Conquest, Empire, Impact, and Context:
The Early Islamic Empire in a Medieval World-System

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Introduction | Henri Pirenne and the End of Antiquity

The boundary between antiquity and the medieval period has historically been defined as the transition from the "fall" of the Roman Empire to a post-Roman period of economic and cultural decline. The medieval period is considered to be the time between the fifth and the fifteenth centuries. Although the transitions from antiquity to the Middle Ages (and beyond) varied in nature and timing based on location and circumstance, the general cause of this transition is typically attributed to the Germanic invasions of the fourth and fifth centuries. Beginning with the work of eighteenth-century English historian Edward Gibbon, and continuing through the medieval history narratives of nineteenth- and twentieth-century writers, this boundary organized – and indeed, still does – the dominant narrative of the beginning of the medieval period.

Edward Gibbon's *History of the Decline and Fall of the Roman Empire* (1776-1789) illustrated the history of the Roman Empire and its legacy from the first century to the mid-fifteenth century. Gibbon's *History* illuminated the many actors, phenomena and events that he interpreted to have contributed to the end of the cultural and economic cohesiveness of the Roman Empire. Gibbon divided the chronology of Roman decline into three periods: the first from the age of Trajan and the Antonines to the invasions of the "barbarians of Germany and Scythia"; the second from the reign of Justinian to the Lombard Invasions of Italy, the Islamic conquests of former

Roman and Byzantine provinces, and the rise of Charlemagne's empire in Western Europe; and, lastly, the several centuries between Charlemagne's coronation and the conquest of Constantinople by the Turks in the fifteenth century.[1]

Belgian Historian Henri Pirenne (1862-1935) contributed what is known as the "Pirenne Thesis" to the study of medieval European history. In *Mohammed and Charlemagne* (1939), Pirenne rejected the dominant narrative of historians such as Gibbon. Instead, Pirenne defined the end of antiquity as the onset of the seventh-century Islamic invasions into former Roman and Byzantine territories. Pirenne traced the origins of medieval Europe to isolation, urban decay, and commercial decline that he suggested occurred in Europe following the rise of the Islamic Empire. In contrast, later scholars, such as Richard Hodges and David Whitehouse (1983), have argued that commercial and urban decline began long before the expansion of the Islamic Empire. Michael McCormick (2001), for example, has taken a further step in suggesting that the transitions that occurred in Western Europe, especially Carolingian France, were part of a broader system connected by communication networks.

The consolidation of the early Islamic Empire reveals that reorganization of pre-existing structures and creation of new institutions occurred in the Mediterranean world. An innovative combination of old and new institutions,

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[1] Edward Gibbon, "Preface," in *The History of the Decline and Fall of the Roman Empire* Volume 1 (London: W. Strahan and T. Cadell, 1776)

networks, and urban forms in the Mediterranean provides evidence that a new world-system had emerged. Pirenne's attention to the economic networks of the Mediterranean world has influenced my geographical focus. I have chosen to focus on the land masses that surround the Mediterranean Sea, which operated as a venue for cross-cultural interactions – both conflicting and coexisting – during the ancient and medieval periods. Through the lens of the early Islamic Empire, I will attempt to re-illustrate the medieval world as an integrated *world*, as opposed to several isolated systems. Early Islamic economic growth, urban development, and administrative reforms had far-reaching effects on its peripheries and beyond.

I will attempt to juxtapose against the Pirenne Thesis an image of the early Islamic Empire within a new Mediterranean world-system. **Map 1** illustrates a majority of the places within this system named within this paper.[2] Early Islamic economic growth, urban development, and administrative reforms had far-reaching effects on the empire's peripheries and frontiers. In placing the Islamic Empire at the center of my study of the early medieval world, I hope to facilitate a discussion of the "Middle Ages" and the "End of Antiquity" that is not weighed down by stories of Western catastrophe, but instead focused on the transformation and redirection of resource flows and administrative power.

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[2] **Map 1** in Appendix, page 78

First, I will define the changes which occurred within the Islamic world and the relationships between urban development, economic networks, and resource flows in this medieval empire. Next, I will examine the impact of these changes beyond the Islamic Empire's peripheries and frontiers: broadly, what effects did the growth and successes of the early Islamic Empire have on the Mediterranean? Did the Islamic Empire influence significant changes upon the Mediterranean and Europe?

I will outline what major changes occurred, if any, in Byzantium, Italy and Tunisia, Carolingian France, and al-Andalus throughout the late antique and early medieval periods. Historical and archaeological studies produced by Richard Hodges and David Whitehouse, Michael McCormick, and others will reveal the sequence of changes which occurred in the Mediterranean in the early medieval period. I will then attempt to determine to what extent the Islamic Empire was responsible for these changes.

Lastly, I aim to contextualize the Islamic Empire within the historiographic debates surrounding the End of Antiquity, the Fall of the West, and the Rise of Islam by highlighting the main arguments of historians such as Henri Pirenne, Edward Gibbon, Bryan Ward-Perkins, Peter Heather, and Adrian Goldsworthy. This debate contributes to a study of the Islamic Empire in two ways: first, it can illustrate how the early Islamic Empire expanded into and changed the Mediterranean world. Pirenne's Islamic Empire, for example, wrought calamity on the West. Second, this context

illuminates the ways in which the narrative of the Rise of Islam by Western historians *romanticizes* the Roman legacy and imposes catastrophe on this history.

I do not intend to enter the debate over how Rome fell or if Rome ever fell, except to say that explanations for the rise of the Islamic Empire should not center upon Rome. As a result of this study, I hope to expand on the conclusions of Henri Pirenne's thesis that the rise of the Islamic Empire brought profound social and economic changes upon the Mediterranean world, changes which facilitated the emergence of Charlemagne's empire. However, I argue that Pirenne's thesis is incomplete. The expansion and consolidation of the Islamic Empire in the seventh and eighth centuries did induce change in the Mediterranean, but the Islamic Empire was not responsible for many other transformations in Europe and the Mediterranean.

Conquest | The Early Islamic Empire: Transition and Transformation

From Byzantine Hegemony to the Islamic Conquests

The division of the east and west Mediterranean between two *Roman* empires appears to mark the beginning of the process of restructuring within the early medieval Mediterranean world. **Maps 3** and **4** illustrate the transition from a united Roman Empire in 300 C.E. to the later division of the Mediterranean between the Western and Eastern Roman Empires in 400 C.E.[3] From the late fourth and fifth centuries onwards, the Byzantine (or East Roman) Empire exerted political and economic control over much of the eastern Mediterranean.[4] By 600 C.E., the Byzantine Empire controlled a substantial number of territories under earlier Roman rule, spreading from Asia Minor, Syria-Palestine, and Egypt to the coasts of North Africa and the southern Iberian Peninsula. **Map 6** demonstrates the extent of the Byzantine Empire at 600 C.E.[5]

Egypt provides a useful case study for the changes that occurred in the Mediterranean world during the early medieval period. Egypt was a unified political entity under the Roman, Byzantine, and Islamic Empires, and maintained communication and economic networks throughout the Mediterranean region after each political transition. Under the Byzantine Empire, Egypt continued to function largely as a breadbasket territory,

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[3] **Maps 3** and **4** in **Appendix**, page 80
[4] **Map 5** in **Appendix**, page 81
[5] **Map 6** in **Appendix**, page 81

funneling wealth in the form of taxes (money and wheat) toward

Constantinople, the Byzantine imperial center, instead of Rome. This was a

continuation of the Roman *annona* system, in which the great consumer city

of Rome depended entirely upon the agricultural productivity of Roman

provinces for its grain supply. Byzantine control over Egypt, along with its

other peripheral territories, crumbled during the early seventh century,

however, due to internal political conflicts, external threats of invasion and

war with Sassanid Persia, and the devastating effects of plague.

In the aftermath of two coups d'état at the turn of the seventh century,

Egypt experienced more violence than any other province between the years

of 608 and 610 C.E.[6] This violence especially took the form of battles

between the supporters of Phokas and those of Heraclius, who secured

power in 608. These violent battles and political upheaval made Byzantine

peripheries vulnerable to invasion, especially in 616, when Sassanid Persia

invaded Egypt, occupying the territory until 629. While the Byzantine Empire

regained its highly valued territory through a treaty with the Sassanids, this

invasion and subsequent occupation further disrupted Roman/Byzantine

hegemonic continuity.

Such internal weakening and disorganization provided an opportunity for

the expansion of the Islamic Empire into Byzantine peripheries, including

Egypt. Indeed, Peter Sarris argues that further military resentment at

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[6] Walter E. Kaegi, "Egypt on the Eve of the Muslim Conquest," in *The Cambridge History of Egypt, Vol. 1: Islamic Egypt 640-1517*, edited by Carl F. Petry (Cambridge University Press, 1998), 37

imperial economizing measures may have contributed to the overthrow of Emperor Maurice by Phokas and subsequent bloody civil wars. The reign of Maurice had witnessed two revolts in Egypt: the first resulted after an attempted removal of the emperor from office by members of a powerful Egyptian family, and the second involved the seizure of imperial tax revenues by a private army.[7] Justinian's reforms placed him at odds with the landed aristocracy, who held considerable local power. In addition, later decentralization of the Byzantine Empire, which featured a diminished central imperial authority, led to destabilizing effects, according to John of Nikiu. Sarris further suggests that these tensions, in addition to the fall of Syria, Palestine, and Egypt to the Sasanians weakened the powers of Byzantine rule and facilitated the Arab conquests of the 630s and 640s.[8]

The expansion and reforms enacted by the early Islamic Empire in the mid-to-late- seventh and early eighth centuries reveal the process by which different parts of a pre-existing system were restructured and reformed. In particular, tax reforms in early Islamic Egypt and city building throughout the empire especially reveal both change and continuity at regional and imperial levels. Looking at the early medieval Mediterranean as a world system that underwent reorganization during this period helps to explain the conflicting processes of change and continuity that have been observed, and bear witness to the impacts of the early Islamic Empire on its peripheries.

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[7] Peter Sarris. *Economy and Society in the Age of Justinian* (Cambridge: Cambridge University Press, 2006), 229
[8] Sarris (2006), 229

The Role of Cities in Imperial Expansion

Michael Doyle defines "empire" as a system of interaction between two political entities, in which a dominant metropole exerts effective political sovereignty, in terms of internal and external policy, of a subordinate periphery.[9] Imperial rulers in the past have frequently boasted unlimited powers. These powers have, however, often been limited to waging war, levying taxes, and extracting tribute. In many historical empires, the city held an important role as a site of authority and of the transmission of resources and ideas.

Cities can have a variety of functions: central ruling sites and symbols of power; outposts of commerce or rule; military encampments; or any combination of the above.[10] Often, as urban historian Derek Keene suggests, "it is the conquest or control of a city rather than its territory that confers or enhances imperial status."[11] For example, the struggles for dominance over Alexandria in Egypt in the 640s dictated which empire, Byzantine or Islamic, maintained control over the province. Cities, thus, have an important role in the transition from one empire to the next.

An imperial ruler could express ideas of imperial unity and authority by erecting institutions and buildings which overlaid indigenous features but did not wholly extinguish them. The key architectural features historically

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[9] Michael Doyle, *Empires* (Ithaca: Cornell University Press, 1986), 12
[10] Derek Keene, "Cities and Empires," in *Journal of Urban History* 32:1 (2005), 8
[11] Keene (2005), 9

found in urban seats of imperial authority, Keene explains, include a palace,

offices for bureaucrats and officials, and temples of an imperial cult or its

equivalent. Subordinate cities in an imperial hierarchy often replicated or

echoed these characteristics. Conquering empires, in addition, tend to

appropriate and transform the pre-existing indigenous institutions through a

process of structural experimentation and reorganization. These imperial

structures would not necessarily eliminate local institutions, but would

enable an imperial state to exert a certain level of authority over subject

groups.

The Roman Empire, for example, displayed a standardized repertoire

of structures, including forums, basilicas, theatres, temples, and

amphitheaters. These structures were paid for both by public funds and

private benefactors, but increasingly became viewed as a source of civic and

imperial identity supported by taxation.[12] In early Islamic cities, these

defining structures included the governor's palace or residential complex

and a mosque. In addition, markets and water supply infrastructures often

played a prominent role in city planning and the success (or decline) of urban

centers. The transition from post-Roman to early Islamic urbanism

introduced a new urban form to the eastern Mediterranean, and facilitated

changes in the structures/infrastructures of commercial and communication

networks in the early medieval Mediterranean.

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[12] Keene (2005), 14

Transformation of Urban Space

Early Islamic cities represent a transition in urban form during the seventh and eighth centuries, offering evidence of ongoing structural experimentation and reorganization. In his "How to Found an Islamic City," Hugh Kennedy provides an especially useful overview of the foundation of four early Islamic cities: Kūfa, Fusṭāṭ, Wāsit, and Ramla. Similarly, Donald Whitcomb's "The *Miṣr* of Ayla: Settlement at al-'Aqaba in the Early Islamic Period" describes the overall plan of Ayla within the context of early Islamic urban planning, focusing on the *amṣār*.

These early cities were established to support already present settlers, especially members of the army and their families, in need of housing and resources. In later Islamic cities, however, economic opportunities were often provided to attract inhabitants. In most early Islamic cities, primary features were laid out first, and the cities developed organically from those frameworks in later periods. The earliest *amṣār* began as garrisons, which were deliberately created to settle Arab Muslim troops and their families in locations where they would not come into conflict (or assimilate) with the area's existing inhabitants, and where they could be controlled and paid for by agents of the state.[13]

These settlements originally consisted of tented encampments that were soon replaced by permanent structures. The *amṣār* became, as Whitcomb

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[13] Hugh Kennedy, "How to Found an Islamic City," in *Cities, Texts and Social Networks, 400-1500: Experiences and Perceptions of Medieval Urban Space* (Farnham: Ashgate, 2010), 47

suggested, settlements of a "type intermediate" between the military camp and the metropolis, as structures with residential, religious, and political functions.[14] Early Islamic *amṣār* also became sites of economic exchange. The existence of a concentrated, salaried body of settlers could only be sustained by economic relationships with areas located outside of the urban space. For example, Kūfa functioned as the center of a regional agricultural base, while 'Aqaba operated as an entrepôt of interregional commerce. Three important aspects characterized the establishment of these early cities: the foundation of a *miṣr* occurred on new land, avoiding older urban settlements; conversion from encampments to permanent and sophisticated architecture was rapid and extensive; and almost all of these foundations, Whitcomb explained, were successful and enduring.

Early Islamic settlements contained axial roads, residential areas, and institutional centers containing a mosque, a palace complex for officials (*dār al-imāra*), and a space reserved for a market (*sūq*). For example, 'Anjar in southern Lebanon, dated to the Umayyad period, contained towered walls, axial streets, a central tetrapylon structure, and a mosque and *dār al-imāra* in the southeast quadrant.[15] Under this urban form, various functions – administrative/political, commercial, residential, and religious – were located together in the same area. This form was profoundly different from

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[14] Donald Whitcomb, "The Misr of Ayla: Settlement at al-'Aqaba in the Early Islamic Period," in *The Byzantine and Early Islamic Near East, II: Land Use and Settlement Patterns*, edited by G.R.D. King and Averil Cameron (Princeton: Darwin, 1994), 167
[15] Whitcomb, 167

what is viewed as a traditionally Roman organization of urban space, indicated by a distinct separation between public and private space, and between commercial/industrial and civic space. Civic centers in the Roman imperial style consisted of monumental colonnaded streets connecting public monuments with city gates.

The town of Baysān[16], in northern Israel, illustrates the gradual transition away from the Roman style of urban organization. Hugh Kennedy has shown that this transition began as early as the sixth century. At this point, monumental construction declined, major colonnaded streets were "encroached," and private shops appeared in previously spacious walkways.[17] The Persian invasion of 614 and the Islamic conquest of 636, Gideon Avni explains, left no direct trace in the archaeological record of the town. It seems, then, that the Islamic conquests had no *tragic* impact on urban life in the eastern Mediterranean city.

An earthquake in 659/660 C.E., however, had devastating effects for the city center, in which large parts were destroyed and subsequently abandoned. Restoration occurred in many areas of the civic center, and the center began to take on a new form, through the implementation of new urban patterns and concepts. Under new Islamic leadership – specifically during the caliphal reign of Hishām b. 'Abd al-Malik (723-743), sites of small

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[16] Baysān has also been referred to as Scythopolis (late antique), Beth Shean (Byzantine), Baisān, and Beit She'an. I have opted to use the name and transliterated form Baysān to refer to this town, because Kennedy uses this form in "How to Found an Islamic City".
[17] Gideon Avni, "'From Polis to Madina' Revisited – Urban Change in Byzantine and early Islamic Palestine," in *Journal of the Royal Asiatic Society* 21:3 (2011), 305

industries and commerce were introduced into the formerly open, public space. From the sixth through the eighth centuries, therefore, conceptual changes in urban form occurred. The urban spatial arrangement of Baysān transformed from the Roman legacy of monumental "clean" construction to a "lively crowded area, with mixed functions of commerce, small industries, public and private constructions."[18]

Construction: New "Islamic" Cities and Towns

As possibly the oldest of the *amṣār*, Baṣra was founded around 635 by ʿUtba b. Ghazwan near the port of Ubulla and the fortified villages of Khurayba.[19] A port to the east connected Basra by two canals to Shaṭṭ al-ʿArab, a river formed by the confluence of the Tigris and Euphrates. To the west lay an open area, and subsequent expansion of the city would occur in this space. The city itself was organized by a rectangular plan that continued as the city later extended out to the west. A central square held the mosque and the administrative residential complex (*dār al-imāra*). In 665, Ziyād restructured these buildings: he expanded the mosque and shifted the *dār al-imāra* from the northeastern to the *qibla* side of the mosque.

Caliph ʿUmar b. al-Khaṭṭāb and Saʾd b. Abī Waqqāṣ, army commander and governor of Iraq, began Kūfa's foundation in 638, immediately after the conquest of Iraq.[20] The governor wrote to ʿUmar regularly, both asking his

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[18] Avni (2011), 306
[19] Whitcomb (1994), 161-162
[20] Kennedy (2010), 48

opinion and receiving the caliph's instructions. The governor had sent scouts

to survey the area, and decided that the site of Kūfa would suit the imperial

army's needs. Another figure, Abū'l-Hayyāj b. Malik, oversaw the plans for

laying out the settlement. 'Umar deeply immersed himself in the city's

founding, as he dictated the measurements of a hierarchy of streets around

which the city would form. Next, a mosque was constructed in the center of

the city, surrounded by an open, square space to ensure its accessibility.

Along the *qibla* side of the mosque, facing Mecca, the governor's palace stood.

'Umar demanded that markets should be organized along the same lines

as mosques, and thus Kūfa's markets were situated around the mosque and

the palace. Markets, therefore, held considerable importance as part of the

city's social and administrative space. Salaried soldiers and other elites could

purchase goods, and merchants or vendors could acquire cash (or other

forms of currency) with which they could pay taxes to the state. The state,

then, could use these funds to engage in further development projects.

No mentions of street planning appear in literary sources which describe

the Egyptian garrison city of Fusṭāṭ. Robert Kennedy infers, therefore, that

Fusṭāṭ required less planning than Kūfa.[21] Excavations have shown that the

early design of Fusṭāṭ followed an orthogonal plan.[22] The settlement was

placed next to the older Roman and Byzantine legionary fort of Babylon. The

Egyptian army commander and governor 'Amr b. al-Āṣ is said to have

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[21] Kennedy (2010) 52
[22] Whitcomb (1994), 163

founded the main mosque, located in the center of the city alongside the *dār al-imāra*. Settlements of Muslim elites surrounded the mosque. No documents mention an official governor's palace, but Kennedy suggests that early elites likely built these individual houses.[23] Other large houses or compounds were built with public funds and intermittently used as a governor's residence.

In nearby Isṭabl 'Antar, south of the old fortress of Babylon and uninhabited at the time of the Arab conquest, archaeological excavations led by Roland-Pierre Gayraud (1987-1989) reveal the early development of the site. [24] The first traces of habitation were a tented encampment and holes in the rocky ground surface, probably tethering points for animals. Permanent houses soon replaced the encampment. Houses discovered at the site were dated to the second half of the seventh century, immediately after the conquest of Egypt. In addition, the earliest aqueduct for this area has been dated to 680-700 C.E., indicating the presence of an early Umayyad development project. Isṭabl 'Antar was clearly created as a residential site to house the Arab Muslim migrants to Fusṭāṭ.

In 703 C.E., the governor of Iraq and the Eastern provinces al-Ḥajjāj b. Yūsūf began the development of Wāsiṭ, located about halfway between Kūfa and Basra. Al-Ḥajjāj b. Yūsūf constructed the site to function as a base for Syrian troops that the governor relied upon to control Iraq. The city's

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[23] Kennedy (2010), 52
[24] Kennedy (2010), 52-53

construction, Kennedy suggests, was part of a larger development project enacted by the Umayyad Caliphate. Al-Ḥajjāj b. Yūsūf began by building numerous new irrigation canals, which consisted of bringing in workmen for labor and reviving the surrounding agricultural land. The city's central mosque was surrounded by open spaces, and outside of these spaces were located the commercial center, blacksmiths, butchers, and a racecourse. The palace (*qaṣr*) was twice the size of the mosque, at over two hundred meters on each side. The main public works, palace, two moats, and wall at Wāsiṭ are reported to have cost forty million dirhams, which cost more than Al-Ḥajjāj b. Yūsūf's military campaigns in Iraq.[25]

The *miṣr* of Ayla, located adjacent to a (largely unstudied) pre-Islamic town that Whitcomb called "Ailana" to distinguish it from early Islamic Ayla, was established at the head of the gulf of 'Aqaba on the Red Sea, between Ailana and the coastline. Whitcomb suggested that Ayla was founded during the caliphal reign of 'Uthman (644-656), but Alan Walmsley has argued instead that architectural traditions and the pro-expansionist economic policies of the Marwānid dynasty suggests that Ayla was established in the early eighth century.[26] Ayla was a fortified complex, occupied for over four hundred years, beginning in the mid-seventh century. Its original plan, Whitcomb explained, borrowed many formal elements of Byzantine style:

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[25] Kennedy (2010), 54

[26] Alan Walmsley, "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 (Leiden: Brill, 2000), 296

monumental arched gateways joined by axial streets, an arched tetrapylon at the streets' intersection, an orthogonal design, and massive towers based on earlier, pre-Islamic prototypes.

Excavations at 'Aqaba between 1986 and 1989 revealed that Ayla was a small, rectangular settlement, measuring 170 by 140 meters, marked by axial streets and divided into four quadrants. The location of Ayla's mosque was uncertain at the time of Whitcomb's 1994 publication, but if Ayla resembled any other early Islamic cities at all, the placement of the mosque likely followed similar patterns. Whitcomb speculated that Ayla, like other early Islamic *amṣār*, appropriated pre-Islamic styles of urban design. The early *amṣār*, he suggested, resembled Roman and Byzantine legionary camps in their general form.

In Palestine, Ramla's foundation followed a similar trajectory. Governor Sulaymān b. 'Abd al-Malik (Caliph 715-717 C.E.), brother of Caliph al-Walīd (705-715 C.E.) built a residence for himself and a capital for the province at Ramla in 705 C.E.[27] The governor intended for Ramla to function as a center where taxes could be collected and salaries could be paid. He constructed a palace, a structure called the House of the Dyers (*Dār al-Ṣabbāghīn*), and a mosque. The governor paid for the construction himself, which was documented by al-Baṭrīq b. al-Nakā, a Christian secretary the governor hired to supervise his state expenses. In addition, the governor initiated the

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[27] Kennedy (2010), 55

construction of an irrigation canal (*qanāt*) to secure water supply for the population.

In sum, the authority of the state in the person of Sulaymān built and paid for the palace, mosque, and commercial center. The state paid for the construction and maintenance of the water supply. New inhabitants were given lots and could build houses at their own expense. The success of the town, Kennedy continues, was based on its establishment as a *miṣr*, a place of government expenditure, and the existence of a body of salaried soldiers and bureaucrats to attract settlers and markets. This pattern clearly was not unique to Ramla: the foundation of other early Islamic cities such as Wāsiṭ, Fusṭāṭ, Kūfa, and Basra and their continued success depended upon this particular body of consumers and vendors.

Infrastructure to support commerce and communications became necessary within and between these new cities and towns. Under both the Umayyad and Abbāsid governments, a major ministry, the Department of Posts and Intelligence (*Diwan al-Barid*), managed the road networks of the early empire.[28] The department used the network to transmit orders and other information between the central government, provincial capitals, and district towns. An improved road network offered greater security and predictability, which encouraged trade, especially in luxury items, to meet the growing demands of Muslim elites. The road network facilitated the transport of construction materials – a necessity for the establishment of

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[28] Walmsley (2000), 300

towns and infrastructure. However, minimal archaeological and epigraphic research has been conducted on the structure and role of road networks in Umayyad and 'Abbāsid times.

The story of early Islamic urban development makes clear that intense state intervention and resources were required to establish new cities, modify existing structures, and enhance the networks which connected those nodes. The enormity of these projects made acquiring steady revenue a necessity. The awareness of this need by Umayyad Caliphs may be indicated by the extensive administrative and fiscal reforms that enhanced the state's ability to extract and redirect resources within the empire.

Imperial Consolidation and Administrative Reforms

In order to understand the tax administrative changes which occurred after the mid-seventh century conquests, the pre-conquest Byzantine methods of administration must be examined. Under the Byzantine Empire, the central administration assigned each province a particular sum of tribute to be extracted. One governor headed each province of the empire. Five eparchies, headed by *duces* (sing. *dux*), divided the province of Egypt. Beginning under the earlier Roman Empire, the *dux* held the highest military office, equivalent to that of a general, within the province, and oversaw military matters. Within the eparchies existed around sixty pagarchies, each

under the administration of a pagarch. This official's primary task was to impose and collect taxes at the district level.[29]

Pagarchs in Egypt were predominantly Coptic-speaking aristocrats who were not appointed by the government, but achieved local power based on their status as prominent landowners. A later pagarch, Flavius Papas of Apollōnos Anō, was a member of this land-owning aristocracy, which dominated the middle and upper ranks of the Egyptian ruling class in the decades following the conquests.[30] Under the authority of the pagarchs, village headmen administered villages, each of which were collectively responsible for payment of taxes assigned to the community by the pagarch. The pagarch evaluated individuals based on their ability to pay, their assumed wealth or possessions, and the productivity of the land (if any) held by each individual. Governors depended upon local officials and notables to apportion each districts tax assessment among the local population. In addition, the same officials who apportioned a district's tax quota also collected the taxes owed.[31]

Immediately following the early conquests, the Caliphate left many aspects of local and provincial administrative functions unchanged. Indeed, according to Petra M. Sijpesteijn, in Egypt, "taxes were assigned and collected

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[29] Petra M. Sijpesteijn, "Landholding Patterns in Early Islamic Egypt," in *Journal of Agrarian Change* 9:1 (2009), 121

[30] Clive Foss, "Egypt Under Muawiya Part 1: Flavius Papas and Upper Egypt," in *Bulletin of the School of Oriental and African Studies* 72:1 (2009), 5

[31] Gladys Frantz-Murphy, "First Five Centuries of Muslim Rule"*, in *Agriculture in Egypt: From Pharaonic to Modern Times,* edited by Alan K. Bowman and Eugene Rogan (Oxford: Oxford University Press, 1999), 244

according to the pre-Islamic, Byzantine system by the same Christian

Egyptian officials who had done so in the preceding years."[32] Local Coptic-

speaking native officials continued to assign and collect taxes as they had

done before the conquest, while newly appointed Muslim Arab officials filled

only the highest positions of the Egyptian administration.[33] These included

the positions of governor (*amīr*), head of police (*ṣāḥib al-shurṭa*), chief judge

(*qāḍī*), and treasurer.

An imperial power often depends upon a small ruling entity to oversee a

vast territory. This was true in Egypt, where the post-conquest Arab

population was too small to effectively oversee local administration. As a

result, the five eparchies remained. Their *duces*, however, lost their military

functions after the breakdown of Byzantine military power in Egypt.

Therefore, the caliphate's new administration acquired the powers lost by

Byzantine administrators.

Having allowed local Christian elites to retain their administrative

positions within Egyptian society, the new Islamic rulers nevertheless

exercised strict and direct supervision over the administration from top to

bottom.[34] Papyri evidence reveals an increase in administrative documents

written in Greek and Arabic. One of the earliest dated Arabic papyri from

22/643 CE, for example, recorded the end of a tax-demand note, marking the

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[32] Sijpesteijn (2009), 121
[33] A. Ben Shemesh, "Abū Yūsuf's Kitāb al-Kharāj," in *Taxation in Islam* III (Leiden: Brill, 1969), 7
[34] Sijpesteijn (2009), 122

early stages of the long-term process of Arabization of the Islamic Empire's

new province. Greek papyri also recorded the raising of levies by Arab

officers for military units traveling through the Egyptian countryside, and

some Greek papyri note that Arabs ("Saracens") delivered tax-demand notes,

collected levies, and enacted special administrative missions for the

governor.[35] In sum, these examples reflect the use of a central recording

system, and the involvement of designated Arab army officers in regular tax

collection.

While documentary papyri reveal the movements of Arab soldiers and

officials throughout rural Egypt, little evidence appears to suggest any

permanent Arab settlements in Egypt prior to the eighth century, beyond the

establishment of Fusṭāṭ in 691 CE. Caliph 'Umar b. al-Khaṭṭāb (r. 634-44)

allegedly instructed Muslims to settle in garrison cities (pl. *amṣār*, sing. *miṣr*),

instead of acquiring land and settling among conquered populations.[36]

Further, Muslim Arab male society at the time was wholly militarized, ready

to continue the conquests to bring the rest of the world under Islamic rule. If

Muslim army leaders received land, it was intended for construction of

housing for themselves and their families, and not usable for agriculture.

The early Muslim Arab inhabitants of Egypt thus did not settle in existing

urban spaces, but in new towns along the desert's edge, such as Fusṭāṭ, as

illustrated above. According to papyri evidence, this settlement pattern

[35] Sijpesteijn (2009), 122
[36] Hugh Kennedy. *The Armies of the Caliphs: Military and Society in the Early Islamic State* (London: Routledge, 2001), 7

meant that land held by existing Egyptian elites would not be confiscated.[37]

Moreover, until the eighth century, no Arab names appear in lists of

agricultural tax-payers or landholders, and no Arab-named cultivators or

landowners are mentioned in Greek or Coptic land leases.

[37] Sijpesteijn (2009), 123

Empire | Umayyad Consolidation and Reform

Centralization: Umayyad Administrative Reforms

The ability to regularly levy taxes is essential if the state is to maintain a steady stream of revenue. Under the Umayyad Caliphate, the empire continued to expand east toward Central Asia and west into North Africa and the Iberian Peninsula. This expansion depended upon the cooperation of soldiers, who conquered, suppressed rebellions, and facilitated tax and tribute extraction. During his reign, Caliph 'Umar I (r. 634-644) established the *dīwān* (central register) for ease of tax collection and payment of *aṭā* (salary) to soldiers, and in Egypt, the conquering general and first governor, 'Amr b. al-'As, allegedly set up the provincial *dīwān*.[38] According to Chase Robinson, registry in the *dīwān* entitled one to annual pay, conventionally distributed in gold or silver coins.[39] Caliph 'Abd al-Malik (r. 685-705) ordered that the *dīwāns* be kept in Arabic instead of Greek. This ensured that only Arabic-speakers could function as administrative officials, thus eliminating natives who had not learned Arabic.

The army underwent a period of professionalization during the reign of 'Abd al-Malik, with the replacement of tribal chieftains with salaried commanders. Under this system, Arab Muslims could acquire wealth and status through their military accomplishments. Soldiers provided the

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[38] Sijpesteijn, "The Archival Mind in Early Islamic Egypt: Two Arabic Papyri," in *From al-Andalus to Khurasan: Documents from the Medieval Muslim World* (Leiden: Brill, 2007),165
[39] Chase F. Robinson, *'Abd al-Malik* (Oxford: Oneworld Publications, 2005), 68

coercion necessary to extract taxes and tribute for the empire, and were paid using tax revenue.[40] Unfortunately, numerical data for expenditures of the early empire is scarce. However, narratives provide some examples for the empire's use of resources. Construction of the garrison city of Wasit reportedly consumed five years of Iraq's land tax revenues (forty million dirhams), and ʿAbd al-Malik's construction of the "Jerusalem mosque" consumed seven years of Egypt's tax revenues.[41] Further, much of the taxation in the early Islamic Empire originated from the need to maintain the growing demands of the army. Thus, territorial expansion of the empire and the growing central *dīwān*s made necessary the fiscal and administrative reforms of the late seventh and early eighth centuries.

Papyri evidence from Nessana, located in Palestine, dated to the mid- to late-seventh century, documents irregular tribute-taking in the early Islamic Empire.[42] According to Robinson (2005), parallel documentation has been found in Egypt, which suggests that such irregularities had also been present in Egypt at the time. The caliphates of ʿAbd al-Malik and his son, al-Walīd (r. 705-715) began empire-wide reforms to enhance the centralization of the empire. Under ʿAbd al-Malik, a comprehensive census was carried out during 691-92, in which each man had to register his name, lineage, crops, possessions, children, and everything else he owned.[43] This census also

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[40] Robinson (2005), 66
[41] Robinson (2005), 76; Kennedy (2010), 54
[42] Robinson (2005), 71
[43] Wadād Al-Qāḍī, "Population Census and Land Surveys under the Umayyads (41-132/661-750)," *in Der Islam: Zeitschrift fur Geschichte und Kultur des Islamischen Orients* (2006), 366

marks one of the first census surveys to be accompanied by a cadastral survey, both of which were "compulsory, comprehensive, organized, and meticulously recorded."[44]

'Abd al-Malik's brother, the Egyptian governor 'Abd al-Azīz, as well as his successor 'Abd Allāh b. 'Abd al-Malik, enacted similar comprehensive fiscal reforms. Such reforms included land surveys, livestock inventories, censuses, safe conducts and neck-sealing, forced land assignments of uncultivated lands, and development projects.[45] 'Abd al-Azīz ordered a census of the monks of Egypt in 74/693-94, in which the monks were counted and a poll tax of one *dīnār* was imposed on each monk, the first time poll tax had been collected from this demographic.[46] Pagarchs and *duces,* increasingly Muslim rather than Christian, maintained closer supervision of taxpayers, including their locations and possessions. Each aspect of these reforms was intended to enhance the rural acreage and fiscal productivity of the Egyptian province.

'Abd al-Malik also introduced coin reforms beginning around 692. Pre-Islamic regional mint variations reflected a more decentralized system, while 'Abd al-Malik's reform coins reflect an effort to centralize the administration. Prior to these reforms, silver was predominantly used in the east, and gold in the west. 'Abd al-Malik's reforms merged these two monetary zones, creating a uniform mode of currency. During the first phase of coin reform, mints featured a continuation of figurative imagery, but introduced Islamic

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[44] Al-Qāḍī (2006), 367
[45] Sijpesteijn (2009), 126
[46] Al-Qāḍī (2006), 381

designs and motifs, such as illustrations a caliph holding a sword or a governor in prayer.[47] The next phase of reform coins feature the exclusive use of Arabic and epigraphic, or non-figural designs. Establishment of a uniform coin provided more ease for the empire to distribute pay to soldiers, and reflected an attempt further centralize the empire. By implementing such changes, the empire's administration could more easily extract resources from its periphery to sustain its continued expansion.

Two themes emerge from the tax reforms which began during 'Abd al-Malik's reign: an extension and increase of tax liabilities and a rise in coercion and efficiency. Individuals who had previously been exempt from paying taxes, including monks, priests, and bishops, became liable for tax burdens.[48] Muslims and non-Muslims were placed in different fiscal categories, and therefore paid different taxes at different rates. Muslims who owned agricultural properties paid a tax which amounted to approximately one-tenth of the produce of the land, while non-Muslims paid a head tax (*jizya*) and land tax (*kharāj*), calculated either on the basis of produce or the area of cultivation.[49]

Centralization in the Sources: Letters and Legal Documents

The increase in Muslim-Arab presence in the local administration is illustrated by eighth-century Coptic letters and legal documents mentioning

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[47] Robinson (2005), 73
[48] Robinson (2005), 75
[49] Sijpesteijn (2007), 167

or written by Arab-named individuals, tax demand notes issued in the names of Muslim pagarchs, and the rise of bilingual documents, written in Arabic and Greek, in administrative communication.[50] The first known documentation of a Muslim tax collector appeared in the late seventh century, when a Muslim named Sulaymān collected a tax payment and countersigned a receipt, affirming this acquisition.[51] We can speculate from such an example that tax collection involved direct interaction with individual Egyptian taxpayers, interaction that signaled a greater involvement by Muslim officials in rural Egypt.

Letters preserved in the archives of a pagarch of Aphrodito named Basilios illustrate the typical response of governors, specifically Qurra b. Šarīk (in office 698-722), to foot-dragging and other small-scale acts of tax resistance.[52] The archive of Basilios contains letters of correspondence from the governor to Basilios, which include demand-notes for taxes, labor, and other resources. A letter from the year 710 (P. Lond. No. 1349) contains an order by the governor to Basilios to begin the collection of the public gold taxes for the previous year and to forward revenues to the Treasury. The governor notes that the peasants of Aphrodito had finished sowing their wheat crop and thus could carry out their taxpaying responsibilities.[53]

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[50] Sijpesteijn (2009), 128
[51] Gonis (2001), 228
[52] Bell, H.I. "Two Official Letters of the Arab Period," in *The Journal of Egyptian Archaeology* 12:3/4 (1926)
[53] Morimoto (1981), 109

Morimoto (1981) emphasizes that this letter was not an order for taxes for the current year, but for the previous year's harvest, revealing that the pagarch had not sent taxes to the Treasury on schedule. Another letter (P. Lond. 1393), also dated to 710, Qurra b. Šarīk requested from Aphrodito sailors and skilled workmen, as well as provisions for the laborers and resources for the military.[54] The governor's treatment of Basilios likely reflects remarkable distrust of local officials by Muslim administrators, because Qurra b. Šarīk provides Basilios with specific orders to treat his men fairly, and to collect the provisions carefully and urgently. In his letter, the governor advises:

> "Therefore let there be no negligence and no deficiency; for you will know that if anything be in arrear we shall by God's command exact it from you in double measure for your neglect and contumacy. Knowing therefore that the matter of the said raid is one of urgency perform it without delay, not affording us any cause of complaint whatever against you."[55]

The governor's reminder, in the form of a threat, allows us to speculate that delays, inaccuracies, and foot-dragging behaviors of pagarchs and other local officials may have occurred with great frequency. Thus, governors like Qurra b. Šarīk had learned to exert a certain amount of force to ensure that pagarchs followed orders promptly and accurately. In addition, this reveals what may have necessitated the more direct involvement of the tax-collecting administration with local populations. Delays and foot-dragging posed a threat to the maintenance of the state.

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[54] Bell (1926), 275
[55] Bell (1926), 279

Indeed, census-surveys initiated during the reign of 'Abd al-Malik reinforced the necessity of these reforms. In 706, the head administrator of the Thebaid eparchy sent a letter to his pagarchs, ordering them to draw up lists of "fugitives and strangers," to levy fines of three solidi from each stranger, and forward the fines to the treasury.[56] First, Wadād al-Qāḍi suggests that this document indicates that census surveys were undertaken by actors within local administrations, rather than by the central government. This supports the high level of dependence of the central administration on local officials.

Second, the problem of "fugitives and strangers" is interesting: evidently, tax evasion was enough of a dilemma in early eighth-century Egypt to warrant official orders to seek them out. The fugitives, Qāḍi continues, remained "a thorn in the side" of the Muslim administration throughout the empire for a long time.[57] The deceased also posed a problem for tax collection: Qāḍi references Pseudo-Severus' account that 'Abd al-Malik gave orders that "no dead man should be buried until [someone] had paid the poll tax for him."[58] Two documents described by Morimoto (1981), P. Lond. 1460 and 1461, represent two lists of fugitives which had been produced in response to these demands.[59] P. Lond. 1460 records the names, present locations, pagarchies of origin of tax fugitives, and the duration of time

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[56] Qāḍi, "Population Census and Land Surveys under the Umayyads (41-132/661-750)," *Der Islam: Zeitschrift fur Geschichte und Kultur des Islamischen Orients* (2006), 389
[57] Qāḍi (2006), 390
[58] Qāḍi (2006), 390
[59] Morimoto (1981), 121

fugitives had spent at large. 1461 contains a list of fugitives who had fled to other pagarchies from Aphrodito. One particular letter from Qurra b. Šarīk in October 709 contained an order for Basilios to register all people in his jurisdiction and send him that register accompanied by a list of tax fugitives.[60] Two months later, Qurra sent the pagarch instructions to compile registers for the fugitives and have them forcibly returned to their place of origin. The governor requested the following information: names of fugitives, their time spent in Aphrodito, amount of property they owned, and the names of those allowed to remain in the pagarchy. Some persons documented in these lists had gone unregistered for twenty or more years. Fugitives who were permitted to remain where they settled were registered and assessed as tax-payer.

Under a previous governor, a guarantee-declaration (P. Lond. 1518) dated to 708 documents six fugitive families. In this declaration, three village officials acknowledge the receipt of these families and vow to keep charge of them until the officials receive further orders from authorities. The names of twenty-two members of the six families are recorded in this document.[61] Qurra also ordered punishments for pagarchs if new fugitives not included in such lists appeared after lists had been collected. Wickham (2005) explains that in at least a dozen letters, Qurra chided Basilios for his delays, and in one letter, the governor warned Basilios: he was to send wood right away, or face

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[60] Morimoto (1981), 123
[61] Morimoto (1981), 122

"a recompense intended to destroy [his] life."[62] Basilios was told that further non-compliance would be harshly punished.

The frustration and threats present in Qurra b. Šarīk's demands for tax fugitives suggests the prevalence of tax evasion as a means for peasants to circumvent rigorous tax policies and the incredible threat that tax evasion by flight posed to the imperial tax system. Indeed, Morimoto (1981) suggests, "[t]hus it would seem that the fugitives lived for long periods among the local villagers and were protected by them, and that the local authorities connived at this." [63] Many tax fugitives had established themselves and started families in their new villages.

That a number individuals had remained unregistered for twenty or more years suggests that tax flight was a common practice, and a major problem for the administration. The increase in registration and resettlement of tax fugitives during this period encountered non-cooperation from village authorities and local peasants, as local authorities further engaged in foot-dragging measures and general non-compliance. ʿUsāma b. Zayd, appointed financial director in 714, demanded that "if a fugitive or one that had not been marked as a monk was discovered, the governor ordered that one of his limbs should be cut off."[64] This threatened the ability of local communities to protect fugitives and ensure their personal safety. Short of cutting off limbs,

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[62] Chris Wickham. *Framing the Early Middle Ages: Europe and the Mediterranean, 400-800* (Oxford: Oxford University Press, 2005), 135
[63] Wickham (2005), 135
[64] Wickham (2005), 124

the increased use of passports to document populations and their whereabouts was another means of identifying fugitives who lacked a passport, which restricted the movement of people. Thus, peasants lost the ability to circumvent taxes via migration.

Later Umayyad caliphs continued to undertake comprehensive tax reforms throughout the early eighth century. By this time, many Muslims had evidently left Fusṭāṭ to engage in agriculture, and a small number of Egyptians had converted to Islam. As a result, the process of institutionalizing Islam, while it proved fruitful for the establishment of a common identity within the empire, contributed to an eroded tax base. Muslims increasingly became involved in agricultural production, but did not pay land taxes. Similarly, Egyptian converts to Islam could avoid religiously-defined taxes.

As a response to this situation, Caliph 'Umar II (r. 717-720) introduced tax reforms based on the territorial, rather than individual, principle. Under the territorial principle, 'Umar II established that the *kharāj* (land) tax must be considered as a tax attached to the land itself, and to be paid by its owners independently of their religion.[65] In addition, 'Umar discontinued the practice of exemption from the poll tax through conversion: if an Egyptian converted to Islam, the individual would give up his or her land. This ensured that Christian Egyptians would remain subject to both the land and poll taxes. Caliph Hišām (r. 723-743) contemplated the creation of an empire-

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[65] Shemesh (1969), 8; Sijpesteijn (2007), 168

wide, unified tax structure, and appointed 'Ubayd Allāh b. al-Ḥabḥāb (in

office 724-734) as financial director, charging him with the task to

reorganize the empire's fiscal procedures. 'Ubayd Allāh launched an

extensive investigation of Egypt's finances, and in doing so, he conducted a

census surveys of male adults and livestock, as well as cadastral surveys. Al-

Maqrīzī recounted that he had assisted in conducting this survey, in which

thirty million *faddāns* were registered.[66]

'Ubayd Allāh intended to use his reforms to strengthen the empire's

ability to collect the poll tax from subjugated populations. In the census

surveys, all males in the province aged twenty to one-hundred were allegedly

counted and tagged with lead badges. This act of tagging men with lead

badges falls under the term neck-sealing, the practice of requiring non-

Muslims to wear leaden seals stamped with their assigned *jizya* (poll) tax

rates. Neck-sealing both identified and stigmatized non-Muslims in the early

Islamic Empire. In pre-Islamic tradition, the acts of sealing, branding, and

otherwise marking individuals signified their status as defeated enemies,

captives, or slaves.[67] Thus, early defeated populations were symbolically

denoted as captives in Muslim eyes.

Here, the caliphate appears to have made use of an existing tradition.

However, while sealing and branding were certainly practiced in pre-Islamic

traditions, the practice of neck-sealing for the purpose of levying taxes on

[66] Morimoto (1981), 135

[67] Robinson, "Neck-Sealing in Early Islam," in *Journal of the Economic and Social History of the Orient,* 48:3 (Leiden: Brill, 2005), 407

subject populations was unprecedented in southwest Asia.[68] Further, Kosei Morimoto explains, 'Ubayd Allāh ordered the Christians of Egypt to be branded on the hand with the image of a lion. [69] 'Ubayd Allāh next ordered the issuing of passports and placement of milestones and boundary markers on roads. As a result of the investigation, 'Ubayd Allāh concluded that Egypt could afford heavier taxes, and after reporting back to Caliph Hišām, he raised the tax quotas of the province. These reforms made it easier to document the whereabouts of imperial subjects, and facilitated resource extraction in the province to support an ever-growing – and ever-demanding – empire.

Reforms and Restructuring

The early medieval period can be seen as one in which a new world system emerged from the disintegrated ancient world system. This new system was still organized along imperial lines, as it had been during antiquity, and covered a similar geographic span. I consider Pirenne to have been right in that this period experienced a dramatic change in the direction of trade and communication networks. However, I disagree with his suggestion that the rise of the Islamic Empire brought forth the disintegration of anything.

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[68] Robinson, "Neck-Sealing" (2005), 405
[69] Morimoto (1981), 135

In fact, based on the evidence of urban development and the widespread administrative and fiscal reforms under the early Islamic Empire, I am inclined to argue that this period was one of innovation, reorganization, and re-*center*ing. Early Islamic administrators recycled old structures and created new ones. From old institutions, new connections were forged. A unified fiscal system facilitated safer transit overland, while maritime voyages increased in frequency despite each voyage covering shorter distances.

Of course, this was a dynamic system in which internal connections were still vulnerable to decay and restructuring, which facilitated internal crises such as civil wars, revolts, and revolution. Not only did this system remain vulnerable, but the effects of the expansion and consolidation of the early Islamic Empire on the Mediterranean and other peripheries varied by geography. Overall, new connections, travel routes, and trade networks became re-focused around the emerging Islamic Empire as a formidable economic and political power in the medieval Mediterranean world.

Impact | The Early Islamic Empire and the Mediterranean

How Pirenne's Islamic Empire Transformed the Mediterranean Sea

Pirenne argued that the expansion of the Islamic Empire rapidly transformed the Mediterranean Sea into a Muslim-controlled lake. This transformation, he suggested, resulted in the shrinkage of cities and ports, the disappearance of Mediterranean commerce, and ultimately the end of the ancient economy. In order to trace the origins of medieval Europe to this isolation and decline, Pirenne largely relied on documentary sources to support his description of the early medieval world, especially Gregory of Tours' *History of the Franks,* along with various saints' lives, miscellaneous letters, and legislative documents.

First, Pirenne claimed that the Germanic invasions of the fourth and fifth centuries did not significantly affect Roman cultural influence or the commercial unity of the Mediterranean. Land ownership and labor remained unchanged, while the Roman style of commerce persisted: the Germans, Pirenne continued, primarily assimilated with Romans and maintained Roman tax administration structures and political institutions. Pirenne described the period after the Germanic invasions as one of general cultural continuity, and measured this continuity in terms of coined money and its circulation, land ownership and labor, and the condition of cities and commerce.

Second, Pirenne suggested that the rapid and unexpected advance of the Islamic Empire in the seventh century broke this tradition of ancient unity. How Pirenne perceived the influence of the Islamic Empire on Mediterranean commerce is evident in the section titled "The Closing of the Western Mediterranean." In Pirenne's medieval world, the Islamic conquests separated the eastern Mediterranean from the west and caused the Mediterranean Sea to no longer support commerce.

While Pirenne conceded that commerce did not disappear entirely, he argued that long-distance trade disappeared and that the flow of trade networks led away from the Western Mediterranean. Instead, economic movement flowed primarily towards Baghdad, the imperial center of the emerging Islamic Empire. Pirenne insisted that this change doomed Mediterranean maritime commerce.[70] Pirenne lamented: "The ports and cities were deserted. The link with the Orient was severed, and there was no communication with the Saracen coasts. There was nothing but death."[71]

The Islamic Empire redirected commercial activity to new trade routes, including routes between the Caspian Sea and the Baltic region. Pirenne argued that routes which had previously connected the east and west zones of the Mediterranean were no longer usable; as Pirenne concludes, "from the middle of the seventh century navigation between the [Muslim] ports of the Aegean Sea and those ports which had remained Christian had become

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[70] Pirenne (1936), 2
[71] Pirenne (1939), 184

impossible…"[72] Pirenne did speculate that it may have been possible to

maintain navigation between the Byzantine Empire, Greece, and Italy, but

dismissed the possibility that the Byzantine vessels would have sailed any

farther due to attacks led by the Islamic conquerors on Sicily.

Further, Pirenne noted, the continual ravaging of North Africa from 643

to 708 put an end to any commercial activities in the region. Pirenne

immediately dismissed any assumption that agents from the Islamic Empire

"could have taken the place of the former merchants of the Byzantine Levant

… They had no notion of trading, but only of pillaging."[73] In Pirenne's

medieval world, there was no possibility for the Mediterranean to retain its

cultural legacy of prosperous long-distance trade under the domination of

the Islamic Empire.

Pirenne measured the extent of the medieval economy by the absence or

presence in documentary sources of mentions of the sale or transportation of

spices and papyrus, or the movement of people, especially merchants.

Papyrus was the first item to disappear in documentary evidence, in the mid-

to-late seventh century. After 716, mentions of spices, like that of papyrus,

also disappear from the surviving texts. Likewise, wine from Gaza

disappeared, oil was no longer exported from Africa, and gold became

increasingly rare. Pirenne concluded that his sources provided no evidence

for the continued existence in Mediterranean cities of merchant colonies or

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[72] Pirenne (1939), 165
[73] Pirenne (1939), 174

the presence of professional merchants in the European interior. From this
disappearance of people, papyrus, and spices from the texts, Pirenne
concluded that these materials were simply not present in early medieval
society.

In the case of spices and herbs, Pirenne assumed that medieval
consumers of spices would use them in the same manner as ancient
consumers, but the possibility arises that the uses of spices changed during
this transition into the medieval period. In *Out of the East: Spices and the
Medieval Imagination* (2009), Paul Freedman highlights the medicinal, ritual,
and cosmetic uses of spices in medieval Europe. During the medieval period,
Freedman argues, spices were in high demand, and the supply often changed
based on price, warfare, and changes in trade routes. The fierce demand for
spices, Freedman continues, was caused by "needs beyond simply
gastronomic preferences."[74] Overall, Freedman's adventure in the medieval
spice trade reveals the many uses of spices (botanical and non-botanical
alike) in medieval Europe and beyond.

Freedman relies largely on a handbook compiled by fourteenth-century
Florentine merchant Francesco Balducci Pegolotti: the *Pratica della
mercatura*. Many spices and drugs Pegolotti describes in his handbook were
imported from the Islamic World and beyond: balsam, for example, was a
plant resin native to Arabia known for its healing properties and spiritual

[74] Paul Freedman, "Spices: A Global Commodity," in *Out of the East: Spices and the Medieval
Imagination* (New Haven: Yale University Press 2009), 1-18

powers. Frankincense, too, has long been well-known for its prominent use in Christian and Orthodox Church rituals. Dragon's blood, a bright red resin extracted from the plant genus *Dracaena*, was used as a medicine and red dye. Non-botanical spices and drugs also appear in Pegolotti's handbook. The panacea "tutty," for example, consisted of the charred scrapings from chimneys and was imported from Alexandria.[75] "Momie" or "mumia" – produced from specially embalmed human remains – was imported from Egypt and other Eastern regions. This product was thought to stop bleeding. Another imported medicinal product, ambergris, was produced by sperm whales in the Indian Ocean. Whales coughed up this material, which could be harvested when it washed up on the shores, usually near East Africa. This material was believed to combat epileptic seizures and was used as a hygienic perfume.

What do these various uses for spices and similar commodities mean for Henri Pirenne and his vision of how the Islamic Empire transformed the Mediterranean world? First, Pirenne's search for the presence of material goods in surviving texts did not take into account how changes in tastes and uses for material goods alters demand, production, and exchange. Second, the presence or absence of material goods in text sources reveals little about how goods were produced, transported, and exchanged. This in part arises from the problem of documents as evidence: what is preserved in these sources depends on what the writer found to be important, and whether or

[75] Freedman (2009), 13-14

not a written document was preserved. However, the presence of and demand for high unit cost items from Asia and Africa in medieval Europe – specifically, spices and drugs – reveals that some network had been created to harvest these materials, transport these products over long distances, and exchange them for money, material goods, or other forms of repayment.

Mediterranean (dis)Unity: Rome, Carthage, and Luni

In *Mohammed, Charlemagne, and the Origins of Europe* (1983), Richard Hodges and David Whitehouse use recent archaeological data to review either the continuity or discontinuation of "Mediterranean unity of the ancient world, [or] what may be regarded as the truly essential features of the Roman culture as it still existed in the fifth century," and to question whether long-distance trade endured through the sixth century as it had in Roman times.[76] Their conclusions challenge Pirenne's argument that the seventh-century expansion of the Islamic Empire into the Mediterranean brought on irreversible economic and cultural decline. The Germanic invasions, Hodges and Whitehouse conclude, had more significant effects on Western Europe's economy, political structures, and material culture than Pirenne had suggested

To compensate for the "deficiency" of early medieval documentary sources, which do not provide an account of the volume of trade, Hodges and Whitehouse compare data from three archaeological sites in particular – in

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[76] Hodges and Whitehouse (1983), 20

Rome, Carthage, and Luni – and arrive at the conclusion that the post-Roman period witnessed a significant decline in material and economic conditions.[77] The three sites reveal the persistence of commercial life, but on a diminished scale, within the Mediterranean and northwest Europe until the sixth century. Though the authors agree that this evidence confirmed Pirenne's belief that Alaric's assault on Rome in 410 C.E. was one incident in a long and complex process, Hodges and Whitehouse suggest that there was no coherently Roman cultural and economic unity in the Mediterranean by the sixth century.

Instead, Hodges and Whitehouse argue that urban and rural excavations suggest that the "final degradation of Rome" occurred in the sixth century and, that "Islam conquered an already decaying [civilization]."[78] Therefore, they suggest, the expansion of the Islamic Empire in the seventh century was a symptom, rather than the cause, of the deep-rooted social and economic decline of the Roman world. The excavations at Rome and Carthage can be compared to create a chronology of decline in the post-Roman Mediterranean world. This "decline" is indicated by the decrease in objects such as amphorae, transported on long-distance maritime voyages across the Mediterranean. In addition, "decline" can incorporate a form of urban decay, in which the standard of housing, population, and maintenance of infrastructure declined.

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[77] Hodges and Whitehouse (1983), 52
[78] Hodges and Whitehouse (1983), 76

The excavations in Rome uncovered a significant amount of fragmented, broken amphorae from North Africa, western Turkey, and Syria in the fill of the Schola Praeconum. This discovery indicated the presence of large-scale seaborne trade between Rome, North Africa, and the eastern Mediterranean between the years 430 and 440 C.E.[79] These dates were derived from thirty-eight legible coins also found among the fragments. Further, according to archaeologists M.J. Fulford and John Riley, massive, UNESCO-sponsored excavations in Carthage suggested that in the late fifth and early sixth centuries, the city of Carthage enjoyed a buoyant economy.

This impression was confirmed by large numbers of African Red Slip ceramic wares found in the excavation, and the wide circulation of Vandal coinage from Carthage in the Mediterranean. Fulford suggested that once the province was released from its obligation to Rome, Carthage could sustain a lively trading relationship with other parts of the Mediterranean, its surplus no longer exported as taxes or invested in monumental buildings for the Roman state. With Justinian's reconquest in the early sixth century, however, commerce diminished, and wheat previously sold to fund the purchase of private luxuries was requisitioned to meet state needs.

Burial sites discovered in the Carthage excavations further illustrate sixth-century decline. A typical Roman burial site consisted of a necropolis, or city of the dead, located outside the city walls. In Carthage, comparatively well-preserved mud brick buildings dating from the late sixth or early

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[79] Hodges and Whitehouse (1983), 24-28

seventh century were discovered. After their abandonment, this collection of buildings appears to have been used as a burial ground. Similar burial sites have been found throughout the former urban areas of Carthage. Hodges and Whitehouse suggest that the presence of a burial ground within city walls reveals the abandonment of substantial areas in a city, in combination with a simultaneous decline in both population and regulation of burial site proximity to human settlement. This phenomenon might, however, also be explained by cultural change, such as Christianization of Italy and the development of new attitudes toward the dead.

The excavations from Luni also revealed a continued decline in pan-Roman economic unity and deterioration of the commercial networks through which this city acquired luxury objects. Until around 400 C.E., the city derived wealth from marble exports and functioned as a trading post for amphorae from the Eastern Mediterranean and glass from Syria. After the marble trade collapsed, Luni was "barely" operating as a port when the Lombards conquered the city in 640.[80] Evidently, the long-distance trade routes that had connected Luni to other trade centers prior to 400 had largely disappeared by 640.

If other ports and trading towns throughout the region experienced a similar decline in long-distance trade, this would negate Pirenne's assumption that long-distance trade carried on as usual throughout the sixth century. In addition, the excavations in Luni revealed a shift in the style of

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[80] Hodges and Whitehouse (1983), 30-32

residential dwellings. The Luni excavations uncovered the post-classical remains of wooden structures, most likely dwellings, dated to the fifth through ninth centuries. The reports from these excavations indicated that the dwellings resembled the homes of West Germanic peoples. This evidence suggests a possible demographic shift in the inhabitants of Luni or at least those who constructed these dwellings.

Hodges and Whitehouse hypothesize that intensive long-distance trade and the market economy collapsed by the sixth century the post-Roman Mediterranean. The authors recognize the limitations of studying the archaeological evidence of small sites in only three Mediterranean towns, and thus test their hypothesis by studyin a contemporary rural settlement in Italy. The authors use this study to test whether major and economic and social change at a local scale could be seen at a regional scale. In order to date late Roman farms and villas, Hodges and Whitehouse use pottery, specifically Red Slip wares of North Africa.

Based on archaeological evidence from South Etruria and the city of Rome, the authors conclude that the size of towns and standard of urban housing declined as the Byzantines levied heavy taxes to pay for the army and central government during a period of "almost continuous warfare"; agricultural and industrial production declined, and social unrest, mass movements, and plague depopulated the countryside.[81] The final "degradation" of Rome, for Hodges and Whitehouse, occurred in the sixth

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[81] Hodges and Whitehouse (1983), 52

century. The instability of the countryside, Hodges and Whitehouse explained, provided an opportunity for kings and chiefs from north of the Alps to establish their own social and economic systems in the Mediterranean. The authors concluded that Pirenne's argument was not borne out by their own evidence, and that cultural and economic destabilization in the Mediterranean occurred prior to the seventh-century Islamic conquests.

Evidence of Constraint: Byzantium, Fifth to Eighth Centuries

Similar patterns of destabilization formed in Byzantium after the fifth century. In *Byzantium in the Iconoclast Era c. 680-850: A History* (2011), Leslie Brubaker and John Haldon outlined patterns of change that occurred in Byzantium. I found in their study many samples of evidence for responses to constraints on the Byzantine Empire before and during this period. Archaeological studies in Byzantium have revealed patterns of change in ceramics productions and building construction. Additionally, numismatic evidence has revealed further responses to constraint. In *The Age of Justinian: The Circumstances of Imperial Power* (1996), J.A.S. Evans highlights the written evidence for imperial building projects enacted to combat the constraints of Justinian's empire.

Byzantium, Evans remarks, "was a beleaguered empire with permeable frontiers," and Justinian's imperial diplomacy mission was to secure

Byzantine frontiers, spread Christianity, and recover lost provinces.[82] The
security of Justinian's empire was threatened by groups such as the Huns,
Bulgars, Vandals, Slavs, Berbers, and Persians. In the early years of his reign,
Justinian was full of reforming zeal, taxing heavily and spending prodigiously.
After the 530s, Justinian refocused his efforts to increase the efficiency of the
administration while reducing its size. Justinian also initiated a new imperial
building program, in which he directed the restoration of churches and cities,
as well as the construction of churches, defensive fortifications, and
mechanisms for water supply and flood control.

Historical sources make it clear that security mattered. Procopius' *Of the
Buildings of Justinian* describes the construction of many structures under
Justinian's program. In North Africa alone, Procopius mentions the
construction of thirty-five forts and five churches.[83] The striking number of
forts compared to churches emphasizes Justinian's focus on frontier security.
In the East, Justinian directed his focus toward the regions of Syria and
Palestine: his fortifications were concentrated in the north to protect the
road to Antioch and the passes through the Amanus and Taurus mountain
ranges. In central and southern Syria, Evans explains, Justinian's imperial
defense strategy relied on alliances with local Ghassanid populations, who
would fight alongside the Byzantine military against the Sassanid Persians.

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[82] J.A.S. Evans, *The Age of Justinian: The Circumstances of Imperial Power* (London: Routledge, 1996), 78
[83] Evans, 216

Along the northeastern frontier, Justinian dispatched military general Belisarius to build an advance post on the very edge of Persian territory and to reconstruct the frontier defenses.[84] Dara, a fortress initially built by Emperor Anastasius and located about thirty kilometers from Nisibis in modern Turkey, was refortified under Justinian's reign. In addition, Justinian's engineers initiated a program of canalization in Dara, which was traversed by the river Cordes (modern Daraçay). Martyropolis, located in Armenia, was strengthened with a ditch and a second wall. The walls of Sergiopolis (modern Resafa) in Syria were also refortified. In the Balkans, a broad band of small garrison posts and fortified settlements were constructed, and "barbarian allies" were secured. [85]

In *Mohammed, Charlemagne, and the Origins of Europe,* Hodges and Whitehouse also highlighted changes in settlement patterns in Europe from sprawling settlements to those clustered around fortresses. Their discoveries, based on archaeological excavations, support the overall focus on fortifying settlements during the late antique/early medieval period. Pirenne had argued that towns began to change in appearance after the onset of the Islamic invasions, but it appears that the historical and archaeological sources reveal that this was already an ongoing process prior to the expansion of the Islamic Empire in the seventh and eighth centuries.

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[84] Evans (1996), 221
[85] Evans (1996), 222

The appearance of cities and towns certainly changed throughout the sixth century. By 600, the "amenities of urban life" largely disappeared from most cities, with buildings such as theatres and amphitheatres and city councils.[86] Materials were often extracted from these structures for building material. In addition, many natural disasters and political disruptions threatened the stability of these structures. Between 525 and 528, a fire and two major earthquakes wreaked havoc on Antioch. After reconstruction, the Sassanid Persians sacked the city, and according to Procopius, the Persians left the city in ashes.[87]

For the next fifteen years, Antioch would suffer from plague, another earthquake, and subsequent tremors. Public baths survived, however; in fact, in addition to restoring Antioch's main street and porticoes, Justinian built and rebuilt public baths at Antioch, Justiniana Prima, Nicaea, Helenopolis, and Nicomeda, but they decreased in size and ceased to be significant social centers. It appears that significant social change occurred that made these structures less socially important, contributing to the damage and decline initiated by natural disasters and political instability.

Christianization seems to have contributed greatly to changes in appearance of towns, especially to shifts in burial customs. By the late sixth century, a cemetery church had been built on Temple Hill in Corinth. The Theodosian ban on burial within city walls was no longer upheld by the turn

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[86] Evans (1996), 225
[87] Evans (1996), 226

of the seventh century. In the last years of Byzantine occupation of
Tripolitania, in Libya, prior to the Islamic conquests, Christian graves were
constructed within the forum of Sabratha, a city rebuilt by Justinian. Evans
summarizes this transition: "The ancient concept which separated the
cemeteries of the dead from the urban space for the living had ceased to
exist."[88] The growth of the Christian church and monasticism transformed
social space, and clouded the social differences of the classical cities. Large
tracts of land and wealth acquired by monasteries and churches no longer
contributed to urban revenues – this eliminated a substantial tax base for the
Byzantine state.

Many cities appeared to "decline" – but the transformation of cities into
localized towns and villages is only considered a decline if higher value is
placed on the classical city. A shift in the balance of power between the city
and countryside occurred: the city's economic dominance faded by the sixth
century. Most trade, Evans highlights, was local trade: approximately a
twenty-kilometer radius from the market center was the most important
distance of early medieval trade.[89]

Other archaeological studies on Byzantium have brought to light major
patterns of localization in ceramic production and distribution. Until the late
fifth to early sixth centuries, North African imports were strongly
represented in the eastern Mediterranean region. The presence of African

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[88] Evans (1996), 228
[89] Evans (1996), 232

red slip fineware and amphorae in Byzantium appears to decline between 480 and 490, but partially recovers by the 530s.[90] During the late sixth and early seventh centuries, Byzantium witnessed a rise in localized fineware production, and new finewares began to predominate locally. North African amphorae were still prevalent until after the mid-seventh century, when local imitations gained momentum, such as those uncovered in the northern Aegean and Greece. The patterns of distribution of material culture became re-centered around local production and transportation during this period, likely due to the destabilization of long-distance trade routes.

Numismatic sources also provide evidence for responses to constraints on the Byzantine Empire. Coins, Brubaker and Haldon explain, were issued "chiefly to oil the wheels of the [Byzantine] state machinery": the state made payments in gold coin in the form of salaries to bureaucrats and the military, who in turn paid for goods and services with this gold.[91] From these goods and services, the state received taxes in the form of gold. The state, therefore, could collect most of the coin it issued into circulation, because Byzantine fiscal policy generally demanded tax in gold. The Byzantine plurimetallic coinage system meant that a base-metal coin was available for day-to-day exchanges, and usually had a stable rate of exchange with precious metal coinage. During periods of economic instability – such as the fourth and early

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[90] Leslie Brubaker and John Haldon, *Byzantium in the Iconoclast Era c. 680-850: A History* (Cambridge: Cambridge University Press, 2011), 151
[91] Brubaker and Haldon (2011), 119

fifth centuries and late seventh and eighth centuries – this rate destabilized. As a result, inflation occurred and the state shifted to extracting taxes in kind.

Indeed, in the second half of the seventh and the eighth centuries, a large proportion of tax in Byzantium was raised in kind. Of course, there were regional and chronological variations. Where rural or urban markets existed and were secure from attack, payments were still made in gold and bronze coin. Metropolitan areas surrounding Constantinople, for example, usually had little difficulty producing payments in coin. What preoccupied the Byzantine state so severely during the late seventh and eighth centuries that it demanded substantial tax payments in kind?

Warring between the Byzantine and Islamic states is a strong possibility. First, the Byzantine Empire lost territory in Syria. Then, the Islamic Empire continued westward through Egypt and much of North Africa. In fact, **Maps 6**, **7**, **8**, and **9** illustrate the shrinking of Byzantium's territorial boundaries from its height in 600 to 888.[92] In the early to mid-eighth century, Byzantium engaged in efforts to stabilize the frontier. Resources – food, building materials, and labor – were necessary to the Byzantine state's endeavors to protect its frontiers and were more useful to the state than tax revenues in coin.

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[92] See **Maps 6-9** in Appendix, pages 81-84

Realignment of Mediterranean Networks: Muslim Spain, Eighth to Thirteenth Centuries

The Iberian Peninsula offers an additional zone of impact for the narrative of the Islamic Empire. The geography of the Iberian Peninsula created a unique direction of communication and commercial networks. The peninsula is bounded by the Mediterranean Sea to the east, the Atlantic Ocean to the west, and the Strait of Gibraltar to the south. Prior to the fourteenth and fifteenth centuries, travel away from the Iberian Peninsula consisted largely of maritime voyages through the Mediterranean and the Strait of Gibraltar, and this facilitated communication between al-Andalus and other regions to the south and the east. Under the Roman Empire, the Iberian Peninsula operated as a south-western periphery in which goods and labor flowed toward Rome. After the Islamic conquests, the Iberian Peninsula went in a new direction, one that facilitated an ongoing realignment of the Mediterranean network.

In 675, an Arab army attacked Spain by sea, but the Visigothic fleet successfully held them back. Nineteen years later, the Visigoth King Egica accused the Jews in Spain of conspiring with the Muslims and began the persecution of Spanish Jews. This offers evidence of internal tensions and anxieties which could easily have contributed to Visigothic Spain's vulnerability to external threats. In 711, a Muslim Berber army crossed the Strait of Gibraltar under the command of Tarik and defeated Rodrigo, the Duke of Baetica.

After this defeat, Pirenne described, "all the cities opened their gates to the conqueror." The conquered territory became known as al-Andalus. Until the Abbasid revolution in 750, the Umayyad caliph in Damascus presided over al-Andalus. According to Olivia Remie Constable (1994), al-Andalus became "marginalized" when the Islamic Empire's center of power shifted from Syria to Iraq with the rise of the Abbasid Caliphate. The increased distance between al-Andalus and the center of power enabled the first Andalusi amir, Umayyad leader 'Abd al-Raḥmān I (756-788), to bring the territory autonomy from the new Abbasid Caliphate.

The ease with which the Islamic Empire absorbed al-Andalus and the later divisions of the Caliphate due to the internal crises of civil war and revolution highlight the dynamism of world-systems that Abu-Lughod emphasized. Despite the order that world-systems provide to combat the disorder of frayed connections, power dynamics and communication routes constantly shift. Maps 9, 10, and 11 especially illustrate the frequent shifts in the expansion or contraction of states and that relationship to world-system dynamics from 650 to 888 C.E. In particular, these maps highlight the shrinking of the Byzantine Empire and the expansion and subsequent division of the Islamic Caliphate into separate political entities. The many processes which yielded all of the various states in the late ninth century spanning from Western Europe to West Asia are beyond the scope of this project, but the presence of these states is significant and should not be overlooked.

From the ninth century onward, a range of locally-based farming techniques were implemented in al-Andalus. This differs distinctly from those implemented by the Islamic state under the earlier Umayyad Caliphate in Western Asia, but still highlights the importance of agrarian production in the medieval world. Excavations in the Murcia region in south-eastern Spain have revealed extensive water management systems that remain embedded within the landscape. Techniques used by medieval Muslim farmers to manage water supply include: ponds used to store water from springs, wells used to draw water from underground, water wheels, and systems of *acequias*, or channels, that transported water diverted from a river by means of a dam.[93]

Carolingian France and the Origins of Europe's Economy

In his *Origins of the European Economy: Communications and Commerce, A.D. 300-900* (2001), historian Michael McCormick attempts to situate the Carolingian economy within a greater system of communication and commercial relations linking the Charlemagne's empire to other Mediterranean powers. As McCormick emphasizes, the regional Carolingian economy depended upon overland and maritime trade routes; in particular,

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[93] Johnny De Meulemeester, "Ethno-Archaeological Approaches to Medieval Rural Settlement in Spain and Morocco," in *Studies in the Archaeology of the Medieval Mediterranean,* ed. James Schryver (Leiden: Brill, 2010), 169

long-distance overland communications increased during this period,

especially along the Alpine corridor, linking the Franks to Italy and its ports.

McCormick suggested that this increase resulted from internal (and

external) political stability. As king of the Franks from 768 to 814 C.E.,

Charlemagne initiated numerous policies to consolidate Frankish rule and

impose a uniform political authority over various conquered peoples. The

policies which most substantially contributed to political included the

creation of an improved communications network, regular assemblies of lay

and ecclesiastical officials, the issuance of imperial and regional capitularies,

coin reforms, and interregional diplomacy. All of this provided a politically

stable environment for communication and trade networks. Rosamond

McKitterick explains, Charlemagne was intent on being informed about what

happened within and outside of his realm and on hearing from his subjects.

To this end, he summoned and hosted regular assemblies of lay and

ecclesiastical magnates.

These assemblies operated as a forum for the ruler's relations with the

political community and to organize military campaigns and exchange

military intelligence. Most importantly, Charlemagne used the assembly as a

means to gather news and exchange information, with participants in these

assemblies expected to arrive well-informed about events in their locales.[94]

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[94] Rosamond McKitterick, "The king and the kingdom: communications and identities," in *Charlemagne: The Formation of a European Identity* (Cambridge: Cambridge University Press, 2008), 223

Charlemagne issued capitularies, or collections of legislative decrees, which dictated the administration of the realm and conquered regions. Charlemagne issued regional capitularies soon after territories were conquered, and these capitularies were locally circulated. Regional capitularies, McKitterick continues, reflect the first stages of the imposition of Frankish rule in newly conquered territories.[95] These capitularies articulated the principles on which Carolingian dominance and control were based, in addition to imposing general administrative arrangements at the local level.

McCormick's work demonstrates that an intricate study of the communication networks of the early medieval period, using both documentary and archaeological evidence, can reveal more about the economic and political environment than what is (or is not) referenced in documents. By tracing the changing patterns of communication across the early Medieval Mediterranean, he has offered a new avenue for understanding the place of Carolingian commerce and politics within the context of the broader Mediterranean world. For example, McCormick has examined both "virtual coins" – those referenced in documentary evidence – and actual coins uncovered in archaeological digs, to demonstrate that an inward surge of Arab gold and silver coins occurred around the Adriatic rim during Charlemagne's generation, with a large concentration of such coins present in Venice c. 800 C.E.[96] The presence of coins is not *per se* evidence for

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[95] McKitterick (2008), 244
[96] McCormick (2001), 386

the presence of trade, McCormick argues that the presence of coins –
especially foreign ones – suggests the presence of people who carried them
and had contact with foreign places in some capacity.

McCormick concluded that coin finds clustered along travel routes –
roads, rivers, and mountain passes. Foreign coins in the Carolingian kingdom
were geographically limited to the edges of Carolingian power, revealing
Frankish efforts to control the circulation of coinage. The geographic
locations of Byzantine and Arab coin finds tend to overlap. The coastal areas
of northern Italy are especially dynamic: northern Italy acted as an
intermediary zone between the monometallic silver-based coinage of the
North and the more complex coinage systems of the Byzantine and Islamic
empires. The "virtual" coin finds, McCormick argues, fill in the blank spaces
left by archaeological data, suggesting that the distribution pattern of coins
mirrors that of communication, with a peak between 775 and 825.

In order to link coins, economies, and travel of the early medieval period,
McCormick focused on the people who traveled and what routes they took,
using travel narratives and itineraries to illustrate these networks.
McCormick emphasizes "communication," as opposed to trade or commerce.
In defense of this, he argues that searching for evidence of communication in
the literature can provide more information than evidence of trade.
McCormick compiled a checklist of Mediterranean travelers, dating from 700
to 900, detailing people who traveled during this period. While travelers
between Western Europe and Southwest Asia were primarily engaged in

political embassies or religious pilgrimage, McCormick contends that these kinds of communications also revealed patterns of commerce because state and religious officials were some of the greatest consumers of the early medieval period.

Out of the numerous documented travelers during this period, only nineteen have been explicitly identified as merchants. McCormick emphasizes that these nineteen merchants were only those whose movements were "least imperfectly documented," which further illustrates the problem of how much data has (or has not) been recorded and preserved.[97] McCormick argues that snapshots of these merchants from saints' lives, legislative decrees, and toll regulations reveal where merchants were at the moment they were mentioned. From these snapshots, McCormick concluded that merchants frequently clustered together in customs posts, towns, and cities. Further, McCormick suggests that if we can find connections between these clusters, a system through which these nodes were connected might be discovered lurking within the sources.

An interesting market appears to have fueled Mediterranean trade during the eighth and ninth centuries: a market in slaves. In the late sixth century, Rome did not have a notable slave market. However, McCormick notes, slave markets in Southern Gaul and Naples did attract the attention of Gregory the Great. In 595, Gregory had tried to buy English slave boys in southern Gaul to

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[97] McCormick (2001), 614

transport to Rome.[98] By 701, however, the slave market in Rome attracted the attention of St. Bonitus, bishop of Clermont. St. Bonitus had earlier tried to limit the slave trade at Marseilles, and in Rome, he bought all of the slaves he discovered and brought them back to Gaul.

In 776, Charlemagne heard that Romans were selling slaves to the Arabs, and the pope countered that Greek slave ships had docked in the papal harbor. The pope insisted that he had never stooped so low and that he had never personally ordered such sales. The pope claimed that he had burned the Greek slave ships and imprisoned their masters, and pointed out that while he wanted to forbid this crime (that is, the crime of the sale of Christians as slaves to non-Christians), "Charlemagne's man in Lucca" failed to obey his orders to attack the slavers.[99] The Greek slave merchants, McCormick explains, sailed along the Lombard coast and could buy slaves in Rome.

The tale of the Roman slave market illustrates the trans-regional scope of the eighth century slave trade. Not only were slaves sold out of Rome, but slaves comprised a substantial share of European exports to Africa and Asia. As McCormick notes, despite the difficulty in tracking slaves via documentary evidence, the movement of people has physically left its mark. While slaves were most likely shackled with wooden yokes or ropes, iron shackles, "the

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[98] McCormick (2001), 625 (footnote 29)
[99] McCormick (2001), 626

very instrument of enslavement" that constrained captives' necks, have recently been mapped across central Europe.

Warfare in Europe – especially during the Carolingian period – produced substantial quantities of war slaves. Many slaves were settled on estates to work a ruler's land, resettled in other parts of the Frankish empire, or held as hostages. Not all slaves would have remained within the empire, however, as slave exports to Asia and Africa continued to thrive. The exchange of human bodies was active and persistent, indicated by legislative attempts to limit the slave trade; "scarcely a decade went by," McCormick explains, "without someone prohibiting slave trading or closing down a slave market."[100]

Without demand, this market could not have thrived as it had. There would have been no incentive to hunt down and ship slaves across the sea. By the mid-eighth century, the Islamic Empire had ceased its westward conquests, and thus the flow of war slaves also waned. An outbreak of bubonic plague in 745 also disrupted the demography and supply of labor in North Africa. The urban mortality rate has been estimated at 25 to 35 percent during this outbreak.[101] One economic consequence of the much better documented plague outbreak of the fourteenth century was the concentration of wealth among survivors and increasing demand for labor. McCormick argues that a similar phenomenon may have taken place in eighth-century Africa: the date of the first recorded effort in Venice to supply

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[100] McCormick (2001), 748
[101] McCormick (2001), 753

slaves to the Muslim world (748) suggests that the Venetians were responding to a spike in demand for labor stemming from the plague.

Moreover, slaves appear to have been cheaper in Europe than in the Muslim world. Within the Islamic Empire, the prices of humans ranged from 59.4 to 637.5 grams of gold (200 dirhams to 150 dinars), with a mean of 348.45 grams of gold, at least three times higher than in the Byzantine empire (63.75 to 127.5 grams of gold/15 to 30 dinars), and almost eight times greater than within Carolingian Europe (37 to 51 grams of gold). [102]Therefore, a slave merchant could purchase human bodies for a much lower price in Carolingian Europe than anywhere else in the Mediterranean, and sell them at an exceptionally high profit. This profit margin likely contributed to the growth of the eighth-to-ninth century Mediterranean slave trade.

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[102] McCormick (2001), 756-757 (Table 25.1)

Context | Narrating the End of Antiquity

Pirenne's Medieval World in Historiographic Context

McCormick concludes in *Origins of the European Economy* fueled the economic and commercial growth of Western Europe. More broadly, the image of early medieval Europe that emerges from his study is not the "impoverished, inward-looking, and economically stagnant place" painted by Pirenne.[103] Far from dealing a deathblow to Mediterranean trade networks, the Islamic Empire in fact provided the wealth and markets which would fuel the first rise of Western Europe. The links between the economies of Europe, Africa, and Asia traced by McCormick reveal that there is more to the story of Mediterranean transformation than Pirenne imagined, and even more to contribute to the narratives of the End of Antiquity and defining the Medieval.

The debates surrounding the End of Antiquity have long centered on the Fall of Rome. Even Pirenne, whose End of Antiquity occurred in the seventh century – long after the Roman Empire waned and disappeared – was preoccupied with Roman-ness. To Pirenne, the fifth and sixth centuries experienced Roman political and cultural continuity. Even if his definition of the End of Antiquity places the Islamic Conquerors at the scene of the crime instead of the Barbarians, this narrative, like others, relies heavily upon the Tragedy that is the Fall of Rome.

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[103] McCormick (2001), 797

Historian Peter Brown is credited with coining the term "Late Antiquity" in the 1970s to define the third to eighth centuries as a period not of the decline of Roman sophistication and civilization, but rather as a period of "lively and positive developments," of transformation rather than collapse. In contrast, historian Bryan Ward-Perkins defines this period as a drop in "economic and technological complexity, and in levels of material comfort."[104] Roman culture certainly disappeared during Late Antiquity, and Ward-Perkins credits this disappearance to changes in values, urban spatial organization, and the disappearance of state programs operated by a distinctly Roman political/administrative entity.

Pirenne's interpretation of the Islamic invasions suggests that the conquests caused rapid, debilitating change in the administrative and economic systems of the Mediterranean world. A study of the timing, nature, and effects of the expansion of the Islamic Empire, therefore, should either support or contradict Pirenne's interpretation. The Mediterranean had already begun to transform prior to the seventh century. This in itself challenges Pirenne's thesis, particularly because he asserted that no dramatic alterations – of any sort – had occurred within the Mediterranean world between 400 and 600 C.E.

In *The Fall of the Roman Empire: A New History of Rome and the Barbarians* (2005), Peter Heather argues that the movements of various

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[104] Bryan Ward-Perkins, "The End of the Roman empire: did it collapse or was it transformed? Bryan Ward-Perkins finds that archaeology offers inarguable evidence for an abrupt ending," in *History Today* 55:6 (June 2005), 12-16

nomadic groups on the "fringes of Europe" may have accelerated the economic and cultural decline of Roman and post-Roman Europe.[105] The Avars, for example, appeared north of the Black Sea in the fourth century, looking for a safe Haven from Western Turks. In the later fourth century, Heather continues, the Guptas moved toward the "silk road" region from northern India. By the early mid-fifth century, the Hephthalite Huns were "ruling the roost" between the Caspian and Aral seas.[106] As a result of these relocations, the balance of power changed in Central and Western Asia as other nomadic groups were forced to relocate or assimilate. Heather suggests that these movements may also have impacted the movement of the "Huns" and could have reverberated as far as Rome. Such relocations would also have significant effects on regional demographics and political structures, as well as cultural and economic systems.

Pirenne was certainly right in the sense that the advancement of the Islamic Empire brought profound change to the Mediterranean world, especially in terms of the evolution of new systems and networks in order to adapt to a new world order. However, Pirenne appears to have incorrectly identified the causes and nature of those changes. The early medieval period can, therefore, can be perceived as a period in which a new world system emerged out of a profoundly disorganized predecessor. This new system was still organized along imperial lines, as it had been during antiquity, and

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[105] Peter Heather, *The Fall of the Roman Empire: A New History of Rome and the Barbarians* (Oxford: Oxford University Press, 2005), 150
[106] Heather (2005), 150

covered a similar geographic space. This period, however, experienced a dramatic change in the direction of trade and communication networks and the rise of innovative systems of governance and administration. This change can be especially seen clearly in the expansion, consolidation, urban development, and reforms of the early Islamic Empire. Indeed, Europe's "small worlds" were intricately linked to the "greater world of the Muslim economies", links that would develop steadily over the next few centuries.[107]

World-Systems and Connections

A vision of the early Islamic Empire located within a Mediterranean world-system is helpful for understanding these connections. World-systems theory, borne out of Immanuel Wallerstein's contemplations on the origins of the European world economy, provides a narrative of economic development and can be applied to the medieval world that does not limit our view to isolated spheres of towns and villages. The medieval world can instead be viewed as a larger network of interconnected communication and trade networks across Europe, Africa, and Asia.

In a new prologue to *The Modern World-System I: Capitalist Agriculture and the Origins of the European World Economy in the Sixteenth Century* (2011), Immanuel Wallerstein explains that his aim in 1974 was to challenge the dominant, country-by-country narrative of economic development by proposing a world-system approach that would allow a more complete image

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[107] McCormick (2001), 797

of economic development. Wallerstein specified that the term "world-system" meant "not the system of the world, but a system that is a world and which can be, most often has been, located in an area less than the entire globe." Such a system comprises of a set of mechanisms under which the core receives surplus value from the periphery. For Wallerstein, the "core" took the form of developed, industrialized parts of the world, the "periphery" consisted of underdeveloped parts of the world that exported raw material, and the market formed the means by which the core could exploit the periphery.

Wallerstein claimed that over the course of the long sixteenth century (1450-1640), a European world-economy emerged that was not an empire and not a political entity, but was an economic entity as geographically spacious as an empire. According to Wallerstein, what emerged was a "world" system because it was larger than "any juridically defined political unit," and a "world-economy" because economic functions formed the primary linkage between parts of this system, functions reinforced by political arrangements and cultural links.[108] This European world-economy was distinct from earlier world-economies, because past systems were defined by imperial political systems, such as those of China, Persia, and Rome.

Wallerstein suggested that the development of modern capitalism and scientific technologies enabled the new world-economy to thrive without the

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[108] Wallerstein, 15

emergence of an empire to provide a unified political structure. Past empires appropriated surplus through tribute, tax, and political payments. In contrast, the capitalist world-economy provided an alternative in which political energy enabled secure monopoly rights. To Wallerstein, "Europe alone embarked on the path of capitalist development which enabled it to outstrip [other world economies of the sixteenth century]."[109] This transition was enabled by a new division of labor under a capitalist mode of production, the ideologies of statism and state capitalism and the beginning of European, especially Portuguese, overseas exploration.

Wallerstein's approach treated the European-dominated world-system that formed during the long sixteenth century as if its appearance was inevitable. That the path of capitalist development on which "Europe alone" embarked solely enabled the European world-system to "outstrip" other world-economies was not convincing to urban sociologist Janet Abu-Lughod. As a result of her work on the urban history of Cairo, Abu-Lughod concluded that this capitalism-inflected, Eurocentric view of the medieval period, proposed by Henri Pirenne and Max Weber, was ill-conceived.[110] Instead, Abu-Lughod produced a history of world systems between the thirteenth and sixteenth centuries that she believed more accurately explained the rise of European hegemony without assuming that the Rise of the West in the

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[109] Wallerstein, 17

[110] Janet Abu-Lughod, *Before European Hegemony: The World System A.D. 1250-1350* (Oxford: Oxford University Press, 1989), viii

sixteenth century was caused by factors internally inherent to European society.

Wallerstein makes only a brief mention of the world-systems that Abu-Lughod chose to investigate: the Eastern Mediterranean system comprising of the Byzantine Empire, Italian city-states, and parts of Northern Africa; the Indian Ocean-Red Sea complex; and China and Central Asia.[111] In *Before European Hegemony: The World System A.D. 1250-1350* (1989), Abu-Lughod intricately described the economic and communication networks of the thirteenth through sixteenth centuries across Eurasia. Abu-Lughod produced this monograph in response to the evolving world-systems approach to global history pioneered by Fernand Braudel, Karl Polyani, and Immanuel Wallerstein, which aimed to explain the history of capitalism and social change. Abu-Lughod asserted, however, that the "Rise of the West" was not a result of internal characteristics of European powers – such as European culture and capitalism – but rather a result of the disintegration of pre-existing world systems.

In *Before European Hegemony*, Abu-Lughod questioned whether the Euro-centric "modern" world system that evolved from the thirteenth-century world system was likely to persist, or if the world had already entered a phase of restructuring. The world system that existed before European hegemony began to break down prior to the Rise of the West, as the profound "devolution" of the pre-existing system facilitated Europe's "easy

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[111] Wallerstein 17

conquest."[112] Abu-Lughod intended to prove this sequence of events by examining the world systems that existed before the sixteenth-century rise of European hegemony.

This required a contextual focus: the geographic, political, and demographic context in which development occurred "was far more significant and determining than any internal psychological or institutional factors."[113] The dis-integration that facilitated the development of the sixteenth-century European world-system resulted from long-term fragmentation of previously unified overland trade route regions and the effects on maritime trade of the Black Death, which spread from China to Europe between 1348 and 1351.

Abu-Lughod identified eight interlinked subsystems that could be grouped into three larger circuits (the Western European, the "Middle Eastern," and the "Far Eastern").[114] The links between these subsystems formed the thirteenth century world-system. **Map 2** illustrates these eight circuits:[115] the trading towns of Champagne; the Venetian-Genoan-dominated Mediterranean sphere; an Alexandria-Cairo-Red Sea complex; a sphere spanning from the Eastern Mediterranean through Baghdad and Basra to the Arabian Sea; a massive overland zone from the Black Sea through Bukhara, Samarkand, and Karakorum to Peking; an Indian Ocean

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[112] Abu-Lughod (1989), 361
[113] Wallerstein, 18
[114] Abu-Lughod (1989), 33
[115] See Map 2 in Appendix, page 79

circuit; and an East Asian circuit spanning from Peking through Hangchow, Zaytun, and Canton to Malacca and Palembang.[116]

Abu-Lughod described the trade pattern of the thirteenth century as a system which "involved a large number of players whose power was relatively equal. No single participant … dominated the whole," and "most participants … benefited from co-existence and mutual tolerance."[117] Therefore, this system was not hierarchical: no single actor dictated the terms of trade and production across the system, which instead comprised several "core" powers (Arab-Persian imperial centers, Mongol and Chinese imperial centers, and the trading towns of Flanders, France, and Italy), semi-peripheries, and peripheries that became increasingly integrated by land and sea as they engaged in both conflicting and cooperative relations.

Abu-Lughod described world systems as dynamic and living. In her formulation, world systems rise when integration increases and decline when connections between systems decay. The old parts of a pre-existing system live on and become the materials out of which restructuring develops and the new system inherits a set of partially organized subsystems.[118] As a result, players formerly peripheral to the system occupy more powerful positions and geographic zones formerly marginal become foci and control centers of system interactions. The world system of the sixteenth century,

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[116] **Map 2** in **Appendix**, page???
[117] Abu-Lughod (1989), 362
[118] Abu-Lughod (1989), 367

thus, resulted from a major change in the pattern of geographically-central core regions.

Late Antique and Early Medieval World-Systems

In a similar way, the thirteenth-century world system emerged from previous systems, specifically the eighth-ninth century system, which in turn resulted from the breakdown of the remainders of the ancient world. Abu-Lughod described the ancient world system as one that covered a similar geographic span, but was structured along imperial lines by the networks that connected the Roman and Han Empires through south and southwest Asia. These two imperial powers had limited and indirect contact with one another at multiple intervening places, contacts forged through travelers, primarily merchants.

This system failed, Abu-Lughod continued, after the fall of the Roman Empire and the loss of Han unity. This description helps to define antiquity as a period that was not centered on the Roman Empire, but rather a period characterized by a system of Roman-Han imperial relations that were connected by a variety of subsystems controlled by a variety of actors across the Eurasian and African continents. As a result of this new definition, we can observe a major flaw in Gibbon and Pirenne's narratives of ancient history: the Roman Empire on its own cannot tell a complete story. Similarly, Pirenne's orphaned Western Europe offers an incomplete narrative of medieval history.

The formerly integrated subsystems of the Mediterranean underwent reorganization by the seventh and eighth-century consolidation of the Islamic Empire and its extensions. Abu-Lughod concluded in her analysis of late antique and early medieval world systems that it was this reorganization that eventually culminated in the thirteenth-century world system traced in *Before European Hegemony*.[119] The consolidation of the Islamic Empire and early attempts at unified administrative reforms facilitated the empire's expansion of overland caravan and seaborne trade routes. Thus, the expansive conquests, urban development, and administrative reforms of the early Islamic Empire indicate the presence of an already emerging world-system in the seventh and eighth centuries.

Conclusion: Re-Viewing the Early Medieval Mediterranean

Pirenne's vision of the Islamic conquests of the seventh century was an image of rapid, debilitating administrative and economic change. According to Pirenne, these systems were largely unaffected by the Germanic invasions and the fall of the Roman Empire in the fourth and fifth centuries. Rather, he suggested, the Islamic invasions swiftly unraveled the administrative and economic fabric of the Mediterranean world and produced a dilapidated Mediterranean economy.

Discontents with Pirenne's thesis derived from problems with Pirenne's methodology and the validity of his arguments. Grierson (1959), for example,

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[119] Abu-Lughod (1989), 366

criticized Pirenne and other historians for scouring documentary sources and archaeological data for evidence of trade. In documentary evidence, mentions of merchants are scarce, and Pirenne interpreted this to mean that merchants similarly were nonexistent in the early medieval Mediterranean. Similarly, Pirenne's critics and supporters used archaeological data and numismatics to determine if trade occurred: coins themselves could not reveal the processes by which they traveled.

Hodges and Whitehouse (1983) tested the validity of Pirenne's argument. They concluded that there was no coherent Roman cultural or economic unity in the Mediterranean for the Islamic conquests to destroy. In particular, metal production had declined long before the advent of Islam. Similarly, McCormick (2001) suggested that the economies which had sustained the Roman Empire collapsed. This intensified the vulnerability of the Roman World to decay.

As illustrated by historical and archaeological publications of the late twentieth and early twenty-first centuries, these systems had already begun to disintegrate or transform prior to the seventh century, and the conquests could not have damaged the Mediterranean economy as Pirenne had argued. The centuries preceding the consolidation of the Islamic Empire began and facilitated this profound reorganization of the Mediterranean world-system. McCormick challenged Pirenne's contention that the Islamic Empire destroyed the Mediterranean economy.

Rather, by creating an image of the Mediterranean economy as part of a larger system of communication networks, McCormick highlighted that the Islamic Empire as a political and economic entity actually facilitated economic growth in terms of development, production, and exchange. The Islamic state's involvement in city-building, infrastructural development, and fiscal administration created a flourishing economy with high demand for luxury goods and labor.

Abu-Lughod's analysis of thirteenth century world-systems has revealed that the eighth-ninth century Mediterranean world-system evolved from the ancient world-system and produced the thirteenth century world-system when it began to disintegrate. This pattern of decayed connections and restructuring of networks was not uniform across the entire Mediterranean, but the persistence of this pattern from the fifth through the ninth centuries (and beyond) is too significant to cast aside.

Thus, Henri Pirenne's thesis was incomplete. The emerging Islamic state wielded profound change on the Mediterranean world-system, but Pirenne placed too much emphasis on the catastrophic effects of the growth of the Islamic Empire on the West and not enough on the possibilities that the economies and networks that the Islamic Empire offered. Not only did Pirenne ignore the impacts of plague, natural disasters, and changing social values on economic systems, but he incorrectly insisted that the Roman-ness of the West remained until the Islamic invasions into the Mediterranean.
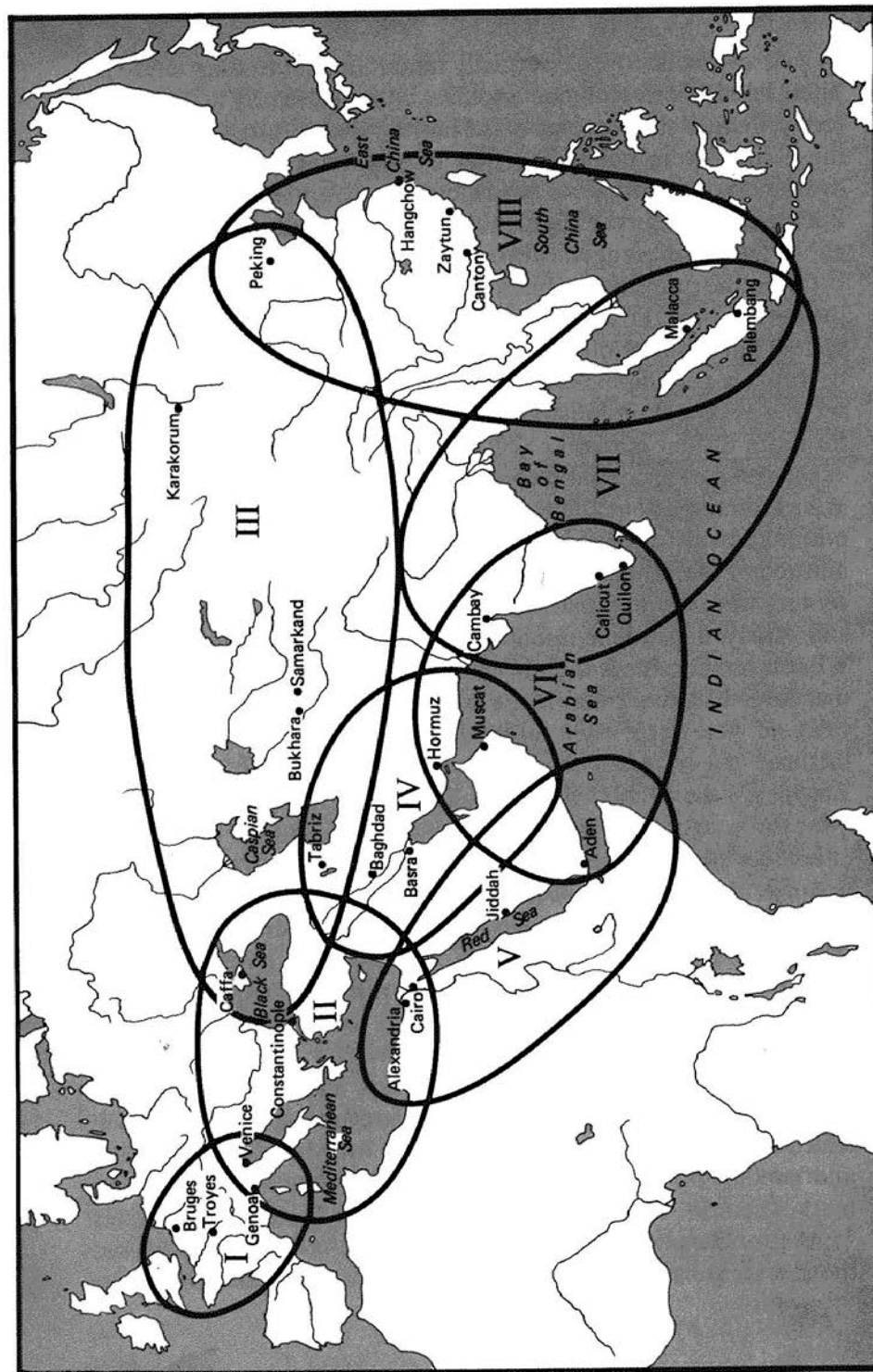
Appendix
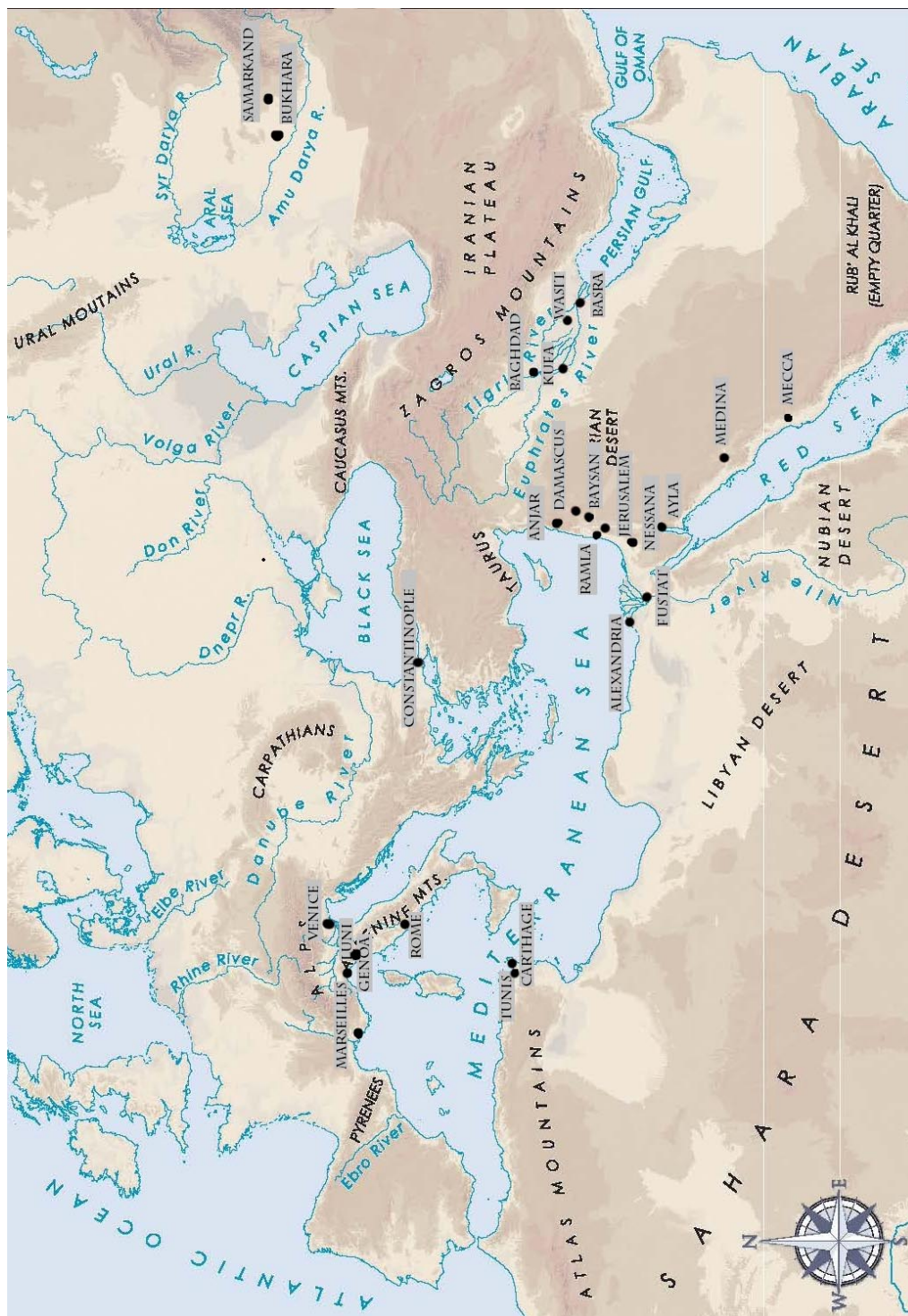
Map 1. The Mediterranean World: Places mentioned [120]

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[120] Edited from: Ancient World Mapping Center, "Europe, North Africa and West Asia: Regions" (University of North Carolina at Chapel Hill, November 2004)
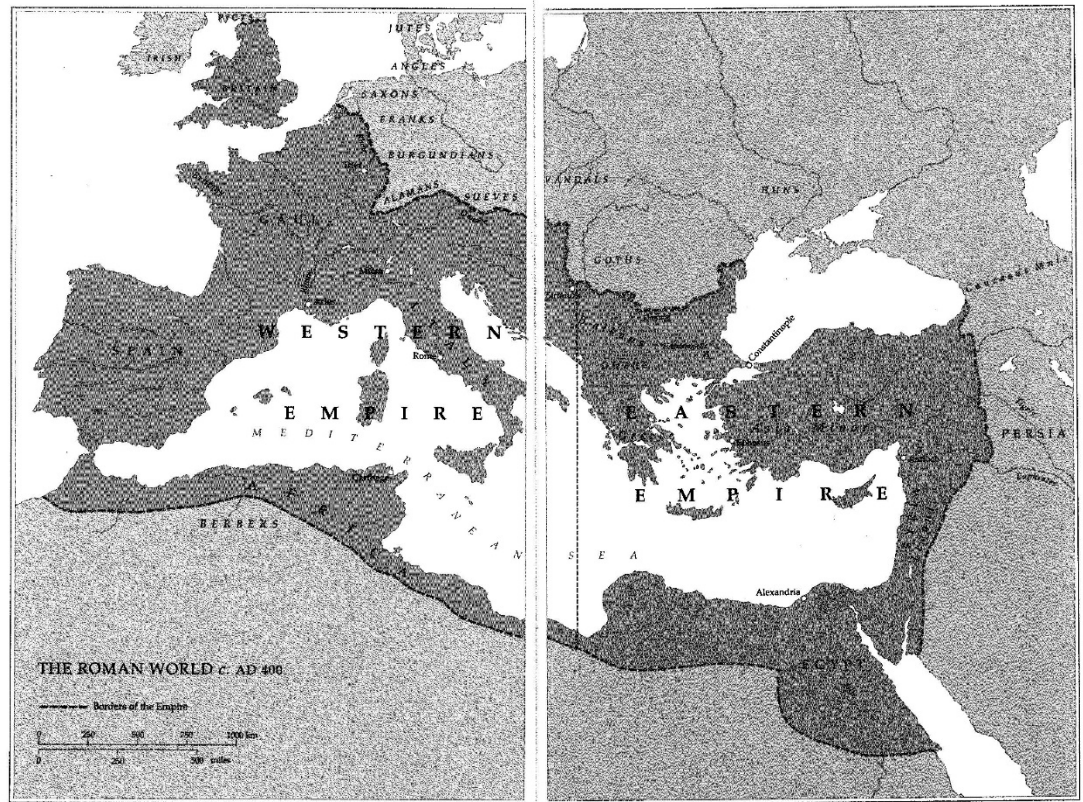
Map 2. Abu-Lughod's world-systems, thirteenth century[121]

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[121] Abu-Lughod (1989), 34

Map 3. The extent of the Roman Empire, 300 C.E.[122]

Map 4. The "Roman World", 400 C.E.: Eastern and Western Empires[123]

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[122] "File:Byzantine Empire map.gif" *Wikimedia Commons,* last modified 3 January 2009. http://commons.wikimedia.org/wiki/File:Byzantine_Empire_map.gif

[123] Bryan Ward-Perkins, *The Fall of Rome and the End of Civilization* (Oxford University Press, 2006)

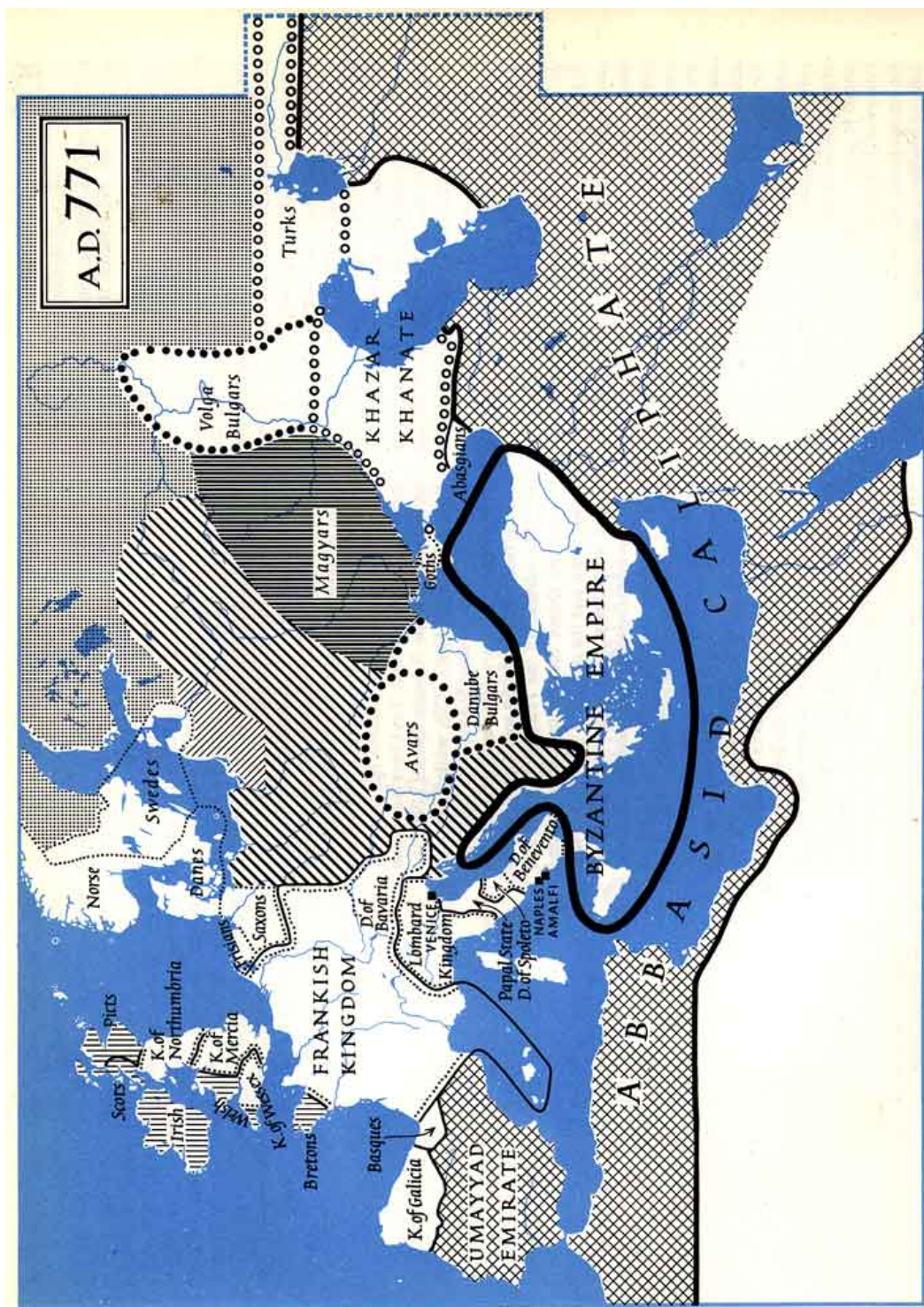**Map 5.** The Roman and Byzantine Empires, 480 C.E.[124]

Map 6. The Byzantine Empire, 600 C.E.[125]

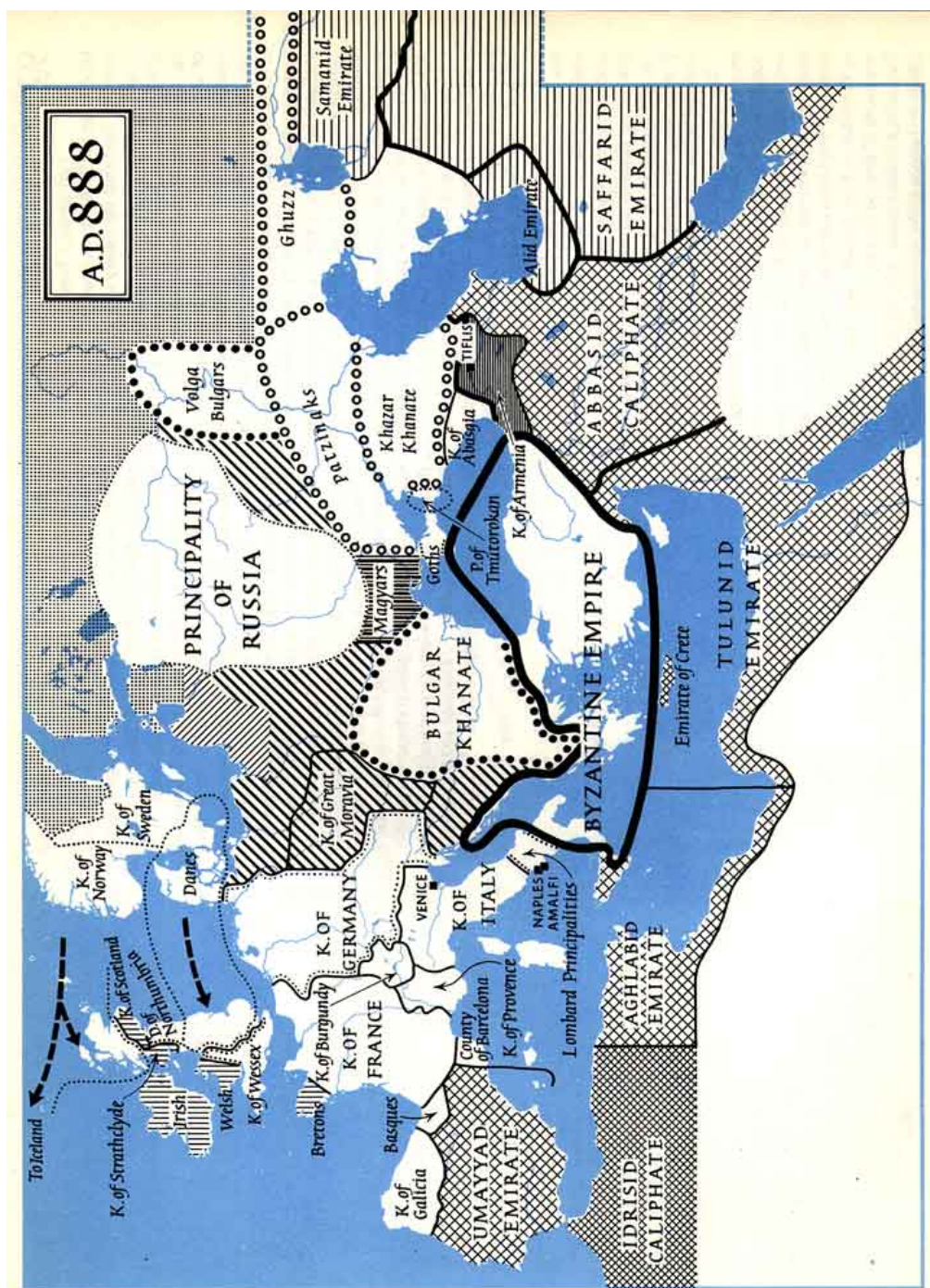[124] "File:Byzantine Empire map.gif" *Wikimedia Commons* (2009)
[125] "File:Byzantine Empire map.gif" *Wikimedia Commons* (2009)

Map 7. The Mediterranean World, 650 C.E.[126]

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[126] Colin McEvedy, *The Penguin Atlas of Medieval History* (Penguin Books, 1961), 37

Map 8. The Mediterranean World, 771 C.E.[127]

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[127] McEvedy (1961), 45

Map 9. The Mediterranean World, 888 C.E.[128]

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[128] McEvedy (1961), 49

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