PART I

The Indian Ocean between Tang China and the Muslim Empire (Seventh–Tenth Century)



Map 1.1 Trade in the Indian Ocean (seventh-tenth century): the relative importance of the main ports

Introduction

Being a merchant, I sought out men of my own profession, and particularly those who came from foreign countries, as I hoped in this way to hear news from Baghdad, and find out some means of returning thither. For the capital of King Mihrage is situated on the seacoast, and has a fine harbor, where ships arrive daily from the different quarters of the world.¹

The fifth and early sixth centuries saw a sharp economic decline in the Afro-Eurasian world-system.² The Silk Roads towards Afghanistan and northwestern India were shut as of the end of the fifth century. This situation favored the development of maritime routes between China and the Persian Gulf, although trade activity remained limited in the Indian Ocean at the beginning of the following century. The sixth century, however, saw a revival in trade within the Eurasian sphere. It was marked by the founding of a Turkish Empire³ in 552 in Central Asia – in this empire, the western khānate controlled Sogdiana⁴ – and the reunification of China by the Sui dynasty in 589. During the third century, the collapse of the Han and the downturn of the Roman Empire had triggered a global recession of the world-system; the reappearance of a Chinese empire under the Sui, succeeded by the Tang in the early eighth century, relaunched a phase of overall growth.⁵ This upturn coincided with a period of climatic changes that probably played a major role: milder conditions prevailed and rainfall increased in northern China and part of Central Asia. Various regions in Europe also enjoyed a milder (and often drier) climate from 700 onward, which would extend –

- "History of Sindbad the Sailor," *The Thousand and One Nights*, www.gutenberg.org/files/10121/10121.txt
 [The Project Gutenberg EBook of Oriental Literature]. In fact, as R. Khawam has demonstrated (1986: 29), the adventures of Sindbad the Sailor are not part of the *Thousand and One Nights*. Sindbad's tale may have been written four centuries prior to the *Nights*.
- ² It is strange that J. M. Hobson (2004: 32) begins his era of Afro-Eurasian globalization "after 500."
- ³ Note that the term "Turk" is already present during the first century CE under the forms Turcae and Tyrcae in texts by Pomponius Mela and Pliny the Elder, respectively.
- ⁴ From their capital, Samarkand, the Sogdians played a key role in commercial exchanges in Central Asia, where their language East Iranian was widespread. The Turkish Empire was divided into eastern and western regions, whose respective capitals were Ötüken (Mongolia) and Suyab (Kyrgyzstan), a town located along a branch of the Silk Roads. Early on, the western Turks converted to Buddhism and took control of the steppes north of the Caucasus. The empire would be more strictly divided in 584, following an armed conflict conducted by the western khānate.
- ⁵ I. Morris gives an estimate of 27,000–28,000 kcal/cap/day for energy capture during the eighth and ninth centuries in the Tang Empire, a figure that may be too low if we compare it to that of the Han period (26000–27000 for the first and second centuries) (2013: III). Morris gives an estimate of 31,000 kcal/cap/ day for the Roman Empire during the first and second centuries (2013: 61).

4

The Indian Ocean between Tang China and the Muslim Empire

along with oscillations and phases of relative cooling – into the mid-thirteenth century.⁶ Egypt benefited from high Nile flooding during the eighth century, a trend that persisted for the first half of the eighth century.⁷ These high floods signal abundant monsoon rains in the Indian Ocean.

During the eighth century, two sets of factors contributed to a spectacular rise in production and exchanges: first, the internal expansion of China and its interest in longdistance trade via the Silk Roads and the southern seas, along with the cosmopolitanism of the Tang period and an attraction to Buddhism; second, the formation of a Muslim empire that would extend from Central Asia to Spain, controlling the southern Mediterranean. The interconnection of these two empires by land and sea was crucial to this second phase of the world-system: it triggered a growing integration of regions that were already in contact with one another and a geographical extension of the system.

"Before the fifth century, it is possible that the Roman imperial economy surpassed the Chinese economy in various fields: road infrastructures, navigational ability, access to raw materials such as wood, and commercial techniques" (Norel 2010). Conversely, from the eighth century onward, the balance was clearly in China's favor. Under the Sui and Tang dynasties, "the Chinese economy became the largest in the world for the first time in both gross and per capita terms," and "China began to exercise a gravitational pull on the rest of the world economy" (Adshead 2004: 68). The Tang preeminence in the world-system was not only based on economics, it was also intellectual and political (China "was the best ordered state in the world").8 The country's development built on its institutional advances: the Tang built a rigorous administration - composed of officials recruited via exams - that encouraged the empire's growth, at least during the first phase. In addition, an efficient army of professional soldiers was set up. For the first time, gunpowder was used in incendiary weapons. Considerable effort was devoted to improving transportation via land and water, and to initiating a postal service. Along with the redistribution of land, progress in agriculture was systematically encouraged, through the diffusion of knowledge, the building of dams, the digging of canals, the growing use of chain pumps or norias (an innovation introduced from western Asia), and the adoption of transplantation techniques in rice cultivation. Advances in agriculture bolstered an urban expansion in the Yellow River basin and the Yangtze region, which was also partly due in this region to the arrival of migrants from the north; this trend would continue and strengthen under the Song. Outstanding production developments occurred in the metallurgical, ceramic, textile, and paper industries, leading to noteworthy social changes: one example was the transformation of matrimonial regimes accompanying the thriving rural textile

- ⁶ Limited decreases in average temperatures in the Northern Hemisphere can be seen around 640, 740, and 800–810 (Mann and Jones 2003). One notes wetter conditions in sub-Saharan Africa between 300 and 1100 (MacEachern 2005: 443). Between 850/900 and 1150/1200, the eastern Mediterranean saw a cooler climate and decreased precipitation (linked to a positive phase of the North Atlantic Oscillation) (Sorrel *et al.* 2007). Büntgen *et al.* (2011) write of "reduced climate variability from ~700 to 1000 C.E." in Central Europe.
- ⁷ W. H. Quinn (1992) lists 15 episodes of low Nile flooding during the seventh century, and 10 during the first half of the eighth century. Their number would later increase.
- ⁸ S. A. M. Adshead 2004: 30. According to Adshead, on a political level, the Chinese rise to power was primarily founded on "good governing."

CAMBRIDGE

Cambridge University Press 978-1-108-42465-3 — The Worlds of the Indian Ocean Volume 2: From the Seventh Century to the Fifteenth Century CE Excerpt <u>More Information</u>

5

Introduction

industry. Significant amounts of bronze coins were issued, allowing for a new monetization of the economy, which went along with combined growth of markets for both goods and factors (an embryonic system of markets set in, which would sharpen during the Song period). This economic rise was linked to flourishing long-distance trade which in turn favored technical innovations. Porcelain, "the first item of global culture" (Adshead 2004: 80), which had already appeared under the Han dynasty, was thus developed and exported at this time. Hydraulic power was used in various types of machines. The invention of xylography spurred a new diffusion of knowledge. The extension of the internal market is reflected in the emergence of a new class of merchants, supervised by the state. The state controlled prices on the grain market and imposed its monopoly on various goods.

The Tang period was a time of religious tolerance, cosmopolitanism, and an openness to the outside world which was not restricted to conducting peaceful commercial exchange and following the paths of Buddhist monks to India. In the Asian interior, the Tang emperors chose to control the supply of certain products and the merchant routes through force. Relying on the quality of their weaponry and the efficiency of their military organization, the Chinese conducted an armed expansion, which was stopped in 751, when a Muslim army defeated the Chinese in the valley of the Talas River, in Kyrgyzstan. The taste of Tang China for the exotic triggered an increase in trade with distant countries via the maritime and terrestrial Silk Roads. In Central Asia, the Chinese traded silk, lacquerware and tea for horses. State-controlled trade with the southern seas was conducted via some ports, primarily Guangzhou, where Austronesians, Indians, Arabs, and Persians docked (the Persians had been traveling to China since the Sassanid period). The Chinese, for their part, did not travel much along the trade routes. With the exceptions of the Chinese drive toward Central Asia and voyages made by monks to India, it was rather agents from other cores and of semiperipheries - such as Southeast Asia and the states of Central Asia - who traveled to China, as well as constantly moving merchant groups, Sogdians, Syrians, Persians, and Radhanite Jews. Of these groups, Adshead aptly comments: "their real homes were not their cities but their markets" (1995: 83). In this way, groups acting as intermediaries ensured the formation of "chains of dominance," thus conducting transfers of wealth along networks.

Trade was accompanied by significant circulation of ideas and knowledge. The Tang governance influenced the Silla kingdom in Korea and Japan during the Nara period: these regions became semi-peripheries of the Chinese "core." The Silk Roads set in motion a westward transfer of Chinese techniques in metallurgy, the paper industry, and xylography. The windmill was introduced from Iran into China, where Syrian or Persian artisans also helped improve the glass industry. Asia's major religions entered China along with merchants. Buddhism, arriving at the start of the first millennium, progressed in both the ruling class and the population. Beyond China, it spread into Korea and Japan. Zoroastrians, Manicheans, Jews, and Nestorian Christians were also present. The Chinese Empire welcomed Islamic influences via Central Asia and the coasts of southern China, where Yangzhou, Quanzhou, and Canton were home to sizeable foreign colonies.

6

The Indian Ocean between Tang China and the Muslim Empire

The second major pole of the world-system was built on military expansion and adherence to a new religion, Islam. This new monotheism appeared in Arabia, thus in a semi-periphery of the system. It became prominent in the Arabian peninsula under the first caliph, Abū Bakr, successor to the Prophet Muhammad in 634. Islam then saw exponential growth under the caliphs 'Umar and 'Uthmān: Muslim armies entered the Byzantine Empire (capturing Syria and Palestine, then Egypt and Libya), and took control of Persian territories as far as Central Asia (634-652), taking advantage of the decline of both the Sassanid and Byzantine empires (Garcin 2000). Impoverished populations often welcomed the Muslim armies. Even so, the Muslims failed to take Byzantium (673–677). Moreover, a civil war erupted after 'Uthmān's death; it led to the assassination of the caliph 'Alī, the Prophet's son-in-law, and the founding of the Umayyad dynasty, which shifted the capital of the Muslim state from Medina to Damascus (661). The death of 'Ali's son, Husayn, at the battle of Kerbala, in 680, marked a split between the Shiites, who formed the party of 'Alī, and the Sunnis. Under the Umayyads, the Muslim Empire expanded into northern Africa and Spain, where the Visigoth kingdom showed little resistance. A defeat at Covadonga (Asturias) (718), however, halted the Muslim advance into northern Spain, and an Arab army which had entered Frankish territory was defeated at Poitiers in 732. The Arabs were also defeated, for the second time, at Byzantium in 718. In Central Asia, the Umayyads controlled territory extending as far as the Aral Sea and Ferghana. They reached the Indus valley, and Daybul - where a Sassanid garrison was stationed was seized in 711; however, the Gurjara-Pratīhāra, who dominated northern India, blocked the Arabs' push toward Gangetic India.

The much-criticized management of the empire by the Umayyads and conflict between Shiites and Sunnis led to a revolt which gave power to Abū al-'Abbās (749), founder of the Abbasid dynasty. The capital shifted to a new city, Baghdad, a choice revealing the new significance of the Persian Gulf, Persia, and Asian trade. The eighth century has often been described as the golden age of Islam. It was a period of economic prosperity and intellectual enlightenment, marked by the translation of the main philosophical and scientific books from the Greek world into Arabic. The period also saw scientific advances. While this cultural movement has often been linked to the action of a few caliphs, it was primarily aligned with a process of statebuilding where competing elites attempted to broaden their knowledge (Saliba 2007). Inflows also came from China (in mathematics and various industries) and India (with the introduction of Indian figures and the translation of books). The spread of Islam (as well as that of other universal religions) promoted a flowering of writing throughout the Ancient World.

The empire promoted progress in agriculture, through irrigation, crop rotation (with the cultivation of legumes), and the introduction of plants from the Indian Ocean. While these advances were not the "revolution" advocated by A. Watson (1983) (versus Planhol 1968), they did underpin demographic growth and an urbanization process as well as an expansion of crafts and industrial production, especially in textiles, glass, and ceramics. The expanding empire promoted technical borrowings and innovations; within this context, not only did the economy grow overall, but per

CAMBRIDGE

Cambridge University Press 978-1-108-42465-3 — The Worlds of the Indian Ocean Volume 2: From the Seventh Century to the Fifteenth Century CE Excerpt <u>More Information</u>

7

Introduction

capita growth occurred (Hobson 2004: 42–43).⁹ A member of the Umayyad family managed to flee to Spain, where he founded an emirate at Cordoba in 756. This emirate later controlled most of the Iberian peninsula, and Cordoba became the largest city in western Europe. The spread of Islam followed not only the paths of the armies, but also commercial, maritime, and terrestrial routes. Rulers encouraged internal and external trade, facilitated by using a common currency and by developing instruments of credit. In this area, the Muslims benefited from the commercial and fiscal structure they had inherited from the Mediterranean economy and the Sassanid Empire. Still, the Muslim Empire did not form a large, unified market; rather, it showed weaker or stronger interconnections among various regional markets. In the Indian Ocean, Muslim merchants and scholars arrived in China and on the East African coast very early on. They also entered the interior of the African continent by following the trans-Saharan or Somali caravan routes.¹⁰ A private sector developed, sometimes connected with the state power, with no institutionalization of power on the part of the merchant class.

In western Europe, the Carolingian Empire was formed, as a counterpoint not only to the Muslim Empire – but also to the Byzantine kingdom.¹¹ Its founder, Pepin the Short, concluded an alliance with the Roman Papacy (in 751), and helped create a pontifical state. Crowned emperor by the pope, Charlemagne (768-814) extended the margins of his domain and the influence of Christianity.¹² With only a rudimentary administrative system, the Carolingian state developed ties of vassalage, thus promoting feudalism,¹³ aided by Europe's recourse to heavy cavalry.¹⁴ Europe's unity was based ideologically on the idea of Islam as a global threat to Christendom; this would later lead to the Crusades (Hobson 2004: 111). Many monasteries were built, often hosting schools and workshops of copyists. The Frankish expansion brought about a modest revival of trade and towns in western Europe. Various innovations - some introduced from Asia by the invasions of the fifth and sixth centuries – helped move the agricultural sector forward. The most notable examples were the replacement of the ard by the plow;¹⁵ three Chinese inventions – the use of the harrow (around the ninth century); the adoption of the trace harness, also called breast harness (sixth century); and the collar harness, which placed the weight of the load onto the horse's shoulders (possibly

- ⁹ This period provides good examples of these "efflorescences" prolonged episodes of increases in per capita product, founded on Smithian and Schumpeterian growth (Pomeranz 2009a) of which Goldstone (2002) has pointed out the recurrence throughout history (on this concept of efflorescence, cf. Pomeranz 2009a).
- ¹⁰ Islam reached southern Ethiopia and the interior of the Horn of Africa via trade networks operating from Dahlak and the port of Zayla' (Kapteijns 2000: 228). On the trans-Saharan routes, see below. Mas'ūdī speaks of Ethiopia as a country ruled by a *najashī* (Negus) who lived at Ku'bar (Axum?).
- ^π The rivalry was both political and religious. Disputes were accentuated by the development of the iconoclast movement at Byzantium (726–787, 813–843).
- ¹² C. I. Beckwith (2011: 140ff.) points out the importance of political changes in Eurasia around the mideighth century. These changes did not all occur at the same level, however.
- ¹³ Feudalism was a system in which a suzerain granted a fief to a vassal, who owed allegiance and committed himself to providing various services, especially military help.
- ¹⁴ Moreover, the medieval European culture was the result of a blend of migrants of Germanic origin and Greco-Roman populations.
- ¹⁵ The Slavs began to use heavy plows soon after the Avar invasion of 567 (Hobson 2004: 102).

CAMBRIDGE

Cambridge University Press 978-1-108-42465-3 — The Worlds of the Indian Ocean Volume 2: From the Seventh Century to the Fifteenth Century CE Excerpt <u>More Information</u>

8

The Indian Ocean between Tang China and the Muslim Empire

ninth century);¹⁶ other innovations included the practice of horse shoeing and the adoption of a three-year crop-rotation system instead of the previous biennial rotation. While these advances were still slow during this period, they they led to spectacular growth from 1000 onward.¹⁷ They were supported by demographic growth which they helped intensify. Various innovations were introduced via the Muslim world from the eighth century onward; one example is the use of the crank, attested in Europe in 830.

Pirenne's explanation for western Europe's decline is well known - and has been rightly criticized recently (see Findlay and O'Rourke 2007: 72ff.). For Pirenne, this decline was due to Muslim domination in the Mediterranean, which cut western Europe off from the Orient. The disappearance of papyrus, luxury textiles, spices from the Orient, and gold coins would come to symbolize this process. "The classic tradition was shattered," writes Pirenne (1939: 136), "because Islam had destroyed the ancient unity of the Mediterranean." However, had this unity not been destroyed earlier? In fact, Muhammad was truly the "maker" of the Carolingian Empire, as Pirenne (1939: 234) suggests ("without Muhammad, Charlemagne would have been inconceivable"), because the Muslim Empire favored – rather than inhibited – growth in production and trade (Findlay and O'Rourke 2007: 74). The Carolingian power encouraged (and controlled) long-distance trade, led by Lombard, Frisian, or Jewish merchants, with the Rhone and the Rhine as major axes for trade within the empire.¹⁸ Already between the fourth and eighth centuries, Jewish and Syrian merchants were trading grains with Europe, essentially from Byzantium. "When Islam spread during the eighth century, ... the Jewish diaspora settled lastingly along the new route of the Po River, the valleys of the Alps and the Rhine valley, while maintaining ancient connections with Africa through Spain, and with the Orient through Italy" (Norel 2009b).¹⁹ As early as the eighth century, merchants from Venice, Amalfi, and Naples were trading with the Muslims, selling mostly slaves (in theory, these cities were Byzantine ports, but Amalfi and Naples in particular sought autonomy from the large powers controlling the sea). The Arabs' capture of Crete (827) and Sicily (831-878), marking a setback for Byzantium, helped emancipate the Italian cities. The Scandinavians also developed trade, starting at the beginning of the ninth century, perhaps in an attempt to bypass the Mediterranean area. Following rivers in Russia, they entered into contact with the Byzantine Empire and the Muslim world, through populations of Turkish origin: the Khazars and the Bulgars of the Volga valley. Swords, furs,²⁰ and slaves were exported southward and westward (Verdun became the "capital of a slave trade" [Simonnot 2002: 101ff.]). Tombs in Sweden, Denmark,

- ¹⁹ "The Jews," writes Pirenne, "were the [only] economic link between Islam and Christianity" (1939: 128).
- ²⁰ See also Lombard 1972 and Grataloup 2010: 95.

¹⁶ See Temple 2002: 20–23.

¹⁷ Mazoyer and Roudart 1998: 259ff. The new agrarian system, using heavy plows and plowing oxen, was above all implemented in cool temperate regions. To improve agriculture, the Mediterranean region followed "methods adapted [to its climate] such as tree crops, the terracing of hill slopes and irrigation" (Mazoyer and Roudart 1998: 260). Agricultural advances in Europe, however, should be qualified if we compare them with those of Muslim Spain, India, or China (Goody 2007: 85).

¹⁸ The exchange networks stretched as far as the British Isles, as shown by the discovery of cowries in Anglo-Saxon tombs in Kent (Sarre), Cambridgeshire (Shudy Camps, Haslingfield), and Yorkshire (Staxton) dated to the seventh century (Hugget 1988: 72).

More Information

9

Introduction

and Germany have yielded glass beads of Asian origin (their exact source, however, remains unknown; these beads show high levels of aluminum, and a Zr/Hf ratio unusual for Indian beads) (Gratuze *et al.* 2013).

The Persian geographer Ibn Khurdā<u>d</u>beh (ninth century) wrote about the activities of the Rus:

The ar-Rus, a tribe from among the as-Saqaliba [Slavs] ... They bring furs of beavers and of black foxes and swords from the most distant parts of the Saqaliba to the sea of Rum [the Mediterranean], where the ruler of ar-Rum levies tithes on them. They travel on the Itil, the river of the as-Saqaliba, and pass through Khamlij, town of the Khazars [near Astrakhan], where the ruler levies tithes on them. Then they arrive at the sea of Gurjan [Caspian Sea], and they land on the shore of it which they choose. On occasion they bring their merchandise on camels from Gurjan to Baghdad, where as-Saqaliba eunuchs serve them as interpreters. They claim to be Christians and pay [only] head tax. (2004: 22)

The founding of a Khazar Empire during the eighth century shows the significance of a route leading to the north of the Caspian Sea. This route was favored by the Byzantines, who were anxious to bypass the Persian obstacle. From the capital, Itil, at the mouth of the Volga River, roads led to the Black Sea and the Baltic Sea on the one side, and to Samarkand on the other. The aristocracy of the Khazar Empire converted to Judaism around 740,²¹ probably under the influence of Radhanite Jews who – according to Ibn Khurdādbeh – "controlled the Silk Roads" (see Lombard 1971: 248) (their name derives from the region of Radhan, east of the Tigris River, near Baghdad). Jews expelled from Byzantium arrived in great numbers in Khazaria during the seventh and eighth centuries. When Muslim armies burst into Khwarezm, Jews also left this region and settled in Khazaria.

Byzantium's political situation was critical at this time. In addition to the Muslim threat, Byzantium had to face the Bulgars, who controlled most of the Balkans in 679 (the Bulgars were first mentioned "in 480, when the Byzantine emperor Zeno obtained their help to fight the Visigoths" [Roux 2003]). The Byzantines were also experiencing setbacks in Italy, against the Lombards, who took the exarchate of Ravenna in 751. Affected by military and economic decline, the Byzantines responded to Muslim attacks on Christian veneration of images: in 726, Leo III the Isaurian issued his first edict against this cult, marking the beginning of the iconoclastic crisis, which was ended - provisionally - by the Council of Nicea in 787. The ban on images, to be resumed in 813 by Emperor Leo V, however, was only the external form of a deeper drive on the part of the emperors to take into account the desires and interests of their rural populations. Here, "concerns related to heresy and divine punishment" probably played a part (Cheynet 2008: 130). This iconoclastic approach reflected a concern for the defense of the empire (Ahrweiler 1976: 194) as well as an attempt at centralization. Byzantium reorganized the administration and the army. The reform was based on the creation of themes, or administrative and military regions, each expected to provide

²¹ Moreover, like the Eastern Turks, the Khazars developed a dual sacred kingship, imitated by the Magyars. There was the sacred king, who was accountable for rainfall, drought, and other cosmic events, and another chief, "who essentially functioned as the executive king" (Czegledy 1966). We know of similar dual kingships in Africa (see de Heusch 1997: 226–228).

10

The Indian Ocean between Tang China and the Muslim Empire

a contingent of soldiers. A parcel of land was granted to each soldier in exchange for his military service, which was also expected of his descendants. The theme system – perhaps already begun under Heraclius (610–641) – would later lead to the rise of a hereditary aristocracy of military commanders, whose interests would clash with those of the central government. During the eleventh century, emperors preferred to use mercenaries.

The eighth century ushered in a period of development and economic integration among the various regions of the Afro-Eurasian world-system. This century and the next one were marked by strong demographic growth, primarily in India, then in China and Muslim western Asia (Bosworth 1995; Chandler 1987).²² The latter two regions underwent urbanization. Baghdad may then have been the most populous city in the world, along with Chang'an.²³ Fourteen urban areas in China were home to over 170,000 households during the eighth century. Four of the largest cities in the world were located along the Silk Roads (Rayy, Nīshāpūr, Bukhara, and Samarkand), a sign of these trade routes' importance. The Silk Roads and the northern "route of the steppes" – which developed in parallel (Christian 2000: 7-9) – explain the rise of the kingdom of Khazaria.²⁴ For this kingdom, as for the Kök Turkish and Uighur empires, "a 'structural' alliance [was forged] between emperors and merchant communities"; this "partnership" spurred the movement of people, goods, and ideas along the routes of Asia (Di Cosmo 1999a: 27). The Byzantine Empire allied itself with the Khazars as early as 626. This alliance was renewed under Leo III, who restored Byzantine military power. North of Khazaria, a Bulgarian state developed in the Volga valley; it exported furs, honey, and slaves to Khazaria and Khwarezm.

Around 900, Muslims from this region reached the city of Bulgar (near Kazan), where the elite converted to Islam; the Bulgar state issued silver coins during the tenth century (Roux 2003).²⁵

Large Indian kingdoms, located centrally within the Asian area, participated in the world-system's process of growth,²⁶ although ceaseless fighting between states led to major decimation of their wealth: these states included the Rāshtrakūta kingdom of the Deccan, which welcomed the Muslims on the western Indian coast; the Gurjara-Pratihāra Empire, which controlled Ujjain and the middle Ganges valley; the Pāla

- ²² According to some estimates, the population of Byzantium may have risen during the seventh century, perhaps reaching 800,000 inhabitants around 650 (Brown 2001: 106, according to Runciman 1958). However, W. Treadgold (2001) sees a population in decline with 100,000 inhabitants around 750, when Byzantium was affected by cyclical plague epidemics. And I. Morris gives an estimate of only 125,000 inhabitants in 700, against 450,000 in 500 CE (2013: 151).
- ²³ Some estimates give 2 million inhabitants at Chang'an during the eighth century. Morris, however, gives only 175,000 inhabitants for Baghdad in 800 CE, whereas Chandler estimates Baghdad at 900,000 in 900 CE, a figure questioned by Morris (2013: 150).
- ²⁴ It may be via this region (Khazaria) that the crossbow (a Chinese invention) reached Europe once again (crossbows were used at the battle of Hastings in 1066). In 1139, the second Lateran Council condemned their use, except for actions against infidels.
- ²⁵ In 922, the Abbasid caliph sent an embassy to Bulgar, with the scholar Ibn Fadlān, who described his encounter with a group of Viking merchants.
- ²⁶ Various authors have criticized A. Wink (1990) for underestimating the role played by the Indian states and merchants; Wink views the development of a Muslim hegemony within the world-economy of the Indian Ocean (see Subrahmanyam 2005b: 52).