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Transport Wine Amphorae and the Economic System in Southern Phoenicia during the Achaemenid Regime

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This paper explores the economic system of the Achaemenid Empire in southern Phoenicia through the study of transport wine amphorae, as well as other ceramic vessels, to show that local trade was primarily conducted in an open, free economic system, with minimum intervention of the empire. Furthermore, structures previously unearthed along the coast and defined as fortresses used to monitor trade, are reconsidered in light of their plan, function and date. It was found that the Persian regime focused on taxation and periodic inspection, attesting that the imported Greek wine transported in amphorae flowed freely into the beakers and goblets of the population of southern Phoenicia.

Keywords: imperial control, transport amphorae, Achaemenid Empire, southern Phoenicia

Introduction

While the scholarly definition of "empire" may vary, some basic elements must exist, one being its ability to sustain itself and control the different polities under its authority through an effective governmental structure, efficient bureaucracy and a strong military. In the past, most paradigms concerning imperial control were ascribed to two main approaches: direct (territorial) and indirect (or hegemonic). Recent studies, however, clearly demonstrated that such a dichotomy is insufficient in describing the complex reality, resulting in the generation of a more flexible approach.[2]

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[1] Dr. Yiftah Shalev, Israel Antiquities Authority. The present paper is an updated version of a lecture presented in the "Archaeology of Imperial Encounters in the Southern Levant during the 2nd and 1st Millennia BCE" conference held in Zurich in May 2016. It is part of an extensive research project funded by an Israel Science Foundation Grant (No. 570/09) awarded to Prof. Ayelet Gilboa and Prof. Gunnar Lehmann and presents some of the results of the author's Ph.D. dissertation on the demographic and commercial aspects of "southern Phoenicia" under the Achaemenid Regime, completed at the University of Haifa under the guidance of Prof. Ayelet Gilboa (Shalev 2014). I am grateful to Dr. Inbal Samet for her invaluable help during the work on the original draft of the article.

[2] Recent discussions concerning imperial control relate to strategies, agents, ideological integration, political economy and even more holistic approaches toward sociocultural relations, such as domination and resistance (e.g., Voss 2008; Morris and Scheide 2009:3–29; Rosenzweig and Marston 2018).

Fig. 1. Map of southern Phoenicia, showing the main sites mentioned in the text.

Therefore, the concept of imperial control should, at the very least, be examined on several levels (or "pathways"): political, ideological, social and economic (Parker 2020).[3]

This article delves into the realm of the economic aspects of imperial control. Notably, variations in the mechanisms of control exist not only among the various imperial levels but

[3] For a discussion of empires as a matter of conceptual theorization, and the different approaches of imperial control, see, e.g., Khatchadourian 2016: esp. Chapter 2.

also across different regions. In this study, attention is directed solely toward one polity—southern Phoenicia—which extends over the area between Ashqelon and the Carmel (Elayi 1982). During the Achaemenid period, this coastal region fell under Phoenician sovereignty—the land granted to the Phoenicians by the Achaemenid king as a token of appreciation for their allegiance to the Persian military campaigns (Fig. 1). Through the discussion of overarching concepts of various approaches of imperial control, rather than focusing on a specific model, it is posited here that the Achaemenid Empire's economic control over the study region was more hegemonic than territorial. This allowed for the relatively free market trade of commodities, particularly notable in transport amphorae that mainly carried wine—a major staple of ancient Mediterranean commodities.

Trade and Commerce in an Imperial Context

Trade serves as a pivotal metric for assessing the extent of economic control: regimes employing hegemonic control often relied on tax collection, permitting commerce to evolve in accordance with market dynamics. In contrast, direct/territorial control typically involves intervention in both supply and demand, occasionally extending to the alteration of trade routes within networks. By mapping trade routes and distribution patterns of several commodities, particularly wine that was transported throughout the region of the Mediterranean in amphorae, the level of state control may be gauged, leading to the identification of the agents involved in commercial exchange, such as merchants, local elite and official administrators.

Transport amphorae are an optimal medium for examining ancient commercial activities due to their distinct shape, providing a precise chronological and provenance framework. They offer direct evidence of commerce, not only an index of its existence: their appearance in different locations evinces trade routes, distribution mechanisms and the mode through which merchandise was transported (Chase-Dunn and Hall 1997:29; Gascoigne 2007; Marchand 2007). As these vessels are known to have mainly contained wine (followed by olive oil)—an important commodity primarily consumed by the socio-economic elite—they attest to the significant effort invested in importing wines, often from a considerable distance. For example, in his triumphal banquet, Julius Caesar provided an expensive, vintage red wine from Chios to demonstrate his wealth and power (Pliny, *Natural History* XIV:16.97).

One of the best attestations of direct intervention of authorities in wine commerce during this period is reflected in the archaeological research of hundreds of Greek transport amphorae found in Gordion, Phrygia (DeVries 1990:399–400; Lawall 1997; 2011; 2012). Prior to the Persian period, there were virtually no trade relations between Gordion and the Aegean. Being 200 km from the coast, the overland transportation of filled amphorae to Gordion was certainly complicated and expensive, requiring a large economic investment and effort on behalf of the local elite.

Reconstructing trade routes solely based on the archaeological record is challenging, as even when the shape of a vessel is well-recognized, it does not necessarily imply a direct journey from its place of origin to the site of discovery. For instance, the unearthing of a Chian amphora at Dor cannot serve as evidence of the arrival of a Chian ship at that location. For that reason, interpretations are often based on comparing assemblages. For example, Lesbian amphorae are commonly found in Egyptian sites, but are notably scarce in Phoenicia despite the geographical proximity of these regions, which would suggest that distinct trade networks operated in each of these regions.

A diverse array of traded commodities indicates an unregulated economic system, as opposed to controlled trade by rulers, who oversaw the production, distribution and consumption of goods (Friedman and Rowlands 1978; Junker 1999:373–377). Within this unregulated market, various commercial mechanisms operated simultaneously, including centralized government management, personal bartering among elites, market exchange and pre-capitalist ventures by independent entrepreneurs.

The authority's level of involvement in commerce and distribution may influence the distribution patterns of certain goods, which is usually demonstrated in an organized redistribution mechanism: commodities are collected in one center administered by the authorities and sent to different regions, institutions or people to cater to specific needs and interests (Renfrew and Bahn 1991:338). Trade operating under centralized rule usually employed a direct-access or central-place redistribution technique, meaning that the goods would make their way from the manufacturer directly to the purchaser (or from the port to the palace/royal storehouse). An indication of such a centralized rule may be seen, for example, at Bronze Age Tel Mozan, Syria, where the palace administered the distribution of goods and facilitated long-distance exchange, limiting the use of high-quality Göllü Dağ obsidian artifacts to the palace complex (Frahm and Feinberg 2013:1129–1130). Another, closer example would be the constant supply of amphora-borne commodities in the Ptolemaic Eastern Desert forts, such as 'Abbad and Bi'r Samut, where the proportion of amphorae exceeds that documented in contemporary third-century BCE households elsewhere in Egypt. It seems that "the large numbers of amphoras discarded at the site are evidence of a supply chain stimulated by and directed at least in part toward the maintenance of the army and other travelers who utilized this network of fortifications and watering stations" (Gates-Foster 2022:359). Another example is the relatively homogeneous amphora assemblages recorded at sixth–fifth-century BCE sites along the north Cypriot coast, where mostly southeastern Aegean amphorae were found, likely the result of an organized, centralized importation system (Lawall 2013; see *Discussion*, below).

The distribution mechanism of a free market, however, is forged by market forces. This system operates based on supply and demand with the aim of gaining profit. In such a system, merchants operate in separate social and financial networks that are based on personal acquaintances and trust relations, helping them control the supply and, at times, even the demand (see, e.g., Veenhof 1972:400; 2000:864; Sherratt and Sherratt 2001:28–31; Stager 2001). Trade in such a setting occurs mostly indirectly, through a down-the-line

mechanism. This kind of indirect trade was mostly common in markets where traded goods were not limited to the elites but also available to others, attested by the finding of similar goods in different contexts, such as public areas (markets, ports, etc.), royal estates and simple dwellings.

The Achaemenid Empire's commercial system, termed by Smith (2004:77–80, Table 1) "Intermediate commercialization," was pivotal to its economic structure. Within this framework, diverse commercial institutions were introduced, such as banking, credit systems and extensive markets, facilitating the trade of goods and labor (Smith 2004:77–80, Table 1). Commerce spurred expansive trade both within and beyond the borders of the Empire, unprecedented at the time (e.g., Demesticha 2011:48–49; Stern 2001:518–522). Alfen's (2002) comprehensive analysis of commodity exchanges across Mesopotamia, the eastern Mediterranean and Greece during the Persian era underscores the breadth and diversity of traded goods and their distribution patterns. As mentioned above, such a large variety of commodities is usually evidenced by the existence of an unregulated economic system.

During the Achaemenid period, the lion's share of south Phoenician trade was conducted most probably by the Phoenician themselves. The Phoenician cities acted as a "port of trade," i.e., a place of exchange located in neutral territory at an important crossroad under the protection of foreign states (Aubet 2001:102). This model, primarily applied to the region in the Hellenistic period, implies a network of distinct Phoenician port communities within the broader Mediterranean world, highlighting the Phoenician cultural persistence despite economic integration. This model may also apply to the Persian period, when the Phoenicians, who kept a certain level of hegemony, participated in the local economic system, engaging in trade and adopting practices that benefited their commercial activities, while adjusting to the new political and economic landscape. Unlike the selective, probably strategic appropriation or rejection of certain objects or practices (Berlin 1997; Berlin and Lynch 2002), the use of certain types of amphorae was the result of economic, not social reasoning, and brought about not by the container, but by what it held (in this case, wine).

The Distribution of Trasport Amphorae in Southern Phoenicia

Amphorae are among the strongest archaeological evidence for restoring ancient trading networks. A comprehensive overview of wine amphorae retrieved from fifth–fourth-century BCE (Persian period) contexts in Levantine costal sites indicates that the commerce system connecting Levantine coasts with Greece was varied and included amphorae from the Aegean Sea (mostly from Chios), the southeastern Aegean (mostly from Samos and Miletus, with other possibilities as well) and the northern Aegean (mostly from Thasos and Mende).[4] The current study included the remains of more than 450 imported Greek amphorae

[4] For a recent discussion concerning the identification of places of production, typologies and chronologies, see Lawall and Tzochev 2019.

retrieved from archaeological excavations at 40 Persian-period sites in the Southern Levant,[5] mostly along the coast, with some extending further inland into areas governed by the Phoenicians in the Shephelah, Jezreel Valley and Galilee. The findspots are ubiquitous, appearing in various settings from major urban centers to rural villages, discovered in domestic, military and commercial contexts. Typically, they are found alongside locally[6] produced containers, such as basket-handled jars and Phoenician jars, highlighting their widespread use and integration into local trade networks.

A careful examination of the different types of amphorae reveals the evolving significance of each group during the fifth–fourth centuries BCE. In the fifth century BCE, amphorae from Chios and the southeastern Aegean were the most common. By the beginning of the fourth century BCE, the northern Aegean amphorae had become the most common group, but they were replaced in the second half of that century by a South-Aegean group, represented by mushroom-rimmed amphorae (Shalev 2014:373–369). The 150 amphora sherds (MNI) from Dor clearly demonstrate this distribution (Figs. 2; 3).

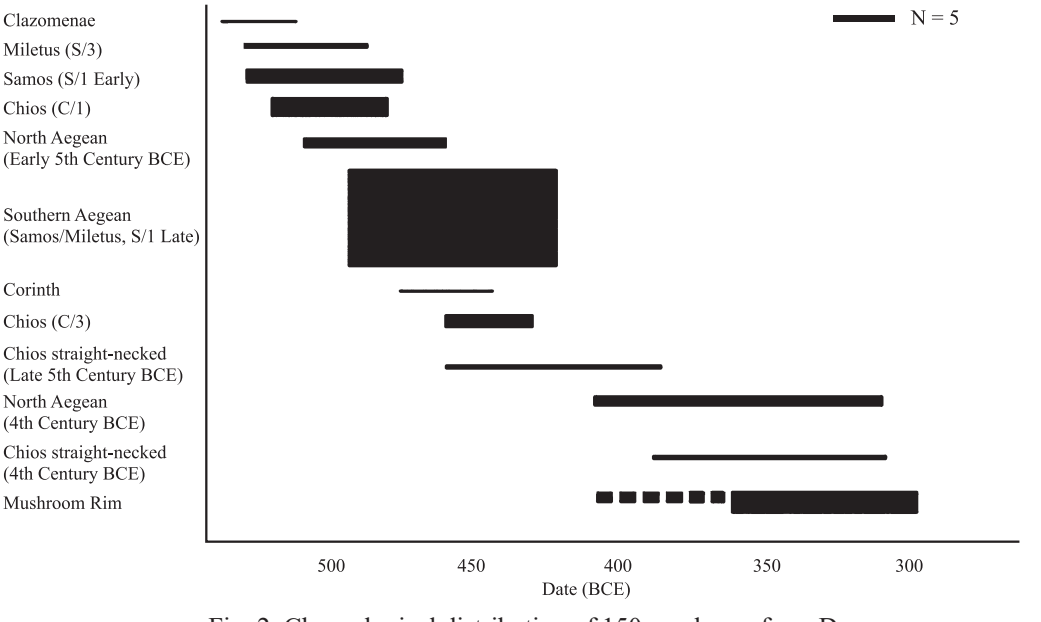

Fig. 2. Chronological distribution of 150 amphorae from Dor.

[5] The amphorae included in this study originated in sites that were published in final excavation reports, such as Tel Mikhal (Tel Michal; Ariel 2006; Kapitaikin 2006; Marchese 1989) and Apollonia (Tal 1999). Amphorae from other sites, such as Shiqmona, Dor or Megadim, which still await their final publication, were examined by the author (Shalev 2014). I wish to thank Sam Wolff, for allowing me to study the material from Megadim.

[6] "Locally" refers to the nearby areas of the East Mediterranean region, including Cyprus and the Phoenician coast.

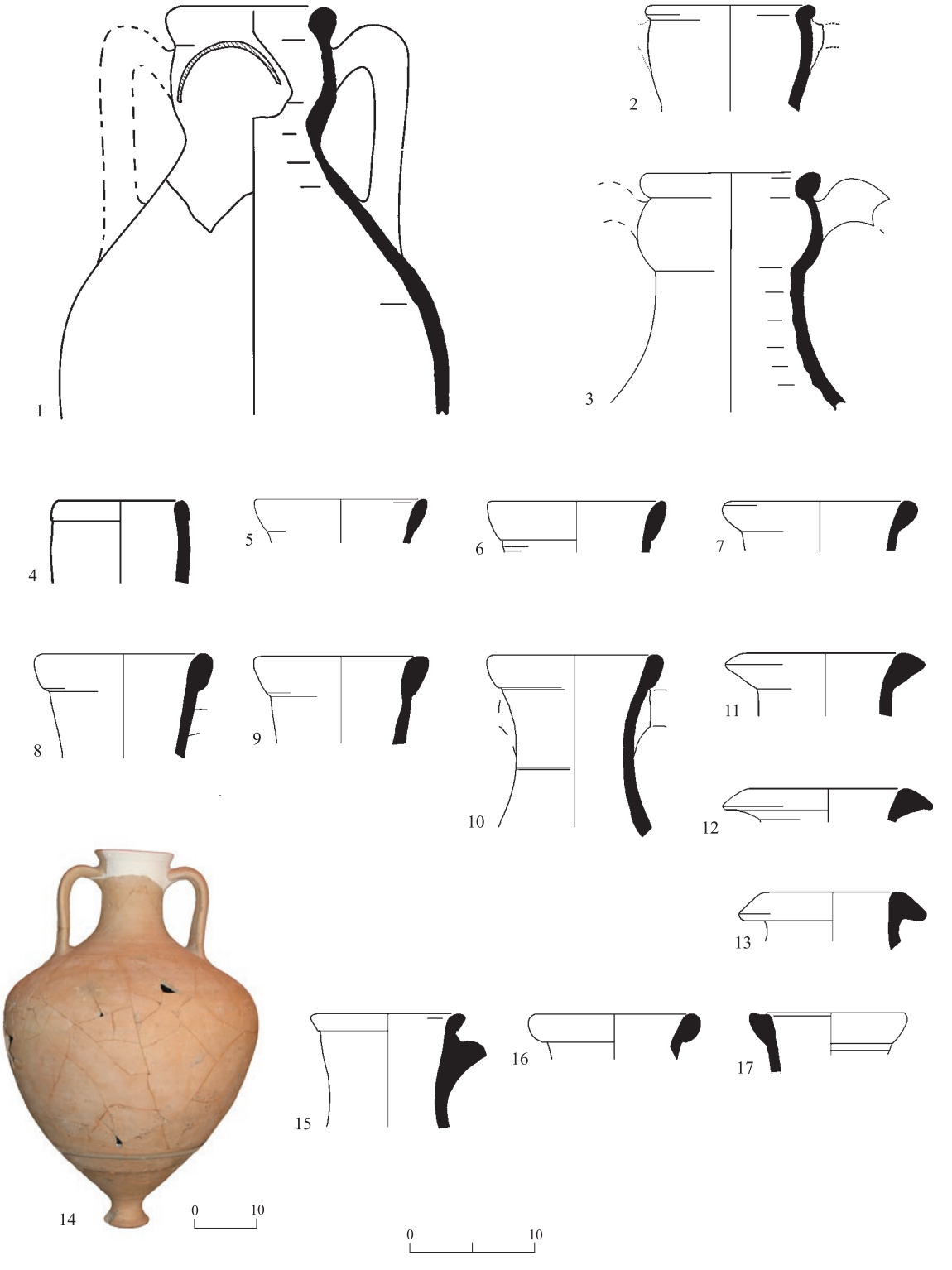

Fig. 3. Transport amphorae from Dor, according to origin: Chios (1–4); Southeast Aegean ("Samos-Miletus," 5–10); "Mushroom Rims" (11–13); North Aegean (14, 15); Corinthian (16); and Clazomenae (17) (digital scanning: A. Karasik).

This distribution pattern, including its diachronic changes, is almost identical to that of southern Cyprus, where a wide range of northern Aegean, Greek and southeastern Aegean amphorae are found (Lawall 2013). It seems that both areas were part of a single trade network, with a maritime route passing through the eastern Aegean Sea to the shores of southern Cyprus and from there to the Levant. A similar maritime route was reconstructed by Stewart and Martin (2005), based on similarities in Attic pottery.

Distribution patterns in other regions of the eastern Mediterranean are altogether different. In Marion and other sites on the northern coast of Cyprus, different distribution patterns were identified, especially at the end of the sixth–first half of the fifth centuries BCE, with the assemblages displaying significant homogeneity, mostly consisting of Southeastern Aegean amphorae. According to Lawall (2013), these two patterns attest to two trade networks employed on the island during this period. The fact that the northern network focused on a single amphora type points to an organized import based on a centralized system. The appearance of many such amphorae in noble tombs in this region suggests that this network was controlled by Cypriot elites and designed first and foremost to provide their personal needs. In contrast, the larger variety recorded in settlements in southern Cyprus indicates a different, more commercial trading system with a wider circulation.

A completely different trade network seems to have existed in Egypt. The southeastern Aegean amphorae (from Samos, Miletus and other nearby production centers), which were the most common group in southern Phoenicia in the fifth century BCE, comprise a small and relatively insignificant group in Egypt. The northern Aegean amphorae, on the other hand, which are relatively scarce in southern Phoenicia, are very common in Egypt, second only to the Chios amphorae (Shalev 2014:270–271; cf. Coulson 1996:63; Defernez 2007:559–561).[7]

The trade pattern noted in Egypt closely resembles those identified in Athens and in the Black Sea sites. In these regions, the amphorae distribution patterns may relate directly to the intensification of the Athens grain-trade network with the Black Sea. It is possible that the amphorae from both centers at Chios and Thasos/Mende were transported to Black Sea sites in exchange for grain (Lawall 1995:303–308). It seems that Chios was one of the main exporters of Aegean wine, especially to the Black Sea, as reflected in the large quantities of Chian amphorae found in these two sites (Bylkova 2005:219–223; Demesticha 2011:49). The relative frequency of northern Aegean amphorae may also be an outcome of the export of wine from Chios, as the maritime route from Athens to the Black Sea passes through the northern Aegean Sea. A similar interpretation may be offered for Egyptian amphorae assemblages during this period, representing a direct trade network between Egypt and Athens. This direct network was created due to Egypt's role as a grain supplier to Athens and was probably mostly conducted by professional Greek merchants.

[7] These differences grow indistinct in the second half of the fourth century BCE, when the mushroom-rimmed amphorae become common.

Contemporaneous with the abovementioned networks, mostly operated by professional merchants, trade also occurred on a private, independent level. This network, undetected in the archaeological record but attested to in documents and historical descriptions, was reliant on small groups of people, who conducted occasional trade on their own initiative.[8] Participating in this kind of trade were individuals who financed their own maritime journeys by transporting cargo on board, as well as soldiers and members of military delegations carrying goods, and farmers and itinerant artists trying to sell their merchandise. Another group comprised gift-exchanging aristocracy and opportunists investing in occasional business deals.[9] The most famous example for this practice is Plato's journey to Egypt, which was financed by the olive-oil cargo carried on board (Plutarch, *Life of Solon* II:4). Another example may be found in a document from Elephantine, describing a grain-trade deal struck by a Persian nobleman named Spentadata, who was in a partnership with another person, probably of Syrian origins. The deal was carried out with the help of two Egyptians, Hori and Petemachis, who had owned a (probably rented) boat. The operation seems to have been the initiative of the noblemen and intended for their own profit; they were also the ones who decided what to do and where to transport the merchandise (Porten 1996:123–124; Kuhrt 2007:863–864).

Inland Distribution Patterns

The imported amphorae assemblages clearly indicate that several trade networks operated in the eastern Mediterranean basin in the Persian period: direct trade supervised by the elites in northern Cyprus; direct trade supervised by professional merchants in Egypt; and small, down-the-line trading systems that operated along the southern Cypriot and Levantine coasts. The fact that these systems existed concurrently within the same area and under Persian rule attests that imperial authorities chose not to be involved in the commercial system in this distant area of the empire, but rather allowed it to develop according to local market demands.

The distribution of Persian-period imported Greek amphorae in southern Phoenicia was mostly limited to the coastline and its immediate vicinity (Fig. 4), save for some larger sites, such as Gezer, Lakhish (Tufnell 1953:319, Pl. 53:8–12; 509, Pl. 96)[10] or Tell el-Ḥesi (Bennett and Blakely 1989: Figs. 152:6, 38; 153:3; 156; 158:14; 162:26), located c. 30

[8] Private international trade existed of course well before the Persian period. In the days of the Neo-Assyrian Empire, the middle class, palace and temple officials partook in this type of trade, investing resources in trade expeditions. The Assyrian king's involvement in trade was limited to imposing taxes and customs on the caravans and, at times, on the traded goods (Galil 2009). The main difference between the private trading system of the Neo-Assyrian period and that of the Persian period is that the participants in the former were mostly elite members investing their money in initiatives of professional merchants, whereas people of different classes were involved in the latter, often initiating trade themselves.

[9] A similar tax was imposed on the transactions in slave trade (Lemaire 2007).

[10] The amphorae published from Lakhish, identified as Rhodian or not identified (Fantalkin and Tal 2006:174, n. 9), are mostly early fifth-century BCE Chian amphorae. Only one rim belongs to a mid-fourth century BCE mushroom-rimmed amphora and retrieved from Layer Ic, dated to the late Persian or early Hellenistic period.

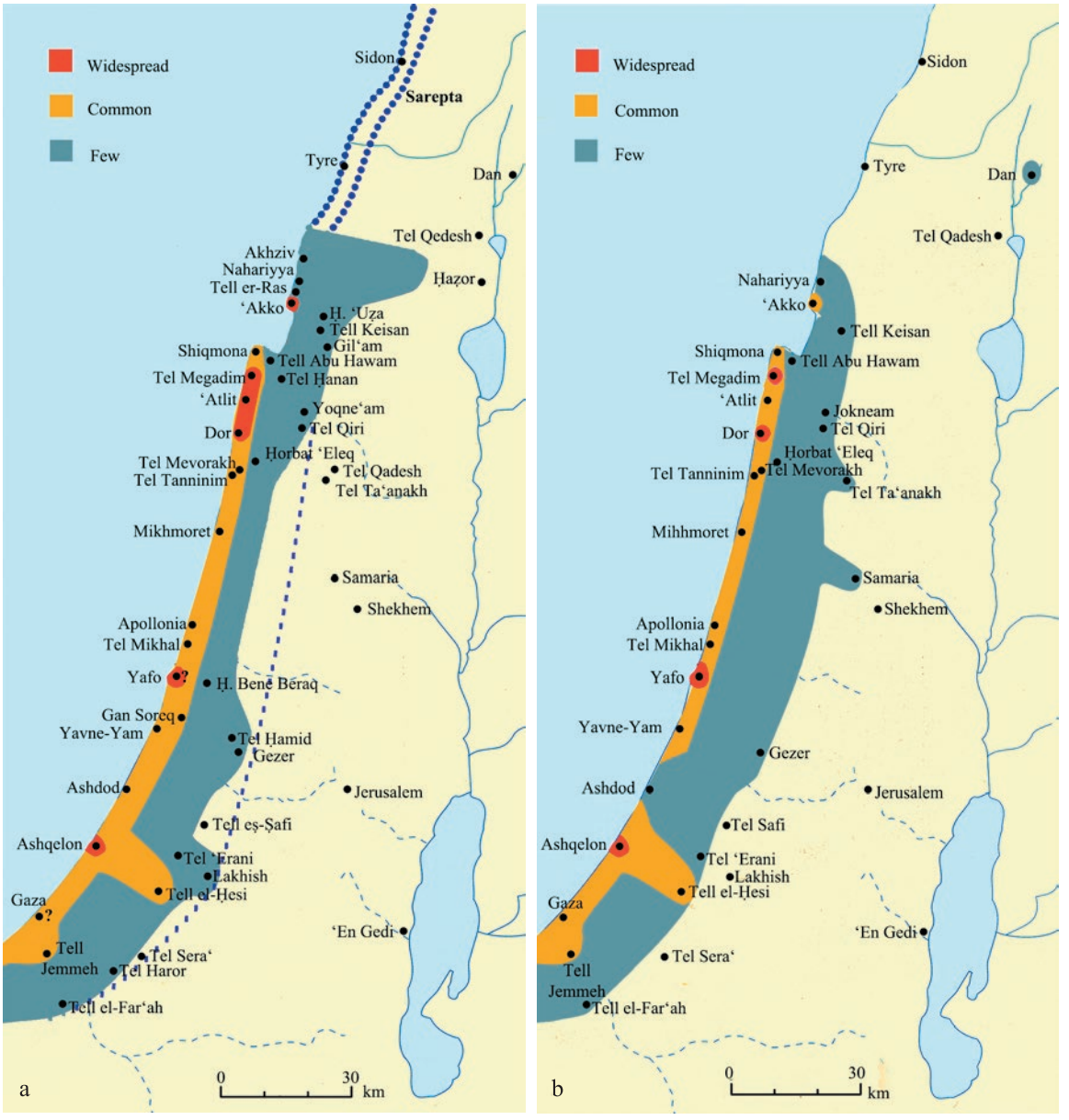

Fig. 4. Distribution maps of amphorae (a) and Cilician "banded bowls" (b) in the fifth century BCE.

km inland.[11] Yet even these sites yielded only few amphorae, all dating to the early–mid-fifth century BCE.[12] It seems that in the fourth century BCE, the import of Greek transport amphorae to these inland sites further declined.

[11] Thus far, none have been found in Jerusalem and nearby settlements (c.f. Zuckerman 2012; Shalev 2015)

[12] The mid-fourth-century BCE southeastern stamp handles bearing the ligature eta-rho were probably used as gaming pieces and may have reached the site as a complete object and not a complete amphora (Bennett and Blakely 1989:213; cf. Ariel 2006:89–90).

The coastal settlements exhibit a relatively homogeneous distribution, with no correlation between amphora types and site types, with the largest amphora concentrations found in the large centers of ʻAkko, Dor, Yafo (Jaffa) and Ashqelon (and probably Gaza).[13] In inland sites, however, the quantities of the amphorae exhibit a direct relationship to the size of the site and its distance from the major abovementioned centers: the smaller the site and the greater its distance from the coastal centers, the lower the number of vessels (Shalev 2014:277–378). This dendritic pattern was the consequence of the distribution mechanism forged by economic considerations of prices and profits and not the result of an organized, well-controlled redistribution arrangement (Peacock and Williams 1986:56–57).

The limited distribution of amphorae at inland sites was already noted at Tell el-Ḥesi, where several Persian-period imported vessels were found, including very few transport amphorae. The excavators argued that the concentration of amphorae along the coast stemmed from their use in maritime, rather than inland transport, and therefore, they are not found too far from the coast (Bennett and Blakely 1989:213–214). In general, long-distance overland transport of wine and other vintage liquids was accomplished by transferring the contents of the amphorae to other receptacles, such as unbreakable water skins (Davies 1984:271); however, this mostly occurred in long journeys, not necessarily being the rule for all overland commerce. When considering the resources of a strong central governing entity, overland distance should not be perceived as an insurmountable obstacle, particularly when there is demand. This is notable in the case of Gordion, Phrygia, located 200 km from the coast, where many Greek amphorae were brought from Chios, Mende and elsewhere during the fifth and fourth centuries BCE (DeVries 1990:399–400; Papadopoulos and Paspalas 1999:162–163; Lawall 1997; 2011; 2012). Another example is the transport of many amphorae, both Greek and Egyptian, to the forts located in the eastern Egyptian desert. These forts functioned as distribution centers of supplies—particularly water and grain—and the vessels were transported under a centralized and controlled commodity supply chain (Gates-Foster 2022). The best example for this in the Southern Levant is the consistent arrival of large quantities of Rhodian amphorae in the inland areas of Israel during later periods, especially from the mid-third century BCE onward. Many amphorae dating to these periods were found in several sites in the Shephelah, as well as in mountainous areas such as Samaria, Jerusalem and Shekhem (Finkielsztejn 2000). In fact, more Hellenistic amphorae were found in Jerusalem and its environs than in all the southern Phoenician sites in the Persian period (Johnsson 2004: Table 5). Moreover, comparing the distribution of Persian period amphorae to those of other receptacles (e.g., basket-handle jars or Phoenician jars) shows a relatively similar pattern. These containers concentrated mostly along the coast, where they can be found in almost every site from this period in vast numbers. Their numbers decrease inland, and only in rare cases can they be found outside

[13] Giroud (2000) and Humbert (2021:93) mention the large number of amphorae found in Anthedon, but do not describe their types or quantity.

the area of Phoenician rule, in Judea and Samaria. This pattern also holds for other imported vessels, such as fine Attic or Cilician banded tableware (Lehmann et al. 2020), although the differences here are slightly less sharp, particularly regarding Attic vessels which are found in small quantities in many land sites. The relatively large number of Attic vessels and several Phoenician jars found in the administration center of ‘En Gedi are an exception. It is obvious that they arrived there through direct trade, complying with the requests of the administrative officials stationed there (Stern 2007:203, 230–240).

Analyzing intra-site distribution patterns is hindered by the fact that many sites dating to this period have not yet been fully published. The information gleaned from the few sites that yielded enough information regarding archaeological context and quantity indicates that amphorae were found in both commercial and domestic areas. Although there are usually larger quantities in commercial areas, the composition of the assemblages in the different areas is nonetheless similar. An analysis of amphorae distribution in Dor (Fig. 5) shows hardly any differences between the assemblages discovered in domestic areas (Areas D5 and D2) and those found in the commercial area in the center of the settlement (Area G).[14] Similar data were gleaned from Shiqmona and Megadim, as well as initial results from Ashqelon (for further details and references, see Shalev 2014:276–298).

Taxation

Authorities may control and oversee commerce through direct involvement in trade and distribution mechanisms. Other mechanisms involved indirect control through taxation and direct control through custom stations and fortresses on main commercial routes.

Tax and tribute collection and redistribution systems were operated regularly in the Persian Empire, especially when administrative needs were concerned. The land tax, usually a deduction of a fraction of the agricultural produce, was one of the most common forms of levy. Foodstuff was collected from the local population as tax payment to the king (Xenophon, *Cyropaedia* IV:5.69). Wine was one of the main products, supplied on a regular basis to the army, as well as to the imperial forces and the local regiments.

Historical texts[15] and administrative documents discovered in Persian governmental centers (e.g., over 200,000 documents in the Persepolis archives—Hallock 1969; Lewis 1990; Jones and Stolper 2008) and administrative centers in distant satrapies (e.g., Elephantine, Egypt—Porten 1968:85–87 and Khirbat el-Qom in Idumea—Lemaire 2004),[16] clearly demonstrate that local products were collected and transferred to central warehouses and then redistributed according to the needs of various sectors: to supply the royal palace,

[14] Rim-sherd numbers according to area: D5 = 75, D2 = 45, G = 30.

[15] See, for example, Xenophon’s *Anabasis* 2.4.27; Herodotus, 2.149; Nehemiah 2:7–8.

[16] For additional reading on the Achaemenid taxation and administration, see, for example, Kleber 2021: esp. Chapters 11–17; Treuk 2022, and see further references therein.

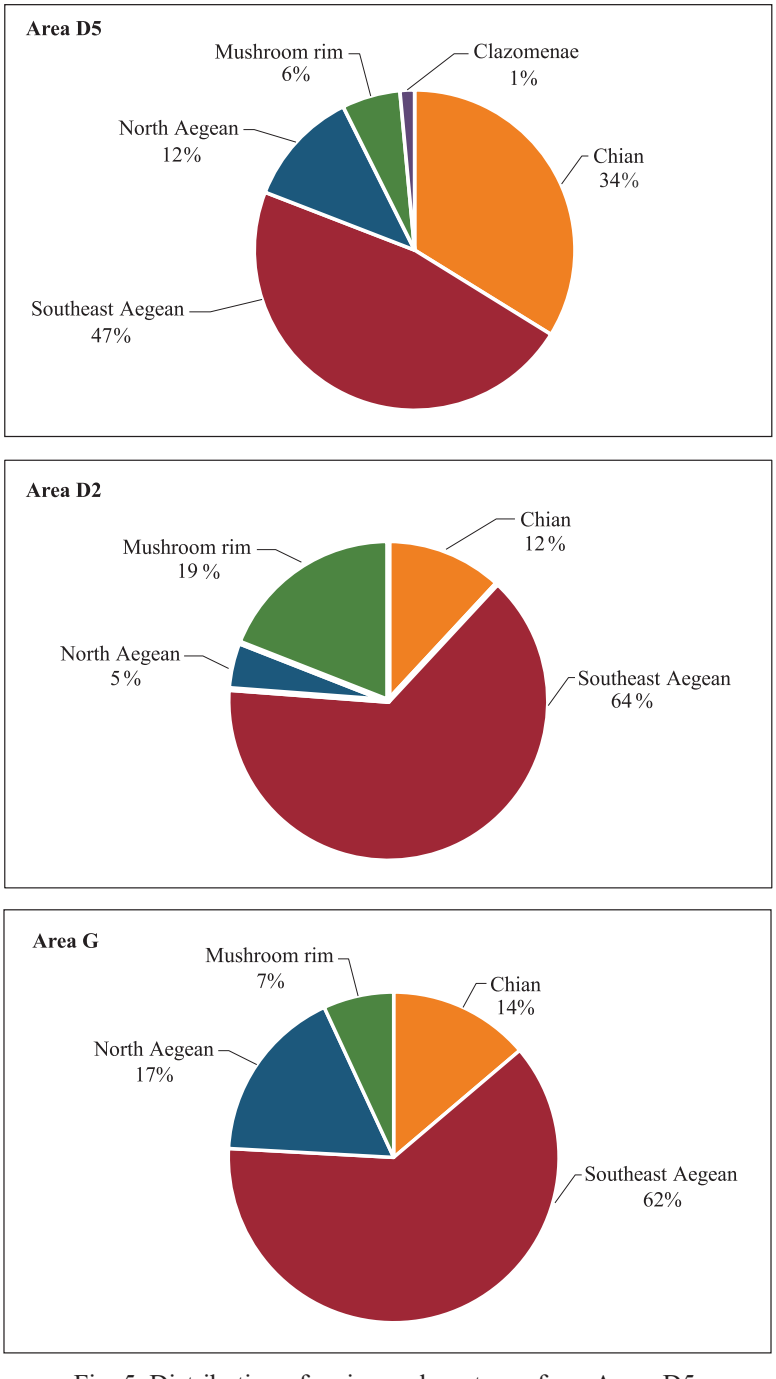

Fig. 5. Distribution of main amphora types from Areas D5, D2 and G at Dor.

temples and aristocratic estates; as provisions for military personnel; supplies for messengers and clerks using the royal routes; and payment to workers or craftsmen. These documents include receipts or certificates related to incoming commodities and their storage, reflecting on the economic systems at play.

Although there is only meager evidence of the local supply system in the Fifth Satrapy, or of its integration into the imperial system, it is obvious that collection and distribution mechanisms were employed here as well.[17] Ezra and Nehemiah provide a detailed description of foods and drinks that were supplied regularly to the Judean governors (Ezra 7:21; Nehemiah 5:17), and several ostraca from ‘Arad and Be’er Sheva‘ describe food that was transported to a main warehouse and wine supplies allotted to soldiers based in the fortresses (Naveh 1979; 1981). An inscription on a jar from Shiqmona mentions “good wine from Gat Carmel”—the wine jar may have been a tax collected and stored at the site (Elgavish 1994:78–87).

Traded goods and trade activity were also subject to taxation. This is best noted in the *Customs Account* papyrus dating to c. 475 BCE, which includes a detailed description of incoming and outgoing ships to and from an Egyptian port over the course of a year (Yardeni 1994). This document further indicates an organized and unified taxation system comprising a fixed commerce tax rate of 10% and a certain sum of money for each of the merchants (termed “Silver of the man”).[18] The unified tax system is also attested on two monumental stelae erected by Nectanebo I (380–362 BCE) in Naucratis and Heraklion, Egypt. The inscriptions on the stelae detail the taxes imposed on Greek merchants (10% of all the goods), while specifying their different destinies: part was kept in the local temple treasury and the rest was transferred to the public purse (Yoyotte 2002; 2006; Fabre and Goddio 2013:70).

The evidence from Egypt indicates that while the Persian authorities ensured that the taxation system operated effectively, they did not interfere with the commercial activity itself. No commodities were entitled to a reduced tax rate to encourage trade, and none were subjected to higher tax rates to discourage certain trade branches. Moreover, Persian rule did not establish a new system of custom stations in Egypt, neither did it set new tax rates; rather, it continued using the existing system and documentation method from the Saite period, prior to the Persian conquest (Möller 2000:207–208; Muhs 2016:186–187).

It is noteworthy that to date, no other taxation system was found to have been similar to that witnessed in southern Phoenicia. It is possible that also in Phoenicia, a certain percentage of the goods was paid as tax and that there was a merchants’ levy too. However, as the Phoenicians enjoyed a reduced tax burden due their close contacts with the Persians, it is unlikely that the that the Empire would apply a stricter tax policy in this region.

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[17] On the whole, our knowledge of governance in the Fifth Satrapy and of Phoenician governance over the local province in particular is quite meager (cf. Meadows 2005; Jigoulov 2019, and see further references therein).

[18] In Athens, for example, significant tax exemptions were offered in the fourth century BCE to Phoenician merchants as a means of encouraging the import of goods, namely grain, into the city (Reed 2003:45–46).

Custom Stations and Fortresses

Direct administrative control is often manifested in the archaeological record in the form of structures erected by the central authority. Such structures were regularly constructed in or near local administrative centers, usually following a uniform plan, and apart from their functional role, they also served as symbols of power and legitimization of the regime (Lawrence and Low 1990:466, 488–490; cf. Giddens 1984:118; Routledge 2004:154–183).

The line of Assyrian fortresses constructed along the Levantine coastline is a good example of the rulers' intent to demonstrate their presence and conspicuous control over the area. These structures were built in similar plan and size, and at equidistant intervals. Most scholars agree that these fortresses were intended not only for security needs, but also, if not mostly, to control traffic and maritime trade (see, e.g., Elat 1978; Na'aman 1995; Fantalkin 2006; Berlejung 2012).[19] The abovementioned Ptolemaic fort lines in the eastern Egyptian desert may also be considered in this light (Gates-Foster 2022).

To date, no similar Persian-period arrangement of administrative structures located along the coast has been found, although many attempts have been made to do so. Some structures, however, were understood as indicators of a central authority, such as the buildings unearthed in Shiqmona Stratum 5 and Naḥal Tut VIII, the so-called fortresses at Mikhmoret and Tel Mikhal, a structure at Tel Qudadi, the administrative building at Tell Qasile, the fortress near Rishon Le-Ẓiyyon, the fortress north of Ashdod and a building at Tell el-Ḥesi.[20] These were often described as local administrative buildings, serving security needs, tax collection and trade supervision (Stern 2001:370–371; Tal 2005b:74–75, 80–81), or even as true fortresses, serving as a line of defense (Balandier 2011). A detailed review of the sites shows, however, that they were not part of an organized system, representing a centralized political authority, as they differ completely in plan, size, function and, most importantly, in the dates of their construction and duration of their use (see below).

Only three of these buildings functioned as true fortresses: Rishon Le-Ẓiyyon, north of Ashdod and Naḥal Tut. Nevertheless, they do not form a pre-planned fortification system and had never functioned together: the Rishon Le-Ẓiyyon fortress is an abandoned Assyrian fortress, doubtfully used during the Persian period (Tal 2005a); the construction date of the Ashdod (Fig. 6:1) fortress has not been established, although it was abandoned toward the end of the fifth century BCE (Kaplan 1969); and the building in Naḥal Tut VIII (Fig. 6:2)

[19] We might add the fortresses at Megiddo and Ḥaẓor, which are outside the region of interest here (Stern 2001:374–378), as well as the palace at Lakhish. Other fortresses were unearthed at Tell Jemmeh, Tell Sera', Khirbat er-Rujum, Tell el-Far'ah (South), Tell Ruqueish, Tel Qaṭif, Be'er Sheva', 'Arad and Tell el-Kheleifeh near Elat. It appears, however, that Fantalkin and Tal (2006) rightly asserted that these fortresses are relatively late, built at the end of the fifth–early fourth centuries BCE. They were part of an increase in the military presence on the new border with Egypt, which had been relocated to the Negev, following the successful Egyptian revolt in the end of the fifth century BCE (Fantalkin and Tal 2006).

[20] For a comprehensive stratigraphic review that includes the finds from all sites discussed herein and further references, see Shalev 2014:85–90.

was built at the end of the fourth century BCE and was only in use for a short period before it was destroyed by fire, based on a coin of Alexander III (323–336 BCE) that was found on the floor of one of its rooms, at the bottom of a collapse layer (Alexandre 2006; Stiebel 2009:14–15). It is possible that the Naḥal Tut fortress was built ad hoc, in preparation for war against the Macedonian army rather than as an integral part of the regional administration system. Moreover, while basket-handle jars and Phoenician jars were found at Naḥal Tut, no amphorae were published from any of these three forts.

Two other buildings, usually considered as fortresses, were unearthed at Mikhmoret and Tel Mikhal. The structure at Mikhmoret is a large stone building, functioning as a fortress or fortified storehouse, as suggested by the large number of storage vessels found within it (Fig. 6:3). This structure was dated to the end of the sixth century BCE, suggesting that it was built during Cambyses' journey to Egypt; however, this date was based on a sixth-century BCE tablet fragment found outside the building in a disturbed fill that also contained sherds dating from the Persian to the Byzantine period. The building was destroyed in a conflagration at the beginning of the fourth century BCE and never rebuilt (Isserlin 1961; Porath, Paley and Stieglitz 2008; Masarwa 2011). A few Cilician bowls were found in this structure, but no transport amphora was extant. The single amphora—a fourth century BCE mushroom-rimmed vessel—was found further north in the village (Masarwa 2011).

The archaeological evidence from Tel Mikhal is even more complicated: a small square building was found in Stratum XI (Building 872; Fig. 6:4) with several *ṭabun*s and pits to its south. It was interpreted as a military camp, with the square building serving as the administrative headquarters and the numerous pits representing the remains of the military depot surrounding it. This interpretation finds no real support in the archaeological record, as there is no clear stratigraphic connection between the buildings and the pits. Furthermore, most of the building's plan is reconstructed and the building itself yielded no finds that suggest a military function. The entire stratum was dated to the end of the sixth century BCE based on imported wares found in one of the pits; this date, however, is inaccurate, as these vessels should be dated to the first half of the fifth century BCE (Marchese 1989; cf. Shalev 2014:298–302; Martin 2007:84–85). According to the excavators, the northern part of the tell continued to serve military and public purposes throughout the entire period: structures from Strata X–VI were interpreted as fortresses or administrative buildings, with no actual data presented to support this.[21] In some cases, a few walls are ascribed to a single complex with an unclear plan, though they are not necessarily related. The reconstructed plan of Structure 340 (Stratum VIII), for example, that was also interpreted as a fortress (Fig. 6:5), resembles the plan of the building at Tell Qasile (considered an administrative, civilian building; Fig. 6:6), more than it resembles a fortress.

[21] For a critical examination of the account of the events that led, according to the excavators, to the founding and demise of each stratum, see Shalev 2014:64–66.

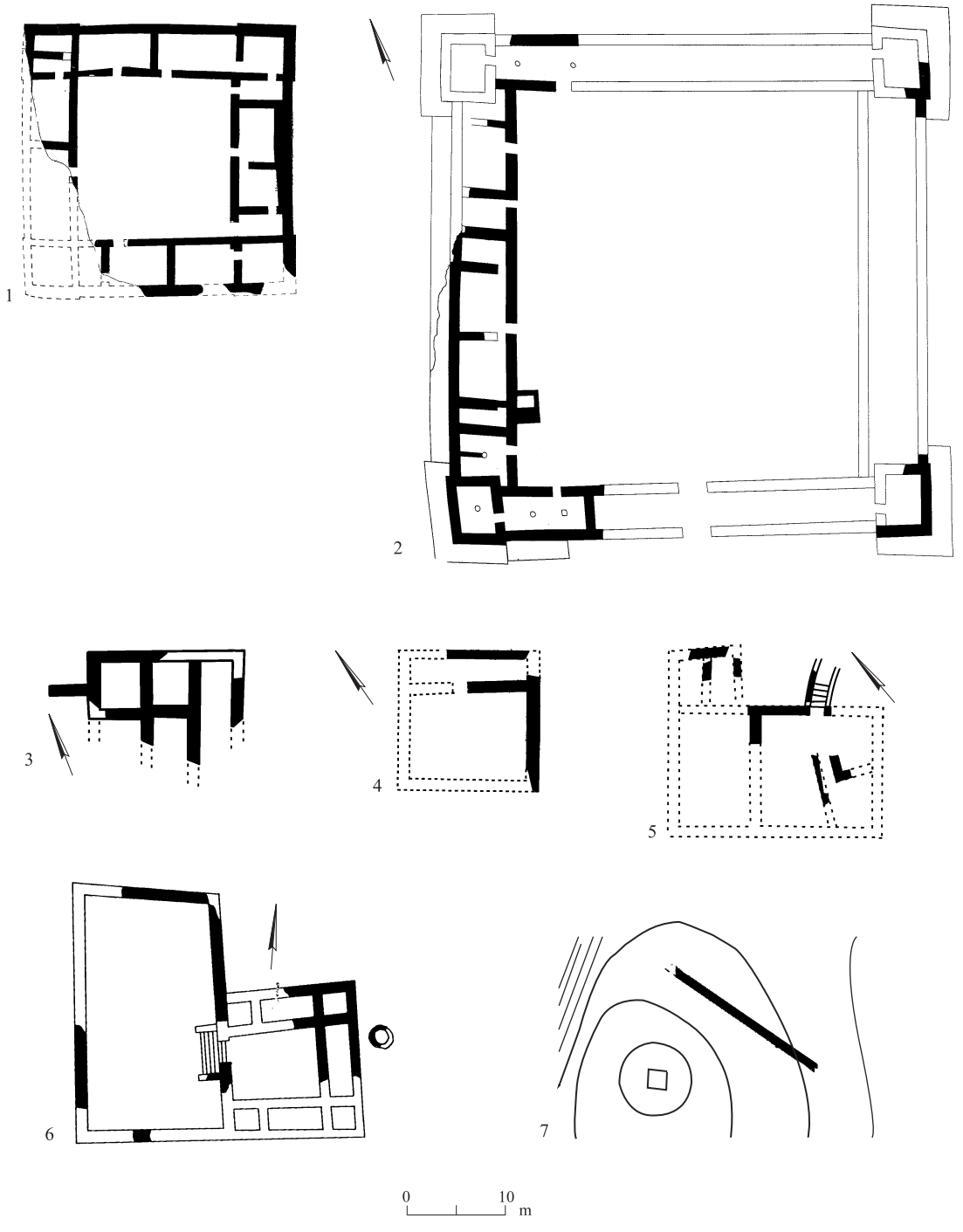

Fig. 6. Buildings in southern Phoenicia that were considered fortresses and administrative structures: (1) the fortress north of Ashdod; (2) Naḥal Tut; (3) Mikhmoret; (4) Tel Mikhal Stratum XI; (5) Tel Mikhal Stratum VIII; (6) Tell Qasile; (7) Tel Qudadi.

It seems that the identification of Stratum XI as a military camp is based mostly on the initial dating of the construction of Building 872 (525 BCE) and on the concept of periodization, according to which the beginning of each stratum is ascribed to a regional political process, and its demise, to a known, documented violent historic event.[22] In fact, there is no evidence of any military use of this building or of any other buildings in subsequent layers. Different bullae and stamps found at the site (Barak and Amorai-Stark 1989), a wine storeroom and a workshop in Stratum VIII, a large silo in Stratum VII and winepresses and storerooms in Stratum IV (Herzog 1989)—all attest to broad commercial and agricultural activities, and to the existence, to some degree, of local administration. Only one imported amphora was published, an east Aegean vessel dated to the late sixth–early fifth century BCE from a Stratum XI pit (Singer-Avitz 1989:116, Fig. 9.1:13).

Additional buildings, usually defined as fortresses were found at Shiqmona and Tel Qudadi. The remains from Shiqmona were dated to the mid-fourth century BCE, with its destruction attributed to the Macedonian conquest. One of the rooms in this building was used for storage. The building's plan is unclear, and the finds were sparse. Moreover, there are no remains of fortifications or signs of construction activity apart from the reuse of parts of the Stratum VI buildings. Despite this, the excavator's interpretation of this building as a fortress and a royal storehouse was widely accepted by many scholars (Elgavish 1994:78–84; see, also, Tal 2005b: 80; Balandier 2011:22–25). No imported amphorae were found, although the remains of numerous jars of other local types in the building indicate that it was used as a storing facility. The existence of a storehouse in an urban settlement, surely one located along the coast, may characterize several building types, including residential units and markets, and does not necessarily indicate military or royal functions.

The finds from Tel Qudadi (Fig. 6:7) include a single wall (17.0 m long, 0.75 m wide), built in the ashlar-pier construction method, exposed above an Assyrian fortress. This wall was attributed to the Persian period based on the pottery recovered from its foundations and its construction method; however, here to, there is no evidence of military activity (Avigad 1993; Fantalkin and Tal 2009; 2010; 2015:64). In comparison to the robust Iron Age fortress walls (c. 2.5 m wide), the thin Persian wall indicates a domestic nature. Therefore, the potential designation of this site as a fortress from the Persian period hinges primarily on its strategic positioning in proximity to the Yarqon estuary. Additionally, this classification may be influenced by a prevalent assumption of ongoing land utilization, drawing from the presence of an extant Iron Age fortress (Fantalkin and Tal 2015:203–205). Notably, it is observed within this framework that during the Persian era, significant central settlements were notably absent along the Yarqon and in its immediate vicinity, including its estuarine regions or sources.

[22] Architectural features of economic nature such as markets, storehouses and shops are very common in settlements along the coast during the Persian period (e.g., Ashqelon, Yafo, Tel Mikhal, Megadim and Dor). It is probable that some storerooms—completely or in part—served in the imperial tax-collection system. Their location nearby shops indicates, however, that alongside the institutional system there was also a private trading system that was organized and managed by private people (Polanyi 1957).

Persian rulers, contrary to their Assyrian counterparts, did not establish an organized system securing the coastline and overseeing commerce. The buildings described above differ from each other in their nature and use and were never used simultaneously as part of a unified system. Furthermore, none of these follow the plan or architectural style of the main grand building at the administrative complex from Tel Qedesh in Galilee, with its eastern-facing, π-shaped colonnaded entry court and a hall with two larger columns that framed an entrance to a second open-air courtyard. Judging by its size, shape and plan, as well as by the finds, this compound was clearly an administrative and economic center belonging to the royal Tyran house who governed the area (Herbert and Berlin 2003; Berlin 2012; Brandl et al 2019:223-226; see *Discussion*, below).[23] While this may represent a local administrative rule, these buildings are clearly not what one might expect from an official set of imperial custom houses or control-compounds.

Discussion

The archaeological study of the nature of Persian governance, and the degree of their involvement in inter-satrapy administration, has usually centered on a two-prong issue of control: political and social. The measure of social control seems easier to explore, as it manifests itself relatively clearly in the material culture. The comprehensive study of local material culture clearly indicates the relatively low interest displayed by the local populations toward the foreign imperial cultural milieu. Evidence of local adaptation, mimicry, modification or reinterpretation of Achaemenid products, symbols or ideologies within indigenous cultures are notably infrequent (Moorey 1980:128; Stern 2001: Book 3, passim). Cultural entanglement primarily indicates western impact, where local elites incorporated Greek influences into the local social fabric.

The study of political control is a more demanding one, as it relies heavily on the means of administration—data that is more likely to be found in documentation rather than in physical evidence. Advocates of the territorial control model claim that the Achaemenid regime was amply involved in all aspects of government and that the regional administration of different satrapies operated under rigorous control of imperial bureaucratic institutions, supervised by imperial forces that were present there regularly (Janzen 2002:143–145; Fried 2004, 2010; Edelman 2007; Balandier 2011). Conversely, those who believe that the Achaemenid regime was characterized by a more hegemonic control dismiss the degree of the regime's involvement in all governing aspects, suggesting that it gained its control by issuing imperial permits for self-governance, following a socioeconomic model based on tax-collection

[23] Tel Qedesh is located in Upper Galilee, beyond the limits of the current study's area of interest (southern Phoenicia). The compound includes several finds that point toward direct contact with the Persian royal court. It was most likely a Tyran stronghold, an administrative center operated by and for the Phoenician governors. For its plan, see Brandl et al 2019: Fig. 13.

(Cahill 1985; for further discussion of this model, see Bang 2003). According to this theory, local rulers, especially the Phoenicians, enjoyed extensive autonomy. They were required to participate in imperial military activity and pay periodic taxes but apart from that, there was no direct involvement in life of the local communities on a social or religious/ritual level, and hardly any intervention concerning local political activity (Briant 2002; Elayi and Sapin 1998:145; Stern 2001:370–373; Lipschits 2006:29–30; Albertz 2011:499–501; Jigoulov 2019). The involvement of the Persian regime was limited to specific incidents when military involvement was required, such as suppressing revolts and reinstating order. Locally, two such events were the Egyptian revolt at the end of the fifth century BCE (*Diodorus Siculus Library* XI:71; see Fantalkin and Tal 2006; Albertz 2011:499–450) and the revolt of Tennes (*Diodorus Siculus Library* XVI:42; see Jigoulov 2010:67).

The data above seem to support the hegemonic approach in describing the regime's involvement on both social and political levels. As shown above, the ostensible system of fortresses and administrative buildings that are the basis of the first approach are nothing but a set of arbitrarily grouped buildings of different plans, nature and date that do not indicate military presence or centralized rule. Stern (2001:370–371) rightfully suggested that the regional administration required the hiring of clerks to manage large areas and cities, but these clerks were probably recruited from the local elites and not foreign administrators or military expats. The analysis of the finds from the administrative site of Tel Qedesh has yielded nothing to indicate the presence of Persian residents, lending further support to the understanding that the day-to-day administration was run by local clerks (Herbert and Berlin 2003; Berlin 2012; Stone 2012).

Contrary to social and political realms, the archaeological discussion of economic control has been largely overlooked and derives mostly from a scholarly perception of the degree of political control. Supporters of the territorial approach supposed that centralized rule oversaw both the economy and commerce—in the case of southern Phoenicia by clerks and soldiers based in fortresses along the coast, supervising maritime traffic. Conversely, advocates of the hegemonic approach claim that, even here, the degree of the rulers' involvement was quite limited, based on the existence of extensive trading with Greece and the textual evidence of a permit granted to Ashqelon and Ashdod to mint their own coins.

To date, only little attempt was made to examine the degree of economical involvement using empirical archaeological tools. The redistribution system relied mostly on tithe collection, which seems to have been run by local rulers, alongside a larger, more diverse distribution system, which was based on the forces of the free market. A large variety of products were transported throughout the Persian Empire, which were found in many domestic sites, including cities, villages and farmsteads. Although it is at times difficult to precisely determine what commodities were traded, both ancient texts (see, e.g., Galil 2009) and the archaeological record indicate the important role of wine in eastern Mediterranean trade and economies. This pattern complies with a non-centralized redistribution system. While multiple distribution systems probably coexisted, no examples for a well-controlled imperial one was attested thus far. The large variety of goods indicates a broad accessibility

to a wide range of products by different sectors of society. Distribution patterns of imported Greek amphorae in southern Phoenicia are nearly identical to those of other imported wares, both receptacles traded for their contents (basket-handled jars and Phoenician jars) and tableware. These were found side-by-side in assemblages originating in domestic and commercial contexts in both large and small domestic sites. This distribution does not suggest a centralized administration in southern Phoenicia. On the contrary, in terms of local systems, it seems that the broad and relatively homogeneous distribution of luxury items indicates the impact of market forces on the existing system.

Conclusions

The examination of distribution patterns of Greek transport amphorae in southern Phoenicia, largely used probably for the import of wine, indicates that trade was not under direct imperial control but rather operated to meet local demand and at the incentive of local elites. The imperial administration oversaw bureaucracy, legislation and inspection; in terms of international trade, its activity was reduced to establishing tax rates (often simply by adopting the previous taxation system) and periodic record inspections. The empire's economic control over inter-regional redistribution systems was even less extensive and the local government had much control over their local market, notable in Cyprus, southern Phoenicia and Egypt.

The local ruler was required to provide the specific needs of the regime through its regional representatives, whether permanently stationed or filling an ad hoc position. It seems, however, that there was no demand for particular products: those stationed in Egypt enjoyed constant supply of North-Aegean wine, while those in southern Phoenician settled for southeast Aegean wine, and those in Judea—for the local brand.

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