AYYUBID JERUSALEM

THE HOLY CITY IN CONTEXT 1187-1250

> edited by Robert Hillenbrand and Sylvia Auld

Stefan Heidemann:

Economic Growth and Currency in Ayyūbid Palestine.



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Ayyubid Jerusalem: The Holy City in Context 1187-1250

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Chapter 13 ECONOMIC GROWTH AND CURRENCY IN AYYUBID PALESTINE

Stefan Heidemann

1 Introduction¹

In 583/1187 Saladin conquered Jerusalem. This occurred in a period of renewed economic growth in Syria and northern Mesopotamia, which lasted until the Mongol invasion. The economic recovery after the political and economic collapse of the 'Abbasid empire began slowly in the Saljuq period in the late 5th/11th century with political and fiscal reforms, and accelerated in the time of Nur al-Din Mahmud ibn Zangi (who reigned 541-569/1150-1174) and the Ayyubids. It then blossomed in the first half of the 7th/13th century. This growth is still visible in the splendours of Zangid and Ayyubid art and architecture.

At the same time it was a period of transition for coinages in western Asia, as it supported and fostered economic development from the last remnants of the monetary systems of the early heights of the Islamic empire to the monetary system of the Ayyubids. Syria has no metal resources of its own for the production of coins. This evolution of the monetary system would not have been possible without close economic relations with the neighbouring regions of Byzantium and Egypt in the early phase, and later with Italy and central Europe.

The study of the currency situation in Ayyubid Jerusalem and Palestine has to be placed within the medieval framework of the economic and monetary evolution in historic Syria. Emphasis is laid on the situation in Jerusalem which changed its government several times, from being the political capital of the Crusader Kingdom to a provincial town under the Ayyubids, then once again coming under Frankish control, and finally back to Ayyubid sovereignty.

Money as a means of co-ordinating human decisions and economic exchange is a complex social invention. It must always be adjusted to the prevailing economic, political and juridical conditions. Seen from another angle, its design and evolution reveal much about the societies creating it. Money in the pre-modern world was based on different concepts from those operating today. The supply of coins, the physical instruments for the exchange of goods and services, was usually restricted. The absence of coins increased the cost of economic exchanges and thus prevented the economy from growing. However, in order to function as an absolute price (thaman mutlag) or equivalent, that is as money, a certain type of coin has to be available in sufficient quantities. Non-physical forms of money, bills of exchange (hawala) and cheques (suftaja), were developed in the Near East, but they were used only among small communities bound by ties of trust and kinship, for example networks of long-distance merchants in major trade cities. In premodern times, two distinct currencies always existed side by side, serving distinct needs within different social classes—high-value money, usually gold or pure silver coins, and the petty coinage, usually debased silver, billon, or copper coins. Geographically well-defined borders of currency zones hardly existed. If they did exist then it was for economic and fiscal reasons.

Gold coins, and to a certain extent silver coins, constituted the principal money for wholesale and long-distance merchants (*tujjar* and *jallabun*) as well as for fiscal administration and state expenditure. It was also the money

Most of the references and source work for this contribution are to be found in *Die Renaissance der Städte in Nordsyrien und Nordmesopotamien*, Leiden 2002, by the author. This chapter presents some preliminary results of the ongoing research project 'The New Economic Dynamics of the Zangid and Ayyubid Period', supported by the German Research Foundation (DFG). I would like to thank David Jacoby for his comments and discussions on some aspects of the text.

The geographical names used, such as Syria, Palestine and Iraq, do not correspond to any modern state or political entity.; they refer to classical Arab geography. Syria denotes bilad al-sham, the land between the Mediterranean Sea and the Euphrates. It includes the region of Palestine or filastin (Palaestina Prima) and of historical Jordan al-urdunn (Palaestina Secunda). The western part of al-urdunn, between the Sea of Galilee and the Mediterranean Sea, is of special significance here as part of the former Crusader territories. It includes the cities of Tabariyya (Tiberias) and Acre. Palaestina Prima and Palaestina Secunda are referred to here for reasons of simplicity as Palestine. The jazina represents northern Mesopotamia, a region stretching from the Euphrates in the west and north, to the Tigris, up to Takrit in the east and south. Iraq denotes lower Mesopotamia, south of Takrit.

of high ranking *amirs* who relied on land-tax or rent from a defined tax-district (*iqta^c*). These groups needed to store wealth, to transfer it conveniently over long distances, and to make payments of large sums. These monies could be traded between regions and existed in competition with other high-value coins. The value of the coins was bound to the metal content but was always somewhat higher than the value of the same amount of metal as a mere commodity. If a coin-type was generally accepted and was in sufficient supply, it was maintained over a long period and remained stable in design and metallic content in order to ensure that wealth could be securely stored, and would be accepted interregionally.

The second type of money fulfilled the needs for daily purchases. It was the money of small dealers, artisans, workers (*suqa* and *ba*^c*a*) in the urban market (*suq*) and, of course, the rest of the urban population. The rural population relied mainly on subsistence. Only certain extra requirements and some excess produce was bought and sold in the *suq*. At least part of their taxes, probably most of them, had to be paid in kind to the *amir*, who held the privilege to crop the land-taxes (*kharaj*) of his *iqta*^c in order to support his military household.

The ratio in price between the different types of high-value coins and petty coinage was always determined by supply and demand. The urban population was dependent for its livelihood on income from its activities within the bounds of city or town, and on purchases in the urban market. In pre-modern times it was usual that the demand for small coins grossly exceeded their supply. Most of the time the authorities mentioned above did not feel responsible for the organisation of a sufficient supply of petty coins. In contrast to the highvalue money, the price of the petty coinage was determined far more by interest in their use by the public than by their intrinsic value. This allowed a much higher profit for those who could provide these means of exchange, in other words the fiscal and political administrations or money-changers. Price manipulation and debasement of petty coinage can be interpreted as a kind of taxation on activities related to the urban market. It is a kind of fiscal skimming of the urban economy which would otherwise be hard to tax. In addition, the value of petty coins could be manipulated by an acceptance of these coins by fiscal administrations for tax debts at a set rate, and by refusing to take any other coinages. Petty coins could be imported from other regions at a profit, if the local administration was not of a mind, or not able, to provide coins for expanding urban markets. Presumably such an import was organised by moneychangers (sing. sarraf, sairafi).

According to Islamic legal theory based on Qur'anic revelation, the value of money is bound only to its metallic content. Silver and gold were the commodities which could be legally used for any transaction. The Islamic jurists of the 5th/11th century were aware of the contradiction between these different concepts. Islamic law thus acknowledges only

the physical metal content as a legitimate base for the value of coins. But jurists observed that in reality a fluctuating value was based on the interests of the public, that is, on the market forces of supply and demand. This contradiction between the normative divine imperatives and observed empirical reality explains the jurists' frequent discussions on riba, or illegitimate profit. Islamic law forbids two equal amounts of precious metal being valued differently in one single transaction. This is the core of the prohibition of riba. The translation, frequently cited, of riba as 'usury' or 'interest' constitutes only one specific case. For example, an unequal assessment existed if someone was required to give back one and a half dinars for a single dinar which he had once taken as a loan. The notion of time did not play a role in these normative legal considerations. The majority of the jurists did not regard copper coins—the generic term is fals/fulus—as money or absolute equivalent; if they regarded it at all, then it was only as a substitute for money. Copper coins could not serve in all legal transactions, as did gold and silver coins.2 These concerns influenced the future design of the system of Ayyubid currency.

There are only a few sources for any research into the monetary situation in Palestine. They are archaeological, numismatic and philological in nature.

Coins of the period in question have been found in different locations in Jerusalem³ and its vicinity: ^cAin Karim (7km to the west of the city), ⁴ Belmont (Suba, 10km to the west), ⁵ Bait Jibrin/Bethgibelin (Beth Guvrin, 35km to the south-west on the way to Asqalon), ⁶ the Frankish village of Parva Mahumeria (Emmaus/al-Qubaiba, 14km to the northwest), ⁷ Bethlehem (5km to the south-west), ⁸ and Jericho (Ariha, about 25km north-east of Jerusalem). ⁹

The northern part of Palestine around Lake Tiberias or the Sea of Galilee has been particularly well researched. Sites

² Cipolla 1956, 27-37; Brunschvig 1967; Sprandel 1975, 156-69; Heidemann 2002, 356-61, 367.

Miles 1985 reported on finds of coins in the Armenian Garden, Jerusalem and Lowick in Carradice 1994 on coins from the German Church of the Redeemer (in the Muristan, Jerusalem). Glücksmann and Kool 1995 describe a hoard dating to the Crusader period from the Haram al-Sharif. Older reports are less useful, because for the first three-quarters of the 20th century few people were able to identify Islamic coins with sufficient accuracy. Gordon 1925 reported on coins found on the sites of Ophel and Siloam within greater Jerusalem. The report is full of errors due to the state of knowledge at that time. However, for some coins, an identification could be established from illustrations and a critical view of a description. Crowfoot and Fitzgerald 1929, 103–20 on the finds in the Tyropoeon Valley, and Saller 1957 on the coins from excavations in Bethany, about 3km east of Jerusalem. It must be recognised that in places of special veneration many diverse coins are found together which are not representative of the normal daily circulation in the region.

⁴ Bagatti 1948, 84-8.

⁵ Metcalf 2000b.

⁶ Kool 2007.

Bagatti 1947, 156-7, pl. 21; Metcalf 1975b; Kool 2007.

⁸ Metcalf 1975b.

⁹ Miles 1958.

include the Frankish Chastelet Vadum Jacob¹⁰ (Ateret, 10km to the north of the Sea of Galilee), Nabratain, ¹¹ Khirbat Shama^c, ¹² and Mairun¹³ at Mount Mairun (Jabal Jarmaq, all to the northwest of the Sea of Galilee), as well as Hammat Ghadir¹⁴ (7km east of the Sea of Galilee), and Khirbat al-Karak¹⁵ (at the southwestern tip of the Sea of Galilee). Most important of all are the finds of coins from the short-lived Ayyubid fortress of Mount Tabor, ¹⁶ located between Tabariyya (Tiberias) and Acre.

Many sites with finds are located within the coastal strip. There are a number of coins reported as coming from Acre (Akkon, ^cAkka), ¹⁷ the capital of the Restored Kingdom of Jerusalem. In the region of Acre lay Tall Kaisan¹⁸ (about 8km to the south-east of Acre), Yoqne^cam (Qaiman, Caymont) (about 30km south of Acre at the foot of Mount Carmel), Chastel Pélerin or ^cAthlith²⁰ (about 21km south of modern Haifa) and Caesarea Maritima (Qaisariyya).²¹

For the rest of southern Syria, the main excavations for reference are the one in the citadel of Damascus, ²² and the one at Tall Shaikh Sa^cd²³ (37km east of the Sea of Galilee).

Only one literary source deals with the specific currency situation in Ayyubid Palestine. A handbook dealing with *hisba*—regulations regarding public order with special reference to the urban market (*suq*)—gives information on certain aspects in the period following the conquest of Jerusalem by Saladin. The author was the well known physician and judge (*qadi*) of Tabariyya, ^cAbd al-Rahman al-Shaizari

¹⁰ Kool 2002. This site is of special importance because occupation was short, lasting only from October 574/1178 to October 575/1179.

(who died *c.* 589/1193).²⁴ Although the manual deals with a general topic, it is obvious that al-Shaizari drew on his local experience as *qadi* in the matter of money.

2 Gold coinage

2.1 Overview

Gold coinage developed in three different stages. In the first half of the 6th/12th century, two gold coinages were current in the Crusader states and in Syria and northern Mesopotamia: the Fatimid *dinar* (pl. 13.1) and the Byzantine *histamenon*²⁵ *nomisma* (pl. 13.2). In the 530s/1140s, however, a scarcity of Fatimid and Byzantine gold coins in circulation led to the production of the *dinar suri* (pl. 13. 3) within the Kingdom of Jerusalem. It was to remain the predominant gold coin in Ayyubid Syria until the Mongol wars and the establishment of the Mamluk sultanate.²⁶

2.2 The Fatimid dinar

In the period before the Crusades, southern Syria and Palestine formed part of the Fatimid empire. The standard gold coin in the region was the Fatimid dinar, which was minted not only in Egypt but also in several Syrian cities. It was known as the dinar maghribi, 'western dinar', or simply as dinar misri, the 'Egyptian dinar' (pl. 13.1). Venetian documents refer to it as biçancius auri saracenatus or some similar term.²⁷ It was struck from almost pure gold.²⁸ The weight was tightly regulated at about 4.2g. From at least the first half of the 5th/11th century, the Fatimid dinar had become one of the most favoured coins in transactions, not only in territories immediately under Fatimid sway but far further afield. Literary and archeological evidence corroborates its wide circulation in northern Syria, northern Mesopotamia and Iraq, especially in the caliphal capital Baghdad and the commercial centre of al-Basra, as well as in the Arabian peninsula. In Iraq it remained in circulation until the first half of the 6th/12th century. However, its importance seems to have declined—at least in northern Syria and northern Mesopotamia—from about the 460s/1067-8 onwards.²⁹

The second half of the 5th/11th century saw a new gold coin emerging in significant numbers in Syria and northern Mesopotamia: the Byzantine *histamenon nomisma* (pl. 13.2). The advance of the *nomisma* was partly due to the

¹¹ Raynor 1981.

¹² Hansen and Bates 1976; Meyers 1985.

¹³ Kool and Ariel 2002.

¹⁴ Amitai-Preiss and Berman 1997.

¹⁵ Delougaz and Haines 1969, 50-3, pl. 47.

¹⁶ Battista and Bagatti 1976, 143-63.

¹⁷ Rahmani and Spaer 1965–1966; Meshorer and Spaer 1965–1966, 77; Metcalf 1975a: 141–9. These find reports do not include Islamic coins. This is probably due to the specific interest of the authors in coins from the Crusader period. Syon 1997; a catalogue of the coins from the recent excavation is in preparation by Danny Syon (forthcoming). I am indebted to him for providing me with the manuscript.

¹⁸ Fulco 1980.

¹⁹ Meshorer 1996; Kool 2005.

²⁰ Metcalf, Kool and Berman 1999. In 583/1187 ^cAthlith fell into the hands of Saladin. The Crusader castle ^cAthlith was constructed in 613-4/1217-18 and was sacked and evacuated in 690/1291.

Metcalf and Holland 1994-1999; Metcalf and Holland 1992-1993; Hohlfelder 1980; Metcalf 1987; Ariel 1986. With the exception of Hohlfelder and Ariel, the other reports deal only with Crusader coins. This is probably due to the special interests of the authors. Although much damaged in the Ayyubid period, Qaisariyya remained in the hands of the Crusaders. For the history of Qaisariyya during the period, see Hazard 1975, 85-8.

²² A Syrian-French excavation of the citadel of Damascus under the direction of Sawsan Khalifa, Direction Générale des Antiquités and et des Musées de Syrie, and Dr Sophie Berthier, Institut Français du Proche Orient. The catalogue is currently under preparation by the author.

²³ Militký and Novak 2002.

²⁴ Hajji Khalifa 1835-58, Kashf III, 510, identifies him as qadi Tabariyya; Brockelmann 1937-1942 Suppl. I, 832; al-'Arini in Shaizari 1946, p. ya'-ka'.

²⁵ Grierson 1966

²⁶ For a general discussion, see Bates 1989a.

²⁷ See, for example, Morozzo della Rocca and Lombardo 1940, no. 53 (document dated April 523/1129).

²⁸ Oddy 1980; Gordus and Metcalf 1980, 119-20.

²⁹ Heidemann 2002, 381-3; Bates 1989a, 424-30.

expansion of Byzantine influence after the Byzantine conquest of Antioch in 358/969. The types of imported nomismas included only issues up to the reign of Michael VII (who reigned 464-470/1071-1078). Their cup-like shape has earned them the name skyphates in modern research literature. The debased nomismas of Michael VII still retained a theoretical gold content of 66 percent, although the measured content was between 50 percent and 68 percent of gold. After Michael's reign the gold content again dropped dramatically, and by then nomismas were no longer imported. They are called various names: western sources usually refer to them as bezants or bisantii or, in particular, to the most common one as michaelita, michaelaton or in Syriac mikhilata (pl. 13.2). Some Arabic sources call them dinar rumi or, of one particularly common issue by Romanus III (reigned 419-425/1028-1034), as dinar armanusi (pl. 13.5). Beyond the confines of the empire, these gold coins remained in sufficient supply even after the reign of Michael VII. In particular, the michaelaton became the dominant gold coin for the Crusader states during the first half of the 6th/12th century.30

2.3 The dinar suri and other new gold coinages

The middle decades of the 6th/12th century saw a series of reforms in gold and silver coinages, not only in the Crusader states but also in the Islamic principalities in Syria and northern Mesopotamia; these were later followed by reforms in Saljuq Anatolia, Iraq and the Caucasus. The reforms can be interpreted firstly as a reaction to the scarcity of gold coins in circulation as the former significant import of dinar maghribi from Egypt diminished and the Byzantine michaelaton was no longer struck; and secondly as a result of economic growth, which began slowly at the end of the 5th/11th century but accelerated in the middle of the 6th/12th century. The first introduction of a new gold coin, the dinar baid, the 'white dinar', occurred in Damascus in 530/1136, but had no lasting effect.³¹ It was followed by the introduction of the dinar suri into the Crusader states probably in the late 530s/1140s. Finally there was a new gold coin struck in Mosul, the dinar amiri, at the latest by 540/1145-6.³² It was only the introduction of the *dinar suri* (pl. 13.3) within the Crusader states which had a lasting impact on Ayyubid Palestine, Syria and northern Mesopotamia.

In their design and in their simplified, partly distorted, legends, the main series of the new gold coins resemble Fatimid *dinars* from the reign of Caliph al-Amir bi-Ahkam

Allah (who reigned 495–524/1101–1130). Three sub-series can be distinguished. The first was obviously a short-lived—and nowadays rare—sub-series with a gold content of over 80 percent.³³ The second and major sub-series contains a ratio of about four-fifths gold with an intended weight of ca 3.7-3.8g. The third, and most important, sub-series has a content of two-thirds gold and a weight of about 3.3-3.4g. The series are difficult to date in absolute terms. A Venetian document naming bisancios saracenatos bonos auri de rege illius terra, that is, of the Kingdom of Jerusalem, is the first secure literary reference, dating from July 537/1142, just before the accession of Baldwin III (who reigned 538-558/1143-1163).34 It is probably a reference to dinars of the first series. Similar renditions of the name appear in documents during the following decades. The second series may have already begun in the 530s/1140s but almost certainly before 560/1165, when a document made a distinction between old and new bisancios auri saracenatos.35 For the last and third series (pl. 13.3), the conquest of the Kingdom by Saladin in 583/1187 and the establishment of the Restored Kingdom in 588/1192 may provide explanations for the debasement. Two documents from October 614/1217 and November 636/1238, both naming the bisantios albos, 36 'white bezant', in the sense of 'silver-alloyed bezant', probably are a reference to them. ³⁷ Although the *dinar suris* are imitative, they can be easily distinguished from authentic Fatimid coins, and are obviously not an attempt at fraud.³⁸ It was a normal feature of western European currencies to strike imitation coins with an immobilised design.³⁹ Arabic sources refer to them as dinar suri, the 'dinar from Tyre' (Sur) and in one Genoese document of August 551/1156 they are called bisancius (....) saracenicus de Sur. 40 It is possible that a mint was situated in Tyre,

³⁰ Heidemann 2002, 383-7; Morrisson 1968. On the gold content, see Grierson 1954, 385-6.

³¹ Heidemann 2002, 425-6; Ilisch in Münzen und Medaillen AG, Basel, Auktion 75 (1989), no. 361; Ibn al-Qalanisi (ed.) Amedroz 1908), 257; (ed. Zakkar 1403/1983), 405.

³² Heidemann 2002, 425-6.

³³ Metcalf 1995, 45; Balog and Yvon 1958, 150 no. 26.

³⁴ Morozzo della Rocca and Lombardo 1940, no. 81; Metcalf 1995, 43, 46; Metcalf 1989, 441–2; Gordus and Metcalf 1980, 137.

Metcalf 1989, 442-3 sees the end of the Restored Crusade (1148) as the most plausible earliest time for the beginning of this series, but as yet there is no further evidence for this suggestion; Morozzo della Rocca and Lombardo 1940, 164 no. 167 (document of 1165). For the second series, evidence from hoards provides termini ante quem of c. 1180 (Metcalf 1975b, Bethlehem) and of 1179 (Kool 2002, Vadum Jacob. Corrigenda no. 1 is a clearly legible coin of the second series dated AH 506).

³⁶ Röhricht 1893, 242 no. 903, 283 no.1085.

³⁷ On the dinar suri, see Heidemann 2002, 423–5 (circulation in Syria); Metcalf 2000; Bompaire et al. 1998 (metal analyses); Metcalf 1995, 43–51; Ehrenkreutz 1994 (response to Metcalf and Bates); Metcalf 1989, 439–48; Bates 1989a: 429–30; Gordus and Metcalf 1980 (metal analyses); Irwin 1980, 91–3 (Arabic sources); Ehrenkreutz 1964 (older views); Balog and Yvon 1964; Balog and Yvon 1958, 145–63. Röhricht 1893 (Latin documents from the Kingdom of Jerusalem); Morozzo della Rocca and Lombardo 1940 (Venetian documents).

³⁸ Metcalf 1989, 440 in response to Ehrenkreutz 1964.

³⁹ Immobilisation of a coin type means that the design and text are fixed or immobilised and did not respond to a change in the political situation. The famous Maria-Theresa Thaler, circulating for centuries in the Levant and struck in many mints all over Europe, is still minted in Vienna with the fixed date of 1780. This phenomenon is usually due to contracts or to the great success of a distinct coin type in the history of money.

⁴⁰ Gordus and Metcalf 1980, 138. Historiae Patriae Monumenta VI 1853, 350 no. 348.

because of the name itself and because it had a Fatimid mint previously, but there is no other evidence for it. ⁴¹ Literary and numismatic evidence, however, point to Acre as the site of the main mint, probably with a royal privilege. ⁴²Tripoli should also be considered as a site for a mint producing the *dinar suri*. It once had a Fatimid mint for gold, and later the mint produced another minor but distinct Crusader gold series. ⁴³ In addition, Tripoli is mentioned in the Papal decree of 650/1253 (see below). An early document of 544-45/1150 may well contain a reference to *bezants* of Acre and also of Jerusalem (*VI millia bisantiorum Accaronensium et M[ille] Hierol.*), ⁴⁴ but, despite being the capital, the city was of low economic importance.

At first these dinar suris may have been intended to act as the local gold coinage, as Michael Metcalf assumed. 45 It might have been expected that the low grade of gold would have prevented their export, a drain which would have deprived the Kingdom of the necessary means for domestic commercial and fiscal transactions. Although the dinar suri is frequently mentioned in texts concerning transactions between Franks and Muslims, it should be recognised that a demand for these gold coins was equally a fact in neighbouring Islamic principalities in Syria. Here those payments due to be paid in *dinars* sometimes had to be made in copper coins owing to the scarcity of gold ones. 46 The route to success for the *dinar suri* had been paved by a universal acceptance of the michaelaton, which was equally an alloyed gold coin. Furthermore, the well regulated dinar suri was in sufficient supply. Most of the gold bullion was presumably imported by Italian merchants. The circulation of the dinar suri went far beyond the Crusader states, and probably even beyond Syria itself, including into regions of northern Mesopotamia. Presumably the coin was struck until the late 640s/early 1250s, when the papal legate Odo, bishop of Châteauroux, condemned its being struck in Acre (see below). The last text referring to the circulation of the dinar suri concerns a ransom payment for an Arab *amir* in Lebanon in the year 702/1302-3.47

No gold coins were struck in Ayyubid Syria except for a single, rare issue in Damascus in 583/1187-8 (pl. 13.7), the year of the conquest of Jerusalem (see below). In Ayyubid Egypt, the *dinar* continued to be struck in the Fatimid type (pl. 13.6), with some major changes in design in the year 622/1225. The sources continued to call it the *dinar misri*. The coins made their way into Syria, but there they did not become a major gold coin.⁴⁸ There are no recorded hoards of Egyptian Ayyubid dinars from Syria. The *qadi* of Tabariyya warned against the exchange of *dinar suris* for the pure *dinar misris*, and of different kinds of *suris*:

It is not permitted (...) like the sale of *dinar misris* against *dinar suris* or [the sale] of *dinar suris* against [other kinds of] *dinar suris* because their [gold-] content (miqdaruha) is unknown and there is no equivalence (*adm tamathul) [in the value based on the gold content] between them.⁴⁹

For his contemporaries, the reason behind the prohibition was clear: *riba*, the illegitimate gain acquired by exchanging different amounts of gold in a single transaction. The second warning may refer to a change in purity in the two main sub-series of the *dinar suri*. The second and third subseries are hardly distinguishable. The latter one, with a much higher level of alloy, is believed to have been issued after the conquest of Jerusalem.

2.4 Gold fragments or qurada

From the 3rd/9th century onwards, all the regions in the core Islamic lands—Egypt, Syria, northern Mesopotamia and Iraq—suffered from a lack of smaller denominations of coins. As a consequence, gold coins in circulation were cut into tiny irregular fragments (pl. 13.4 and 5) so that economic exchanges could be undertaken involving a value well below that of a full gold coin. These gold fragments were called *quradat* (sing. *qurada*). Archaeological information about finds of these is scarce, because fragments were usually not hoarded in the same way as complete coins; moreover, they have been frequently overlooked by modern archaeologists who are not aware of the importance of objects only a few square millimetres in size and usually well below a gram in weight.

⁴¹ Metcalf 1995, 47, discusses as well a late reference in a Venetian document dated October 641/1243 referring to a house in the Venetian quarter of Tyre which served as a mint in c. 1190–1192; Tafel and Thomas 1856, 386 (document). However, in fact it refers to a house belonging to the Venetians and sequestered by Conrad of Montferrat. In his time coins were minted, but nothing is said about the preceding use (*Retinetur nobis una domus in nostro tercierio magna, in qua in tempore marchionis Montisferrati, qui fuit dominus regni, fabricata and incussa moneta fuit)*; see Heyd 1879, 238–9. I owe this reference to David Jacoby.

⁴² Such royal privileges are not known among the documents. And the relation of these mints with the Kingdom of Jerusalem are hypothetical. However, there existed a royal monopoly of coinage and the production of 'faus besans' was forbidden according to the 'assise' in the Livre au Roi, dating back to the middle of the 6th/12th century, meaning in turn that to be legal, bezants had to be minted at least under royal supervision or privilege; Greilsamer 1995, 112.

⁴³ Metcalf 1995, 150-2.

⁴⁴ Röhricht 1893, 66 no. 261 (citation); Metcalf 2000a; Metcalf 1995, 45-50. Bates 1989a, 480.

⁴⁵ Metcalf 1995, 43-4; Metcalf 1994; Metcalf 1989, 440.

⁴⁶ Heidemann 2002, 414-15.

⁴⁷ Irwin 1980, 92.

⁴⁸ In contrast to the frequent mention of the *dinar suri*, there are few references to the *dinar misri* in Syria. In 581/1185 the treasury at Damascus had only *dinar misris* at its disposal, but was obliged to pay *dinar suris*; Isfahani (ed. al-Kutubi 1321/1903), 345; (ed. Landberg), 481–2; (transl. Massé 1972), 431. In 615/1218, after the death of al-^cAdil Abu Bakr, the treasury in Damascus is said to have included 700,000 *dinar misris* in gold coins (*cainan*); Ibn Wasil (ed. al-Shayyal 1957) Vol. III, 275–6; Humphreys 1977, 16. In the year 636/1238–9 Abu Shama in Damascus had to explain the value of the *dinar misri* in terms of the *dirham [nasiri]*; Abu Shama (ed. al-Husaini 1947), 168.

⁴⁹ Shaizari (ed. Arini 1946), 74-5. See translation by Buckley 1999, 94.

But complaints about their circulation are abundant enough to assume that they were a regular feature of daily life in Iraq, northern Mesopotamia and Syria. Some hoards and hoard material⁵⁰ with such fragments have come to light, most of them without a definite provenance but originating in modern Lebanon and Israel.⁵¹The Kingdom of Jerusalem even produced coin types which are only known in the form of cut fragments. These gold fragments with Latin legends were minted in the middle 6th/12th century by one of the Baldwins, probably Baldwin III, and Amaury (who reigned 558-569/1163-1174). They had a gold content of about 50 percent-60 percent. So far, cut fragments of the *dinar suri* have not been found. The Latin fragments were struck alongside the *dinar suri*, obviously as a supplement to the circulation of fragments of Fatimid, and to a lesser extent of Byzantine gold coins.⁵²

The use of gold fragments constituted a major problem for Islamic jurists concerned with the validity of transactions. The phenomenon of their circulation can be found mentioned first in texts from the end of the 5th/11th century, when Iraqi jurists complained about their use. There is a frequent demand for the introduction and use of complete coins (sing. *sahih*). The reason behind their complaints once again lay in the Qur'anic prohibition of *riba*. In the history of money, it is a repeated fact that people accepted a real loss in value when a complete coin was cut up in order to produce smaller amounts for daily purchases; at the same time, this allowed the remainder of the coin to be saved as a high-value currency. In modern times this situation has occurred only in extreme situations. ⁵³The *qadi* of Tabariyya, al-Shaizari, who has already been mentioned, pronounced the following dictat:

The sale of a complete dinar (dinar sahih) against a dinar in fragments (dinar qurada) is not permitted because of the difference in their values.⁵⁴

All previous proclamations concerning the prohibition against *qurada*s were without lasting effect, because there was no available alternative in everyday life. In Syria it can be assumed that the circulation of fragments stopped at the end of the 6th/12th century about the time of *qadi* al-Shaizari's warning. It is possible that this coincided with the introduction of an almost pure silver *dirham* with a regulated weight (see below) in Syrian mints. In Iraq, in 632/1234-5, silver *dirham*s were introduced explicitly in order to prevent the use of *quradas*, according to the chronicler al-Suyuti (who died 911/1505-6). The new silver *dirhams* could be used as coins of intermediate value, between copper and gold, in place of gold fragments, thus avoiding the possibility of *riba* in daily life.

3 Petty coinage

3.1 Overview

A supply of petty coinage was more important for urban economic life than a supply of gold coins. A solution for the problem of small denominations can be taken as a measure of urban and economic development in the society creating them. Communities depending primarily on their own subsistence can live by means of barter or by deferring payment, as well as by relying on small amounts of credit provided to consumers, based on personal relationship, kinship or trust. But when urban communities grow, and more people have to depend on a specific profession,⁵⁶ they have increasingly to rely for their daily needs on markets, which tend to become anonymous. This calls for an increased supply of coins as a medium of anonymous exchange. Petty coins usually remained within the area in which they were issued. When they were transported to another zone, they were frequently discarded, to be found in future archeological excavations.

The middle decades of the 6th/12th century not only saw reforms in gold coinage, but also a series of reforms in the petty coinage of Bilad al-Sham and northern Mesopotamia. These brought to an end the period of the indigenous *dirham aswad*, the 'black *dirham*' (pl. 13.8) as well as to the imported *denier* (pls 13.9 and 13.10) in the Crusader states. Both consist of a highly alloyed silver. Three major regions in Syria must be distinguished—northern Syria with its centre in Aleppo, southern Syria with its centre in Damascus, and the Frankish coastal region. After decades when Byzantine copper coins

⁵⁰ Hoard material is a feature of the antiquity market. There are groups of coins which obviously belong together, to a hoard or constitute parts of unrecorded hoards. Sometimes hoard material is mixed with other coins which do not belong to the group.

⁵¹ The appearance of hoard material in Beirut and Israel may have something to do with the peculiarities of the antiquity market. The interest of dealers and authors lay in the distinctive Latin fragments and they only took accompanying Fatimid fragments as 'context' without analysing them. In Syria and Iraq no Latin fragments were found and interest in these damaged and unmarketable coins is probably rather low.

For Syria, northern Mesopotamia and Iraq, see Heidemann 2002, 365-99. For a new assessment in the light of a small hoard of two fragments from the citadel of Damascus, see the forthcoming excavation report, as well as Heidemann 2003a, 2003b. In Bethgibelin a single fragment of the crusader type was found; Kool 2007, 151-3 with further references fn 46. For hoard material of cut fragments from the regions of the Crusader states, see Metcalf 1995, 107-8; Metcalf and Holland 1994-1999, 162; Brady 1982, 1981, 1978; Miles 1967, 189-97; Seltmann 1966a, 1966b; Bagatti 1947, 158, 164 no. 60-6, pl. 21; Besley 1985. On their gold content, Gordus and Metcalf 1980, 137, 150. None of the descriptions of the cited hoards includes a study of the Fatimid fragments. There are no reports as yet of cut dinar suris. It may be that they were included in summaries of Fatimid fragments.

⁵³ This could be observed in Belgrade during the hyper-inflation in 1993, when people were willing to accept eight ten-mark notes in exchange for a (high-value) German hundred-mark note. N Mappes-Niediek, 'Dinar im Teufelskreis', in *Die Zeit* 45 (5 November 1993), 36 and N Mappes-Niediek 'Ein Brot für eine Milliarde', in *Zeitmagazin* 45 (5 November 1993), 8-9.

⁵⁴ Shaizari (ed. Arini 1946), 75; see the translation by Buckley 1999, 94-5.

⁵⁵ Suyuti (ed. al- Uthmani 1986), 528-9; Heidemann 1994, 325-6.

⁵⁶ Division of labour was one of the criteria of a city (misr) according to Islamic jurists; Johansen 1981–1982, 141–2.

were imported into northern Syria and northern Mesopotamia, Nur al-Din Mahmud and his successors successfully reintroduced indigenous copper coins. The way the reforms were designed was probably much influenced by concerns about *riba*. Although copper coins were not allowed to function as money in all legal transactions, they are not considered a *riba* commodity. This meant it was possible to complete transactions with petty coins without the fear of violating the prohibition of *riba*. Saladin's conquest changed the supply of petty coins in Jerusalem and Palestine from a zone of circulation with Frankish billon *deniers* to one with Damascene copper coins. But the circulation in Palestine may have retained some features of the Crusader past, at least for a couple of decades.

3.2 The 'black dirham'

After the political and economic collapse of the central lands of the 'Abbasid empire during the 4th/10th century, the silver dirham became a much debased coin with no regulated purity or weight (pl. 13.8). It had once been a pure silver coin with a regulated standard weight, which circulated freely between North Africa, Central Asia and the Baltic. Now different kinds of dirhams were used, each only within a limited and defined zone. Amounts of money were expressed in terms of money of account.⁵⁷ Actual payments were weighed in transactions. The number of coins being struck diminished dramatically.⁵⁸ The monetary sector of the urban economy in the core lands of the Islamic empire—northern Syria, northern Mesopotamia, Iraq and western Iran—shrank to a low the level of which may not have been experienced since Hellenistic antiquity. These local dirhams differed from region to region. In the narrative sources the coins are given the generic term of 'black dirham', dirham aswad (plural darahim sud), because of their normally dark appearance (pl. 13.8). In Egypt they were called dirham wariq, 59 the 'silver[ish] dirham'. In legal texts they were more properly identified as darahim maghshusha, 'debased dirhams'.

Islamic jurists saw the same problem of *riba* in connection with different kinds of billon coins as they saw with gold coins and gold fragments. *Dirham aswads* from different zones of circulation might contain a different amount of silver alloy, that is, a different silver content. In a transaction, the intrinsic amount of silver in foreign *dirhams* might be unknown *(majhul)*, or the coins might be valued differently with no regard to the real content of precious metal. This would imply numerous possibilities for an unequal exchange of precious metal in a single transaction. In order to avoid *riba* and to enable commerce to take place at all, jurists allowed transactions with *dirham aswads* only as long as they involved current *dirhams* circulating within a single zone *(ra'ij fi'l-balad)*.⁶⁰

3.3 Billon deniers in the Crusader states

As the main means of daily transactions, the Crusader states possessed a coin which resembled the dirham aswad in many respects, but was European in origin—the billon denier (pls 13.9-13.12). When the Crusaders arrived in the Levant, the denier took over the role played by the local dirham aswad within the territories under their domination. These deniers were imported from seven privileged mints in Italy and France. The choice of coins which were to be imported was probably made before the Crusader advance. Most important among them were the deniers of Lucca in northern Italy (pl. 13.9), and of Valence in southern France (pl. 13.10). 61 The deniers were small, debased coins and dark in colour. Like the dirham aswad, their zone of circulation seems to have been restricted, here to the Crusader states on the Mediterranean coast. 62 But, in contrast to the dirham aswad, there seems to have been a sufficient supply of deniers, to judge by finds of coins and hoards.63

During the reign of Baldwin III, at about the same time as the introduction of the *dinar suri* in the 530s/1140s, the Kingdom of Jerusalem, the principality of Antioch and the county of Tripoli began for the first time to mint indigenous billon *deniers*. These new *deniers* were similar in appearance to the imported ones, with Baldwin's coins showing the Tower of David (pl. 13.11). They superseded all other European coins in circulation. ⁶⁴ In about 562/1167, Amaury introduced a new

^{57 &#}x27;Monies of account' are coins not actually struck or struck any longer, but are used in order to determine legally amounts of money in transactions, contracts or debts. In the history of currencies, monies of account were used particularly when the weight of actual coins was not regulated, or coinages were constantly being debased. For example a payment in a contract of 100 dinars (of account, which determines the weight and value) could equal 104 real dinar coins of unregulated weight, which added up to the stipulated weight of 100 dinars. A modern example of a money of account is the old British guinea with a value of 21 old shillings or 105 new pence. In Britain it is still used for the purchase of racehorses in such places as Newmarket (Suffolk). It resulted from the debasement of the old gold pound coin (guinea) to the new gold pound which was lighter in weight (sovereign), first struck in 1817.

⁵⁸ This can be determined by counting the dies used for each individual issue. At the height of the 'Abbasid empire, it is almost impossible to count the dies, even for the lesser mints. In the 4th/10th and 5th/11th century, the coins usually show only a very limited number of dies. See Noonan 1986.

⁵⁹ M Bates, 'Wariq' in EI²Vol. XI, 147.

⁶⁰ Heidemann 2002, 369-80. On the legalities of the dirhams aswad, see Ghazali (ed. Abu Hafs 1414/1994) Vol. II, 108-9; see as well Vol. IV, 142-4.

⁶¹ Schulze and Schulze 2003; Heidemann 2002, 407-9; Metcalf 1995, 12-21; Matzke 1994, 1993a, 1993b; Metcalf 1984-5. Older views are to be found in Stahl 1986, 86-8.

⁶² The numerous finds of imported *deniers* were all within Frankish territories with the exception of a few found during the excavations at the Citadel of Hama; Hammershaimb and Thomsen 1969, 168 nos 1236–1248 (Lucca), 1249–1252 (Valence).

⁶³ On Crusader coins in Palestine in general, for a brief overview see Kool 1999; Metcalf 1995; Metcalf 1989. Robert Kool, Israel Antiquity Authority, is currently preparing a thesis on coin circulation during the Crusader period.

⁶⁴ Metcalf 1995, 53-7. Metcalf 1978 (Burgey hoard).

type of denier depicting the Holy Sepulchre (pl. 13.12). The Amaury type was immobilised and for a long time it became the standard small coin for the Kingdom of Jerusalemsuperseding the earlier Baldwin deniers—until at the latest 575/1179.65 These findings suggest a strict, well-regulated regime with regard to petty coinage. There were two successive series of Amaury deniers, the earlier, heavy one of some 0.9g,66 (pl. 13.12) and a lighter one, of about 0.5g. The immobilisation of *denier* types also occurred in many mints in Europe, especially in Italy and France. However, the importation of the seven preferred European deniers continued up to the conquest by Saladin. But the coins were imported with the intention of melting them down to be re-minted into the new coinage of the Kingdom. 67 After the re-establishment of the Kingdom of Jerusalem in 588/1192, there was a resumption of production of Amaury deniers in Acre, presumably initiating the light series. The preceding series of heavier deniers could also have been produced in Acre. The Amaury deniers continued to be struck probably until the 620s-630s/1220s-1230s.68 Dies counted for these issues run into thousands, thus providing the cities of the Latin East with abundant petty coinage. 69

3.4 Re-emergence of copper coins in northern Syria

From the middle of the 3rd/9th century, copper coins were not in general use in the central lands of the Islamic empire. Under Saljuq rule, the former Byzantine Antioch was the only exception. A regulated local copper coinage was introduced there, probably following a Byzantine model. These issues were frequently recalled, overstruck and then newly put into circulation. This system continued unchanged in Antioch without interruption under the Crusader princes. ⁷⁰ It may have been one of the models for the later copper coinage system in northern Syria.

In northern Syria, northern Mesopotamia, Armenia and the Caucasus, copper coins came back into general circulation

(and modern archeological finds) as imported anonymous Byzantine bronze 'folles' (pl. 13. 14). These folles were struck in Byzantium in huge quantities between the end of the 4th/10th and the end of the 5th/11th century. Arriving perhaps in about the 420s/1030s, they slowly took over the circulation role of 'black dirhams'. In Byzantium, a reform in coinage abolished these folles within their country of origin in 485/1092. But outside the Byzantine empire, they remained in circulation, perhaps in even greater quantities than before. By the second half of the 5th/11th century 'black dirhams' were still being struck, but in rather limited numbers, as the only indigenous coinage. They continued to be produced until the reign of Nur al-Din Mahmud (pl. 13.8). In northern Syria Nur al-Din began to supplement the stock in circulation by imitating Byzantine copper folles (pl. 13.15). In northern Syria and in the Diyar Mudar (the western part of northern Mesopotamia), Byzantine folles remained in circulation until ca 570-580/1175-1185, when further reforms in copper and silver coinages occurred (see below). In literary Arabic sources these Byzantine folles are called girtas or gartis (plural qaratis). This expression became the generic term for all coins of small denomination in Bilad al-Sham until the Mamluk period, but in the main it was used for copper coins.⁷¹

The year 571/1175 saw a decisive reform of the copper coinage in northern Syria and Diyar Mudar (pl. 13.16). Al-Salih Isma^cil of Aleppo (who reigned 569-576/1174-1181), the son of Nur al-Din Mahmud, introduced a system by which copper coins were periodically recalled (demonetisation) and restruck, similar to the system in Antioch. Behind the system lay a fiscal purpose of indirect taxation on urban markets. The reform, together with the introduction of the new, regulated silver coins (see below), brought an end to the use of Byzantine *folles*.⁷²

3.5 Re-emergence of copper coins in southern Syria

In 558/1162-3 Nur al-Din Mahmud introduced a different system of copper coins into southern Syria (pl. 13.17).⁷³ From the finds, this region was not included in the circulation zone of Byzantine *folles/qirtas*.⁷⁴ The system of periodic recall and

⁶⁵ The date 575/1179 is based on the finds from Vadum Jacob; Kool 2002, 81–2. See too Stahl 1986, 89–90.

⁶⁶ In Vadum Jacob 22 specimens of the heavy series were found in an archeological context sealed at the time of the conquest of the Chastelet by Saladin in October 575/1179; Kool 2002,79-81.

⁶⁷ Metcalf 1995, 169; Glücksmann and Kool 1995; Stahl 1986, 89. Even before the Third Crusade French feudal coins seem to have reached the Levant; compare Duplessy and Metcalf 1962.

⁶⁸ On the Amaury *denier* see Metcalf 1995, 57-71 (for the dating of post-1167 esp. 57-8); Metcalf 1987, 84-92; Pesant 1980. It was previously thought that one of the two coin types of John of Brienne was also struck in Acre. For numismatic reasons this is now ruled out by Metcalf (1995, 80-5).

⁶⁹ For some estimates compare Metcalf 2001, 79.

The Extensive discussion about the Saljuq coinage in Antioch can be found in Heidemann 2002, 406-7, especially notes 208 and 209; see too Ilisch 1982 (the only attempt to reconstruct the sequence of Saljuq coins from Antioch). For earlier views, see Metcalf 1995, 23 and Bates 1989a, 437. On the copper coins of Crusader Antioch see Metcalf 1995, 22-30.

⁷¹ For a discussion of the importation and circulation of these Byzantine *folles*, see Heidemann 2002, 387-422; for earlier views, see Bates 1989a, 437-8. The term of *qirtas* was used for the last time in historiographic literature by al-Maqrizi for the year 720/1321-32; Maqrizi (eds Ziyada and 'Ashur 1956-73), Vol. II/1, 205.

⁷² On the reforms of the copper coinage, see Heidemann 2002, 424-39.

⁷³ Spengler and Sayles 1996, 62-3, type no. 74.1.

Payantine folles were also occasionally found in Palestine, but they may have arrived during the Byzantine rule of Antioch, or due to regular exchanges on the Levantine coast and centres of Christian pilgrimage. Most important of the finds is a group of 83 copper coins with 55 anonymous folles amongst them, as well as two dirham aswad from al-Mustansir billah (reigned 427–487/1036-1094). They form part of a hoard of scrap bronze, which included about 800 domestic objects, in a site which is presumed to have been a metal workshop. The hoard was found in 1998 on the outskirts of Tabariyya during a rescue excavation; Bijovsky 1999. No Byzantine folles were found

reminting of coins in order to skim tolls from urban markets was never introduced into the circulation zone of Damascus; nor did overstriking, a regular feature of coins from northern Syria, occur on Damascene coppers.

The size of the Damascene fals resembles Byzantine copper coins circulating in the north, but the type was different and distinctive, carrying merely inscriptions decorated with a variety of arabesques, stars and other ornamentation. The basic coin type (pl. 13.17) never changed its general appearance despite different successive rulers being named. The last issue was struck in the year 610/1213-4.75 The term girtas was also applied to these indigenous copper coins.⁷⁶ According to finds of coins, the Damascene girtas struck by Nur al-Din Mahmud remained in circulation in southern Syria long after the conquest of Jerusalem by Saladin.⁷⁷ The pattern of archeological finds underlines the fact that the circulation of copper coins in the north and the south were distinct. It seems clear that their circulation was controlled, if not by the authorities then by market forces. In general, regulated copper coinages tended to be overvalued in their respective zones of circulation. For example, it was possible for the administration to set their value, by allowing certain payments (for example taxes) to be made in fiduciary⁷⁸coins. Due to economic revival and the subsequent integration of the different parts of Syria and northern Mesopotamia, copper coins from the north arrived in the south—and vice versa—in small quantities. This is reflected in archaeological finds. If they were accepted as payment outside their own zone then it is probable it was with a significant loss.⁷⁹

in excavations at the Armenian Garden, Jerusalem, in the Erlöserkirche, in the Tyropoeon valley, in Bethany, in Emmaus/al-Qubaiba, in 'Ain Karim or Damascus. At Khirbat al-Karak, 2 *folles* of 'class K' of Alexius I were found; Delougaz and Haines 1969, 52 nos 33 and 34, pl. 47 nos 11 and 12. An imitation *follis* of Constantine X and Eudokia was found at 'Athlith, struck by Nur al-Din Mahmud; Metcalf, Kool and Berman 1999, 126 no. 237.

- The year AH 610 is found on one specimen from the excavations at the Citadel in Damascus (CD2-secF-1500-m075) and on specimens found in the *faubourgs* of ^cAthlith castle. One coin (in Balog 1980, no. 324), which Balog read as AH610, is in fact a coin of the type of the year AH598. For the coins from ^cAthlith castle, see Metcalf, Kool and Berman 1999, 127 nos 257-259, illustration of 257 on p. 108. See too Bates 1989a, 437.
- This is obvious from two passages by Abu Shama. Under the years 626/1229 and 643/1245-6, he named a coin of low value in Damascus as a 'qirtas' and synonymously used the term fals, the generic Arabic word denoting any copper coin; Abu Shama (ed. al-Husaini 1947), 155, 178.
- ⁷⁷ Subsequent emissions circulated together. This is proved by a sealed context at the excavations in the Citadel of Damascus which included coins from the period of Nur al-Din Mahmud until that of al-cAdil Abu Bakr. Even clearer evidence is provided by coin finds at the fortress of Mount Tabor, which was built in 609/1212 and then demolished in 615/1218. The finds here include 48 qirtas of Nur al-Din Mahmud from Damascus; Battista and Bagatti 1976, 151-2, nos 68-115.
- 78 'Fiduciary coins' are tokens representing money. Their value is not based on metal content (gold or silver according to Islamic law) but only on market forces or administrative regulations.
- ⁷⁹ An exception to this rule can be seen in the export of Byzantine *folles*, which were in strong demand in the Islamic border lands because of a lack of sufficient coinage; see n. 72.

4 The regulated Ayyubid silver dirham

The introduction of a new copper coin system in Aleppo was not the only monetary innovation in the year 571/1175-6. In the same year, an almost pure, regulated silver dirham weighing about 2.80g was introduced in Zangid Aleppo (pl. 13.23) and Damascus (for the design see pl. 13.25). The latter had just come under the sway of Saladin (in Rabi^c II 570/November 1174). It was the first successful attempt of this kind for almost three hundred years. But the production of the dirham did not reach a sufficiently high amount to satisfy circulation requirements until the 580s/1185s.80 These new dirhams were the keystone of a reformed coinage system, which was much more in accordance with the demands of jurists and the exigencies of the prohibition against riba than the preceding one had been. Although we have no explicit statement from jurists about the coinage reforms of the Zangid and Ayyubid periods, there were no further complaints in the chronicles about contemporary coinage. Dinar suris could now be exchanged for silver dirhams, which replaced gold fragments in circulation. The dirhams could in turn be exchanged for copper *qirtas*, which had taken over the role of the billon coins. Abu Shama gave the exchange rate in Damascus for the year 636/1238-9, during a period of increasing prices, of one dinar misri being equal in value to nine dirhams [nasiris].81

The Ayyubids mainly used two distinct designs for their dirhams. The 'Damascene' type (pl. 13.25) was mostly struck in southern Syrian and Egyptian mints. It had a square within a circle on each side. The 'Aleppan' type, struck mostly in northern Syria and northern Mesopotamia, had a six-pointed star (known as the 'seal of Solomon') on both sides (pl. 13.24). Both types of design circulated simultaneously without distinction, both being found together in hoards. In literary sources, in Egypt the new Ayyubid dirham was called dirham nuqra, 'silver dirham', and in Syria dirham nasiri. This last name refers to the honorific title (laqab) of Saladin, al-malik al-nasir. Egypt Saladin attempted to introduce the new silver dirhams in 586/1190-1. The attempt failed with the dirham wariq being minted until the Mamluk period. The failure illustrates the different monetary structures of Egypt and Syria.

This hypothesis is based on the observation that *dirhams* from the 580s/1185-1195s are found much more frequently today than those from the 570s/1175-1185s; Heidemann 2002, 418-9, also Bates 1989b, 457. On this reform, see Bates 1989a, 435-6 and (outdated) Broome 1988-9; Balog 1961, 129-33.

⁸¹ Abu Shama (ed. al-Husaini 1947), 168. Irwin 1980, 87-8.

⁸² Heidemann 1994, 234-5.

⁸³ Al-Maqrizi gave the date for this attempt as 583/1187. But no coin is known of this early date. However, al-Maqrizi is allegedly imprecise in his references to Ayyubid monetary conditions. Balog mentions a single Egyptian dirham dated 585/1189-90. It was known to him only in a single unillustrated specimen. Its date seems likely to be a misreading of '(sanat) sitt wa-thama-' as being '(...) sanat khams'; Balog 1980, 74-75.

⁸⁴ Balog 1961, 123-30. For the Mamluk period see Heidemann 1994, 213-5.

5 The merger of currency zones after 583/1187

5.1 Overview

583/1187-8, the year of Saladin's conquest of Jerusalem, saw the only Ayyubid gold issue ever minted in Syria and struck in Damascus. It carries Saladin's honorific title, *sultan al-islam wa 'l-muslimin* (pl. 13.7). It was the only occasion that this full title was used on Saladin's gold coins. The issue can be interpreted as one made specifically to extol the conquest. The pale and debased gold of the coins suggests that it was struck so that reminted booty and huge ransoms of *dinar suris* could be redistributed. ⁸⁵ Jerusalem and parts of Palestine were integrated into the zone of circulation of Damascene petty coinage after the battle of Hattin.

If any mint in Jerusalem had still been active in the decades preceding Saladin's conquest, there is no doubt that by now it was definitively closed. The city of Jerusalem returned to what it had been—a medium-sized provincial town with no economic importance of its own. Frankish institutions, which had poured money into the city, had left; the number of Christian pilgrims, a common source of income, presumably diminished. As a subsidy, Saladin invested a third of the tax revenues of Nablus, which lay 50km to the north, in an endowment (waqf) for the support of the welfare of Jerusalem (thulth iqta' nabulus 'ala masalih al-quds), and the city came to be seen as a drain on the resources of the principality of Damascus.⁸⁶

5.2 Circulation of Damascene copper coins in Palestine

The evidence from finds shows that Palestine and Jerusalem saw an influx of Damascene copper coins. A substantial and significant number found in excavations in Jerusalem and Palestine were *qirtas*, minted over a long period from 558/1162-3 to 610/1213-4.⁸⁷ Many of the *qirtas* found were struck by Nur al-Din Mahmud (pl. 13.17).⁸⁸

The question is, when did this influx occur, before or after the conquest of Jerusalem in 583/1187? Up to now, no final conclusion on the date of their importation can be drawn on the basis of known hoards of coins or sealed archeological contexts. An exception may be coin finds from Vadum Jacob. This shortlived fortification allows a picture of the circulation for the year 574-75/1178-79.

A preliminary hypothesis would be that in general Damascene copper coins entered the circulation zone of deniers only after Saladin's conquest. The finds of Vadum Jacob demonstrate a high degree of control over the petty coinage in the Kingdom at that time, which in general excluded other coins. Twenty-two immobilised Amaury deniers of the heavy series (pl. 13.12) were found, but not a single example of the preceding Baldwin deniers or of any European coins. In this period sometime before the 585s/1190s, hoards have less than 3 percent foreign European coins.89 Deniers were available in sufficient numbers in Crusader Palestine or, if not, their circulation may have been supplemented by local production and circulation of lead tokens. 90 There seems to have been no need to import Damascene copper coins. It is indeed questionable whether Damascene coins were accepted at all for official payments within the Crusader states. But nevertheless three Damascene copper coins of Nur al-Din Mahmud were found in sealed Frankish contexts in Vadum Jacob. 91 Zangid coins might have been in circulation in Vadum Jacob, but this may have been due to the siege situation or the vicinity of the principality of Damascus, and may reflect a regular practice in border territories. Also in Qaimun, south of Acre, the qirtas of Nur al-Din Mahmud might have entered after 1187.92 Qaimun was returned to the Crusaders in 1192. However, recent excavations in Acre show that at least they entered the markets of the Crusader's capital.93

⁸⁵ Balog 1980, 77 no. 79 and a correction of the reading by Nicol 1986, no. 79.See Bates 1989a, 430; Kraemer 1952, 52-3.

⁸⁶ See Pahlitzsch 2001, 239-40; Little 1989, 181-3; Humphreys 1977, 78-9, 93-6; Heyd 1879a I, 193; Ibn al-Furat, *Tarikh* Vol. IV/2, 92-3. I am grateful to Y Lev for this last reference.

For example in Jerusalem, but see also n. 83: Miles 1985, 173-6; Lowick in Carradice 1994, 323, no. 125-6 (Dimashq AH598 and AH609); Saller 1957, 350 no. 65 (Dimashq AH569-570). For Belmont, see Metcalf 2000b, nos. 18-21. For Bethgibelin, see Kool 2007, 155.

⁸⁸ Jerusalem, Armenian Gardens, see Miles 1985, 174, nos 344-50 (7 specimens). For Ophel and Siloam—close to Jerusalem—see Gordon 1925, 185 no. 3 (misattributed to al-ʿAdil Abu Bakr). In the vicinity of Jerusalem, there were at least 28 specimens found at Emmaus/al-Qubaiba/Parva Mahumeria (Bagatti 1947, 165-6 nos 78-93, 175 nos 70-81; Kool 2007, 143-147) and 4 at ʿAin Karim (Bagatti 1948, 86 nos 18-22). A further example was found at Jericho (Miles 1958, 40 no. 57). In Bethgibelin R Kool detected about 60 Zangid copper qirtas; Kool 2007, 155.

⁸⁹ Stahl 1986, 90.

For Vadum Yacob, see Kool 2001, Kool 2002, 83-4 (4 specimens); for "Athlith, see Metcalf, Kool and Berman 1999, 109*-110*, 124* (11 specimens); for Bethgibelin, Kool 2007, 151-4; for Belmont Castle, see Metcalf 2000b, 84-5, and Kool 2002, 84 n. 22 (436 specimens); for Acre, see Rahmani and Spaer 1965-6, 73 (one specimen), Syon 1994-2000, Syon (forthcoming), nos. 67-70. In general, see Metcalf 1995, 306-7, with further references on lead tokens. For a different explanation of these tokens as game-counters, see Sebbane 1999.

⁹¹ Kool (2002, 84-5) obviously made a general distinction between Damascene Zangid and Ayyubid coins, without taking into account that the Ayyubid coins are merely a continuation of the Zangid series and that they were circulating side by side. He therefore concludes that the Zangid coins found on Frankish sites must have arrived before the Ayyubid take-over of the Zangid state and the battle of Hattin, and as a consequence must have already been in circulation in Crusader Palestine before 583/1187.

⁹² Kool 2005, 100-101 no. 5 (Dimashq AH 558-561). See also the *qirtas* of al-'Aziz 'Uthman (Dimashq AH 592-595); Meshorer 1996, 240-241 no. 13 (Balog 1980, nos 222, 223).

⁹³ Syon, forthcoming, nos. 16-41 (from Nur al-Din Mahmud to Qala'un).

5.3 Deniers in Ayyubid Palestine

What happened to Frankish *deniers* in Jerusalem and the newly integrated Palestinian territories? Despite the lack of conclusive archaeological data and datable hoard material, some evidence (a passage by al-Shaizari and an Ayyubid issue of *deniers*) allows an assumption that local use continued after the conquest of Jerusalem, and that the coins remained in circulation for some time. Firstly, al-Shaizari, *qadi* of Tabariyya, mentions certain *al-qaratis al-ifranjiyya*. This passage contains the sole reference in the literary sources. What are these Frankish *qaratis*? The context implies *riba* and hidden credit transactions employing coins with a silver content. It is probable that the term denotes Frankish billon *deniers*:

With regard to the sale of gold for silver, a surplus (tafadul) is permitted, but delay (nas') [in taking possession of the coins] is forbidden (yuharram) and the separation [of both parties] before seizure [of both gold and silver as goods and price]. (...) And among them [those who are practising illicit credit transactions] are also those who purchase dinars with silver dirhams (darahim fidda) [meaning Ayyubid dirhams] or with Frankish qirtas (al-qaratis al-ifranjiyya) [meaning billon deniers], then he says to the seller: 'Assign them [the dinars] to me as a debtor to you in order to make you free from examining them (naqduha) and weighing them [for the moment] and draw them from me bit by bit.' And he [the seller] agrees with him about this practice because of the infinity of his ignorance (jahluhu).94

Secondly, when the son of Saladin, al-cAziz cUthman (reigned 589-595/1193-1195), and his successor the brother of Saladin, al-cAdil Abu Bakr, ruled over Ayyubid Syria, they commissioned certain billon coins to be struck in southern Syria which resembled the old *denier* (pl. 13.13). Unfortunately, these billon coins bear neither mint nor date, nor are they known from any controlled excavation. One, however, was found in a hoard of *deniers* buried after 618/1221. 20 percent of the coins in this hoard consist of Amaury *deniers* (pl. 13.12). The success of the Ayyubid billon coins was obviously somewhat limited. Only five specimens are known today. The conclusion cannot be excluded that circulation of the

remaining billon *deniers* continued for an indeterminate period in order to keep up established regional commercial ties.

5.4 Petty coinage in the remaining Crusader territories

The next question is what happened to the petty coinage in those regions still under Crusader control after the reconstruction of the Kingdom in 588/1192. The Amaury type *denier* continued to be struck in the mint of Acre, probably until the 620s–30s/1220s–30s. In the period from the 530s/1140s to *ca* 585/1190, in hoards European *deniers* from the preferred seven mints make up less than 3 percent. Thereafter there was an increase in the numbers of *deniers* in hoards with different

Ilisch 1993, no. 181 (same specimen as in Nicol 1986); Tübingen University collection (1993–9–1; 0.48g); Album, Price List 218 (2006) no. 48892 (0.74g); one further specimen in a private collection (SB 7581; 0.85g; 17mm; 3h). Only the Tripolis hoard of French and Crusader billon *deniers* included one of these billon *deniers* of al-'Adil Abu Bakr; Cox 1933, 55, pl.VIII.6. The scarcity of these coins nowadays points to a brief period of minting. Production may also be related to an episode of urban unrest in Damascus in 611/1214–5, reported by Abu Shama, when al-'Adil Abu Bakr stopped the production of the traditional Damascene copper *qirtas* and introduced so-called *qaratis al-sud al-'Adiliyya*. The identity of the latter is not yet firmly established; Abu Shama (ed. al-Husaini 1974), 86, 125; Heidemann 2002, 408–10. L Ilisch proposes that these briefly struck billon coins of al-'Adil Abu Bakr might be his 'black *qaratis*' (by email, 8 February 2001).

- ⁹⁶ Emmaus/al-Qubaiba. Firstly, two *Pogesi* of Acre of Henry of Champagne (reigned 588-593/1192-1197), and secondly three other *deniers* which are connected with the Third Crusade. The *Pogesi* was a debased *denier*, a small copper coin used as nearly half a standard *denier*. The name is derived from the French mint of Le Puy. For this type see: Metcalf 1995, 71-4 and Holland and Metcalf 1992-1993, 100 no. 77-8. Finds: Bagatti 1947, 163 no. 39, 40 (Pogesi of Acre), 164 no. 48 (Dijon), 174 no. 65 (Dijon), 174 no. 58 (Anjou). See also Metcalf 1968-9, 445.
- ⁹⁷ Kool 2007, 155, mentions a single *denier* from Tripoli, dated to the 1230s.
 ⁹⁸ Because most reports of finds of single coins make no distinction between the heavy and the light series of Amaury *deniers*, they cannot be taken as evidence. Only some distinct Crusader and European coin types are significant. There were no distinct *deniers* postdating 1192 found in the Armenian Garden in Jerusalem or in the Tyropoeon Valley. The excavation in the Church of the Redeemer yielded one French feudal coin and in Bethany, one Louis IX *denier* was found—Carradice 1994, 232 no. 121; Saller 1957, 349 no. 62. For French feudal coin types which are connected with the Third Crusade, see Metcalf 1995, 169–176 and also Longuet 1935 and Cox 1933. The Samos hoard (t.p.q. 1170–1185) suggests that the beginning of this import might have occurred even earlier: Duplessy-Metcalf 1962.

But it seems that circulation of *deniers* was not significantly supplemented by coins coming from the Restored Kingdom. In Ayyubid Palestine, places like Emmaus/al-Qubaiba, ⁹⁶ and Bait Jibrin/Bethgibelin⁹⁷ yielded a limited quantity of post-583/1187 *deniers*. ⁹⁸ But, even at this place of pilgrimage with many foreign visitors, amongst the abundance of Ayyubid coins these *deniers* are rare. Al-Shaizari did not mention copper coins, although these had been in circulation in southern Syria for almost thirty years at the time he was writing. The reason for this silence might be that copper and copper coins are not *riba* commodities and therefore were not a topic for his treatise.

⁹⁴ Shaizari (ed.) Arini 1401/1981, 74-5. For different translations, see Buckley 1999, 94-6; Irwin 1980, 93. I am grateful to Tilman Seidensticker for a discussion of the text.

⁹⁵ Al-ʿAziz ʿUthman: Balog 1980, nos 199-200 (today Israel Museum nos. 6724-6725). Although the design is close to the contemporary Egyptian dirham wariq, its fabric as denier is distinct. Al-ʿAdil Abu Bakr: Balog 1980, no. 336 (British Museum); Nicol et al. 1982, no. 2384; Nicol 1986, 131 no. 336;

European, mostly French feudal, mints making up to an average of about 30 percent. French feudal coins feature frequently in single finds as well. Due to the diminished size of the Kingdom and subsequent much closer economic interaction with Ayyubid territories, finds of coins reveal that Damascene copper coins were now a common feature in the circulation of the Restored Kingdom. This is well documented in the finds from the Crusader castle of Athlith. The castle was constructed as late as 613-4/1217-8 and finally surrendered in 690/1291. Damascene copper coins were also found in other places dating to the Restored Kingdom. However, further research on the circulation of petty coinage is still needed.

6 The Frankish interlude of Frederick II

Frederick II, Roman emperor, King of Sicily and Germany, (who reigned as emperor from 617-48/1220-50) had taken the cross as the symbol for a new crusade in order to regain political sovereignty over the holy places for Christianity. He was hard pressed politically by the Pope to fulfil his pledge. He was indeed excommunicated because of the delay in the Crusade. Unwilling to waste his own military resources in such a campaign, in 625-26/1228-29 Frederick finally led the Fifth Crusade. Immediately after his arrival in Acre, he negotiated with al-Kamil Muhammad, who, at a period of severe family strife, was in turn reluctant to wage full-scale war for Jerusalem. The treaty of Jaffa dating from Rabi^c I 626/February 1229 secured Frederick a ten-year armistice, sovereignty over Jerusalem, and the villages along the access route from Acre. However, the Haram al-Sharif, still with an Ayyubid garrison, and the surrounding villages in the district of Jerusalem, remained in Muslim hands. These villages had once been a source of income for the military orders. Under the treaty, the Muslim population was forced to leave the city,

thus further reducing economic activity. Indeed, the treaty was a much-criticised diplomatic victory for both sides. Frederick entered Jerusalem on 19 Rabi^c II 626/17 March 1229. On the following day, in the Holy Sepulchre he 'walked under the crown' as King of Jerusalem. ¹⁰⁴ Although following a Frankish defeat in 637/1239, the whole city of Jerusalem came once again under Ayyubid control, it was returned to the Franks in 638/1240. The political succession in Jerusalem for the following years is not well established. In the year 642/1244 the Khwarizmian army ravaged and plundered the city. This was the final loss for the Crusader Kingdom. ¹⁰⁵

It is remarkable for a medieval ruler in the Levant that no coin with his name from Jerusalem or from Acre bears witness to Frederick's sovereignty. He was well acquainted with the forms of royal representation in the Islamic world. The inclusion of the ruler's name into the protocol of coins (sikka) was proof of rulership. John of Brienne (reigned 607-22/1210-35) made this statement, when he commissioned coins at Damietta. 106 The absence of coins from Frederick seems to underline his awareness of political reality. In Jerusalem he wanted to keep as low a profile as possible in order avoid any compromising gesture towards al-Kamil Muhammad. Frederick created no obvious symbol (sikka) for the Islamic public that sovereignty over Jerusalem had passed into the hands of the Christian emperor. However, this argument should not be overstated, because it has to be taken into account that the production of *deniers* in the Kingdom, presumably in Acre, had ceased by about the 620s-30s/1220-30s and that immobilised types were the norm. For Frederick, the re-establishment of Christian sovereignty in Jerusalem and the security of the holy places for Christian institutions had value only in his play for power in Italy and Germany. In Sicily and southern Italy he represented himself on coins as the King of Jerusalem. 107 The Frankish interlude left no imprint on the monetary circulation, apart from stray finds of Sicilian deniers within Frankish territories. 108

⁹⁹ Stahl 1986, 90.

¹⁰⁰ See, for example, on 'Athlith Castle, Metcalf, Kool and Berman 1999, 117*
122* nos 103-195. For Khirbat Shama', see Hansen and Bates 1976, 166
(two French feudal coins).

¹⁰¹ Athlith Castle: 22 Damascene qirtas from Nur al-Din Mahmud to al-Adil Abu Bakr originating from the faubourgs; Metcalf, Kool and Berman 1999, 106*-107*, 126*-127* nos 238-259.

Tall Kaisan: Fulco 1980, 240 no. 55; Yoqne'am (Qaimun): Meshorer 1996, 241 no. 13 (al-'Aziz 'Uthman, Dimashq, AH594/595, Balog 1980, nos 222, 223). On the history of Qaimun, see Kedar 1996; for Qaisariyya: Hohlfelder 1980, 130 no. 10; Ariel 1986, 145 no. 142 for Khirbat Shama': Hansen and Bates 1976, 164-5, pl. 6.5 (9 Damascene qirtas, starting with one example of Saladin [acknowledging the overlordship al-Salih Isma'il] to those of al-'Adil Abu Bakr and al-Kamil Muhammad). Meyers (1985, 64) presumes the circulation of Islamic and European Crusader coins existed simultaneously.

¹⁰³ For a brief outline of the coin circulation in the Restored Kingdom, see Metcalf 1997, 194-6. However, he does not take the Damascene copper coins into account.

¹⁰⁴ On the question of the legitimacy of his rule as King of Jerusalem from a European point of view, see Hiestand 1996, especially pp. 143, 146– 7. Frederick II could not be officially crowned because he was still excommunicated.

¹⁰⁵ Pahlitzsch 2001, 240-2, 260-2; Atrache 1996, 73-149; Little 1989, 183-5; Humphreys 1977, 183-4, 193-9, 202-4, 266, 274-5.

¹⁰⁶ Metcalf 1995, 80-5, and Ilisch 1993 argue that these coins may have been struck in Acre as well. The coins of John of Brienne were certainly not struck in the sense of the Islamic sikka, that is, with the inclusion of the ruler's name in the coin protocol as proof of rulership. The immobilised coin types in the Crusader states show that they did not care about sikka. However, from an Islamic point of view, the existence of coins with the name of a Frankish ruler could have been perceived as proof of rulership.

¹⁰⁷ He used the title on his coinage in Sicily and southern Italy, see Grierson and Travaini 1998, 168-72, 177-83.

¹⁰⁸ For Acre: Metcalf 1975a, 148; Meshorer and Spaer 1965-66, 77; Syon, forthcoming, nos. 41-44; Athlith: Metcalf, Kool and Berman 1999, 119*-120* nos 127-138; Caesarea: Metcalf 1995, 358-9 (7 deniers); Metcalf and Holland 1994-9, 160-1, nos 173-6—the last two coins are later from Conrad I (reigned 1250-1254); Khirbat Shama^c: Hansen and Bates 1976, 166 nos R2016, R2090.

7 Jerusalem as part of the circulation zone of Damascus

In the year 610/1213-14, the last issue of the Damascene copper coins introduced more than fifty years earlier was struck. We know that in the following year, in 611/1214-15, there was a certain amount of urban unrest in Damascus with regard to qaratis al-sud al-'Adiliyya. It is possible that this qirtas is identifiable as the *denier* of al-cAdil Abu Bakr (pl. 13.13) already mentioned above, a billon coin which did not fit into the existing Ayyubid coinage system. As a billon coin, circulating with the silver dirham nasiri, it once again raised possibilities for violation of the prohibition against riba. The spokesman for the population was the Hanbalite Shaikh ^cAbdallah al-Yunini (who died in 617/1221), father of the well-known chronicler, who condemned this innovation. The circulation of the Ayyubid *denier* did not meet with success (see above), ¹⁰⁹ and the old copper coins remained in circulation. At least four copper different issues followed up to the time of the Mongol invasion.110

In 622/1225, al-Kamil Muhammad began to reform the coinage throughout his territories. However, literary sources do not give details, except for Egypt.¹¹¹ According to coins and finds of coins, in 622/1225 changes also occurred in southern Syria and northern Mesopotamia. Perhaps one aim of al-Kamil Muhammad's policy was the unification of petty coinages within the different circulation zones of his dominions.

—In 622/1225 and 623/1226-7, two undated types without the name of a mint were introduced. There is a smaller type (pl. 13.18)¹¹² and a larger one (pl. 13.19)¹¹³ which is distinguished by a quatrefoil on both sides. Evidence from hoards and archaeological finds makes it likely that both coins were circulating in parallel in Egypt and in southern Syria. ¹¹⁴ The

relation of the smaller to the heavier and larger one in terms of value is not known. Both were probably minted in Cairo and imported into Syria, but Damascus should not be excluded as a possibility. In Palestine itself the coins have been found at Jerusalem, ¹¹⁵ ^cAthlith¹¹⁶ and Acre. ¹¹⁷

—The next issue of copper coins again names Damascus as the mint. They were struck only in the years 631/1233-34 and 634/1237 (pl. 13.20). They were designed with a square-incircle on both sides. ¹¹⁸ This type was first introduced into the northern Mesopotamian territories of al-Kamil Muhammad in the year 622/1225 in the mint of Harran, but in 631/1233-4 this type was also introduced into southern Syria. ¹¹⁹

—In the year 641/1243 there followed an issue of copper coins in Damascus, much smaller in size than the preceding ones (pl. 13.21). It names al-Salih Ayyub (who reigned 636-47/1239-49). This type was struck in Damascus and in Hama. To judge by surviving specimens, the latter mint was much the more prolific. 120

—In the year 648/1250 al-NasirYusuf (II) of Aleppo took over Damascus and for ten years ruled a more or less united Syria until the Mongol invasion in 658/1260. The copper coin types of al-NasirYusuf rarely display mint or date. For the majority of them it has been difficult up to now to determine either a respective mint or a relative sequence. The occurrence of about four coins of a certain type¹²¹ (pl. 13.22) at the Citadel of Damascus, one at ^cAthlith¹²² and perhaps a further one at

¹⁰⁹ See n. 95.

¹¹⁰ The sequence of Ayyubid coin types from Damascus will be discussed in detail in the excavation report of the Citadel of Damascus currently being prepared by the present author.

Bates (1989a, 433-4, 439) concentrates on Egypt. Allouche (1994, 67-8), Cahen (1981) and Rabie (1972, 177-84) use only literary evidence with a passing reference to Egypt. Balog 1977 describes the new copper coin types.

¹¹² Balog 1980, nos 416-19.

¹¹³ Balog 1980, nos 420-21.

¹¹⁴ One coin of the larger type (CD5.1-1070-m004) and one of the smaller type (CD8-1996-m011) were found in the Citadel of Damascus. In addition, a hoard of some 350 copper coins is preserved in a private collection. These were studied by the author in 2003. The latest issue represented in it, that of al-Salih Ayyub, is dated to the year 641/1243. The majority of this hoard comprises copper coins of al-Kamil Muhammad from Damascus dated 631/1233-34 and 634/1237-37. From its composition, the hoard is obviously southern Syrian in origin. The quatrefoil type is represented by 33 specimens and the smaller type by 9 specimens. Paul Balog (1977) suggests the mint in Cairo for both types. The Amin Awad collection, consisting of finds from Fustat with no archaeological

provenance, also comprises both types (Bacharach 2002, 61–2). A published area from a controlled excavation in Fustat by George Scanlon brought to light one example of the smaller type (no. 419) and three of the quatrefoil type (no. 420); Schultz 2001, 271 nos 11–14. Both types were also frequently found among the unpublished coin finds from the Fustat excavation, which were studied by Michael Bates. I am very grateful to him for this information.

¹¹⁵ In Jerusalem two of the larger quatrefoil type coins were found in the Armenian Garden; Miles 1985, 173 nos 342. A further example was found at Ophel and Siloam; Gordon 1925, 187 no. 6 (misattributed, but see the illustration).

¹¹⁶ Another example of the quatrefoil type was excavated, together with the smaller type at 'Athlith; Metcalf, Kool and Berman 1999, 128* nos 262, 263.

¹¹⁷ Syon (forthcoming) no 33.

¹¹⁸ The research on the copper coin hoard mentioned in n. 114 above shows that this type was minted only in Damascus during these two years. All the other dates mentioned in Balog (1980) for the Damascus mint are misinterpretations of the same marginal legends, which are never completely legible on a single specimen.

¹¹⁹ For finds of this type in Palestine—see Jerusalem: Miles 1985, 175 no. 342; Hammat Ghadir: Amitai-Preiss and Berman 1997, 303 no. 3; Khirbat Shama^c: Hansen and Bates 1976, 165 no. R520; Athlith: Metcalf, Kool and Berman 1999, 128 nos 264-267.

¹²⁰ For the fals of Damascus, see Heidemann 2003c, 185, no. 315; 3 further specimens in a private collection SB7265 (the only specimen with a clearly legible 'Dimashą') and 2 further specimens (SB7266, 7267). So far, none of the coins known has a legible date, but AH641 can be presumed with confidence from the parallel and much more frequent dated Hama issue; Balog 1980, no. 566 and Korn 1998, nos 101–105. On the historical context for this issue, see Humphreys 1977, 272–3. One coin of this type either from the issue of Damascus or from Hamah was found in Tall Shaikh Sa'd; Militký and Novak 2002, 46 no. 283.

¹²¹ Nicol 1986, no. 782b.

¹²² Metcalf, Kool and Berman 1999, 129★ no. 278.

^cAin Karim, ¹²³ allows a preliminary conclusion that this coin type was current in southern Syria and Damascus, and was minted there as well. This was probably the last copper issue minted in Damascus before the advance of the Mongols. However, for the last ten years of Ayyubid rule the picture of the circulation of copper coins in southern Syria is far from being complete.

8 The importation of silver from Europe

The establishment of the Restored Kingdom of Jerusalem, with its capital and main entrepôt at Acre, 124 began a period of unprecedented economic exchange with Europe. Despite a severe reduction in territory, there followed significant economic growth in the Kingdom and in the Ayyubid confederation. The success of the introduction of silver dirhams (pls 13.24, 13.25), beginning in the year 571/1185, would have been impossible without massive importation of European silver. On one hand, this silver provided the material basis for the coin circulation. The ready availability of coins provided the economy of Syria with the necessary means of exchange, easing commercial transactions and allowing much more efficient taxation. On the other hand, the influx of silver can be interpreted as a strong European demand for goods from Syria—cotton, ceramics, glass and so on. Demand stimulated production. This was crucial for the economic revival of the urban economies and growing cities in Syria, and thus also created incentives for an increase in agricultural production.

In the second half of the 6th/12th century, rich new silver mines were discovered in Saxony (Freiberg), Styria and Carinthia in the region of the Alps. 125 The north Italian mercantile republics, Venice, 126 Pisa and Genoa, exported this silver into the Levant. 127 The trade policy of the Italian republics had become largely independent of the Crusader states' politics of war. It was the importation of silver that made Saladin's reform of the coinage a success. 128 An increase in the production of Ayyubid *dirhams* during the 580s/1185s can be discerned. We have only scant literary data on this early silver trade. The

earliest documentary evidence is a treaty between Venice and the Cilician Kingdom of Armenia, dating to the year 598/1201. The privileges were renewed in 643/1245. The Venetians were granted immunity from taxation on the import of gold and silver into the Kingdom of Armenia, except when these precious metals were imported for the purpose of minting, in which case the Venetians had to pay the same fee as they did for their minting in Acre. 129 But in all known cases their influence went beyond the privileged access to the mint. They were probably able to determine a suitable coin design for the purpose of interregional trade. In Cilicia they probably commissioned an immobilised imitation of the Egyptian dinars of Saladin. 130 In 604/1207-8, Venice concluded another treaty with the Ayyubid ruler of Aleppo, al-Zahir Ghazi (who reigned 582-613/1186-1216), regarding privileged access to the Aleppan mint. The Venetians were entitled to bring in silver bullion in order to strike coins for a preferential fee (seigneurage) of 5 percent. 131

Later the coins themselves give hints as to the import of silver. From the year 613/1216, after the death of al-Zahir Ghazi, it is obvious that again an immobilised Ayyubid 'Aleppan' coin type (pl. 13.26)—posthumously naming al-Zahir Ghazi—was struck in parallel with the regular Ayyubid Aleppan series, which named the actual hierarchy of power. The dates for this immobilised type run without interruption to the year 630/1232-33 with a single final issue—at least according to present knowledge—in the year 638/1240-41. This immobilised *dirham* is a regular feature in Ayyubid coin hoards from the first third of the 7th/13th century. ¹³² It may be connected with the privileges granted to the Venetians which have already been mentioned. The production of these coins allowed the Venetians and other European merchants easy access to markets within Ayyubid territories. ¹³³

The model for a second and even more successful immobilised *dirham* type (pl. 13.28) is a *dirham* from the years 638/1240-1 to 640/1242-43 struck by al-Salih Isma^cil of Damascus (whose second reign ran from 637/1245 to 643/1249). The first types of the immobilised series are known for the years 641/1243-44, 643/1246, 644/1246-47 and perhaps also 647/1249-50. In contrast to the 'Aleppan' type, the dates on the 'Damascene' type may be fictitious. Differences in style and some formulae show that this immobilised type is unlikely to have been

¹²³ Bagatti 1948, 86 no. 25.

¹²⁴ For the economic growth of Acre see Jacoby 1998.

¹²⁵ Spufford 1988, 109-19.

¹²⁶ On the export of German precious metal to Venice see especially Stahl 2000, 128, 129, 131; Fryde and Stromer 1999, 44.

¹²⁷ See also Stahl 1986, 97-8. He estimated that about 1 million kilograms of silver in coins and bullion left Europe with the Crusaders for their own sustenance. In addition there was the direct import of silver for commercial purposes, which is dealt with here.

¹²⁸ Bates 1989b, 458; Spufford 1988, 148–52; Robbert 1983, 53–4. Saladin made his first contract with the Venetians in Egypt in 1173, but the details of this agreement are unknown; Rösch 1999, 240; Labib 1965, 25. Pisa also negotiated with Egypt in 1173; Ashtor 1976, 240; Labib 1965, 25, 30; Heyd 1879a II, 438–9.

¹²⁹ Metcalf 2000a, 210; Bedoukian 1979, 27-8, 45; Schlumberger 1878, 137. See the documents of 1201 and 1245 in Sopracasa 2001, 19-38, especially 27 and 36.

¹³⁰ Ilisch 2005 identified an imitation of dinars of Saladin as the Armenian bezant. The same coin is also published in Ilisch 1993, 38 no. 425, with a different attribution.

¹³¹ Pozza 1990, 26–39; Tafel and Thomas 1856, 62–6; Irwin 1980, 38; Heyd 1879b II, 293–4.

¹³² See for example Metcalf 1995, 104.

¹³³ Metcalf 1995, 100-1; Bates 1989b, 460-4, 471 (he counted 94 obverse and 110 reverse dies); Bates 1974, 402-6. As a possible political environment for this last, rather isolated, issue, Bates saw a short-lived alliance between the Crusaders and al-Salih Isma^cil; Humphreys 1977, 265-9.

struck in Damascus, as the legend on the coin pretends. The mint for the 'Damascene' type was probably Acre, which is mentioned on some less important sub-series with Christian devices and dated AD 1251(pl. 13.27). ¹³⁴ From the above mentioned document of 643/1245, we also know about the importation of silver and the privileged access of the Venetians to the mint in Acre. ¹³⁵ Abu Shama and other Arab chroniclers call the Frankish imitation coin the 'everlasting or permanent *dirham'*, *dirham baqi*—a name suitable for an immobilised type. ¹³⁶

Late in the year 647/spring 1250, Bishop Odo of Châteauroux arrived in Acre, accompanying the Crusade of Louis IX of France. He was upset about coins minted in Acre with the Muslim creed and date, that is the dinar suri and the immobilised 'Damascene' type, the dirham bagi. The year of his arrival coincides with the last Islamic date found on the imitation coins, if the blundered dates have been correctly deciphered. Odo wrote to Pope Innocent IV (who reigned 641-52/1243-54) and in a letter dated 12 February 1253 (pl. 13.29), the Pope replied by prohibiting the use of the Muslim creed and date on 'bisantiis et drachmis made by Christians in Acre and Tripoli'. 137 Production was continued but now in a series which, although Ayyubid in style, contained Christian inscriptions and the date '1251' (pl. 13.27). However, the series was short-lived; it obviously did not meet with much success in circulation. From 650-1/1253 onwards the old type of al-Salih Ismacil was resumed, but the immobilised dirhams of this late sub-series carry the fixed date of AD'1253' in Arabic, and the central inscription became barely legible (pl. 13.28). This '1253' sub-series was struck in enormous quantities, ¹³⁸ continuing perhaps up to the Mongol invasion of 658/1260. Hoards of coins which were buried during the years of the Mongol wars contain between 9 percent and 45 percent of these imitative dirhams. 139 The scholar Abu Shama, a critical observer of the situation in Damascus, noticed their huge circulation and made them—erroneously—responsible for inflation and economic hardship after the withdrawal of the Mongols. 140

The immobilised 'Damascene' coin type in a standard quality, produced in Acre, suggests a contractual agreement as a legal basis for its production and its circulation in Avvubid territory as in the earlier 'Aleppan' case. One party would have been al-Salih Ismacil, named on the coin, the other would probably have been Venice or any other Italian city-state importing silver.¹⁴¹ However, only Venice is known to have been engaged in the production of precious metal coins in the Levant. From medieval Central Europe treaties between states are known which entitled one state to produce coins of another with a defined quality and usually with an immobilised design in order to have access to the common circulation zone. Such a treaty would have allowed the importing party the production in Acre and the importation of the prescribed coin type, known as dirham baqi. However, there is in this case no literary or documentary evidence for such a treaty, only factual numismatic data. The pieces of evidence are the existence and abundance of these coins themselves, their immobilisation and the name bagi (perpetual, everlasting), which fits the Central European model. Contractual agreements in monetary matters are known with Armenia in 598/1201 and 643/1245 and the one with Aleppo in 604/1207-8, allowing in both cases only a privileged access to the mint. These treaties suggest—and this is the argument here—that questions of access to the money circulation in Cilician and Ayyubid markets were a matter of treaties between states. The possibility for such a suggested treaty or privilege for the 'Damascene' dirham baqi may have occurred in the political environment of the short-lived alliance between the Crusaders in Acre and al-Salih Isma^cil against Ayyubid Egypt in 641/1244.142 Almost nothing is known about the details of the legal relation between the royal prerogative to mint coins in the Kingdom and the legal nature of the minting activities of the Venetians in Acre. The treaties with the Armenian Kingdom suggest that they at least possessed a privileged access to the royal mint.143

The end of 658/1260 saw the peak of the economic crisis after the Mongol withdrawal. ¹⁴⁴ As a cure for the severe inflationary trend, in Damascus the *dirham baqi* and the old

¹³⁴ Metcalf 1995, 103.

¹³⁵ Schlumberger 1878, 137. The economic importance of Acre becomes evident from the figure of 50,000 pounds sterling of silver as an annual tax given by Richard, Earl of Cornwall, who visited the east in 1240–1241; Riley-Smith 1973, 64.

brown a detailed discussion of the 'Damascene' type, see Bates 1974 (a ground-breaking study); Metcalf 1995, 101-4; Bates 1989b, 464-73. For a discussion on the dirham baqi and the erroneous economic assumptions in connection with the dirham baqi of the theologian see Abu Shama (ed. al-Husaini 1947), 211; Heidemann 1994, 236-7, 247-51; Bates 1989b, 471-3. In Heidemann 1994, 236 n. 10, Lutz Ilisch commented that in medieval Germany contractual money minted by member states was permitted to circulate between all parties. These contractual coins were frequently called the 'Ewiger Pfennig' or 'denarius perpetuus', translatable as 'everlasting or permanent penny'. Dirham baqi is in substance a translation of the name and concept. For older views, see Irwin 1980, 94-6. On the Armenian documents see n. 129.

¹³⁷ Berger 1897, 176 no 6336. Lavoix 1877, 52-3.

¹³⁸ Michael Bates counted 142 obverse and reverse dies; Bates 1989b, 471. Usually the Ayyubid mints had significantly less than ten pairs of dies per year.

¹³⁹ Heidemann 1994, 249 n. 32.

¹⁴⁰ See n. 136.

¹⁴¹ The Kingdom of Jerusalem can probably be excluded because the large scale of silver imports connected with this coinage could only be conducted by one of the importers.

¹⁴² Heidemann 1994, 236-7, 247-251; Bates 1989b, 465-73. For this alliance, see Humphreys 1977, 274 and Lupprian 1982. The nature of a commercial relation between Venice and Damascus might have prevented its entry into Latin and Arabic chronicles.

¹⁴³ See the 'livre au roi', chapter 16; paragraphs 3 and 6 deal with the royal prerogative of minting coins and forbid the counterfeiting/striking of bezants by feudal lords. In turn, it can be argued that the immobilized bezants, struck with gold imported by the Venetians, and probably the dirham baqis too, were seen as royal money: Greilsammer 1995, 179–181. A Genoese document dated November 1161 clearly identifies 'bisancios aureos saracenatos de moneta regis' as royal money; Morozza della Rocca-Lombardo 1940, no. 154.

¹⁴⁴ For the Mongol raids in Palestine, see Amitai 1987, 236-42.

dirham nasiri were recalled from circulation. A new kind of dirham, but similar in appearance to the previous issue, was released into circulation by the usurper Sanjar al-Halabi (who reigned 658-59/1260-61). This was the 'new dirham', the dirham jadid (plural darahim judad). At the same time al-Zahir Baibars introduced the dirham zahiri in Cairo. When Baibars' amirs expelled Sanjar al-Halabi from Damascus only a couple of weeks later, this coin was introduced into Damascus. The early dirham zahiri depicts Baibars' blazon, a pacing lion. The production of the dirham zahiri lasted for almost one and a half centuries, and opened a new chapter in the monetary history of Syria and Palestine. 145

9 Summary

The Levant connected European and western Asian economic developments during the Zangid and Ayyubid periods. The region is a key to an understanding of the political and economic recovery of the core lands of the much fragmented Islamic empire. Economic growth was supported by the development of coinages. In a nutshell, the circulation of coins in Palestine and Jerusalem reflects not only the transformation of the currencies during the 6th/12th and 7th/13th century in western Asia, but also the encounter of different monetary traditions—those of Europe and the Islamic empire. The Zangid and Ayyubid periods saw the re-emergence of an urban monetary economy. From the 5th/11th century onwards, Islamic jurists complained about the degenerated monetary system inherited from the early Islamic empire at its height. The system allowed numerous opportunities for illegitimate gain, or riba, prohibited by the shari^ca, Islamic law, through the use of different kinds of debased silver coins (pl. 13.8) and gold dinars (pls 13.1-13.3). In addition the latter were frequently cut into fragments (pls 13.4, 13.5). The coinage reforms of the Zangid and Ayyubids appear to reflect these juridical concerns. A coinage system was created which reduced the probability of violating the prohibition of riba in daily life, and at the same time provided the economy with sufficient physical means for exchange, that is coins. This would not have been possible without commercial ties with Europe and its newly discovered silver mines in Saxony and the region of the Alps. The amounts of silver imported by the Italian city republics and their representatives in the Crusader states are most apparent in the Ayyubid currencies themselves.

In the pre-Crusader period and during the first half of the 6th/12th century, Palestine was merely an importer of foreign high-value gold coins from Egypt and Byzantium. Sometime in the late 535s/1140s, the Levant under the

Crusaders became the most prolific producer of gold coins for circulation in Syria and northern Mesopotamia. It is likely that the gold bullion was mostly imported by Italian merchants. The minted coin was called *dinar suri* or *bicantius saracenatus*, and presumably was struck mainly in Acre, Tripoli and Tyre (pl. 13.3). Its production continued after the fall of Jerusalem at least until the 650s/1250s, and it remained the standard gold coin for Syria and Palestine until the end of the 7th/13th century.

Urban economy depends on the availability of small coins for daily purchases. The petty coinage in the Crusader Levant consisted of billon *deniers*. These *deniers* were imported from seven privileged mints in France and Italy (pls 13.9, 13.10). Sometime around the 530s/1130-40s, indigenous billon *deniers* began to be produced in most Crusader states (pl. 13.11). After the fall of Jerusalem in 583/1187, the production of *deniers* for the Kingdom continued in Acre. The Frankish billon *denier* in many ways resembles the billon *dirham aswad* (pl. 13.8), the standard indigenous small coin in Egypt, Syria and northern Mesopotamia. The *denier* and the different types of *dirham aswad* only circulated in their own respective, rather limited, zones.

The next decade saw a major change in the currencies in Islamic Syria. In 558/1162-3, Nur al-Din Mahmud successfully introduced a copper coin in Damascus known as *qirtas* (pl. 13.17). The *dirham aswad* slowly disappeared from circulation. For Jerusalem and Palestine the major change probably occurred after the conquest by Saladin. Jerusalem and parts of Palestine became integrated into the circulation zone of Damascene copper coins (pls 13.17-13.22). But the old billon *denier* (pl. 13.12) may have continued in circulation for a couple of decades as a medium for local exchange with neighbouring Crusader territories.

Twelve years before the fall of Jerusalem, in 571/1175-6, when Saladin was advancing from Egypt, an almost pure, weight-regulated silver *disham* was successfully introduced into northern and southern Syria (pls 13.23–13.25). It was the first coin to be so regulated for some three hundred years. During the next fifty to sixty years, similar silver coinages were introduced all over western Asia. The success of the far-reaching reforms was due to the importation of European silver by northern Italian republics into the Levant, mainly from Saxony and the region of the Alps (pls 13.26–13.28). A further factor in this importation of European silver was a strong demand for goods from Syria and their export, which fostered economic growth both in Ayyubid Syria and in Europe. While the whole Syrian region prospered, economic development in Jerusalem was neglected because of political circumstances.

¹⁴⁵ Heidemann 1994, 222-3, 247-55.

Gold coins



Pl. 13.1 Fatimid, al-'Aziz billah, dinar maghribi or misri, Misr (Cairo), 368/978-9.



Pl. 13.2 Byzantium, Michael VII, *histamenon nomisma* or *michaelaton* (Constantinople, 464-470/1071-1078). Private collection. Photograph © A Günther and S Heidemann.



Pl. 13.3 *Dinar suri* (Acre or Tyre, c. 588/1192 to 647-8/1250). Balog and Yvon 1958, 151 no. 29; see Metcalf 1995, nos 136-141. Private collection SB 0174. Photograph © K Gutberlet and S Heidemann.





Pl. 13.4 Fatimid, al-Mustansir billah (427-487/1036-1094), *qurada* (fragment of quarter-*dinar*, Sicily). Citadel of Damascus CD2-secC-m162. Photograph © K Gutberlet and S Heidemann.





Pl. 13.5 Byzantium, Romanus III (419-425/1028-1034), *qurada* (fragment of a *histamenon nomisma*, Constantinople). Citadel of Damascus CD2-secA-1837-m128. Photograph © K Gutberlet and S Heidemann.





Pl. 13.6 Saladin, *dinar misri*, Cairo, 586/1190-1. Balog 1980, no. 46. Private collection SB 4979. Photograph © K Gutberlet and S Heidemann.





Pl. 13.7 Saladin, *dinar*, Damascus, 583/1187-8. Balog 1980, no. 79. Samir Shamma Collection, Oxford, published with kind permission of the Visitors of the Ashmolean Museum. Photograph © L Treadwell.

Billon coins



Pl. 13.8 Zangid, Nur al-Din Mahmud, *dirham aswad*, (Aleppo, 541-555/1146-1160).



Pl. 13.9 Denier, Lucca, c. 12th century. After Metcalf 1995, nos. 9-14. Private collection SB 7257. Photograph © K Gutberlet and S Heidemann.



Pl. 13.10 *Denier*, Valence, *c.* 12th century.

Metcalf 1995, nos 22-23.

Private collection SB 7261. Photograph © K Gutberlet and S Heidemann.



Pl. 13.11 Kingdom of Jerusalem, Baldwin III, *denier* (Jerusalem, Acre, Tyre?, 1143-*ca.* 1167).

Metcalf 1995, nos 159-164 (Group 4, smooth series).

Private collection SB 7255. Photograph © K Gutberlet and S Heidemann.



Pl. 13.12 Kingdom of Jerusalem, Amaury, *denier* (Jerusalem, Acre, Tyre?, *ca.* 1167–*ca.* 1187).

Metcalf 1995, nos 169–174.

Private collection SB 7256. Photograph © K Gutberlet and S Heidemann.



Pl. 13.13 Ayyubid, al-cAdil Abu Bakr, *denier* (Syrian mint, Damascus?, *c.* 611?-618/1214-5?-1221). Ilisch 1993, no. 182. University Collection Tübingen CC6-B4. Photograph © L Ilisch.

Copper coins



Pl. 13.14 Byzantine Empire, Constantine X and Eudokia (1059–1067), *follis/qirtas* (Constantinople).

Morrisson 1970, no. 51/Cp/AE/01.

Private collection SB. Photograph © S Heidemann.



Pl. 13.15 Zangid, Nur al-Din Mahmud, *qirtas* (Aleppo?, 541-569/1150-1174). Hennequin 1985, no. 603-29.

Private collection SB 1228. Photograph © K Gutberlet and S Heidemann.



Pl. 13.16 Zangid, al-Salih Isma^cil, *fals*, Aleppo, 571/1175-6. Spengler and Sayles 1996, 71-3 type 76. Oriental Coin Cabinet, Jena, inv. no. 353-B1. Photograph © K Gutberlet and S Heidemann.



Pl. 13.17 Zangid, Nur al-Din Mahmud, *qirtas*, Damascus, 558/1162-3. Spengler and Sayles 1996, 62-3, type no. 74.1. Private collection SB 1235. Photograph © K Gutberlet and S Heidemann.





Pl. 13.18 Ayyubid, al-Kamil Muhammad, *qirtas* (Cairo or Damascus, 622-623/1225-1226). Balog 1980, nos 416-417. Private collection SB 7005. Photograph © K Gutberlet and S Heidemann.





Pl. 13.19 Ayyubid, al-Kamil Muhammad, *qirtas* (Cairo or Damascus, 623-631/1226-1234).
Balog 1980, no. 420.
Private collection SB 7010. Photograph © K Gutberlet and S Heidemann.





Pl. 13.20 Ayyubid, al-Kamil Muhammad, *qirtas*, Damascus (631, 634/1233-4, 1236-7). Balog 1980, nos 464-465. Private collection SB 4442. Photograph © K Gutberlet and S Heidemann.





Pl. 13.21 Ayyubid, al-Salih Isma^cil, *qirtas*, Damascus (641/1243-4). Heidemann 2003c, 185 no. 315. Private collection SB 7265. Photograph © K Gutberlet and S Heidemann.





Pl. 13.22 Ayyubid, al-Nasir Yusuf II, *qirtas* (Damascus?, 648-658/1250-1260).

Nicol 1986, no. 782b.

Private collection SB 5387. Photograph © K Gutberlet and S Heidemann.

Silver dirhams





Pl. 13.23 Zangid, al-Salih Isma^cil, *dirham*, Aleppo, 571/1175-6. Oriental Coin Cabinet, Jena inv. no. 2001-1-1 (gift of R Bettenhausen). Photograph © K Gutberlet and S Heidemann.





Pl. 13.24 Ayyubid, Saladin, *dirham*, Aleppo, 583/1187-8. Balog 1980, no. 133.

Private collection SB 0800. Photograph © K Gutberlet and S Heidemann.





Pl. 13.25 Ayyubid, al-Kamil Muhammad, *dirham nasiri*, Damascus, 616/1218-19. Balog 1980, no 425.

Oriental Coin Cabinet, inv. no, 1993–2-123. Photograph $\ @$ K Gutberlet and S Heidemann.





Pl. 13.26 *Dirham*, 'Aleppo' [mint unknown, Aleppo or Acre?], 620/1223-4. Balog 1980, no. 639; Metcalf 1995, no. 217. Private collection SB 7253. Photograph © K Gutberlet and S Heidemann.



Pl. 13.27 *Dirham*, Acre, AD 1251, with Christian devices. Metcalf 1995, no. 229.

Private collection SB 2265. Photograph $\ensuremath{\mathbb{C}}$ K Gutberlet and S Heidemann.



Pl. 13.28 *Dirham baqi*, 'Damascus' (Acre), AD 1253 in Arabic. Metcalf 1995, no. 233-9.

Private collection SB 7254. Photograph © K Gutberlet and S Heidemann.





Pl. 13.29 Innocent IV, lead seal for the authentication of documents. Private collection SB 1221. Photograph © K Gutberlet and S Heidemann.