways, and controlling these channels was as economically important as it was political for both the state as well as the vested interests of the Umayyad caliphs.

[54] Durak suggests that the Byzantine ships in al-Muqaddasī's account likely came from Attaleia (modern Antalya) in southern Anatolia. See Durak, "Commerce and Networks of Exchange between the Byzantine Empire and the Islamic Near East from the Early Ninth Century to the Arrival of the Crusaders," 343–44.

[55] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma'rifat al-Aqalim*, 148–49.

Construction	Caliph	Date Built	Inscription	Reference
Market (sūq) at Baysān	Hishām	737/38 CE	In the name of Allāh, the Compassionate, the Merciful. Ordered this building the servant of Allāh, Hishām, Commander of the Faithful, [to be built] by the governor Isḥāq b. Qabīṣa (completed in ?) the year [ ] and one hundred.	Khamis 2001
Palace at Acre	Hishām	Ca. 736 –743 CE	Ishaq b. Qabisah b. Dhu'ayb was nominated to manage diwan as-sadaqah for Hishām, and he was also responsible to run his (the Caliph's) estates in (the province of) Urdunn. His name is written in mosaics on one of the palaces of as-Sabbah in ʿAkkā: This is what was produced by the hands of Ishaq b. Qabisah.	Sharon 1997, *CIAP I*, 30-31
Renovations at the ports of Acre and Tyre	Hishām	Ca. 744 –750 CE	Ziyad b. Abu al-Ward al-Ashja'i was Marwan's secretary in charge of the expenditure: and his name is written on the (gate?) of the port of Tyre and the port of ʿAkkā: This is what the Commander of the Faithful Marwan II has ordered to repair and it was carried out by the hands of Ziyad b. Abu al-Ward.	Sharon 1997, *CIAP I*, 31
Construction of a mosque and minaret at Ascalon	Marwan II	771/72 CE	Bismillah. Has ordered the establishment of this minaret and mosque al-Mahdi, Commander of the Faithful, may Allāh guard him and grant him great reward and good recompense. [The work was accomplished] under the supervision of al-Mufaddal b. Sallam an-Namari, and Jahwar b. Hishām al-Qurashi in December-January 771/772.	Sharon 1997, *CIAP I*, 144-47
Construction of coastal fort at Caesarea	Aḥmad b. Ṭūlūn	878—83 CE	In the name of Allāh the Compassionate, the Merciful. Has ordered the construction of this blessed tower (?) (or frontier fortress) Aḥmad b. Ṭūlūn the servant of the Caliph (*amīr al-mu'minīn*), may Allāh grant him long life, (he built it) hoping for Allāh's reward, and this was at the end of Muḥarram [the year…]	Sharon 1999, *CIAP II*, 275-276

Table 6. Several caliphal constructions

5.2.3 Role in navigation and territorial delineation

Forts, watchtowers, and *ribāṭs* along the coast were integrated into the eastern Mediterranean maritime networks. Coastal sailing comprised the bulk of movement along the Syro-Palestinian coastline, and ships would frequently seek harbor to shelter from inclement weather, resupply or engage in trade, or transfer on to other destinations. Watchtowers, fortresses, city ramparts, and minarets provided observation points that could provide advanced notice of the arrival of merchant ships, the presence of naval fleets or corsairs, and a way to monitor maritime disasters. These coastal cities, forts, and watchtowers were situated along the coast on hills or plains that allowed a wide vantage for monitoring the sea as well as communicating with one another (see Figure 5). This broader network permitted a complete visual command of the territorial waters and shore for defensive and economic purposes (see section 3.2.2 for further discussion).

This role is clear in al-Muqaddasī's description of the Palestinian *ribāṭs*, which were spaced between 7 and 14 km apart, with watchtowers placed in between.[56]

> *The alarm is sounded when the Romaean [Byzantine] ships come into sight: if it be night a beacon is lighted at the station, and if it be by day they make a smoke. From each coastal station to the capital is a series of lofty towers in each of which is stationed a company of men. As soon as the beacon is lighted at the coastal station, it is then done at the next one, and then in turn at the others, so there is scarcely an hour before the capital is under levy.*[57]

The utility of these structures was not simply to provide a vantage point from which to monitor the coast, but to be seen in return. These prominent structures would have been visible in

[56] Khalilieh, "The 'ribaṭ' of Arsūf and the Coastal Defence System in Early Islamic Palestine," 167.
[57] al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma'rifat al-Aqalim*, 148–49.

clear relief above the low featureless coastline and served as navigational aids for mariners sailing along the shore. Visual references were an essential part of both ancient and medieval navigation and are still used by coastal pilots in the modern era.[58] Beyond their utility, the fortified towers and minarets were clear visual expressions of the religious, political, and military power of the early Islamic state to pilgrims, merchants, pirates, and enemy ships. Like modern city limit signs, their visibility from sea heralded the maritime boundaries of the dār al-Islām.

5.2.4 Symbols of Wealth, Legitimacy, and Power

Ribāṭs, as well as other monumental projects such as city fortifications and mosques, served as visual representations of the wealth, legitimacy, and power of the early Islamic state. It is possible that their symbolic role may have been one of the most important. While many *ribāṭs* take the form of forts, military architecture is frequently used to express the power and status of an individual or the state, even in situations where that architecture no longer plays a significant miliary role. For instance, in the case of later English castles and fortified domestic architecture, licenses to crenellate (fortify) a building were issued as royal acknowledgements of status, a means for elites to express their social rank through a symbolic building.[59] Beyond personal status, castles also served as civic, religious, and historical symbols.[60]

The Umayyad *qusūr* (desert castles) provide a model of the symbolic function of the *ribāṭs*. They were established throughout Greater Syria, largely under the Marwanid line of the Umayyads. They served a variety of functions depending on their context, and much like the

[58] Agius, *Life of the Red Sea Dhow: A Cultural Hisotry of Seaborne Exploration in the Islamic World*, 176–77.
[59] Coulson, "Structural Symbolism in Medieval Castle Architecture"; Davis, "English Licenses to Crenellate 1199-1567."
[60] Wheatley, "The Idea of the Castle in Medieval England."

ribāṭs, there is no single definition that wholly encapsulates their purpose or utilization. They have been variously interpreted as desert retreats, pleasure palaces, agricultural estates, and waystations, as well as political and diplomatic centers.[61] More recently, they have been described as "periodic palaces" associated with the Umayyad phenomenon of itinerant kingship.[62]

A distinguishing characteristic of the Umayyad *qusūr* was their fortified form. They exhibit numerous elements of late antique military architecture, manifested most significantly in their impressive enclosure walls and towers. However, they are not military structures. Architects drew on monumental, military-inspired modes of expression to create imposing structures that would impress observers and serve as a visceral reminder of the wealth, power, and legitimacy of the Umayyad elite.[63] Whitcomb observed that the "*qusūr* were probably indistinguishable from estates of the aristocratic elites, who attempted to imitate the palatial styles."[64] Genequand notes that "first and foremost, they represent the visibility of the new Islamic power and the residences of a wealthy elite investing in landed property."[65] Similarly, the *limes* were militarized symbols of the power and reach of the Roman empire. While they served defensive and economic purposes, they also were physical monuments of Roman control over the frontier.

The Palestinian coastal forts at Ashdod-Yam, Yavne-Yam, and Kafr Lām all drew on this tradition of military architecture. Certainly, there were defensive aspects to their construction,

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[61] Genequand, *Les établissements des élites omeyyades en Palmyrène et au Proche-Orient*, 379–95; Genequand, "Umayyad Desert Castles," 2.
[62] Whitcomb, "Periodic Palaces: An Economic Approach toward Understanding the 'Desert Castles'"; Borrut, "Pouvoir Mobile et Construction de l'espace Dans Les Premiers Siècles de l'islam."
[63] Genequand, *Les établissements des élites omeyyades en Palmyrène et au Proche-Orient*, 392; Genequand, "Umayyad Castles: The Shift from Late Antique Military Architecture to Early Islamic Palatial Building," 25.
[64] Whitcomb, "Periodic Palaces: An Economic Approach toward Understanding the 'Desert Castles,'" 100.
[65] Genequand, "Umayyad Desert Castles."

and the forts would have been able to serve as safe havens during raids and in times of unrest. However, as with the *qusūr*, *limes*, and Tunisian *ribāṭs*, the use of military architecture also created a permanent monument to the presence and power of early Islamic rulers.[66]

It is essential to recognize that the construction of early Islamic coastal forts was part of a wider process of establishing physical and ideological dominance over a region that was primarily non-Muslim. By constructing and rebuilding fortifications, settling garrisons, and improving infrastructure, the early caliphs certainly increased security and control over potentially rebellious domains. Moreover, these acts were also a form of political propaganda, with the Umayyads casting themselves in the traditional role of a ruler – as one who protects and improves the realm.[67] The construction of these sites underscored the legitimacy and permanency of their rule. Similarly, the caliphal patronage of mosques and minarets at cities along the maritime frontier imparted merit and legitimacy upon the benefactors.

It is telling that the act of constructing coastal fortifications and mosques became almost a prerogative of caliphs, and numerous projects were completed by dynasties that sought to proclaim power over the maritime frontier (see Table 6). This seems to have been especially true as the Syro-Palestinian coast became a sacred frontier landscape in second half of the eighth century and the ʻAbbāsid caliphate struggled to reclaim their authority along the frontiers. The Arabic foundation texts on these monuments would have been recognizable, if not legible, symbols of the religious and political authority of the caliphate to Muslims, Christians, and Jews.

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[66] For the Tunisian *ribāṭs* as symbols of visual authority, see Pentz, *From Roman Proconsularis to Islamic Ifrīqiyah*.
[67] For a discussion on frontier policy and legitimacy see Bonner, *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*; Eger, "The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier."

In addition to monuments to Muslim control and caliphal power, the early Islamic forts could have also served as symbols of personal status for elite individuals. It is unknown how the early forts in Palestine were continually financed, or who initially received control of them, but it was likely a combination of wealthy individuals and ruling elite. Tunisian parallels may shed some light on this. Patronage of several Tunisian *ribāṭs* was provided by members of the Aghlabid family, as well as wealthy private individuals, including a Kairouan trader.[68] Like those in Tunisia, the Palestinian *ribāṭs* certainly represented the concentration of immense wealth, both in the resources used to construct them, and in the ability to maintain their garrisons and *murābiṭūn*. Their location along both maritime and terrestrial corridors of trade potentially also created an opportunity to control the flow of goods or levy taxes. Furthermore, we can speculate that like the *qusūr* and Tunisian *ribāṭs*, the individuals who controlled the forts and *ribāṭs* may have held dominion over surrounding properties and agricultural lands, as discussed below.

[68] Hassen, "Les Ribat Du Sahel S'Ifriqiya: Peuplement et Évolution Du Territoire Au Moyen Âge," 153; El Bahi, "Les Ribats Aghlabides : Un Problème d'identification," 332.

5.2.5 Centers of Settlement and Agricultural Development

In addition to being conceived as primarily military structures, the coastal forts and *ribāṭs* have largely been studied as isolated structures, with few investigations into the hinterlands of these sites. However, I would suggest that it is possible that, along with their many other functions, the Palestinian forts and *ribāṭs* could have served as the nuclei for settlements and agricultural development, and thus, be integrated into a much broader economic and social landscape than their immediate footprint. Both Tunisian *ribāṭs* and the *qusūr* can serve as models for this role, demonstrating the importance of expanding investigations beyond the confines of walled structures.

Beyond their militaristic and ascetic functions, the Tunisian *ribāṭs* were components of a resettlement policy along the coast, and several villages and cities developed alongside successful *ribāṭs*.[69] In this manner, the *ribāṭs* could function as "nuclei of settlements" as well as "a form of exploitation and development" of coastal resources and land.[70] In addition to official and private patronage, land rent was a primary source of income for the Tunisian *ribāṭs*. Hassen has demonstrated that many of the *ribāṭs* in Kairouan's coastal hinterland included adjacent territory that was reserved for orchards, crops, pasture, and forests.[71] This territory is frequently referred to as *ḥimā*, a pre-Islamic term from Arabia used to designate a protected pasture for horses or camels. The *ḥimā-ribāṭ* relationship may have developed in Ifrīqya as early as the eighth century.[72] In its connection with the *ribāṭs*, the *ḥimā* appears to be comprised of estates and lands functioning as *waqf* (endowment), that was under the protection and control of the

[69] Hassen, "Les Ribat Du Sahel S'Ifriqiya: Peuplement et Évolution Du Territoire Au Moyen Âge," 156.
[70] Hassen, 161.
[71] Hassen, 156.
[72] Hassen, 156; El Bahi, "Les Ribats Aghlabides : Un Problème d'identification," 329.

ribāṭ and its inhabitants. Other terms were also used to designate the lands and resources of certain *ribāṭ*, including *day'a* (orchard), *al-faḥṣ* (field of cereal), *sha'râ* (pasture and forest), and *buḥayra* (vegetable garden).[73] This might provide a model for analyzing the Palestinian *ribāṭs* and postulating what sort of economic models may have supported them.

The *qusūr* provide a second model for fortified sites serving as the locus for settlement and agricultural development. Significantly, the *qusūr* are rarely ever isolated, but are instead part of wider complexes comprised of various structures—palaces, forts, residences, and agricultural complexes and water supply. Many of the *qusūr* may have also been intended to develop into towns—functioning perhaps as the nuclei of settlements. Genequand has demonstrated that to understand the function of the *qusūr*, scholars must look beyond their fortified structures and consider associated external elements, including residential areas, hydraulic systems, industrial installations, and agricultural complexes.[74]

Many of the *qusūr* appear to be related to wealth investment in the form of agricultural development.[75] Curiously, several *qusūr* have special associated lands (*ḥayarat*) thought to be allocated for animals or agriculture–a potential parallel to the *ḥimā-ribāṭ* relationship. Investment in landed property, or estates known as *ḍiyāʿ* (*ḍay'a*, sing.), was popular during the Umayyad and 'Abbāsid periods, and may have its roots in pre-Islamic Arabia.[76] Caliphs and local elite invested in properties throughout Arabia, Egypt, and Syria-Palestine. For instance, Muʿawiya owned estates in the Hijaz, ʿAmr b. al-ʿAs owned several near Ashkelon, Hishām owned estates in Urdunn, and an Egyptian papyrus dated to 699–700 CE mentions a caliphal estate in the

[73] Hassen, "Les Ribat Du Sahel S'Ifriqiya: Peuplement et Évolution Du Territoire Au Moyen Âge," 157.
[74] Genequand, "Umayyad Desert Castles"; Whitcomb, "Periodic Palaces: An Economic Approach toward Understanding the 'Desert Castles,'" 96.
[75] For instance, Qasr Hayr al-Gharbi and al-Sharqi, Khirbet al-Minya, Ma'an, and Wadi al-Qantar and Umm al-Walīd, to name a few.
[76] Whitcomb, "Periodic Palaces: An Economic Approach toward Understanding the 'Desert Castles,'" 97, 100.

Fayyūm that was involved in wine production.[77] Meanwhile, private estates like the one near Ayla owned by the ḥadīth scholar, Abu Bakr al-Zuhri (d. 742), and the ʻAbbāsid family estate at al-Humayma represent entrepreneurial investments by the newly enfranchised local elite.[78]

Rather than treating Palestinian *ribāṭs* as isolated forts, they would benefit from a similar methodological approach with a focus on their hinterlands. The Palestinian bag-shaped storage jars (LRA 5 and 6) found at Yavne-Yam and Ashdod-Yam attest to some of the economic connections maintained by the coastal forts and their hinterlands.[79] The models provided by *qusūr* and the Tunisian *ribāṭs* suggests that connections between regional resettlement efforts, land grants, elite patronage, and wealth investment would be worth examining in the case of the Palestinian *ribāṭs*. Like the *qusūr*, coastal fortifications may have been part of a settlement and agrarian development strategy, with some sites following the model of an agriculture estate, and successful ones perhaps eventually developing into towns, or at least becoming lucrative sources of commodities and revenue. The archaeological assemblage from the excavation at Ashdod-Yam provides some insights into some of the non-military activities that were conducted at these forts. Among the finds were everyday items including fishing weights and fishing net needles, finely made basalt and marble basins for grinding and pounding wheat, barley, and legumes, spindle whorls, weaving needles, hair pins and a comb, a chess piece, and a pilgrim cross

[77] Whitcomb, "Notes for an Archaeology of Muʿāwiya: Material Culture in the Transitional Period of Believers," 15; Lecker, "The Estates of 'Amr b. al-'Āṣ in Palestine: Notes on a New Negev Arabic Inscription"; Sharon, *Corpus Inscriptionum Arabicarum Palaestinae (CIAP)*, 1:30–31; Sijpesteijn, "The Arab Conquest of Egypt and the Beginning of Muslim Rule," 2007, 450–51.

[78] Cobb, "Scholars and Society at Early Islamic Ayla," 427.

[79] Raphael, *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*, 32. Several Umayyad storage jars from Ashdod-Yam stamps with Arabic inscriptions on their handles—including "Allāh aḥʻad" (God is one) and "Yā rabb salimm wa-nafiiʻ" (Oh Lord, save and cause prosperity). Other stamps included a rosette or a star and rosette, both popular on storage jars in southern Palestine.

pendant attest to the varied activities and individuals who either inhabited Ashdod-Yam.[80] Overall, the collection of material from the excavations at Ashdod-Yam attests not only to the continued occupation of this early Islamic coastal fort (and later, a ribāṭ) into the Fatimid period and its economic links to both hinterland and overseas networks, but also the character of the lives of its inhabitants.

5.3 Summary/Synthesis

Despite being discussed primarily as military and religious structures, it is probable that the Palestinian *ribāṭs* were entangled with many of the complex economic, social, and political layers that comprised the thughūr baḥriyya. The Palestinian *ribāṭs* played a key role in propagating the religious and political ideology that underpinned the sacralization of the maritime frontier. Thus, the *ribāṭs* were both born out of the maritime frontier, but also key components in its creation. They were monumental symbols of power and legitimacy—signposts demonstrating Muslim presence and control over the coastal frontier. Their foundation and upkeep helped frame caliphs and regional administrators in the role of the proper rulers and protectors of the dār al-Islām. Beyond their symbolic, religious, and political roles, they were also economic structures, playing a role in navigation and acting as waypoints along the maritime and terrestrial networks that linked Bilād al-Shām with the interregional trade networks of the wider eastern Mediterranean and Aegean. Moreover, based on the models provided by *qusūr* and Tunisian *ribāṭs*, they may have controlled or had influence over the agricultural estates and industries in their hinterland, and even served as nuclei for future communities. This is supported by the diverse artifact assemblages found at some of these sites, which offer glimpses

[80] Raphael, 59–61.

into the day-to-day lives of the people who inhabited these coastal spaces. Much work is needed to further refine the nature of the *ribāṭs*, but it should begin not with the exploration of the ruined fortifications, but with an expanded investigation of their hinterlands and broader role within the complex layers of the maritime frontier.

Chapter 6 - Conclusion

6.1 Significance of the Study

The Muslim conquest of Syria-Palestine transformed the coast of Bilād al-Shām into a maritime frontier, transforming patterns of trade and ending Byzantine control over the sea routes of the eastern Mediterranean. The nature of this transformation has been much debated and clouded by outdated paradigms, biased histories, and problematic archaeological data. Despite the critiques and revisionist works of historians and archaeologists, the Pirenne Thesis continues to cast a shadow over the economic history of the post-Roman Mediterranean and notably, the fate of Syria-Palestine's Classical ports and coastal cities under Islam. The predominant and persistent narrative has been one of economic decline, fracture, and regional abandonment. However, while the conquest might have marked the end of an era from the Byzantine perspective, it also marked a new beginning for the nascent Islamic empire—one in which the foundation would be laid for a Muslim maritime network that would ultimately stretch from the Western Mediterranean to the Far East.

It is crucial to recognize that there are fundamental flaws and biases in data supporting the characterization of the Islamic maritime frontier as a zone marked by of conflict, the retraction of trade networks, and abandonment (see chapter 1.2). Militaristic biases in the conquest narrative and literary accounts have helped propagate this characterization, describing the coast as a 'no-man's-land.' These histories were not written as uncritical accounts, but are propagandistic in nature, marked by literary tropes. The problems created by these biased accounts are exacerbated by an Orientalist tendency to portray Islam as being culturally and intellectually "incompatible with the sea."

The archaeology supporting this model of economic decline and depopulation is equally problematic, if not more so (see section 1.2.4). The distribution of archaeological work throughout the coastal region of the Levant has been uneven, with a dearth of early Islamic era material from Lebanon and Syria. This is due in part to differential academic interest, limited resources, and regional conflict. Site selection further biases the available datasets, as many projects have been focused on Classical or Biblical remains—though this situation is changing, particularly with a series of recent studies in Israel-Palestine. Another fundamental problem that arises is with the dating of transitional ceramics. Scholars have long assumed a late seventh century terminus for many forms based on the erroneous belief that the conquest brought about a stylistic change in material culture. However, it appears that many forms continue into the eighth, ninth centuries, and tenth centuries. Moreover, it can be difficult to identify the subtle differences in late survivals of these forms and establish their provenance without petrographic analysis. Thus, many productions have been assigned a seventh century terminus based on the widely accepted history of the region, and historical studies have subsequently argued for decline based on the apparent disappearance of these forms. Fortunately, new typologies and chronologies are being developed, and an increased interest in in transitional and early Islamic material culture of the region has helped present a developing picture of 'intensification and abatement' and nuanced transformation in Syria-Palestine.

The overall objective of this dissertation has been to reevaluate these outdated paradigms and provide a more detailed understanding of the early Islamic maritime frontier in Bilād al-Shām. Following the lead of Eger, I have reframed the frontier as a zone comprised of deeply interwoven and permeable political, military, religious, economic, cultural, and geographic layers, each affecting and pulling on the others. Through a reanalysis of the conquest narratives,

literary sources, and archaeological evidence, I have sought to provide a more complex understanding of the institutions, interactions, and events that have defined the maritime frontier, and how they were each multifaceted in character and shaped by political, economic, and religious components. At the outset of this dissertation, I proposed four questions to help constrain and frame the course of this research which I will now seek to answer.

6.2 Research Questions

6.2.1 How did the early Arab rulers conquer and consolidate power along the Syro-Palestinian coast, and what did their policies and priorities tell us about their approach to the sea?

The conquest of the Syro-Palestinian coast was more than a series of battles by marauding armies seeking to claim land and dislodge Byzantine rule. The early Muslim rulers and their generals carried out a complex and calculated plan to conquer and consolidate the Mediterranean littoral, with an apparent priority on securing and revitalizing the primary ports of each district. Though the initial conquest of the littoral began in 632 CE, consolidation of power along this contested coastal frontier continued well into the ʻAbbāsid period, as various dynasties vied for control over the ports. A close analysis of the literary sources provides insights into numerous phenomena, including new perspectives on the strategies underlying the conquest of the coast, the value placed on maritime activity, and the shifting priorities of the Muslim state, which I have examined in detail in Chapter 1. To better understand how policies and priorities developed and shifted along the coast, I have divided the conquest into five stages:

During the initial stage of the conquest of the coast, the primary ports of the provinces of Filastin and Urdunn were captured first, followed by those of Hims and Dimashq. In 638 CE, ʻUmar established the entire coast of Syria-Palestine as a unified administrative region under the

command of the *amīr al-sāḥil.* The early Muslim commanders repaired coastal fortifications and established a network of communication between watchtowers. Garrisons were posted in critical ports during the sailing season to guard against Byzantine sea raids, but also likely to control trade.

While the first stage was focused on capturing and holding the main coastal centers of each region, the second was centered on more permanent measures of settling, developing, and expanding control over the coast, and importantly, the development of a navy to continue the expansion overseas. During ‘Uthmān’s reign (644-56), Muslim soldiers were allotted land along the maritime frontier to settle and develop, while foreign populations were transplanted to dissident areas along the coast, or to ports where the Byzantines might attempt to establish bridgeheads for reconquest. Mu‘āwiya seemingly had a clear vision for the early Muslim navy. While power was still being consolidated along stretches of Syria-Palestine’s coast, he developed the ports of Acre and Tyre in *jund* Urdunn as centers for the future Syrian fleet. Resources were redirected to developing the arsenals in Egypt, Syria, and Tunisia and skilled craftsmen were transplanted around the early empire to build the fleets of the caliphate. It was during this time that the esteemed position, ‘commander of maritime expeditions,’ was born. These admirals remained an important fixture in the early Islamic administration.

The end of the Second Civil War (680-92) ushered in the third stage, which can be characterized as a period of expansionism. The conquest of Constantinople remained at the forefront of Islamic expansionist policy. Al-Walīd created a new tripartite division of administration between the coasts of Ḥimṣ, Dimashq, and Urdunn. The Muslim fleets were stationed between the naval bases at Latakia, Tripoli (and Beirut), and Acre. In 717-18, these fleets joined the land forces in besieging Constantinople.

The failed siege of Constantinople effectively ended the expansionist agenda begun by al-Walīd. The fourth stage was therefore characterized by a more refined maritime policy that focused on consolidating the fleet at Tyre in the *jund* of Urdunn and defending the coast. The Muslim fleets continued to raid overseas, but these expeditions appear to have been more targeted and less focused on conquest. For instance, the expedition against Cyprus under Walīd II (r. 743-44) may have been an attempt to reinstate the state's waning political and military influence over the island. 'Umar II (r. 717-20) ended the tripartite division of administration along the coast and gathered the fleets in Tyre. Importantly, he instituted a new policy whereby the fleets were overseen by a single commander who had a good Islamic pedigree. The first individual appointed to this new position—al-Mukhāriq b. Maysara al-Ṭāʾī—was both a ḥadīth scholar and an Arab. This marked the beginning of the spiritual-military leader along the maritime frontier.

While the foundations for the fifth stage were established during the second quarter of the 8th century, they become prominent following the shift of political power to the east with the accession of the 'Abbāsids. During this phase, the coastal cities of Syria-Palestine became the epicenters of a process of sacralization, which transformed the coast into a sacred maritime frontier. An influx of religious scholars and their families emigrated to coastal centers like Beirut and Ashkelon in the mid to late 8th century, and through their teachings, their role as spiritual leaders was born. It was during this stage that the concept of *ribāṭ* crystalized, and the Syro-Palestinian coast was transformed into an Islamic religious frontier. The rising power of these spiritual leaders diminished the caliphs' role as spiritual and military leaders of the *ummah*. To reclaim this authority and legitimacy, caliphs took inspiration from the feats of the early commanders and leaders of the conquest. From the very beginning, caliphal patronage along the

coast was a means of claiming political and religious authority along the maritime frontier. Accordingly, later dynasties adopted this strategy as indicated by the numerous renovations of coastal fortifications and constructions of mosques. The building programs of the ʻAbbāsid and Ṭūlūnid caliphs were as much a symbol of caliphal legitimacy as they were powerful expressions of control over the Islamic maritime frontier for political and economic purposes.

The literary sources are largely silent on the economic aspects of the conquest of the coast. However, the invading Muslim armies would have clearly recognized the economic potential of the coast. The priority placed on capturing ports may have in a large part been driven by the desire to secure lucrative centers of movement and exchange. Control over the Syro-Palestinian ports extended control over both inland and maritime trade routes. Hishām's commercial investments in Tyre and his relocation of the Syrian arsenal there indicate a keen understanding of the economic value in controlling and investing in trade. In addition to being a funneling point for commodities, ports generated revenue through taxation and customs. Given the oppressive measures that Willibald and his companions faced when passing through Tyre in 726/27 CE, we can imagine that the state's efforts to fortify and garrison these commercial centers was to ensure to continuous flow of revenue. The fact that Byzantine raids were largely aimed at the primary trading ports would suggest that disrupting these substantial avenues of revenue was a strategic aim.

Ultimately, the conquest and consolidation of the Syro-Palestinian coast should be seen as a complex, multifaceted process. Beyond military objectives, many of the policies of the early caliphs indicate a priority on economic goals and defending and securing trade routes. Later military actions, including fortifying the coast, became increasingly symbolic and religiously motivated. The process would have involved a broad range of cross-cutting interactions, from

negotiations with conquered communities, the introduction of new religious and cultural practices, and the integration of a broad array of foreign peoples and cultures through coastal resettlement programs. Importantly, this process integrated the Islamic world into the broader Mediterranean economy through the economic exchange and cross-cutting interactions that accompanied the maritime raids.

6.2.2 How did the maritime frontier compare to land-based frontiers, and how did the unique nature of the coast impact the Muslim approach to the frontier?

Cleanly dividing the land from the sea, a coastline can give the impression of a hard boundary when drawn upon a map, or even when seen from shore. Yet this boundary is in constant motion, and by no means static. Maritime frontier zones are not defined by fixed lines but are diffuse zones that encompass both terrestrial and marine environments. The dual nature of the maritime frontier sets them apart from inland frontiers. Therefore, as I have argued, they require a revised understanding of boundaries, space, and activity within them (Chapter 1.3.2)

Maritime frontiers have nested rhythms, beyond the changing of seasons that are typical of inland frontiers. These patterns shape every aspect of movement and connectivity within the frontier zone. While at times travel between two ports might be swift, at other times, it might be arduous, hazardous, or even impossible. The innate patterns of maritime zones include cyclical changes in the wind and currents, the daily shifting of diurnal breezes, seasonal storms, and unexpected squalls, and submerged hazards. Mobility within the maritime frontier required specialized ships, technology, navigational knowledge, social networks, and political permits.

While cities are confined to land, their populations were not. Fishermen, merchants, mariners, pilgrims, and raiders all inhabited the maritime zone—earning their living from it, and

sleeping, eating, and travelling upon the water. For some ships and sailors, the sea would be a final resting place. The interface between the sea and shore was a boundary of exchange for commodities, information, technology, and even people. The ability of ships to beach along the coast made it a permeable boundary, facilitating small-scale or even covert exchanges, while the presence of official ports also made it a boundary that was meticulously controlled.

Thus, the early Islamic state did not stop at the shore of Bilād al-Shām, but extended beyond it, encompassing the trade routes that serviced the region, the marine resources harvested by its fishermen, and the territorial waters policed by its navy. The region's administrators clearly recognized the unique character and obstacles posed by the maritime frontier and took various measures to establish it as an independent administrative zone. While Bilād al-Shām was divided into separate administrative provinces, Caliph 'Umar established a separate governor of the coast (*amīr al-sāḥil*) in 638 CE. Unlike other administrators who oversaw districts or cities, the *amīr al-sāḥil's* primary role was to oversee the defense of the coast, including the construction of fortifications, the manning of watchtowers, and the allocation of garrisons.

While the administration of the coast would change over the centuries, echoes of this early structure were apparent in the late ninth to early tenth century administrative structures. By that time, the coasts of Syria-Palestine had come to be referred to as *thughūr baḥriyya* (sea frontiers). According to Qudāma, while the provinces of Filasṭīn, Urdunn, Dimashq, and Ḥimṣ were all governed independently, their coastal portions were considered components of the overall maritime frontier, and collectively administered by a *ṣāhib al-thughūr al-baḥriyya*. Unlike other governors, the *ṣāhib al-thughūr al-baḥriyya* was responsible for the fleet, rather than the administration of the cities.

An important component of controlling the frontier were the laws that governed the sea (Chapter 3.1.3). The first codified Islamic legal treatises on maritime law appear in the early tenth century, and unfortunately, similar documents are not available for the earliest centuries of the Islamic period. However, the evidence suggests that the Muslims adapted aspects of the well-established Rhodian Sea Law to their own needs and purposes. Significantly, the adoption of established maritime law would have created a familiar basis of interaction between Muslims and foreign merchants who visited the *dār al-Islām*, facilitating connectivity, exchange, and cross-cultural interactions.

Travel across the frontier involved the paying of religious dues, fees, and taxes and required extensive documentation, receipts, and certificates of protection (*amān*) which allowed foreign merchants and travelers to conduct business and pass freely. Trade was funneled through official entrepots, and merchants would have to pay taxes on the cargo, as well as a variety of port fees. Travelers and ships alike were subject to intense scrutiny, and smuggling was persecuted. Maritime law also dictated naval interactions at sea, as well as exchanges occurring within the *dār al-ḥarb*. An intriguing circumstance was that naval warriors who were engaged in *jihād* were allowed to trade in the *dār al-ḥarb*, though military vessels were not permitted to transport private merchandise without explicit permission from the admiral.

Maintaining control over the coastal waters was essential both for defending against Byzantine raids and protecting maritime resources, as well as ensuring the lucrative flow of trade goods, commodities, and pilgrims. The early caliphs prioritized rebuilding coastal fortifications and manning the region. This was accomplished through resettlement efforts that included the transfer of foreign populations to the coast and the allotment of land to soldiers. Garrisons were also stationed at strategic centers and places that were prone to rebellion. Intriguingly, during the

initial stages of the conquest, these garrisons rotated and did not maintain a full permanent presence during winter when the sea was closed. The increase in forces during the summer months may have partially been in response to an increase in Byzantine raids during the sailing season. More likely, however, is that their presence was in response to the uptick in commerce during the summer, and that their job was to safeguard and tax trade.

The state employed several strategies to project power over the water. Along with refortifying coastal cities, the early caliphs constructed and rebuilt a network of watchtowers along the coast (Chapter 3.2.2). These watchtowers and city towers increased visibility out to sea, allowing observers to monitor shipping traffic as well as signs of pirates or even Byzantine raiders. Visibility varied based on the weather but was 10 nautical miles on average, creating a wide zone of control. As the towers were visually linked, watchmen could quickly send signals along the shore and to the district capitals, warning of attacks or calling for reinforcements and naval intervention. The watchtowers also served as navigational markers for mariners, and along with towering minarets and city walls, they created a visual reminder of Muslim control over Bilād al-Shām and the sea.

An effective naval presence was essential to policing the sea lanes, controlling trade, and extending the conquest overseas. Muʿāwiya is credited with the inception of the early Muslim navy, and his capture of Cyprus in 648/49 marked the end of Byzantine hegemony over the sea. Through the recruitment of Egyptian shipwrights and carpenters, the early Islamic state ultimately established arsenals at Babylon, al-Qulzum, as well as naval bases at Alexandria, Acre, Beirut, Tripoli, and Latakia.

According to the Aphrodito papyri, during the eighth century, the Muslim navy was comprised of four raiding fleets (Egyptian, Syro-Palestinian, African, and a ‘raiding fleet of the

sea,' likely based in the Red Sea) as well as one that defended the Nile mouths (Chapter 3.2.3). They were overseen by a 'commander of maritime expeditions,' though the organization and administration of the navy changed over time as subsequent caliphs adapted their maritime strategies (Chapter 1).

The investment in the navy had significant secondary impacts on the maritime frontier. Caliphs pulled significant resources and manpower from across the provinces to establish the early Muslim naval bases, build the navy, and man the fleets. This would have stimulated shipbuilding, as well as its dependent industries, including timber harvesting, ropemaking, metalworking, and textile production. The subsequent flow of mariners, skilled craftsmen, and technology throughout the empire would have ultimately led to cross-cultural interactions, social exchange, and the sharing of maritime traditions and knowledge.

6.2.3 How did maritime trade and connectivity transform during the Byzantine-Islamic transition, and what economic, social, and technological aspects drove the 7th and 8th century changes?

Following the conquest of Bilād al-Shām, the trading networks that had integrated the Byzantine Empire fundamentally changed. The Roman-Byzantine fiscal system was part of a conduit that mobilized not only grain and agricultural goods, but a wide variety of products, from one end of the Mediterranean to the other. For scholars who see the Byzantine fiscal system as the primary driver of interregional exchange, its end necessitated a decline in the vitality of trade and the economic networks that had become entangled with it. This position has been supported by the declining presence of imported late Roman amphorae as well as African and Phocaean Red Slip wares in the eastern Mediterranean. While all of these served as established markers for

connectivity during the Roman period, they simply cannot be used the same way to measure trade in the late seventh century and beyond. The picture of decline is exacerbated by the faulty ceramic chronologies that do not account for long-lived productions. For instance, the terminus dates of many fine wares and amphorae are not well understood (nor accepted), and many survivals of CRS/LRD (Form 9) and Late Roman Amphorae continued well into the eighth, ninth, and tenth centuries. Moreover, well-established typologies and chronologies that can account for the diversity of amphora forms and production centers do not exist for the early Islamic period.

In this study, I have sought to redefine the seventh and eighth century transformations in trade not as one of decline, but one of fundamental reorganization, characterized by the redirection of resources, the emergence of new productions centers, and a realignment of trading networks. Rather than economic collapse, the end of the *annona* and rise of the early Islamic state created opportunities for regional products and for new systems of movement and exchange to develop.

During the first centuries after the conquest, Egypt emerged as a significant economic influence in the region. It became a primary production center for a variety of Late Roman amphorae survivals as well as red slipped ware, which outcompeted ARS and many other forms in the region. These Egyptian productions travelled around the eastern Mediterranean to southern Bilād al-Shām, Cyprus, and southern Anatolia. While the distances traveled were not the same as those covered by ARS in the Roman period, these networks were still interregional in nature, crossing cultural and administrative boundaries, and requiring specialized technology, navigational knowledge, and social networks.

The distribution of Cypriot amphorae and tablewares suggests that its trading networks became closely oriented toward Egypt, southern Bilād al-Shām, and Anatolia. The diverse production of amphora forms and imitations during this period can be read as evidence of a highly competitive market. Though the data from Syria is absent, based on the distribution of later Syrian Brittle Ware, it appears that northern Bilād al-Shām had interregional ties to Beirut, Anatolia, and Mesopotamia. Overall, we can identify the emergence of several interregional maritime trading networks.

a. Egypt and the southern-central Bilād al-Shām (Gaza to Beirut)
b. Northern ports of Bilād al-Shām (Tripoli to al-Mina) and southern Anatolia
c. Cyprus and the southern-central ports of Bilād al-Shām (Gaza to Beirut)
d. Cyprus and Egypt
e. Cyprus and southern Anatolia

The proliferation of fine ware and cooking ware production within Bilād al-Shām also suggests that local manufacturers took advantage of the market opportunities created by the decline of ARS and other imports and began intensifying their own productions. The patterns of ceramic production and distribution, in addition to known administrative and cultural boundaries, help us define the presence of several intra-regional maritime interaction spheres:

a. The Egyptian Delta
b. Southern-central Bilād al-Shām (Gaza to Beirut)
c. Northern Bilād al-Shām (Tripoli to al-Mina)
d. Cyprus
e. Southern Anatolia

As discussed in Chapter 4.2.4 the distribution of these regional and interregional networks is in a way, partially reminiscent of Bronze Age and Iron Age patterns of

connectivity—particularly the strong ties between Egypt, Cyprus, and the Southern Levant. Separated by millennia, these exchange networks were in no way equivalent. However, the return to these connective patterns highlights 1) the persistent push of the winds, currents, and geography that helped shape regional connectivity, and 2) the foreign and anomalous nature of the trading systems that accompanied the *annona*—a system that siphoned resources from regions for the benefit of a distant capital. When this fiscal system ended, the invisible but persistent buzz of activity within the maritime small worlds around the eastern Mediterranean helped to establish resilient social, cultural, and economic ties that could withstand external political and environmental shifts. In sum, the picture that emerges along the eastern Mediterranean and Syro-Palestinian maritime frontier following the conquest is not one of decline, contraction, or abandonment—it is a mosaic of robust and expanding regional economies that were increasingly integrated both through the redistribution of products and resources as well as the movement of skilled workers, sailors, pilgrims, merchants, and fleets across the maritime frontier.

6.2.4 How does frontier theory help us form a more multifaceted and complex view of the maritime frontier and the Islamic policies and institutions created to support it?

The fundamental characteristic of frontiers is that they are places of overlap, exchange, and interchange. Frontier theory draws attention to these interactions, prioritizing the places and conceptual spaces where economic, political, cultural, and religious boundaries meet. This perspective can be applied to every aspect of the history and archaeology of the Islamic maritime frontier. For instance, when considering the early Islamic arsenals, frontier theory helps draw attention to the motivations and impacts beyond those related to their military role. Arsenals

should not be seen simply as state shipbuilding centers, but as dynamic places shaped by cross-cutting interactions. They were places of industry and economic exchange, and the destinations for timber, iron, rope, canvas, and provisions that were sourced from throughout the empire. The crews of the fleets stationed there were not culturally uniform, but relied on shipwrights, mariners, and marines who were also drawn from distant regions. Several of the Aphrodito papyri attest to the recruitment of Egyptians to serve in the African and Syrian fleets (Chapter 3.2.3). Even the location (and relocation) of arsenals was not entirely based on military objectives but was influenced by economics and politics as well. For instance, the transfer of the arsenal from Acre to Tyre under Hishām was reportedly tied to his personal commercial investments in Tyre.

I have selected the Palestinian *ribāṭs* as a case study for how frontier theory helps us better understand these institutions. Typically, *ribāṭs* are discussed as fortified locations that played a role in *jihād* and the religious duty of defending the coast. I have shown that scholars have 1) back-projected a tenth century religious-military system onto early Islamic fortifications, 2) conflated forts with ribāṭ, as opposed to recognizing that some forts ultimately became places of ribāṭ, and 3) looked at *ribāṭs* in isolation, without investigating their hinterlands or alternative roles.

The Tunisian *ribāṭs*, Roman *limes*, ʻAbbāsid waystations, and *qusūr* (desert castles) all provide parallels for how forts and *ribāṭs* could function outside of the exclusively religious-military realm. They played an important role in the visual landscape of the region, both as navigation markers for mariners, as well as demarcating the presence of Muslim control. They were symbols that projected both the power of the state as well as the status of the elites that controlled them. They also served a variety of economic roles as waystations on the maritime

and terrestrial trading corridors, as watchtowers to protect shipping lanes, and as places of economic and prisoner exchange. And like the *qusūr* and the Tunisian *ribāṭs*, they may have ultimately been the nuclei of settlements and agricultural estates.

6.3 Further Work

A fundamental question that must be answered at the end of every study is what gaps remain, and what further work must be done. My goal with this dissertation was to challenge the established narratives, propose a new framework for understanding interactions along the maritime frontier, draw attention to the economic resilience and vitality of the region, and lay the groundwork for future investigations. As such, it raises far more questions than it answers.

Some issues are beyond the scope of any one research project or scholar. The dearth of data available from coastal Syria-Palestine will remain an enduring problem until new surveys and excavations are undertaken with a priority on Islamic levels. Similarly, the dating of late antique and early Islamic ceramics needs considerable reevaluation free from the assumption of a late seventh century terminus, with new dates provided from secure contexts. Such a study would additionally necessitate the reevaluation of early site publications and their presumed timelines. However, with these broader endeavors in mind, I would propose two areas which deserve further study, in the context of this dissertation.

Firstly, this dissertation has focused largely on elite level military, religious, and political interactions, as well as economic transactions. Necessarily, it has not explored the nature of the frontier on an individual level. A study of settlement patterns and urban contexts during the transition is essential to understanding the lives of the various communities that made up the maritime frontier. The established paradigm of widescale population abandonment has been

advanced by a focus on Classical and Byzantine-era settlements, but it is essential to ask where did these people go? Moreover, the chronicles record the wide-scale resettlement of some sites by external populations, including Jewish and Persian communities. Additionally, populations from Egypt, including shipwrights and potters, likely also made their way into the frontier zone. The maritime frontier—like many frontier areas—was a melting pot for individuals from different states and cultures. Moreover, it would have been a zone of interaction between the established Christian, Jewish, and Byzantine populations and the new Arab populations. Evidence of this confluence may be visible in both material culture and architecture, including building styles and religious structures.

Secondly, a major area of need is to explore the hinterlands of coastal forts and *ribāṭs*. I have proposed, based on evidence from the *qusūr* and the Tunisian *ribāṭs*, that they may have served as the nuclei for settlements and agricultural estates. The Palestinian *ribāṭs* integrated military, religious, propagandistic, and economic components, and as an institution, they helped link the complex layers that made up the frontier together. It is essential to understand not just the structures themselves, but how they impacted the communities, pathways, and lands around them.

6.4 Reconceptualizing the Maritime Frontier

Overall, the picture that emerges of the maritime frontier is not one of economic collapse and divided Muslim and Christian worlds, as presented by those focused on conflict, but an entangled world, filled with cross-cultural, social, and economic interactions. In many ways, the frontier zone functioned both as a barrier and a bridge between the Byzantine and Islamic

Empires and what later became known as the *dār al-Islām* (house of Islam) and the *dār al-ḥarb* (house of war).

As a barrier, the maritime frontier zone was fiercely defended by watchtowers, fortified cities, garrisons, and fleets, and served as a launching point for raids on Byzantine territory. While it is this view of the frontier that dominates the historical narratives and modern characterization, the maritime frontier was also a bridge—an economic and cultural interface comprised of cross-cutting social networks that spanned geographical, social, and ideological borders. Even the most militarized aspects of the frontier carried with them economic interactions. Maritime law made provisions for exchanges with foreign merchants during war, as well as trade conducted while raiding abroad. The ransoming of captives at *ribāṭs* marked the confluence of economic, social, and political exchange, where individuals were ransomed at established rates by multi-lingual merchants.

Although it has been characterized as a region in economic decline, the frontier is better understood as a zone in transition. While from the Classical perspective, the conquest of Bilād al-Shām represented the end of Byzantine hegemony over the sea and of the redistribution systems that Constantinople relied on, for the nascent Islamic Empire it marked a new beginning, ripe with opportunities for local producers to find new markets for their goods and for merchants to develop new trading networks throughout the eastern Mediterranean.

Rather than displaying a fear of the sea and avoiding maritime ventures, the early caliphs clearly understood the potential and opportunity provided by the sea. They prioritized the conquest and refurbishment of key ports, invested in maritime infrastructure, established arsenals, and developed a strong naval presence in the eastern Mediterranean. The navy was a mechanism for launching raids and propagating religious warfare, but it was also a tool for

controlling and protecting the maritime resources and economic connections that were vital to the empire. In the end, these priorities laid the foundations for maritime networks that centuries on would ultimately stretch between the western end of the Mediterranean and the Far East.

Bibliography

Adan-Bayewitz, D. “The Pottery from the Late Byzantine Building and Its Implications (Stratum 4).” In *Excavations at Caesarea Maritima: 1975, 1976, 1979 Final Report*, edited by Lee Levine and Ehud Netzer, 21:90–129. QDEM. Jerusalem: Hebrew University of Jerusalem, 1986.

Agius, Dionisius. *Seafaring in the Arabian Gulf and Oman: The People of the Dhow*. New York; London: Routledge, 2005.

Agius, Dionisius A. *Life of the Red Sea Dhow: A Cultural Hisotry of Seaborne Exploration in the Islamic World*. London: I.B. Tauris, 2019.

al-Muqaddasi. *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqasim Fi Ma’rifat al-Aqalim*. Translated by Basil Anthony Collins. New York: Ithaca Press, 2001.

Al-Zuzani. *Sharh Al-Mu’allaqat as-Sab’*. Cairo, 1907.

Amitai-Preiss, Nitzan. “Kura and Iqlim Sources and Seals.” *Israel Numismatic Journal* 19 (2016): 120–32.

———. “Umayyad and Later Period Coins.” In *Horvat Mesad: A Way-Station on the Jaffa-Jerusalem Road*, edited by Moshe Fischer, 234–42. Tel Aviv: Emery and Claire Yass Publications in Archaeology, 2012.

Amitai-Preiss, Reuven. “Northern Syria between the Mongols and Mamluks: Political Boundary, Military Frontier, and Ethnic Affinities.” In *Frontiers in Question: Eurasian Borderlands, 700-1700*, edited by Daniel Power and Naomi Standen, 128–52. London: Macmillan Press Ltd, 1999.

Armstrong, Pamela. “Trade in the East Mediterranean in the 8th Century.” In *Byzantine Trade, 4th-12th Centuries*, 157–78. Farnham: Ashgate Publishing Company, 2009.

Arnaud, Pascal. “Ancient Sailing-Routes and Trade Patterns: The Impact of Human Factors.” In *Maritime Archaeology and Ancient Trade in the Mediterranean*, edited by Damian Robinson and Andrew Wilson, 59–78. Oxford: Oxford Centre for Maritime Archaeology, 2011.

Arnon, Yael. *Caesarea Maritima, the Late Periods (700-1291 CE)*. Oxford: Archaeopress, 2008.

Avni, Gideon. *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*. Oxford: Oxford University Press, 2014.

Balādhurī, Abbas Ahmad ibn-Jabir al-. *Kitāb Futūḥ Al-Buldān*. Translated by Philip Khuri Hitti. Vol. 1. London: P.S. King & Son, Ltd., 1916.

Banaji, Jairus. *Agrarian Change in Late Antiquity: Gold, Labour, and Aristocratic Dominance*. Oxford: Oxford University Press, 2001.

Barbe, Herve, Yoav Lehrer, and Miriam Avissar. "Ha-Bonim." *Arkheologiyot: Excavations and Surveys in Israel* 114 (2002): 30–33.

———. "Ha-Bonim." In *The New Encyclopedia of Archaeological Excavations in the Holy Land*, edited by Ephraim Stern, Hillel Geva, Alan Paris, and Joseph Aviram, 5:1753–55. Jerusalem: The Israel Exploration Society, 2008.

Barbe, Herve, and Itamar Taxel. "Habonim-Kafr Lam: A Ribat of the Levantine Coastal Defensive System in the First Centuries of Islam." In *The Art of Siege Warfare and Military Architecture from the Classical World to the Middle Ages*, edited by Michael Eisenberg and Rabei Khamisy, 153–63. Oxford: Oxbow Books, 2021.

Barkai, Ofra, and Yaacov Kahanov. "The Tantura F Shipwreck, Israel." *The International Journal of Nautical Archaeology* 36, no. 1 (2007): 21–31.

Barkai, Ofra, Yaacov Kahanov, and Miriam Avissar. "The Tantura F Shipwreck: The Ceramic Material." *Levant* 42 (2010): 89–91.

Barkan, Diego, Assaf Yasur-Landau, Hans Mommsen, David Ben-Shlomo, and Yaacov Kahanov. "The 'Dor 2006' Shipwreck: The Ceramic Material." *Tel Aviv* 40 (2013): 117–43.

Bar-Nathan, R, and W Atrash. *Baysan. The Theater Pottery Workshop*. Vol. 2. IAA Reports 48. Israel Antiquities Authority, 2011. https://www.israelexplorationsociety.com/product-page/copy-of-iaa-reports-48-bet-shean-ii-baysan-the-theater-pottery-workshop.

Bartl, Karin. "Islamic Settlements in the Plain of Akkar/Northern Lebanon." *Al-Usur al-Wusta* 11, no. 2 (1999): 29–33.

Bell, H. I. "Translations of the Greek Aphrodito Papyri in the British Museum." *Der Islam* 17 (1928): 4–8.

———. "Translations of the Greek Aphrodito Papyri in the British Museum, Part I." *Der Islam* 2 (1911): 269–83.

———. "Translations of the Greek Aphrodito Papyri in the British Museum, Part II." *Der Islam* 2 (1911): 372–84.

———. "Translations of the Greek Aphrodito Papyri in the British Museum, V." *Der Islam* 4 (1913): 87–96.

———. "Two Official Letters of the Arab Period." *The Journal of Egyptian Archaeology* 17, no. 3/4 (1926): 265–81.

Bell, H. I., and W. E. Crum, eds. *Greek Papyri in the British Museum: The Aphrodito Papyri*. Vol. IV. Oxford: Oxford University Press, 1910.

Berend, Nora. "Medievalists and the Notion of the Frontier." *The Medieval History Journal* 2, no. 1 (1999): 55–72.

Beresford, James. *The Ancient Sailing Season*. Vol. 351. Mnemosyne Supplements: History and Archaeology of Classical Antiquity. Leiden: Bril, 2013.

Bes, Philip. "Early and Middle Islamic Amphorae from the Tüpraş Field Excavations." In *Excavations at Tüpraş Field and Surrounding Surveys: The Roman, Byzantine, and Early Medieval Periods*, edited by Asa Eger, Vol. 8. Kinet Höyük Excavations Final Reports, Forthcoming.

Bianquis, Th., P. Guichard, A. Raymond, Sarab Atassi, J.P. Pascual, J.C. David, Suraiya Faroqhi, and K.A. Nizami. "Sūḳ." In *Encyclopaedia of Islam, Second Edition*, 2012.

Blakely, Jeffrey A. "Ajlan: Locating the Estate of Amr b. al-As." *Near Eastern Archaeology* 73, no. 4 (December 2010): 210–22.

Blankinship, K. Y. *The End of the Jihad State: The Reign of Hisham Ibn Abd al-Malik and the Collapse of the Umayyads*. Albany: State University of New York Press, 1994.

Bonner, Michael. *Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier*. New Haven: American Oriental Society, 1996.

———. "In Search of the Early Islamic Economy." *Al-Usur al-Wusta* 27 (2019): 1–39.

———. "The Naming of the Frontier: Awāṣim, Thughūr, and the Arab Geographers." *Bulletin of the School of Oriental and African Studies* 57, no. 1 (1994): 17–24.

Borrut, Antoine. "Architecture Des Espaces Portuaires et Réseaux Défensifs Du Littoral Syro-Palestinien Dans Les Sources Arabes (7e-11e Siècles)." *Archeologie Islamique* 11 (2001): 21–46.

———. "L'espace Maritime Syrien Au Cours Des Premiers Siècles de l'Islam (VIIe-Xe Siècle): Le Cas de La Région Entre Acre et Tripoli." *Tempora: Annales d'Histoire et d'Archéologie* 10–11 (2000 1999): 1–33.

———. "Pouvoir Mobile et Construction de l'espace Dans Les Premiers Siècles de l'islam." In *Le Gouvernement En Déplacement: Pouvoir et Mobilité de l'Antiquité à Nos Jours*, by Sylvain Destephen, Josiane Barbier, and François Chausson, 243–67. Rennes: Presses universitaires de Rennes, 2019.

Brauer, Ralph. "Boundaries and Frontiers in Medieval Muslim Geography." *Transactions of the American Philosophical Society, New Series* 85, no. 6 (1995): 1–73.

Brown, Peter. *The World of Late Antiquity [AD 150-750] from Marcus Aurelius to Muhammad*. London: Thames and Hudson, 1971.

Burke, Aaron A., Katherine Strange Burke, and Martin Peilstöcker, eds. *The History and Archaeology of Jaffa 2*. Monumenta Archaeologica 41. Los Angeles: Cotsen Institute of Archaeology Press, 2017. https://catalog.lib.uchicago.edu/vufind/Record/11411547.

Chabbi, J., and Nasser Rabbat. "Ribāṭ." In *Encyclopaedia of Islam, Second Edition*, edited by P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, and W.P. Heinrichs. Leiden: Brill, 2012.

Christides, Vassilios. "The Raids of the Moslems of Crete in the Aegean Sea: Piracy and Conquest." *Byzantion* 51 (1981): 76–111.

Cobb, Paul. "Scholars and Society at Early Islamic Ayla." *Journal of the Economic and Social History of the Orient* 38, no. 4 (1995): 417–28.

———. "Virtual Sacrality: Making Muslim Syria Sacred Before the Crusades." *Medieval Encounters* 8, no. 1 (2002): 35–55.

Cohen, Maayan, and Deborah Cvikel. "Ma'agan Mikhael B, Israel: A Preliminary Report of a Late Byzantine–Early Islamic Period Shipwreck." *International Journal of Nautical Archaeology* 48, no. 1 (2019): 189–207. https://doi.org/10.1111/1095-9270.12331.

———. "Rigging of the Ma'agan Mikhael B Shipwreck (7th–8th Centuries AD): New Finds." *International Journal of Nautical Archaeology* 49, no. 2 (2020): 291–302. https://doi.org/10.1111/1095-9270.12423.

Commito, Angela. "The Cities of Southern Asia Minor in the Sixth Century." In *Asia Minor in the Long Sixth Century : Current Research and Future Directions*, edited by Ine Jacobs and Hugh Elton, 109–41. Oxford & Philadelphia: Oxbow Books, 2019.

Conrad, Lawrence I. "The Conquest of Arwad: A Source-Critical Study in the Historiography of the Early Medieval Near East." In *The Byzantine and Early Islamic Near East, I: Problems in the Literary Source Material*, edited by Averil Cameron and Lawrence I. Conrad, 317–401. Princeton, N.J: Darwin Press, 1992.

Cooper, John. "Egypt's Nile - Red Sea Canals: Chronology, Location, Seasonality and Function." In *Connected Hinterlands: Proceedings of the Red Sea Project IV Held at the University of Southampton, September 2008*, edited by Lucy Blue, John Cooper, Ross Thomas, and Julian Whitewright, 195–209. BAR International Series 2052. Oxford: Archaeopress, 2009.

Coulson, Charles. "Structural Symbolism in Medieval Castle Architecture." *Journal of the British Archaeological Association* 132 (1979): 73–90.

Creisher, Michelle, Yuval Goren, Michal Artzy, and Deborah Cvikel. “The Amphorae of the Ma‘agan Mikhael B Shipwreck: Preliminary Report.” *Levant* 51, no. 1 (2019): 105–20.

Curta, Florin. “Introduction.” In *Orders, Barriers, and Ethnogenesis: Frontiers in Late Antiquity and the Middle Ages*, edited by Florin Curta, 1–9. Studies in the Early Middle Ages 12. Turnhout: Brepols, 2005.

Damgaard, Kristoffer. “Modelling Mercantislism: An Archaeological Analysis of Red Sea Trade in the Early Islamic Period (650-1100 CE).” PhD diss., University of Copenhagen, 2011.

Danys-Lasek, Katarzyna. “Pottery from Deir El-Naqlun (6th–12th Century). Preliminary Report from Polish Excavations in 2010 and 2011.” *Polish Archaeology in the Mediterranean* 23, no. 1 (2014): 543–642.

Davis, Danny. “Commercial Navigation in the Greek and Roman World.” PhD diss., The University of Texas at Austin, 2009.

———. “Navigation in the Ancient Eastern Mediterranean.” MA thesis, Texas A&M University, 2001.

Davis, Philip. “English Licenses to Crenellate 1199-1567.” *The Castle Studies Group Journal* 20 (2006): 226–45.

De Giorgi, Andrea U., and A. Asa Eger. *Antioch: A History*. Cities of the Ancient World. Abingdon, Oxon: Routledge, 2021. https://www.taylorfrancis.com/books/e/9781315727608.

Decker, Michael. “The End of the Holy Land Wine Trade.” *Strata: Bulletin of the Anglo-Israel Archaeological Society* 31 (2013): 103–16.

Dixneuf, D. *Amphores Égyptiennes. Production, Typologie, Contenu et Diffusion (IIIe Siècle Avant J.-C.-IXe Siècle Après J.-C.)*. Études Alexandrines 22. Alexandria, 2011.

Donald Whitcomb. “Islam and the Socio-Cultural Transition of Palestine – Early Islamic Period (638-1099 CE).” In *The Archaeology of Society in the Holy Land*, edited by Tom Levy, 488–501. London: Equinox, 1995.

Donner, Fred. *Muhammad and the Believers at the Origins of Islam*. Cambridge: The Belknap Press of Harvard University Press, 2010.

———. “Qur’anicization of Religio-Political Discourse in the Umayyad Period.” *Revue Des Mondes Musulmans et de La Méditerranée* 129 (2011): 79–92.

———. *The Early Islamic Conquests*. Princeton, N.J: Princeton University Press, 1981.

———. “Visions of the Early Islamic Expansion: Between the Heroic and the Horrific.” In *Byzantium in Early Islamic Syria*, edited by Nadia El Cheikh and Shaun O’Sullivan, 9–29. Beirut: American University of Beirut, 2011.

———. “Was Early Islam an Apocalyptic Movement?” Lecture, The Medieval Institute, University of Notre Dame, February 26, 1998.

Durak, Koray. “Commerce and Networks of Exchange between the Byzantine Empire and the Islamic Near East from the Early Ninth Century to the Arrival of the Crusaders.” Harvard University, 2008.

Effros, Bonnie. “The Enduring Attraction of the Pirenne Thesis.” *Speculum* 92, no. 1 (2017): 184–208.

Eger, Asa. “Frontier or Frontiers? Interaction and Exchange in Frontier Societies.” In *The Islamic-Byzantine Frontier: Interaction and Exchange Among Muslim and Christian Communities*, 158–73. London: I.B. Tauris, 2015.

———. “Ḥiṣn Al-Tīnāt on the Islamic-Byzantine Frontier: Synthesis and the 2005–2008 Survey andExcavation on the Cilician Plain (Turkey).” *Bulletin of the American Schools of Oriental Research* 357 (2010): 49–76.

———. “Ḥiṣn, Ribāṭ, Thaghr or Qaṣr? Semantics and Systems of Frontier Fortifications in the Early Islamic Period.” In *The Lineaments of Islam*, edited by Paul Cobb, 427–55. 95. The Netherlands: Brill, 2012.

———, ed. *The Archaeology of Medieval Islamic Frontiers: From the Mediterranean to the Caspian Sea*. Louisville: University Press of Colorado, 2019.

———. *The Islamic-Byzantine Frontier: Interaction and Exchange Among Muslim and Christian Communities*. London: I.B. Tauris, 2015.

———. “The Spaces Between the Teeth: Environment, Settlement, and Interaction on the Islamic-Byzantine Frontier.” PhD diss., The University of Chicago, 2008.

El Bahi, Ahmed. “Les Ribats Aghlabides : Un Problème d’identification.” In *The Aghlabids and Their Neighbors: Art and Material Culture in Ninth-Century North Africa*, edited by Glaire Anderson, Corisande Fenwick, Mariam Rosser-Owen, and Sihem Lamine, 321–37. Handbook of Oriental Studies 122. Leiden: Brill, 2018.

El Safadi, Crystal. “Bronze Age and Iron Age Levantine Harbours: An Evaluation of Their Maritime Accessibility and Protection.” MA thesis, University of Southampton, 2014.

———. “Wind and Wave Modelling for the Evaluation of the Maritime Accessibility and Protection Afforded by Ancient Harbours.” *Journal of Archaeological Science: Reports* 5 (2016): 348–60.

El’ad, Amikam. “The Coastal Cities of Palestine During the Early Middle Ages.” *The Jerusalem Cathedra* 2 (1982): 146–67.

Ellenblum, Ronnie. “Were There Borders and Borderlines in the Middle Ages? The Example of the Latin Kingdom of Jerusalem.” In *Medieval Frontiers: Concepts and Practices*, edited by David Abulafia and Nora Berend. New York: Routledge, 2016.

Erdkamp, Paul. *Annona (Grain)*. Oxford University Press, 2016. https://oxfordre.com/classics/view/10.1093/acrefore/9780199381135.001.0001/acrefore-9780199381135-e-8000.

Fahmy, Aly Mohamed. *Muslim Naval Organisation in the Eastern Mediterranean From the Seventh to the Tenth Century AD*. Cairo: National Publication & Printing House, 1966.

———. *Muslim Sea-Power in the Eastern Mediterranean From the Seventh to the Tenth Century AD*. Cairo: National Publication & Printing House, 1966.

Fenwick, Corisande. “Early Medieval Urbanism in Ifriqiya and the Emergence of the Islamic City.” In *Entre Civitas y Madīna. El Mundo de Las Ciudades En La Península Ibérica y En El Norte de África (Siglos Iv-Ix)*, 203–19. Collection de La Casa de Velázquez 167. Madrid: Casa de Velázquez, 2018.

Fischer, Mosche, and Itamar Taxel. “Yavneh-Yam in the Byzantine–Early Islamic Transition: The Archaeological Remains and Their Socio-Political Implications.” *Israel Exploration Journal* 64, no. 2 (2014): 212–42.

Fischer, Moshe. *Ḥorvat Meṣad: A Way-Station on the Jaffa-Jerusalem Road*. Monograph Series, number 30. Tel Aviv: Emery and Claire Yass Publications in Archaeology, 2012. https://catalog.lib.uchicago.edu/vufind/Record/8907588.

Foss, Clive. “Egypt under Mu’awiya Part II: Middle Egypt, Fustat and Alexandria.” *Bulletin of the School of Oriental and African Studies, University of London* 72, no. 2 (2009): 259–78.

———. “Egypt under Muʿāwiya Part I: Flavius Papas and Upper Egypt.” *Bulletin of the School of Oriental and African Studies* 72, no. 1 (2009): 1–24.

———. “The Persians in Asia Minor and the End of Antiquity.” *The English Historical Review* 90, no. 357 (1975): 721–47.

Frankel, Rafael. “Some Oil Presses from Western Galilee.” *Bulletin of the American Schools of Oriental Research* 286 (1992): 39–71.

Gal, Z. “Khan Et-Tuggar: A New Look at a ‘Western Survey’ Entry.” *Palestine Exploration Quarterly* 117 (1985): 69–75.

Gascoigne, Alison, and Gillian Pyke. “Nebi Samwil-Type Jars in Medieval Egypt: Characterisation of an Imported Ceramic Vessel.” In *Under the Potter’s Tree: Studies on Ancient Egypt Presented to Janine Bourriau on the Occasion of Her 70th Birthday*, edited by Janine Bourriau, David A. Aston, Bettina Bader, Carla Gallorini, Paul T.

Nicholson, and Sarah Buckingham. Orientalia Lovaniensia Analecta 204. Leuven: Uitgeverij Peeters en Departement Oosterse Studies, 2011. https://catalog.lib.uchicago.edu/vufind/Record/8393146.

Gayraud, R. P., and J. Treglia. "Amphores, Ceramiques Culinaires et Ceramiques Communes Omeyyades d'un Niveau d'incendie a Fustat-Istabl Antar (Le Caire, Egypte)." In *LRCW4: Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean*, edited by Natalia Poulou-Papadimitriou, Eleni Nodarou, and Vassilis Kilikoglou, 1:365–76. BAR International Series, 2616 (I). Oxford: Archaeopress, 2014.

Genequand, Denis. *Les établissements des élites omeyyades en Palmyrène et au Proche-Orient*. Bibliothèque archéologique et historique, t. 200. Beyrouth: IFPO Damas, 2012. https://catalog.lib.uchicago.edu/vufind/Record/9336459.

———. "Umayyad Castles: The Shift from Late Antique Military Architecture to Early Islamic Palatial Building." In *Military Architecture in Greater Syria*, edited by Hugh Kennedy, 3–25. Leiden: Brill, 2006.

———. "Umayyad Desert Castles." In *The Encyclopedia of Ancient History, First Edition*, edited by Roger Bagnall, Kai Brodersen, Craige Champion, Andrew Erksine, and Sabine Huebner. Blackwell Publishing Ltd, 2013.

Gibbs, Martin. "Cultural Site Formation Processes in Maritime Archaeology: Disaster Response, Salvage and Muckelroy 30 Years On." *International Journal of Nautical Archaeology*, 2006, 1–16.

Goodman-Tchernov, Beverly, and Hendrik Dey. "Tsunamis and the Port of Caesarea Maritima over the Longue Duree: A Geoarchaeological Perspective." *Journal of Roman Archaeology* 23 (2010): 265–84.

Grohmann, Adolf. *Arabic Papyri in the Egyptian Library*. Vol. 5. Cairo: Egyptian Library Press, 1955.

Gwiazda, Mariusz, Joanna Piątkowska-Małecka, Urszula Wicenciak, Piotr Makowski, and Tomasz Barański. "The Sidon's/Ṣaydā Northern Hinterland during the Early Byzantine-Early Islamic Transition." *Bulletin of the American Schools of Oriental Research* 385 (May 2021): 171–200. https://doi.org/10.1086/712931.

Haldon, John. "Commerce and Exchange in the Seventh and Eighth Centuries: Regional Trade and the Movement of Goods." In *Trade and Markets in Byzantium*, edited by Cecile Morrison, 99–124. Washington D.C.: Dumbarton Oaks, 2012.

———. "Greater Syria in the Seventh Century: Context and Background." In *Money, Power and Politics in Early Islamic Syria*, edited by John Haldon, 1–20. Farnham: Ashgate, 2010.

Hassen, Muhammad. "Les Ribat Du Sahel S'Ifriqiya: Peuplement et Évolution Du Territoire Au Moyen Âge." In *Castrum 7, Cones Côtières Littorales Dans Le Monde Méditerranéen Au*

Moyen Age: Défense, Peuplement, Mise En Valeur : Actes Du Colloque International Organisé à Rome, 23-26 Octobre 1996, 147–62. Rome: École française de Rome, 2001.

Haug, Robert. "Frontiers and the State in Early Islamic History: Jihad Between Caliphs and Volunteers." *History Compass* 9, no. 8 (2011): 634–43.

Havighurst, Alfred F., ed. *The Pirenne Thesis: Analysis, Criticism, and Revision*. Lexington: Heath, 1976.

Hinds, Martin. *The History of Al-Tabari: The Zenith of the Marwanid House*. Vol. 23. Erscheinungsort nicht ermittelbar: Verlag nicht ermittelbar, 1990.

Hodges, Richard, and David Whitehouse. *Mohammed, Charlemagne & the Origins of Europe: Archaeology and the Pirenne Thesis*. Ithaca, N.Y: Cornell University Press, 1983. https://catalog.lib.uchicago.edu/vufind/Record/577306.

Hoffman, Tracy, and Denys Pringle. *Ashkelon 8: The Islamic and Crusader Periods*. Final Reports of the Leon Levy Expedition to Ashkelon. University Park, Pennsylvania: Eisenbrauns, 2019.

Holum, Kenneth. "Caesarea in Palestine: Shaping the Early Islamic Town." In *Le Proche-Orient de Justinien Aux Abbassides: Peuplement et Dynamiques Spatiales: Actes Du Colloque "Continuites De L'occupation Entre Les Periodes Byzantine et Abbasside Au Proce-Orient, VIIe-IXe Siecles," Paris, 18-20 Octobre 2007*, edited by Antoine Borrut, 169–86. Belgium: Brepols Publishers, 2011.

Horden, Peregrine, and Nicholas Purcell. *The Corrupting Sea*. Malden: Blackwell Publishing, 2000.

Hornell, James. *Water Transport: Origins and Early Evolution*. Cambridge: Cambridge University Press, 1946.

Hourani, George F., and John Carswell. *Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times*. Princeton, N.J: Princeton University Press, 2003.

Hoyland, Robert. *Seeing Islam as Others Saw It*. Princeton, N.J: The Darwin Press, Inc., 1997.

Hoyland, Robert G. *Theophilus of Edessa's Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam*. Translated Texts for Historians. Liverpool: Liverpool University Press, 2011. http://bvbr.bib-bvb.de:8991/F?func=service&doc_library=BVB01&doc_number=024433717&line_number=0001&func_code=DB_RECORDS&service_type=MEDIA.

Humphreys, Stephen. *The History of Al-Tabari. The Crisis of the Early Caliphate*. Vol. 15. Albany: State University of New York Press, 1990.

Imbert, Frederic. “Graffiti Arabes de Cnide et de Kos : Premières Traces Épigraphiques de La Conquête Musulmane En Mer Égée.” In *Constructing the Seventh Century*, edited by Constantin Zuckerman, 731–58. Travaux et Memoires 17. Paris: Association des Amis du Centre d’Histoire et Civilisation de Byzance, 2013.

Israeli, Eyal, and Yaacov Kahanov. “The 7th-9th Century Tantura E Shipwreck, Israel: Construction and Reconstruction.” *The International Journal of Nautical Archaeology* 43, no. 2 (2014): 369–88.

Jacobi, Renate. “Al-Walīd.” In *Encyclopaedia of Islam, Second Edition*, edited by P. Bearman, Th. Bianquis, C.E. Bosworth, E van Donzel, and W.P. Heinrichs. Leiden: Brill, 2012.

Jahshiyārī, Mul:J.ammad b. ’Abdus al-. *Kitab Al-Wuzara’ Wa-al-Kuttab*. Edited by Abyari Saqa. Cairo: Mustafa al-Babi at-Tibbi, 1938.

Jaʿfar, Qudāma b. *Qudāma b. Jaʿfar, Kitāb al-Kharāj Wa-Ṣināʿat al-Kitāba*. Baghdad: Dār al-Rashīd lil-Nashr, 1981.

Juynboll, Gautier H. A. *History of Al-Tabari. The Conquest of Iraq, Southwestern Persia, and Egypt: The Middle Years of ’Umar’s Caliphate A.D. 636-642*. Vol. 13. Albany: State University of New York Press, 1989. http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=3440557.

Kahanov, Yaacov, and Hadas Mor. “The Dor 2001/1 Byzantine Shipwreck, Israel: Final Report.” *International Journal of Nautical Archaeology* 43, no. 1 (2014): 41–65. https://doi.org/10.1111/1095-9270.12029.

Kampbell, Sarah. “Shipwrecks of the Syrian Coast.” *International Journal of Nautical Archaeology* 42, no. 2 (2013): 419–25.

Katherine Strange, Burke. “Islamic and Crusader Potter from Jaffa: A Collection of Whole and Reconstructed Vessels.” In *The History and Archaeology of Jaffa 2*, 2:197–209. Monumenta Archaeologica 41. Los Angeles: Cotsen Institute of Archaeology Press, 2017.

Kennedy, Hugh. “From Polis to Medina: Urban Change in Late Antique and Early Islamic Syria.” *Past and Present* 106 (n.d.): 3–27.

———. “Inherited Cities.” In *The City in the Islamic World*, edited by Salma Jayyusi, 93–113. Leiden: Brill, 2008.

———. “The Last Century of Byzantine Syria: A Reinterpretation.” *Byzantinische Forschungen* 10 (January 1, 1985): 141–83.

Khalilieh, Hassan. *Islamic Maritime Law: An Introduction*. Leiden: Brill, 1998.

———. “The ‘ribaṭ’ of Arsūf and the Coastal Defence System in Early Islamic Palestine.” *Journal of Islamic Studies*, no. 2 (2008): 159.

———. “The Ribât System and Its Role In Coastal Navigation.” *Journal of the Economic and Social History of the Orient* 42, no. 2 (1999): 212–25. https://doi.org/10.1163/1568520991446811.

Knapp, Arthur Bernard. *Seafaring and Seafarers in the Bronze Age Eastern Mediterranean*. Leiden: Sidestone Press, 2018. https://catalog.lib.uchicago.edu/vufind/Record/11703863.

Kogan-Zehavi, Elena. “Ono: Final Report.” *Hadashot Arkheologiyot: Excavations and Surveys in Israel* 123 (2011).

Konrad, Miller. *Die Weltkarte Des Castorius: Genannt Die Peutingersche Tafel*. Ravensburg: Otto Maier, 1887.

Kraemer, Casper. *Excavations at Nessana, Volume 3*. Vol. 3. Princeton: Princeton University Press, 1958.

Lankila, Tommi. “Saracen Maritime Raids in the Early Medieval Central Mediterranean and Their Impact on the Southern Italian Terraferma (650-1050).” PhD diss., Princeton University, 2017.

Le Strange, Palestine. *Palestine Under the Moslems*. London: A. P. Watt, 1890.

Lecker, Michael. “The Estates of ’Amr b. al-’Āṣ in Palestine: Notes on a New Negev Arabic Inscription.” *Bulletin of the School of Oriental and African Studies, University of London* 52, no. 1 (1989): 24–37.

Legendre, Marie. “Aspects of Umayyad Administration.” In *The Umayyad World. Ed. Andrew Marsham*, 133–57. London & New York: Routledge, 2021. http://proxy.uchicago.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ich&AN=ICHA1119681&site=eds-live&scope=site.

Leidwanger, Justin. “A Preliminary Archaeometric Analysis of the Late Roman 1 Amphoras from the Cargo of the Seventh-Century Yassiada Shipwreck, Turkey.” In *LRCW4: Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean*, edited by Simonetta Menchelli, Sara Santoro, Marinella Pasquinucci, and Gabriella Guiducci, 2:897–906. BAR International Series, 2185 (II). Oxford: Archaeopress, 2014.

———. *Roman Seas: A Maritime Archaeology of Eastern Mediterranean Economies*. New York: Oxford University Press, 2020.

Lightfoot, Kent, and Antoinette Martinez. “Frontiers and Boundaries in Archaeological Perspective.” *Annual Review of Anthropology* 24 (1995): 471–92.

Loseby, Simon. “The Mediterranean Economy.” In *The New Cambridge Medieval History: Volume 1: C.500–c.700*, edited by Paul Fouracre, 1:605–38. The New Cambridge Medieval History. Cambridge: Cambridge University Press, 2005. https://doi.org/10.1017/CHOL9780521362917.024.

Magness, Jodi. *Jerusalem Ceramic Chronology: Circa 200-800 CE*. JSOT/ASOR Monograph Series, no. 9. Sheffield: JSOT Press, 1993. https://catalog.lib.uchicago.edu/vufind/Record/1490274.

———. *The Archaeology of the Early Islamic Settlement in Palestine*. Winona Lake: Eisenbrauns, 2003.

Marriner, Nick. *Geoarchaeology of Lebanon’s Ancient Harbours*. BAR International Series 1953. Oxford: Archaeopress, 2009. https://catalog.lib.uchicago.edu/vufind/Record/7727421.

———. “Geoarchaeology of Phoenicia’s Buried Harbours: Beirut, Sidon and Tyre - 5000 Years of Human-Environment Interactions.” Doctoral, Université Aix-Marseille, 2007.

Marriner, Nick, Christophe Morhange, and Muntaha Saghieh-Beydoun. “Geoarchaeology of Beirut’s Ancient Harbour, Phoenicia / Géoarchéologie Du Port Antique de Beyrouth, Phénicie.” *Journal of Archaeological Science* 35, no. 9 (2008): 2495–2516.

Masarwa, Yumna. “Early Islamic Military Architecture: The Birth of Ribats on the Palestinian Coast.” *Al-Usur al-Wusta* 19, no. 2 (2007): 36–42.

———. “From a Word of God to Archaeological Monuments: A Historical-Archaeological Study of the Umayyad Ribats of Palestine.” PhD diss., Princeton University, 2006.

———. “Transforming the Mediterranean from a Highway into a Frontier: The Coastal Cities of Palesting During the Byzantine and Early Islamic Periods.” In *Le Proche-Orient De Justinien Aux Abbassides: Peuplement et Dynamiques Spatiales*, edited by Antoine Borrut, Debie, A Papaconstantinou, D Pieri, and J Sodini, 149–67. Turnhout: Brepols Publishers, 2011.

Mathisen, Ralph W., and Hagith S. Sivan, eds. *Shifting Frontiers in Late Antiquity*. Aldershot, Hampshire: Variorum, 1996.

Mayerson, Philip. “The Case for 8,000,000 Modii in Justinian’s Edict 13.8.” *The Bulletin of the American Society of Papyrologists* 44 (2007): 167–74.

McCormick, Michael. “Movements and Markets in the First Millenium: Information, Containers, and Shipwrecks.” In *Trade and Markets in Byzantium*, edited by Cecile Morrison, 51–98. Washington D.C.: Dumbarton Oaks, 2012.

———. *Origins of the European Economy : Communications and Commerce AD 300-900*. New York: Cambridge University Press, 2001.

Melkawi, Ansam, Khairieh Amr, and Donald Whitcomb. “The Excavation of Two Seventh Century Pottery Kilns at Aqaba.” *Annual of the Department of Antiquities in Jordan* 38 (1994): 447–68.

Mesqui, Jean, Jocelyn Martineau, and Hervé Barbé. *Césarée maritime: ville fortifiée du Proche-Orient*. Paris: Picard, 2014. https://catalog.lib.uchicago.edu/vufind/Record/10155365.

Mikati, Rana. “The Creation of Early Islamic Beirut: The Sea, Scholars, Jihad and the Sacred.” PhD diss., University of Chicago, 2013.

Mikati, Rana, and Dominic Perring. “From Metropolis to Ribat : Some Recent Work on Beirut at the End of Antiquity.” *Archaeology & History in Lebanon*, no. 23 (January 1, 2006): 42–55.

Montgomery, James A. “Salvation at Sea? Seafaring in Early Arabic Poetry.” In *Representations of the Divine in Early Arabic Poetry*, edited by Gert Borg and Ed De Moor, 25–47. Amsterdam: Rodopi, 2001.

Morelli, Federico. *Griechische Texte: Documenti Greci per la Fiscalità e la Amministrazione dell’Egitto Arabo*. Vol. 15. Corpus Papyrorum Raineri 22. Wien: Hollinek, 2001.

Morony, Michael G. “Economic Boundaries? Late Antiquity and Early Islam.” *Journal of the Economic and Social History of the Orient* 47, no. 2 (2004): 166–94.

Morris, Ellen. *Ancient Egyptian Imperialism*. Hoboken: Wiley Blackwell, 2018.

Morrison, C, and J Sodini. “The Sixth Century Economy.” *The Economic History of Byzantium from the Seventh through the Fifteenth Century* 1 (2002): 171–220.

Morriss, Veronica. “Persistent Pathways: The Roman Annona as a Model for the Economic Impact of the Early Islamic Grain Trade on the Red Sea,” 2020.

———. “Reimagining the Palestinian Ribat and Their Role in the Creation of the Islamic Maritime Frontier.” *Cuadernos de Arquitectura y Fortificacion* 6 (2021): 33–56.

Morriss, Veronica, and Whitcomb, Donald. “The Umayyad Red Sea as an Islamic Mare Nostrum.” In *The Umayyad World*, edited by Andrew Marsham, 267–92. Routledge, 2021.

Nadav-Ziv, Liat, Ellie Haddad, Yossi Elisha, Galit Tal, Rivka Ben Shlush, Yael Gorin-Rosen, Orit Tsuf, Debora Sandhaus, and Dor Golan. “Tel Yavne, Areas B and D: Preliminary Report.” *Hadashot Arkheologiyot: Excavations and Surveys in Israel* 133 (2021).

Natan, Eyal, Yael Gorin-Rosen, Agnese Benzonelli, and Deborah Cvikel. “Maritime Trade in Early Islamic-Period Glass: New Evidence from the Ma‘agan Mikhael B Shipwreck.” *Journal of Archaeological Science: Reports* 37 (June 1, 2021): 102903. https://doi.org/10.1016/j.jasrep.2021.102903.

Noth, Albrecht, and Lawrence I. Conrad. *The Early Arabic Historical Tradition: A Source-Critical Study*. 2nd ed. Studies in Late Antiquity and Early Islam 3. Princeton, N.J: Darwin Press, 1994. https://catalog.lib.uchicago.edu/vufind/Record/1727887#toc.

Oked, Sarit. "Patterns of the Transport Amphorae at Ostrakine during the 6th and 7th Centuries." *ARAM* 8 (1996): 165–75.

Oxley, Ian, and Matthew Keith. "Introduction: Site Formation Processes of Submerged Shipwrecks." In *Site Formation Processes of Submerged Shipwrecks*, edited by Matthew Keith, 1–14. University Press of Florida, 2016.

Peacock, David, and David Williams. *Amphorae and the Roman Economy : An Introductory Guide*. London; New York: Longman, 1991.

Peña, J. "Amphorae, Roman." In *Oxford Classical Dictionary*, n.d. Accessed April 6, 2023.

Pentz, Peter. *From Roman Proconsularis to Islamic Ifrīqiyah*. GOTARC, no. 22. Göteborg: Göteborgs Universitet, 2002. https://catalog.lib.uchicago.edu/vufind/Record/4906544.

———. *The Invisible Conquest: The Ontogenesis of Sixth and Seventh Century Syria*. Copenhagen: National Museum of Denmark, Collection of Near Eastern and Classical Antiquities, 1992. https://catalog.lib.uchicago.edu/vufind/Record/2354650#toc.

Petersen, Andrew. *The Towns of Palestine under Muslim Rule AD 600-1600*. Oxford: Archaeopress, 2005.

Picard, Christophe. "Architecture, Institutions et Societes Portuaires Des Cites Maritimes Musulmanes de La Mediterranee Medievale, Bilan et Enjeux." *Histoire Urbanine* 2 (2007): 77–92.

———. *Sea of the Caliphs: The Mediterranean in the Medieval Islamic World*. London: The Belknap Press of Harvard University Press, 2018.

Picard, Christophe, and Antoine Borrut. "Râbata, Ribât, Râbita : Une Institution à Reconsidérer." In *Chrétiens et Musulmans En Méditerranée Médiévale, VIIIe-XIIIe Siècle : Échanges et Contacts*, edited by Nicolas Prouteau and Philippe Sénac, 33–65. Civilisation Médiévale 15. Poitiers: Centre d'études supérieures de civilisation médiévale, 2003.

Pieri, Dominique. *Le commerce du vin oriental à l'époque byzantine, Ve-VIIe siècles: le témoignage des amphores en Gaule*. Bibliothèque archéologique et historique, t. 174. Beyrouth: Institut français du Proche-Orient, 2005. https://catalog.lib.uchicago.edu/vufind/Record/6642958.

———. "Regional and Interregional Exchanges in the Eastern Mediterranean during the Early Byzantine Period." In *Trade and Markets in Byzantium*, 27–49. Washington D.C.: Dumbarton Oaks, 2012.

Pirenne, Henri. *Mohammed and Charlemagne*. London: G. Allen & Unwin, 1958.

Planhol, Xavier de. *L'Islam et la mer: la mosquée et le matelot : VIIe - XXe siècle*. Paris: Perrin, 2000.

Porath, Yosef. "Caesarea – 1994–1999." *Hadashot Arkheologiyot: Excavations and Surveys in Israel* 112 (2000): 34–40.

Power, Daniel, and Naomi Standen, eds. *Frontiers in Question: Eurasian Borderlands, 700-1700*. New York: St. Martin's Press, 1999.

Pryor, John H. *Geography, Technology, and War: Studies in the Maritime History of the Mediterranean, 649-1571*. Cambridge; New York: Cambridge University Press, 1988.

Pryor, John, and Elizabeth Jeffreys. *The Age of the Dromon: The Byzantine Navy ca 500-1204*. Leiden: Brill, 2006.

Randall, Ian. "Conceptualizing the Islamic-Byzantine Maritime Frontier." In *The Archaeology of Medieval Islamic Frontiers: From the Mediterranean to the Caspian Sea*, edited by Asa Eger, 72–91. Louisville: University Press of Colorado, 2019.

———. "Setting an Insular Table: Pottery, Identity, and Connectivity on Crete and Cyprus at the End of Antiquity." PhD diss., Brown University, 2018.

Raphael, Sarah Kate. *Azdud (Ashdod-Yam): An Early Islamic Fortress on the Mediterranean Coast*. BAR International Series 2673. Oxford: Archaeopress, 2014.

Reynolds, Paul. "Amphorae in Beirut from the Umayyads to the Crusaders: A Guide to Trends in Local and Imported Products." *Archeologia Medievale* XLV (2018): 91–110.

———. "Levantine Amphorae from Cilicia to Gaza: A Typology and Analysis of Regional Production Trends from the 1st to 7th Centuries." In *LRCW 1. Late Roman Course Wares, Cooking Wares and Amphorae in the Mediterranean: Archaeology and Archaeometry*, 563–611. Oxford: Archaeopress, 2005.

———. "Pottery and the Economy in 8th Century Beirut: An Umayyad Pottery Assemblage from the Roman Imperial Baths (BEY 045)." In *VIIème Congrès International Sur La Céramique Médiévale En Méditerranée Thessaloniki (11-16th October 1999)*, 725–34. Athens: Éd. de la Caisse des Recettes Archéologiques, 2003.

———. "The Homs Survey (Syria): Contrasting Levantine Trends in the Regional Supply of Fine Wares, Amphorae and Kitchen Wares (Hellenistic to Early Arab Periods)." In *Roman Pottery in the Near East: Local Production and Regional Trade.*, edited by Bettina Fischer-Genz, Yvonne Gerber, and Hanna Hamel, 53–65. Roman and Late Antique Mediterranean Pottery 3. Oxford: Archaeopress, 2014.

———. “The Oil Supply in the Roman East: Identifying Modes of Production, Containers and Contents in the Eastern Empire.” In *Roman Amphora Contents: Reflecting on the Maritime Trade of Foodstuffs in Antiquity (In Honour of Miguel Beltrán Lloris)*, edited by Dario Bernal-Casasola, Michel Bonifay, and Victoria Leitch, 307–54. Archaeopress., 2021.

———. “Transport Amphorae of the 1st - 7th Centuries: Early Roman and Byzantine Periods.” In *Excavations at Zeugma: Conducted by Oxford Archaeology*, edited by William Aylward, 2:93–161. California: The Packard Humanities Institute, 2013.

Reynolds, Paul, and Yona Waksman. “Beirut Cooking Wares, 2nd to 7th Centuries: Local Forms and North Palestinian Imports.” *Berytus* 50 (2007): 59–81.

Rieth, Eric. “Pour Une Approche Nilotique Des Origines (ve-Viie Siècle) de La Construction Navale «Sur Membrure Première» En Méditerranée.” In *La Batellerie Égyptienne: Archéologie, Histoire, Ethnographie*, edited by Patrice Pomey, 201–25. Études Alexandrines 34. Alexandria: Centre d’Études Alexandrines, 2015.

Riley, J. A. “New Light on Relations between the Eastern Mediterranean and Carthage in the Vandal and Byzantine Periods: The Evidence from the University of Michigan Excavations.” In *Actes Du Colloque Sur La Ceramique Antique de Carthage*. Tunis: Centre d’études et de documentation archéologique de la conservation, 1982.

Roll, Israel. “Medieval Apollonia-Arsuf: A Fortified Coastal Town in the Levant of the Early Muslim and Crusader Periods.” In *Autour de La Premiere Croisade: Actes Du Colloque de La Society for the Study of the Crusades and the Latin East (Clermont-Ferrand, 22-25 Juin 1995)*, by Michel Balard, 595–606. Byzantina Sorbonensia 14. Paris: Publications de la Sorbonne, 1996.

Rosen-Ayalon, Myriam. “The Early Islamic Monuments of the Haram Al-Sharif: An Iconographic Study.” *Qedem* 28 (1989): I–XVI, 1–73.

Saghieh-Beydoun, Muntaha. “Evidence of Earthquakes in the Current Excavations of Beirut City Centre.” *Archaeology and History in Lebanon*, no. 5 (1997): 15–20.

Schacht, J. “Amān.” In *Encyclopaedia of Islam*. Brill, 2012.

Sela, S. “Medieval Arabic Sources on the Jaffa–Jerusalem Roads.” In *Roman Roads in Judaea II. The Jaffa Jerusalem Roads*, edited by Moshe Fischer, Benjamin Isaac, and Israel Roll, 25–29. British Archaeological Reports International Series 628. Oxford, 1996.

Shahid, Irfan. “The Umayyad Ajnād: Byzance Apres Byzance.” *ARAM* 6 (1994): 1–11.

Sharon, Mosche. “Arabic Inscriptions from Caesarea Maritima: A Publication of the Corpus Inscriptionum Arabicarum Paleastinae.” In *Caesarea Maritima – A Retrospective After Two Millenia*, edited by Avner Raban and Kenneth Hollum, 401–40. Leiden: E.J. Brill, 1996.

Sharon, Moshe. “An Arabic Inscription Engraved with Crusader Shields.” In *Ashkelon 1: Introduction and Overview*, edited by L. Stager, D. Schloen, and D. Master, 1:405–26. Winona Lake: Eisenbrauns, 2008.

———. *Corpus Inscriptionum Arabicarum Palaestinae*. Vol. 2. Leiden; Boston: Brill, 1999.

———. *Corpus Inscriptionum Arabicarum Palaestinae (CIAP)*. Vol. 1. New York: Brill, 1997.

———. *Corpus Inscriptionum Arabicarum Palaestinae, (CIAP)*. Vol. 6. Handbuch Der Orientalistik. Nahe Und Der Mittlere Osten ; New York: Brill, 2017.

Shoemaker, Stephen J. *The Apocalypse of Empire: Imperial Eschatology in Late Antiquity and Early Islam*. Divinations: Rereading Late Ancient Religion. Philadelphia: University of Pennsylvania Press, 2018. https://catalog.lib.uchicago.edu/vufind/Record/11564828.

Sijpesteijn, Petra. “The Arab Conquest of Egypt and the Beginning of Muslim Rule.” In *Egypt in the Byzantine World, 300-700*, edited by Roger Bagnall, 437–59. Cambridge: Cambridge University Press, 2007.

———. “The Arab Conquest of Egypt and the Beginning of Muslim Rule.” In *Egypt in the Byzantine World, 300-700*, edited by Roger Bagnall, 437–59. Cambridge: Cambridge University Press, 2007.

Sirks, Boudewijn. *Food for Rome: The Legal Structure of the Transportation and Processing of Supplies for the Imperial Distributions in Rome and Constantinople*. Amsterdam: J.C. Gieben, 1991.

Stern, Edna J., Anastasia Shapiro, and S. Y. Waksman. *’Akko I, the 1991-1998 Excavations: The Crusader-Period Pottery. Part 2: Plates*. IAA Reports, number 51/2. Jerusalem: Israel Antiquities Authority, 2012. https://catalog.lib.uchicago.edu/vufind/Record/11704933.

———. *’Akko I, the 1991-1998 Excavations: The Crusader-Period Pottery. Part1: Text*. IAA Reports, number 51/1. Jerusalem: Israel Antiquities Authority, 2012. https://catalog.lib.uchicago.edu/vufind/Record/11704934.

Tal, Oren. “Apollonia-Arsuf Excavation Project.” Tel Aviv University, 2023.

Tartaron, T. “Geography Matters: Defining Maritime Small Worlds of the Aegean Bronze Age.” In *Maritime Networks in the Ancient Mediterranean World*, edited by Justin Leidwanger and C Knappett, 61–92. Cambridge: Cambridge University Press, 2018.

———. *Maritime Networks in the Mycenaean World*. Cambridge: Cambridge University Press, 2013.

Taxel, Itamar. “Early Islamic Palestine: Toward a More Fine-Tuned Recognition of Settlement Patterns and Land Uses in Town and Country.” *Journal of Islamic Archaeology* 5, no. 2 (2018): 153–80.

———. “The Byzantine-Early Islamic Transition on the Palestinian Coastal Plain: A Re-Evaluation of the Archaeological Evidence.” *Semitica et Classica* 6 (2013): 73–106.

Taxel, Itamar, Ayala Lester, and Uzi ʿad. “Two Rare Early Abbasid Paint-Decorated Ceramic Bowls from El-Khirba/Nes Ziyyona, Israel.” *Muqarnas* 35 (2018): 273–80.

Theophanes, and Harry Turtledove. *The chronicle of Theophanes: Anni mundi, 6095-6305 (A.D. 602-813)*. Philadelphia, Pennsylvania: University of Pennsylvania Press, 2011.

Tibi, Amin. “Arabia’s Relations with East Africa as Reflected in Three Documents.” *ARAM* 8 (1996): 237–41.

Tomber, R. “Polarising and Integrating the Late Roman Economy: The Role of Late Roman Amphorae 1-7.” In *Ancient West and East*, edited by G. Tsetskhladze, 3:155–65. Brill, 2004.

Tor, Deborah. “Privatized Jihad and Public Order in the Pre-Seljuq Period: The Role of the Mutatawwi’a.” *Iranian Studies* 38, no. 4 (2005): 555–73.

Trombley, Frank R. “Amr b. al-As’ Refurbishment of Trajan’s Canal: Red Sea Contacts in the Aphrodito and Apollononas Ano Papyri.” In *Connected Hinterlands, Proceedings of Red Sea Project IV Held at the University of Southampton September 2008*, edited by Lucy Blue, John Cooper, Ross Thomas, and Julian Whitewright, 99–109. Oxford: Archaeopress, 2009.

———. “Fiscal Documents from the Muslim Conquest of Egypt: Military Supplies and Administrative Dislocation, ca 639-644.” *Revue Des Études Byzantines* 71 (2013): 5–38.

———. “Sawirus Ibn Al-Muqaffa and the Christians of Umayyad Egypt: War and Society in Documentary Context.” In *Papyrology and the History of Early Islamic Egypt*, edited by Petra Sijpesteijn and Lennart Sundelin, 199–226. Leiden: Brill, 2004.

Turker, A. C. “Roman and Early Byzantine Amphorae from the Archaeological Survey in Pamphylia and Tracheia Cilicia.” In *LRCW4: Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean*, edited by Natalia Poulou-Papadimitriou, Eleni Nodarou, and Vassilis Kilikoglou, 1:271–80. BAR International Series, 2616 (I). Oxford: Archaeopress, 2014.

Turner, Frederick Jackson. *The Frontier in American History*. New York: H. Holt and Company, 1932. https://catalog.lib.uchicago.edu/vufind/Record/1831350.

Uscatescu, A. “Report on the Levant Pottery (5th-9th Century AD).” In *VIIème Congrès International Sur La Céramique Médiévale En Méditerranée Thessaloniki (11-16th October 1999)*, edited by Bakirtzis, 546–58. Athens: Éd. de la Caisse des Recettes Archéologiques, 2003.

Vokaer, Agnes. “Byzantine Cooking Ware Imports in Syria: The ‘Workshop X.’” *Berytus* 53–54 (2011 2010): 213–32.

———. “Cooking in a Perfect Pot. Shapes, Fabrics and Function of Cooking Ware in Late Antique Syria.” In *LRCW3. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean*, edited by Simonetta Menchelli, Sara Santoro, Marinella Pasquinucci, and Gabriella Guiducci, 1:115–29. BAR International Series, 2185 (I). Oxford: Archaeopress, 2010.

———. “Late Roman Amphorae from Apamea, Syria.” In *LRCW 5: Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean*, 2:779–803. Etudes Alexandrines 43. Alexandria: Centre d’Etudes Alexandrines, 2017.

———. “Pottery Production and Exchange in Late Antique Syria (Fourth-Eighth Century AD). A Study of Some Imported and Local Wares.” In *Local Economies? Production and Exchange of Inland Regions in Late Antiquity*, edited by Luke Lavan, 567–606. Late Antique Archaeology 10. Leiden: Brill, 2013.

Vorderstrasse, Tasha. *Al-Mina: A Port of Antioch from Late Antiquity to the End of the Ottomans*. Leiden: Nederlands Instituut Voor Het Nabije Oosten, 2005.

Wachsmann, Shelley. *Seagoing Ships and Seamanship in the Bronze Age Levant*. London: Chatham Publishing, 1998.

Wachsmann, Shelley, and Kurt Raveh. “A Concise Nautical History of Dor/Tantura.” *The International Journal of Nautical Archaeology and Underwater Exploration* 13, no. 2 (1984): 223–41.

Waliszewski, Tomasz, and Urszula Wicenciak. “Chhim, Lebanon: A Roman and Late Antique Village in the Sidon Hinterland.” *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 3, no. 4 (2015): 372–95.

Walmsley, Alan. *Early Islamic Syria: An Archaeological Assessment*. London: Duckworth, 2007.

———. “Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565-800.” *Dumbarton Oaks Papers* 61 (2007): 319–52.

———. “Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?” In *The Long Eighth Century*, edited by Inge Lyse Hansen and Chris Wickham, 265–343. Leiden: Brill, 2000.

———. “Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?” In *The Long Eighth Century*, edited by Inge Lyse Hansen and Chris Wickham, 265–345. Leiden: Brill, 2000.

———. “The Administrative Structure and Urban Geography of the Jund of Filistin and the Jund of Al-Urdunn: The Cities and Districts of Palestine and East Jordan during the Early Islamic, Abbasid and Early Fatimid Periods.” PhD diss., University of Sydney, 1987.

Wheatley, Abigail Margaret. “The Idea of the Castle in Medieval England.” PhD diss., University of York Center for Medieval Studies, 2001.

Whitcomb, Donald. *Aqaba, “Port of Palestine on the China Sea.”* Amman: Al Kutba, 1988.

———. *Ayla, Art and Industry in the Islamic Port of Aqaba*. Chicago: Oriental Institute Museum Publications, 1994.

———. “Excavations in ’Aqaba: First Preliminary Report.” *Annual of the Department of Antiquities of Jordan* 31 (1987): 247–66.

———. “Notes for an Archaeology of Muʿāwiya: Material Culture in the Transitional Period of Believers.” In *Christians and Others in the Umayyad State*, edited by Antoine Borrut and Fred Donner, 11–27. Chicago: The University of Chicago, 2016.

———. “Periodic Palaces: An Economic Approach toward Understanding the ‘Desert Castles.’” In *Wohnen, Reisen, Residieren. Herschaftliche, Repräsentation Zwischen Temporärer Hofhaltung Und Dauerhafter Residenz in Orient Und Okzident*, by Dorothee Sack, Daniela Spiegel, and Martin Gussone, 95–101. Berliner Beiträge Zur Bauforschung Und Denkmalpflege 15. Petersberg: Michael Imhof Verlag, 2016.

———. “Qaysariya as an Early Islamic Settlement.” In *Shaping the Middle East – Jews, Christians, and Muslims in an Age of Transition 400-800 C.E.*, edited by Kenneth Hollum and Haymin Lapin, 65–82. Maryland: University Press of Maryland, 2011.

Whitcomb, Donald. “Reassessing the Archaeology of Jordan of the Abbasid Period.” In *Studies in the History and Archaeology of Jordan*, edited by S. Tell, IV:385–90. Amman: Department of Antiquities, 1992.

Whitcomb, Donald. “The Misr of Ayla: New Evidence for the Early Islamic City.” In *Studies in the History and Archaeology of Jordan*, edited by A. Hadidi, 277–88. 5. Amman: Department of Antiquities, 1995.

Whitewright, Julian. “Sailing and Sailing Rigs in the Ancient Mediterranean: Implications of Continuity, Variation and Change in Propulsion Technology.” *The International Journal of Nautical Archaeology* 47, no. 1 (2018): 28–44.

———. “The Potential Performance of Ancient Mediterranean Sailing Rigs.” *The International Journal of Nautical Archaeology* 40, no. 1 (2011): 2–17.

Wickham, Chris. *Framing the Early Middle Ages: Europe and the Mediterranean, 400–800*. Cambridge: Cambridge University Press, 2005.

———. “The Mediterranean around 800: On the Brink of the Second Trade Cycle.” *Dumbarton Oaks Papers* 58 (2004): 161–74. https://doi.org/10.2307/3591384.

Wilson, Andrew. “Developments in Mediterranean Shipping and Maritime Trade from the Hellenistic Period to AD 1000.” In *Maritime Archaeology and Ancient Trade in the Mediterranean*, edited by Damian Robinson and Andrew Wilson, 33–59. Oxford: Oxford Centre for Maritime Archaeology, 2011.

Zavagno, Luca. *Cyprus Between Late Antiquity and the Early Middle Ages (ca. 600-800): And Island in Transition*. Birmingham Byzantine and Ottoman Studies 21. Abingdon: Routledge, 2017.