

XI

CRUSADER COINAGE WITH ARABIC INSCRIPTIONS

A. *The Islamic Context*¹

CURRENCY IN THE MOSLEM WORLD

In the Islamic lands, the crusaders encountered monetary systems quite different from the one they knew in Latin Europe, where the only coins until the thirteenth century were small, often debased, silver deniers (pennies). The Moslems, in contrast, used gold dinars, silver dirhams, and copper *fulūs* (*fals* in the singular). Not every part of the Islamic world had coins in all three metals at the same time. Systems varied from place to place, even within the realms of dynasties such as the Fāṭimids, Aiyūbids, and Mamluks, and evolved during the two centuries the crusaders were in Syria.

Some features, nevertheless, were general among the Moslems whom the crusaders met. In the Moslem lands, as elsewhere in pre-modern

For the coinage of the major Islamic dynasties in contact with the crusaders, see, for the Fāṭimids, George C. Miles, *Fatimid Coins in the Collections of the University Museum, Philadelphia, and the American Numismatic Society* (ANS, Numismatic Notes and Monographs, no. 121; New York, 1951), a catalogue of one major collection only but with references to all previous work; for the Aiyūbids, Paul Balog, *The Coinage of the Ayyubids* (Royal Numismatic Society Special Publication, no. 12; London, 1980); for the Mamluks, *idem*, *The Coinage of the Mamluk Sultans of Egypt and Syria* (ANS, Numismatic Studies, no. 12 [New York, 1964]). Both these latter are corpuses, including all coins known at the time of publication. The standard reference for all the Arabic coins of the crusaders is Paul Balog and Jacques Yvon, "Monnaies à légendes arabes de l'Orient latin," *Rev. numis.*, 6th ser., I (1958), 133-168; the abbreviation BY used frequently below indicates the variety numbers established by them. The most recent general classification of the crusader gold varieties is Adon A. Gordus and D. M. Metcalf, "Neutron Activation Analysis of the Gold Coinages of the Crusader States" (similarly, GM), in *Metallurgy in Numismatics*, ed. Metcalf and W. A. Oddy, I (London, 1980), 119-150, summarized with some additional refinements by Metcalf, *Coinage of the Crusades and the Latin East in the Ashmolean Museum, Oxford* (London, 1983), pp. 9-14, 42-44. For the crusader Arabic dirhams, the standard survey is Michael L. Bates, "Thirteenth Century Crusader Imitations of Ayyubid Silver Coinage: a Preliminary Survey," in *Near Eastern Numismatics, Iconography, Epigraphy and History: Studies in Honor of George C. Miles*, ed. Dickran K. Kouymjian (Beirut, 1974), pp. 393-409.

1. This section is by Bates.

economies, precious metal coins were struck from bullion or non-current coins that were brought to the mint by the government or by private persons. Charges for materials and labor were levied proportionately on the coins struck from the material brought in by the customer. Private persons had to pay a government seigneurage (mint tax) in addition. As a result, the amount of bullion in the coins received by the customer was less than the amount of bullion brought in. In other words, coins were a manufactured product with a value (buying power) greater than an equivalent amount of the raw material from which they were made. The difference in value between coins and the bullion in them was fundamentally a result of the mint charges, but was also affected by such factors as inconvenience of minting, transport charges to the mint, reluctance of individuals to reveal holdings of precious metals, and many other intangible factors which can be summed up as the result of supply and demand in a given place at a given time. As legal tender, only current coins could be used for payments to the government and in most transactions between private parties, and this legal constraint was sufficient to keep their money value above their intrinsic (metal) value. If a coin issue was demonetized (abolished as legal tender), its value would drop to the value of the bullion in each coin, causing a loss to the possessors at the time of demonetization.

In a minting regime such as that described, coins can be exchanged by count only if the proportional variation in weight of individual coins is less than the difference between the value of the raw metal in them and their value as coins. If coins circulate by count, and some coins vary from the normal weight by more than total mint costs, it may become profitable to withdraw these heavier coins from circulation to melt and return to the mint, obtaining more coins with a higher money value from the same amount of bullion. There may be a tendency to set aside heavier coins, with a higher intrinsic value, for savings, while returning lighter coins to circulation, and it may become profitable to clip the edges of coins, retaining the same money value while profiting from the bullion value of the clippings. These practices, if they become common, will result in a general lowering of the average weight of the issue in circulation and thereby force weighing of payments in self-defense.

For a government to force its coins to circulate by count, it must either set minting charges high, creating a large difference between their bullion value and their money value, or control the weight of its coins very precisely.² Some Moslem coinages are known to have circulated

2. For a fuller discussion of monetary theory relating to pre-modern mints see Gilles P.

by count, suggesting that one of the two latter conditions obtained, but in the crusader period most precious metal issues were weighed out in transactions. A payment of 100 dinars, for example, took the form of an amount of coins equal in weight to 100 times the current standard weight of the dinar, an amount which might be more or less than 100 individual coins. The process of weighing was recognized as an inconvenience, but was considered normal. Almost every transaction required a balance, with standard weights supplied or regulated by the government.³ To alleviate the inconvenience somewhat, coins were often sealed in purses, with a label indicating the content by weight; these purses, if sealed by government agencies or reputable money-changers, could be passed from hand to hand like large-denomination notes today. A form of check, *ruq'ah*, also was used in payments.⁴ It is important to realize, therefore, that while the words "dinar" and "dirham" meant respectively "a gold coin" or "a silver coin", a payment of a certain number of dinars or dirhams meant transferral of that many weight units of the coinage in question—the number of coins was immaterial.

Because the intrinsic value of precious metal coins was close—even though not equal—to their monetary value, it would have been impossible for any government to guarantee effectively the relationship of denominations in two different metals. To do so would have meant to back up the relationship by standing ready to exchange either for the other at a set rate, but this was impossible in practice because of fluctuations in the prices of the metals. (It is impossible even in the twentieth century, as shown by the abandonment by all governments of precious metal coins with a defined legal tender value. The fixed relationships of modern coins and notes are possible only because their intrinsic worth is far less than their nominal value.)

Hennequin, "Problèmes théoriques et pratiques de la monnaie antique et médiévale," *Annales islamologiques*, X (1972), 1–51.

3. The major exception in the crusader era was the new dirham coinage introduced by Saladin in Syria and Egypt in the late twelfth century, which circulated by count at least some of the time. Other exceptions would include most copper coins, which were probably sold by the mint against payment in silver or gold coins at a price far above the value of the copper in them, many small transactions (a Syrian market manual of Saladin's time refers to a rule that transactions of less than four coins could be by count), and informal payments—no one weighed a coin before tossing it to a beggar. On the other hand, no eastern Mediterranean Islamic gold coinage of the period 1092–ca. 1420 could have circulated by count, although the western Mediterranean dinars of the type introduced by the Muwahhids probably did.

4. Solomon D. F. Goitein, *A Mediterranean Society*, 3 vols. (Berkeley, 1967–1978), I, 229–266, discusses means of payment in 10th–13th-century Egypt and Syria in detail. For the evidence for weighing see also Bates, "The Function of Fātimid and Ayyūbid Glass Weights," *Journal of the Economic and Social History of the Orient*, XXIV (1981), 70–81.

In the Moslem world and almost all pre-modern economies, current gold and silver coins were related in value only by the marketplace, like different national currencies today. Governments could fix values only in certain transactions (for example, in denominating salaries in one currency while paying them in another) and sometimes might attempt to decree relationships in private transactions, but such decrees were widely evaded and impossible to enforce. In normal times values were fairly stable, so that people could have a notional rate for the relationship of the dinar and the dirham, but in any substantial transactions involving both coins the exchange rate had to be set by negotiation. The value of foreign coins in local currency was also determined by supply and demand, not by precious metal content; moreover, if payments were made by weight, local weights would have been used to measure foreign coins, so that varying coin weight standards would have no effect on value. To be sure, metal content set a floor value for any coin, but its actual equivalency in local currency was set in the marketplace.

ISLAMIC GOLD COINAGE

The major Moslem mints for gold coinage in the vicinity of the crusaders were Cairo and Alexandria in Egypt, and Mosul and Baghdad (named *Madīnat as-Salām* on coins) in Mesopotamia. A few other mints in the region issued gold occasionally. For gold coinage, the Euphrates was a clear dividing line between two different systems. The dinars of Mosul (pl. XII, no. 1) and Baghdad (pl. XII, no. 2) did not circulate in Syria and did not influence the coinage of the crusaders. The issues of both these mints continued the Selchūkid Iranian tradition. For the eleventh and first half of the twelfth centuries, their coins are rather scarce, but after about 1160 the representation of both becomes more continuous, while for the thirteenth century (until the Mongol conquest) the coins of these mints are common, large, well engraved, and quite pure, although completely irregular in weight,⁵ a general characteristic of gold coins east of the Euphrates from the tenth to the fourteenth centuries.

Egypt first minted gold coins under Islam in 786 and immediately became one of the principal centers of gold coinage in the Moslem world, issuing dinars continuously and abundantly throughout the 'Ab-

5. Arlette Nègre, "Le Monnayage d'or des sept derniers califes abbassides," *Studia islamica*, XLVII (1978), 165-175.

bāsid, Ṭulūnid, and Ikhshīdīd periods.⁶ In northwestern Africa and Sicily the Fāṭimid monetary system included dinars, quarter dinars, and small silver dirhams. These coins were distinguished from those of the Sunnī 'Abbāsīd realms by the presence of certain Shī'ī inscriptions, by different weight standards, and especially by a design so obviously different that even illiterates in Arabic could distinguish the two coinages.

The conquest of Egypt by the Fāṭimids resulted in the introduction of their monetary system there, replacing the previous 'Abbāsīd-style coinage. Under al-Mu'izz (in Egypt, 969–975) and al-'Azīz (975–996), the Fāṭimid dinar was closely controlled in weight, and is said by a contemporary to have circulated by count,⁷ but under al-Ḥākim (996–1021) a series of changes began. In A. H. 400 (1009/10), and then again in 404, the design of the dinar was substantially altered. The coinage of his successor, az-Zāhir (1021–1036), was at first much like the last issues of al-Ḥākim, but new major changes were made in 420 (1029/30) and 424 or 425. Again, the earliest coinage of al-Mustanṣir (1036–1094) is like the third type of az-Zāhir, but changes in arrangement and content of inscriptions were made in 430 (1038/9), 435 (pl. XII, no. 3), and 439, while in 440 (1048/9; pl. XII, no. 4) and 474 (1081/2; pl. XII, no. 5) radically different designs were introduced. Under al-Musta'li (1094–1101) in Muḥarram 490 (1096/7),⁸ another substantive change was made in the design of the gold coinage (pl. XII, no. 6). Thereafter Fāṭimid gold coinage was unchanged in appearance until the end of the dynasty (pl. XII, no. 7), except for the issues of az-Zāfir (1149–1154).

The purpose of these new issues is not clear in every instance, and there is no need to discuss them in detail here, but it can be said in general that such obvious changes in the appearance of the coinage were not merely cosmetic, but marked changes in the monetary function of the coins. Contemporaries, it is clear, regarded the different issues as different monies, related to each other by fluctuating exchange rates;⁹ put another way, each new issue became the standard current legal tender, while the previous issue was usable only to pay off debts

6. Egypt may have minted dinars before 786, but they cannot as yet be identified. Dinars of the late Ikhshīdīd period are scarce today, perhaps as a result of the recoinage of gold forced after the Fāṭimid conquest, which would have brought most of the previously circulating dinars to the melting pot (Ibn-Muyassar, *Akhbār Miṣr*, ed. Ayman Fu'ad Sayyid, II [Cairo, 1981], 164).

7. Al-Maqdisī (al-Muqaddasī), *Aḥsān at-taqāsīm fī ma'rifat al-aqālīm*, ed. Martin J. de Goeje (Bibliotheca geographorum arabicorum, III; Leyden, 1906), p. 240.

8. Ibn-Muyassar, *op. cit.*, II, 65.

9. For example, Goitein, *op. cit.*, I, 239, citing a Geniza document of about 1060 which distinguishes between "lined" dinars (the issue or issues of 425–440) and "concentric" dinars (the

denominated in it, or for export, or as bullion. The kinds of monetary change that the new types marked might have included changes in the weight standard or metal alloy of the dinars or of the silver dirhams (which were changed in parallel with the dinars), changes in the way standards of alloy or weight were enforced, changes in the terms on which coins were issued from the mint, or changes in the weight standards used to measure out payments. The determination of which of these factors was behind any particular change rests upon a more careful study of Fāṭimid coinage than has yet been made, as well as a re-examination of the written sources.

Al-Mustanşir's coinage was the prototype for one group of crusader imitations, although most of the imitations do not precisely reproduce any of his coins. Balog and Yvon cite an issue struck from 1043 to 1047 (pl. XII, no. 3) as prototype for their crusader varieties 3-16,¹⁰ but there does not seem to be any good reason for this short-lived issue to have been selected in particular. BY 3-16 have only four horizontal lines of inscription on the obverse, unlike any of al-Mustanşir's issues. It is more realistic to say that these imitations merely reproduce, after a fashion, a coin type introduced first in 1043 or 1044 but retained with variations until 1048 or 1049, then reintroduced in 1081 or 1082 and retained until al-Mustanşir's death in 1094. All the dinars of these years have the words "‘Alī" and "Ma‘add" at the top of the obverse and reverse field inscriptions, as do the imitations, but none of the originals have only three lines of inscription below these words as do the imitations. Probably the crusader die cutters attempted to reproduce only the general appearance of the prototype, condensing four or five lines into three. Most of these imitations are extremely barbarous, and their makers could have had no idea of the meaning of the inscriptions they attempted to copy. Very likely the coin they had before them was an example of al-Mustanşir's last issue, which was struck in Egypt and Syria for about twelve years and ended only some three years before the First Crusade (the type was retained for a few years after al-Mustanşir's death, but no longer with his name or the words "‘Alī" and "Ma‘add").

The concentric inscription type that interrupted the "‘Alī-Ma‘add" type may also have been imitated, but very sparingly if at all. Balog and Yvon list only one such coin in their corpus.¹¹ There may, how-

issue of 440-474), as well as between Damascus and Egyptian dinars of the same kind. These latter seem to the modern observer to be externally identical except for the mint names.

10. Balog and Yvon, *op. cit.*, pp. 145-146.

11. BY 1, a coin in the American Numismatic Society (0000.999.14974); its attribution is problematic (pl. XVI, no. 45); see below, p. 455.

ever, be others still attributed to the Fāṭimids in various collections. One example might be a dinar of Miṣr, 443, in the British Museum with a gold fineness of only 89.1 percent according to Oddy's measurement.¹² All the crusader imitations of al-Mustanṣir's issues are attributed in the next section to the county of Tripoli.

The last Fāṭimid type, beginning in 490 (1096/7), bears the words *'āl ghāyah*, "high standard (of fineness)" (pl. XII, no. 6),¹³ and this issue, like its predecessor, was initially higher in fineness, probably as close to pure gold as technology permitted at the time, although this standard was not always maintained during the issue's century of life. On the other hand, the *'āl ghāyah* coins do not seem to have been struck to any weight standard. This mattered little, since dinars were usually weighed in payment.

It was this type that was most extensively imitated by the crusaders, specifically the issues of the caliph al-Āmir (1101–1130), whose dinars would have been the most common in circulation in the earliest years of the crusading principalities. According to Metcalf's chronology (below, pp. 441–448), these imitations would have begun at a date around the middle of the twelfth century and continued until the third quarter of the thirteenth; they are attributed to the kingdom of Jerusalem.

Egypt's rulers took pride in the high quality of their gold coinage, and the mint discriminated against foreign gold coins, even those of nearly the same level of purity. Generally speaking, this high quality was maintained: with few exceptions, Fāṭimid gold coins are better than 90 percent pure, and most are as pure as contemporary technique permitted.¹⁴ Nevertheless, it would be gathered from what has been said that the picture of the Fāṭimid dinar as the "dollar of the Middle Ages", absolutely standard in weight and purity from the beginning to the end of the dynasty, is seriously misleading. Both the weight standard (or the standard of the weights used to measure transactions) and the purity of the Fāṭimid dinar were changed from time to time; contemporaries were well aware of these variations, but to reconstruct the exact sequence of changes will require a more minute study of the coinage than has yet been made.¹⁵

Egyptian dinars issued under the Aiyūbid sultan Saladin do not seem

12. Oddy, "The Gold Contents of Fāṭimid Coins Reconsidered," *Metallurgy in Numismatics*, I (London, 1980), 116, no. 811, plate 9.

13. For *ghāyah* as a synonym for "fineness", or more precisely "intended fineness", see Ibn Khaldūn, *Al-muqaddimah*, I, ed. Étienne M. Quatremère, *Notices et extraits des manuscrits de la Bibliothèque nationale*, XVI (Paris, 1858), 407; Fr. trans. William MacGuckin de Slane, *ibid.*, XIX (1862), 460; Eng. trans. Franz Rosenthal (Bollingen Series, no. 43, New York, 1958), I, 464.

14. Oddy, *op. cit.*, pp. 99–118.

15. For a fuller discussion of these problems see Bates, "The Function," pp. 86–91.

to be materially different from those of the last Fāṭimids. The change in government and religion led to some modifications in the inscriptions and small changes in the arrangement, but the basic coin design, with brief central horizontal inscriptions surrounded by prominent circular legends, is much the same (pl. XII, no. 8). It has been asserted that Saladin abandoned standard weight for his gold coinage, but this in fact had happened long before, in 490 (1096/7); if the range of variation of Saladin's dinars is larger than that of al-ʿĀḍid's, this is probably a result of the larger number of coins available for study. It has also been asserted that Saladin debased his dinars significantly, but some of the low-fineness coins assigned to him may be crusader imitations. The alleged debasement of the dinar in his reign cannot be confirmed until careful numismatic study has separated his genuine coins from their crusader imitations.¹⁶

It was not until the reign of al-ʿĀdil Abū-Bakr I (1200–1218) that any substantive change in the appearance of the Aiyūbid dinar is seen (pl. XII, no. 9). In the first year of his reign a new dinar type with long horizontal inscriptions and a single marginal legend was introduced, or rather revived from the eleventh century. The mint alternated between the old and new designs during al-ʿĀdil's reign, but by the time of al-Kāmil (1218–1238) the new type was definitively adopted and maintained until after 713 (1313/4). Major variations on this type include the introduction of Naskhī script instead of Kufic after 622 (1225/6), and aẓ-Ẓāhir Baybars' use of a lion or leopard on dinars as his personal symbol (pl. XIII, no. 10), an innovation not maintained by his successors. There is no evidence to suggest that any of the changes after Saladin's time reflected a change in the weight standard, fineness, or other monetary functions of the Egyptian dinar, but the Aiyūbid and Mamluk gold coinage has yet to be examined rigorously on these points.

Miṣr, the official name of Fuṣṭāṭ, the commercial center of the Cairo metropolis, is the usual mint name on Fāṭimid Egyptian dinars. In 516 (1122/3), however, unspecified problems at the Fuṣṭāṭ mint led to the opening of an additional mint in the administrative center al-Qāhirah, that is, in Cairo properly speaking.¹⁷ After 525 (1130/1) this mint ceased

16. Cf. Andrew S. Ehrenkreutz, "The Standard of Fineness of Gold Coins Circulating in Egypt at the Time of the Crusades," *Journal of the American Oriental Society*, LXXIV (1954), 162–166, a work published before the existence of crusader imitations of Aiyūbid gold was suspected.

17. Al-Maqrīzī, *Kitāb al-mawāʿiẓ wa-l-iʿtibār fī dhikhr al-khiṭaṭ wa-l-āthār* (Cairo, 1270/1853), I, 445. An issue of al-Ḥākim dated 394 (1003/4) is also known from a mint in Cairo, but this mint apparently operated only in this year for some special purpose.

operation, but in the troubled times of al-ʿĀḍid (1160–1171) a mint was again opened in Cairo and produced the bulk of his issues. This was apparently the only mint in the city under the Aiyūbids and Mamluks. A second regular mint was established in Egypt at Alexandria in 465 (1072/3)¹⁸ and operated regularly into the fifteenth century. A mint also operated in Qūṣ in Upper Egypt from 517 (1123/4) to 519.

In eleventh-century Syria a number of towns had mints for the Fāṭimids: Aleppo, Damascus, Tiberias, Ramla (which used the name *Fīlasṭīn*, Palestine, on coins), Tyre, Tripoli, Acre, and Ascalon.¹⁹ Of these, only Tyre may have minted continuously throughout the Fāṭimid period, but even there the record has gaps. The first four mints mentioned, all located inland, apparently ceased to operate in the 1060's, probably as a result of the Selchūkid conquests in Syria. Production of Fāṭimid dinars was left to the port cities Tyre, Tripoli, and Acre—the latter issued dinars for the first time just as the inland mints were closing down, perhaps not coincidentally. The last recorded date for Acre and Tripoli is 495 (1101/2) while production at Ascalon began in 503 (1109/10), at the time of Tripoli's capture by the crusaders, and continued until 510 (1116/7). The last date recorded for Tyre is 517 (1123/4) (pl. XIII, no. 11),²⁰ just before it was taken by the crusaders (1124). According to a much later Arab writer, the crusaders kept the mint of Tyre open for three years after its conquest, striking coins in the name of al-ʿĀmir.²¹ *Dīnār Ṣūrī*, "Tyre dinar", was the generic Arabic term for the crusader Arabic gold coins, but only a small proportion of these imitations actually bear the mint-name Ṣūr.²² These last three major Fāṭi-

18. The various references in the literature to issues of Alexandria before 465 are all to be dismissed; those that have been carefully examined have turned out to be misattributions. For example, the coin of the University Museum, Philadelphia, ascribed by Miles to the year 435 (Miles, *Fatimid Coins*, no. 259, pl. III; the coin is on loan to the American Numismatic Society, 1002.1.1083; pl. XVI, no. 46) is an imitation or counterfeit; its date is indistinct, but its type was not introduced until 474 (1081/2). It may well be a crusader imitation, as its gold fineness is approximately 78.5 percent by specific gravity measurement, the same as that of many crusader bezants.

19. The table in Miles, *op. cit.*, pp. 50–51, is still valid for the termination dates of Fāṭimid Syrian issues, except for Ṣūr (Tyre).

20. The unique dinar of that date is unpublished, in the collection of the American Numismatic Society (1955.131.1).

21. Ibn-Khallikān, *Kitāb waḥyāt al-a'yan*, ed. Iḥsān ʿAbbās (Beirut, n.d.), V, 301; Fr. trans. MacGuckin de Slane (Paris, 1843–1845), III, 456; see below, p. 441.

22. It seems odd that only a few crusader bezants can be assigned to Tyre, as will be seen below. Robert Irwin, "The Supply of Money and the Direction of Trade in Thirteenth-Century Syria," in *Coinage in the Latin East: the Fourth Oxford Symposium on Coinage and Monetary History*, ed. Peter W. Edbury and Metcalf (BAR International Series, no. 77; Oxford, 1980), p. 91, has explained this anomaly with the suggestion that from the late twelfth century, if not earlier, the word Ṣūrī was a calque on the French term "de Syrie".

mid Syrian mints for gold — Tyre, Tripoli, and Acre — are also the most likely locations for the mints that issued the crusader gold imitations.

After the Fāṭimid dinar mints closed, Moslem Syria had little gold coinage of its own. The mint of Damascus began issuing dinars in 530 (1135/6) and continued for about ten years, striking coins of Fāṭimid style with the names of the 'Abbāsid caliphs and the Selchūkid sultans of the east, but these coins are quite scarce today, suggesting a small issue (pl. XIII, no. 12).²³ In 583 (1187/8) dinars were struck for Saladin in Damascus, perhaps to process the booty from Jerusalem and his other conquests in that year, but no other Moslem Syrian gold coins are known until the reign of Baybars (1260–1277).²⁴ For the most part, Syrians used imported Egyptian or crusader (Ṣūrī) dinars in the twelfth and thirteenth centuries.²⁵

In addition to the mints listed in Syria, Egypt, and Mesopotamia, there are also a very few Rūm Selchūkid issues in gold, from Konya beginning as early as 573 (1177/8), and from Sivas.²⁶

23. Ibn-al-Qalānisi, *Dhail ta'rikh Dimashq*, ed. Henry F. Amedroz (Leyden, 1908), p. 257; trans. Roger Le Tourneau, *Damas de 1075 à 1145* (Damascus, 1952), p. 236 (where the text's description of the metal content of the coins is misconstrued as a list of denominations). Published examples of this series are few; one is in Stanley Lane-Poole, *Catalogue of Oriental Coins in the British Museum* (London, 1887–1890), III, 45, no. 88.

24. For the Damascus dinar issue of Saladin see Balog, *Ayyubids*, p. 77, no. 79. The first Damascus dinar of Baybars, with an illegible date, has recently been discovered in the collection of the Kuwait National Museum. Otherwise, Mamluk gold coinage in Damascus is known only from the reign of Kalavun (1279–1290) onward (*idem*, *Mamluk Sultans*, p. 120). The dinar attributed to Filastīn, 592, by Balog, *Ayyubids*, p. 108, no. 201 (now in the collection of the Kuwait National Museum, where it was reexamined by one of the present authors), is surely misread. The mint name is somewhat unclear but is probably al-Iskandariyah (Alexandria). It is, incidentally, not impossible that the reintroduction of gold minting at Damascus was a response to the cessation of crusader gold minting in or shortly after 1258.

25. Eliyahu Ashtor, *Histoire des prix et des salaires dans l'Orient médiéval* (Paris, 1969), pp. 239–240, and Irwin, *op. cit.*, pp. 91–93, provide many citations for the use of *Miṣrī* and *Ṣūrī* dinars. For example, the waqfs founded by Nūr-ad-Dīn (d. 1174) yielded in the year 608 (1211/2) 9,000 Ṣūrī dinars per month (Abū-Shāmah, *Kitāb ar-raudatain fī akhbār ad-daulatain*, ed. Muḥammad Hilmī Muḥammad Aḥmad [Cairo, 1956], I, 23). A waqf, of course, is a Moslem pious endowment for some worthy cause, so this is surely an example of the use of Ṣūrī dinars among Moslems, which Irwin denies. Another example cited by Irwin himself is a statement of the price of grain in Damascus in 1178/9 in Ṣūrī dinars. The debate over the use of crusader coins by Moslems has perhaps been overdrawn. Since Syria had no mint for gold during most of the 12th and 13th centuries, and since it is known that crusader bezants came into the Moslem territories as tribute, indemnities, and perhaps even trade payments, it can only be assumed that these bezants were used by Moslems in further transactions among themselves. The only alternatives would have been reserving such coins for return transactions with the crusaders or sending them to the Moslem mints in Egypt and Mesopotamia for recoinage. It does not necessarily follow that crusader coins predominated in the gold money in circulation, and only a tiny minority of transactions were large enough to make gold coins appropriate.

26. İbrahim and Cevriye Artuk, *İstanbul arkeoloji muzeleri teşhirdeki islâmî sikkeler kataloğu* (Istanbul, 1970), no. 1060 (Konya, 573), and *passim*.

ISLAMIC SILVER COINAGE

The eleventh and most of the twelfth centuries have been regarded as an era of "silver famine" for the Moslem Near East, with little or no silver coinage, but this is a misconception, as shown not only by the frequent references in Arabic written sources to transactions in dirhams, but also by the increasing repertoire of silver coins of Egypt and Syria found by numismatists once they began looking for them.²⁷ It is nevertheless true that the full-weight good silver dirham of the eighth to tenth centuries vanishes from the central Islamic lands in the eleventh and twelfth centuries, and it seems that many areas, especially east of the Euphrates, almost totally ceased coinage in silver for some time. The silver coinage of Egypt and Syria that survives from this period is difficult to study for a variety of reasons,²⁸ and the present state of numismatic knowledge is fragmentary indeed. Only a few generalizations can be made at this time. The region east of the Euphrates can be dealt with summarily: dirhams disappear completely, as far as is now known, in the early eleventh century (except in the farthest east) and do not reappear until the thirteenth century.

The type of small dirham characteristic of Egypt and Syria in the Fāṭimid era first appeared in Sicily or North Africa under the Aghlabids in the ninth century. This coinage was continued by the Fāṭimids and introduced by them to Egypt and Syria when they conquered these lands in 969. It is difficult to say if Egypt had any substantial dirham coinage before that date, for only a handful of Egyptian Ikhshīdīd dirhams are known. As with the absence of late Ikhshīdīd dinars, the paucity of Ikhshīdīd dirhams may be a result of the recoinage forced at the beginning of the Fāṭimid period. On the other hand, Egypt had no Islamic silver coinage at all before 787, and Egyptian dirhams are rare throughout the 'Abbāsīd and Ṭulūnīd eras.

27. Claude Cahen, "Monetary Circulation in Egypt at the Time of the Crusades and the Reform of Al-Kāmil," in *The Islamic Middle East (700-1900)*, ed. Avram L. Udovitch (Princeton, 1981), pp. 315-334; Balog, "History of the Dirhem in Egypt from the Fatimid Conquest until the Collapse of the Mamluk Empire, 358-922 H./968-1517 A.D.," *Rev. numis.*, 6th ser., III (1961), 109-146.

28. The silver coins of the period are small and much alloyed with copper, making them especially liable to corrosion, which usually renders the inscriptions partially illegible. Judging by those that survive, they were not particularly well struck to begin with; the dies are larger than the coin blank, so that only a part of the inscription appears on the coin. Sometimes most of the coin surface is blank, with only one or two letters to be seen. As a result, only a small proportion of the coins can be attributed with certainty to a specific date and place. These small dark-colored bits have often been overlooked or ignored in scientific archeological excavations, and they are of no interest at all to the illicit diggers who, for better or worse, are the main source for numismatic finds from the Near East.

In the reign of al-Ḥākim difficulties which are not yet clearly understood occurred, ending up in the recoinage of A.H. 400 (1009/10), when, for the first time, the gold coinage was changed in appearance during a caliph's reign.²⁹ It is possible, in fact, that this and the subsequent changes in the design of the gold coinage mentioned above are related much more to changes in the silver coinage than in the dinar. At any rate, the evolution of Fāṭimid silver coinage in the eleventh century will not be understood until the metrology and silver content of each of the successive types is studied separately. The general picture, however, is one of decline in the fineness of the silver, accompanied naturally by lower exchange rates against the dinar, which remained relatively constant in fineness.³⁰ At the end of the century, references to dirhams in Egypt are seldom encountered in the written sources, while surviving examples of such dirhams from the late years of al-Mustanşir and the reign of al-Musta'li are few.

The new dinar type introduced in 490 (1096/7) was accompanied by a new dirham.³¹ The designs of the two denominations are similar, but there was also a change in the fabrication of dirhams. Previously they were thin and circular, probably cut or punched out of silver sheets before striking, but after 490, and until the beginning of the thirteenth century, dirhams were struck on squarish chunks of silver cut by a chisel from a long ribbon-shaped ingot. Usually two opposite edges of the coins can be seen to be cut, but sometimes "tongue-shaped" dirhams are found with three rounded edges and one cut, evidently the end of an ingot.³² This dirham type endured into the Aiyūbid era with only the necessary changes in inscription (pl. XIII, no. 16).

Several contemporary descriptions of the Aiyūbid Egyptian mint specify that these dirhams were to be 30 percent silver and 70 percent

29. Al-Maqrīzī, *Ighāthat al-ummah bi-kashf al-ghummah*, ed. Muḥammad Muṣṭafā Ziyādah and Muḥammad ash-Shaiyāl (Cairo, 1940), pp. 15–16, 64–65. The problems arose in 397, according to the first passage, or 399, according to the second, but al-Maqrīzī does not say that the change in the coinage occurred in the same year, only that the situation continued until the reform. The change in the appearance of the coinage does not come until 400.

30. Balog, "History," p. 122; Goitein, *op. cit.*, I, 368–392.

31. Both old- and new-type dirhams are known from the reign of al-Musta'li (a new-type black dirham is published by Balog, "Études numismatiques de l'Égypte musulmane: Périodes fatimite et ayoubite, nouvelles observations sur la technique du monnayage," *Bulletin de l'Institut d'Égypte*, XXXIII (1951), 7–8; the ANS has another (1953.48.3; pl. XIII, no. 14), as well as a dirham of the older type (1971.132.15; unpublished, pl. XIII, no. 13). Ibn-Muyassar, *op. cit.*, II, 65, mentions a reform of the dinar in 490, and it seems reasonable to suppose that the new dirhams were introduced at the same time. The change is, probably wrongly, attributed to al-Āmir's reign by as-Suyūṭī, *Ḥusn al-muḥāḍarah*, II, 156 (ed. 1299, II, 205).

32. Balog, "Études numismatiques de l'Égypte musulmane, III: Fatimites, Ayoubites, premiers Mamelouks, leurs techniques monétaires," *Bulletin de l'Institut d'Égypte*, XXXV (1953), 401–429.

copper, a statement largely confirmed by a small number of modern analyses.³³ It seems likely that this was the intended fineness from the beginning. The weights of these little coins are quite irregular, ranging from less than half a gram up to more than two grams; for payments, they were weighed against a standard of about 2.95 grams per monetary dirham. The exchange rate during the twelfth and early thirteenth centuries was between 35 and 40 monetary dirhams per dinar.³⁴ In the Aiyūbid period, when these dirhams had to be distinguished from other silver coins, they are often identified specifically as "black" dirhams, but this term is seldom used earlier — they are simply called dirhams. A small number of larger round-flan dirhams of twelfth-century Fāṭimid Egypt survive; these have the same design and inscriptions as the square coins, vary widely in weight (from 2.25 to 3.60 grams), and judging by appearance (which can be misleading) have the same silver purity as the square coins (pl. XIII, no. 15).³⁵ Probably these should be regarded only as an alternate physical form of the standard dirham with the same monetary value (weight for weight). These Fāṭimid large black dirhams are not to be confused with the new dirhams introduced by Saladin, discussed below. The latter were a currency separate from the black dirham and intended to replace it. Aiyūbid large black dirhams have not been found.

In 622 (1225/6), under the Aiyūbid sultan al-Kāmil, a change was made in the small dirhams because of certain difficulties with the existing silver issues, but as contemporary sources make clear, the change was only in the method of manufacture.³⁶ The new "round" or

33. Ibn-Mammātī, *Qawāwīn ad-dawāwīn*, ed. 'Azīz Suryāl 'Atīyah (Cairo, 1943), pp. 331–333; al-Makhzūmī, *Minhāj*, trans. Cahen, "La Frappe des monnaies en Égypte au VIe/XIIe siècle d'après le *Minhāj* d'al-Makhzumi," in *Near Eastern Numismatics, Iconography, Epigraphy and History: Studies in Honor of George C. Miles*, ed. Dickran K. Kouymjian (Beirut, 1974), p. 338; Ibn-Ba'rah, *Kashf al-asrār al-'ilmīyah bi-dār ad-darb al-miṣriyah*, ed. 'Abd-ar-Rahmān Fahmī (Cairo, 1966), pp. 83–84, 87, trans. Ehrenkreutz, "Extracts from the Technical Manual on the Ayyubid Mint in Cairo," *Bulletin of the School of Oriental and African Studies*, XV (1953), 440–442. For modern analyses see Balog, "History," pp. 122, 128.

34. Goitein, *op. cit.*, I, 379–383. It is often asserted that the rate 40 : 1 corresponds to a rate for pure silver (*nuqrah*) dirhams of $13\frac{1}{2}$: 1, but this is mathematically incorrect; 40 : 1 for 30 percent fineness is equal to 12 : 1 for pure silver. An exchange rate of $13\frac{1}{2}$: 1 is attested only for the second half of the 13th century (*ibid.*, I, 386–387, 390); on the other hand, 12 : 1 is attested by one document of the twelfth century (*ibid.*, I, 387, no. 90).

35. Balog, "Notes on Some Fatimid Round-Flan Dirhams," *Numis. Chr.*, 7th ser., I (1961), 175–179.

36. Described by Ibn-Ba'rah, *op. cit.*, pp. 83–84, who states that they are to be 30 percent silver. The change may have been a restoration of the black dirham standard, for al-Kāmil's early dirhams are different in fabric and design from previous black dirhams and may have been less fine or otherwise unsatisfactory. Al-Kāmil has been unfairly accused of a "colossal fraud" because al-Maqrīzī, two centuries later, erroneously states that his new dirhams were two-thirds

"globular" black dirhams were made by striking blanks produced by pouring molten alloy over a cone so that the drops fell into water; their fineness, however, was unchanged. These continued to be struck in Egypt until the reign of Baybars. In his reign or later, the older cut-ribbon technique was reintroduced. The last known are from the reign of aṣ-Ṣāliḥ Ismāʿīl (1342–1345).³⁷ Although the fabric of Mamluk black dirhams is similar to earlier ones, it is not known if their fineness was the same.

In the eleventh century Fāṭimid dirhams were also issued at Syrian mints, apparently according to the same system that obtained in Egypt. Silver minting did not, however, cease in Syria at the time of the closure of the Fāṭimid gold mints mentioned above, although it seems to have diminished considerably. Debased silver coins are known bearing the names of Tughtigin of Damascus (497–522: 1104–1128), Alp Arslan (507–508: 1113–1115) of Aleppo (but probably struck in Damascus) (pl. XIII, no. 17),³⁸ and the Börid Ismāʿīl of Damascus (526–529: 1132–1135), as well as dirhams corresponding to the brief gold series from Börid Damascus, 530–540 (1135–1146). Generally the designs of these coins are inspired by contemporary or past Fāṭimid issues, but the names on them are those of Selchükids, the ʿAbbāsīd caliphs, and local Turkish Syrian rulers. Their debasement is such that it is difficult to be certain in some instances whether they are intended to be dirhams or copper *fulūs*, but at least some are surely billon (heavily alloyed silver.)³⁹ One billon issue of Aleppo, probably of 479–487 (1086–1095), is also known.⁴⁰ More of these coins will probably be found as numismatists become aware of their existence, but nevertheless they seem to be excessively scarce and probably were not issued in large quantities. None are known after 541 (1146/7). Neither these nor the preceding Fāṭimid silver issues were imitated by the crusaders, probably because the Franks' own small debased pennies fulfilled the same monetary function.

silver while they are in fact less than one-third, but there is no evidence that al-Kāmil himself made such an absurd claim, which would have fooled no one.

37. Balog, *Mamluk Sultans*, p. 172, no. 284.

38. Kamāl-ad-Dīn, *Kitāb zubdat al-ḥalab fī taʾrīkh Ḥalab*, in *RHC, Or.*, III, 604, mentions that Alp Arslan's name was put on the coinage of Damascus after his conquest of the city in 508 (1115); the ANS coin of Alp Arslan is probably this issue.

39. Only a few examples of these series have been published: Lane-Poole, *Catalogue*, IX, 296, no. 3051 (a billon dirham of Tughtigin); Coskun Alptekin, "Selçuklu paraları," *Selçuklu Arastirmaları Dergisi*, III (1971), 551, no. 209A (a billon dirham of Damascus, ca. 530–540). Others exist in public and private collections.

40. Lutz Ilisch, "Unedierte Silbermünzen der Salğūqen und ihren Nachfolger aus Nordsyrien," *Münstersche Numismatische Zeitung*, XII, no. 1 (March 1982), 10, no. 1.

Saladin's conquests in Syria began a new era in the history of the Islamic dirham. He introduced for the first time in two centuries the minting of full-weight good silver dirhams at Damascus, where the earliest recorded date on his new dirhams is 571 (1175/6), the year after his occupation of the city (pl. XIII, no. 18).⁴¹ By the following year, 572 (1176/7), silver dirhams were being struck in Aleppo with the name of the Zengid atabeg, Ismā'īl ibn-Maḥmūd (pl. XIV, no. 20).⁴²

Saladin's new dirhams departed from previous Islamic practice in having the main inscriptions on both sides enclosed in a square, which was in turn enclosed in a circle with subsidiary inscriptions in the sectors between the square and the circle.⁴³ When Saladin took Aleppo in 1183, he introduced full dirhams there as well, but with the central inscriptions enclosed in a hexagram, or "seal of Solomon", like pl. XIV, no. 21, a coin of his son aḡ-Zāhir.⁴⁴ Dirhams with one or the other of these designs were struck at several Aiyūbid mints in Syria (including, at one time or another, Gaza, Hamah, and Homs) as well as in towns in upper Mesopotamia and beyond, including Akhlāt, Harran, Ḥiṣn Kaifā, Manbij, Mardin, Maiyafariqin, Nisibin, and Edessa (ar-Ruhā). They were issued by the Artukids as well as by Aiyūbid princes, and also by the crusaders, as will be seen (pl. XIII, no. 19, a coin of Damascus, 1242/3, is one of the prototypes for the crusader dirhams). Both the square-type and hexagram-type dirhams were accompanied by analogous half dirhams, which probably circulated at par with the full dirhams (on a weight-for-weight basis) and are not to be confused with the black dirhams of Egypt, a separate currency.

In Shawwāl 583 (1187), Saladin ordered the introduction of these dirhams in Egypt to replace the Egyptian black dirhams, intending to relieve the populace of the necessity of weighing dirhams in transactions. The innovation did not succeed, however, possibly because the fineness of the new dirhams (in Egypt) was not consistent: some were pure silver and others only half silver.⁴⁵ At either fineness, the

41. Ignatz Pietraszewski, *Numi Mohammedani*, I (Berlin, 1843), 111, no. 406.

42. Unpublished, in the ANS collection (1951.108.4). A published example, of 574, is in Lane-Poole, *op. cit.*, III, 213, no. 603.

43. The design was new for dirhams, but was adapted from the prestigious Muwahḥid gold dinar of the western Mediterranean.

44. This design was quite new, and was noted by the historian Ibn-abī-Ṭaiy (quoted by Abū-Shāmah, *op. cit.* [Cairo, 1288/1871], II, 47).

45. The variation in fineness probably explains the conflicting reports by al-Maqrīzī: in the *Shudhūr al-'uqūd fī dhikr an-nuqūd*, ed. and trans. Daniel Eustache, "Études de numismatique et de métrologie musulmanes," *Hespéris Tāmuda*, X (1969), 128–129, he states that the new dirhams were half silver and half copper, but in the *Kitāb as-sulūk li-ma'rifat duwal al-mulūk*, ed. Ziyādah (Cairo, 1956) I, 99, the new dirhams are said to be of pure silver. These coins are very

new dirhams with their stable weight might have been acceptable and have replaced the irregular black dirhams as intended, but the populace apparently considered unreliability in alloy a greater disadvantage than the inconvenience of weighing out the black dirhams with their stable 30 percent silver content. The black dirham continued to be issued in Egypt throughout the Aiyūbid period and into the Mamluk era, but full dirhams, of Damascus type, were also struck in Egypt under al-ʿĀdil I and from the 1240's until 1260; their fineness is unknown.

In the latter year Baybars introduced a new dirham, analogous in appearance to his gold coinage and with 70 percent silver. This was the standard silver issue of the rest of the thirteenth and first half of the fourteenth century in both Egypt and Syria (pl. XIV, no. 23).⁴⁶

Following Saladin's initiative, silver coinage spread to Anatolia, Mesopotamia, and Iran in the thirteenth century. The Selchūkids of Rūm produced massive issues of dirhams from Anatolian mints, with a design quite different from Saladin's; Cilician Armenia issued quantities of silver trams; and the ʿAbbāsīd caliphs began minting dirhams in the 1230's. Under the Mongols, silver coinage became the standard currency of Iran by the end of the thirteenth century, in complete contrast to the situation only a century before. None of these coinages, however, is relevant to that of the crusaders.

ISLAMIC COPPER COINAGE

In general, copper coinage disappeared in the Moslem world in the ninth century, not to reappear until the twelfth or later. Egypt, for example, had no copper coinage after 872. In areas without copper currency, everyday transactions were probably carried out with cut-up dirhams, with standard commodities, or by accumulating transactions at neighborhood merchants until the total bill was large enough to pay with a dirham. In Fāṭimid and Aiyūbid Egypt, the small somewhat debased dirhams had a value low enough for everyday minor purchases.

There are, however, exceptions to this general situation. One area

scarce today. The two in the ANS were analyzed by Professor Adon A. Gordus of the University of Michigan Department of Chemistry. One (1972.250.14), dated 585, contained 52 percent silver, while a second (1917.215.1328; pl. XIV, no. 22), of 586, was 97.7 percent fine. Note that the later coin is the purer, but it would be hazardous to draw conclusions as to the temporal sequence of the two fineness levels from only two examples.

46. Balog, *Mamluk Sultans*; Bates, "The Coinage of the Mamlūk Sulṭān Baybars I: Additions and Corrections," ANS, *Museum Notes*, XXII (1977), 161-181.

where copper persisted longer than elsewhere, and returned sooner, was northern Syria. The earliest datable issue in the crusader period bears the name of Ridvan, ruler of Aleppo (1095–1113; pl. XIV, no. 24), but there are many anonymous coins of fabric and style similar to this issue, some of which may be earlier than his reign (pl. XIV, no. 25).⁴⁷ These coins are irregular in shape, but most often polygonal, with straight edges; the blanks appear to have been cut from thin sheets of copper with shears. They bear images of various kinds—a lion, elephant, or bird—or complicated geometrical figures. Their inscriptions are sparse and often cryptic. On the basis of provenance and a general similarity of style, they have generally been attributed to the Selchükids of Syria, and perhaps because of Ridvan's name, Aleppo is regarded as their center of manufacture, but until they have been carefully studied, these identifications should be accepted only tentatively. These coins are probably the original *qirtās*, a term that is known first in an account of the death of Ridvan, who left behind dinars of gold, black dirhams, silver coins, and *qirtās*.⁴⁸ This notice and others throughout the twelfth and into the thirteenth century suggest that *qirtās*, which means literally "papyrus" or by extension any rough brown paper, came to designate copper coinage in general in twelfth-century Syria. Looking at the coppers of the Selchükids of Syria, one can see how the appellation may have arisen, because either the thin sheets of copper or the thin, often rectangular, coins themselves may have brought to mind sheets of brown paper.

It is not known how long these coins were struck. They were probably replaced by a copper issue of the Zengid Nūr-ad-Dīn (1146–1174) struck on normal round flans with images borrowed from Byzantine coppers, but with his name and title in Arabic (pl. XIV, no. 26). These are generally attributed to Aleppo. Nūr-ad-Dīn also initiated copper coinage in Damascus, with a purely inscriptional issue bearing his name and the caliph's in bold tall script (pl. XIV, no. 27). The mint and date of issue are inscribed in the margin of these coins, but the dates most often are illegible; the earliest so far recorded is 558 (1162/3).⁴⁹ This particular Damascus issue was also called *qirtās* and was continued by Saladin and his successors until 611 (1214/5), when it was abolished.⁵⁰

47. Miles, "Islamic Coins," in *Antioch-on-the-Orontes*, IV, 1, *Ceramics and Islamic Coins*, ed. Frederick O. Waage (Princeton, 1948), pp. 119–121.

48. Ibn-abī-Ṭaiy, quoted in Ibn-al-Furāt, *Ta'rikh ad-duwal wa-l-mulūk*, ms. Vienna I, 75 verso (this reference was provided by Professor Claude Cahen).

49. Nikita Elisséeff, *Nur ad-Din: un grand prince musulman de Syrie au temps des croisades (511–569 H./1118–1174)* (Damascus, 1967), III, 821, noting a coin in the Damascus Museum.

50. Al-Maqrīzī, *Sulūk*, I, 180.

but small copper coinage continued to be called *qirṭās* in Damascus until at least as late as 720 (1320/1).⁵¹

Since the crusader states of northern Syria also issued copper coins beginning in the early twelfth century, and Latin Europe had no indigenous copper coinage, the possibility exists of some influence between the crusader coppers and the early polygonal *qirṭās*. The two series, however, are, with rare exceptions, not very similar in appearance. The crusader coppers are adaptations of Byzantine types, while the images on the Moslem coins are neither Byzantine nor Frankish but rather traditional Near Eastern. The crusader coins are also dissimilar in fabric, being struck on round, probably cast, flans, although a few thin polygonal crusader coppers are known, perhaps overstruck on Moslem *qirṭās*.⁵² It is not even clear which series antedates the other, since Miles's tentative attribution of a Moslem issue to the time of the Selchūkid Malik-Shāh (d. 485/1092) is unconfirmed. At most, it may be that the crusaders conquered a population using copper coins and issued their own coppers to meet an existing economic need. A single reference indicates that the Moslems referred to the crusader coppers also as *qirṭās*.⁵³

There are two other important Moslem copper coinages of the crusader era. One, the large image-bearing coppers of eastern Anatolia and northern Mesopotamia, evidently began as a Moslem adaptation of the heavy anonymous coppers of Byzantium, because the earliest issues, under the Dānishmendids Amīr Ghāzī (1104–1134) and Muḥammad (1134–1140; pl. XIV, no. 28), bear only Byzantine inscriptions and images.⁵⁴ Later issues have Arabic inscriptions combined with a wide range of different images, including Byzantine images from coins or wall paintings, types copied from pre-Islamic coins (Greek [pl. XIV, no. 29], Roman, Parthian, and Sāsānid), personifications of planets and other astronomical phenomena, and traditional Near Eastern royal images. Such coppers were struck by Dānishmendids, Artukids, Zengids, Aiyūbids, Rūm Selchūkids, and several minor Moslem dynasties. It has often been suggested that the use of images on this coinage evinces crusader influence, or issuance for trade with the crusaders, but in fact

51. *Ibid.*, II, 205, where the coins are described as "*fulūs* which are called *qirṭās*"; see Ashtor, *op. cit.*, pp. 242, 247, 260, and 263 for other references to *qirṭās* in the 13th century.

52. Gustave Schlumberger, *Numismatique de l'Orient latin* (Paris, 1878), plate II, nos. 4–5; Metcalf, *Coinage of the Crusades*, plate 3, no. 40.

53. Ash-Shaizarī, *Nihāyat ar-rutbah fī ṭalab al-ḥisbah*, ed. al-Bāz al-'Arīnī (Cairo, 1946), p. 75.

54. Estelle J. Whelan, "A Contribution to Danishmendid History: the Figured Copper Coins," *ANS, Museum Notes*, XXV (1980), 133–166.

there are no images derived from Latin Europe, or any other evidence linking these coins with the crusaders. Rather, the large coppers are generally found only in the regions where they were struck, and must have had an important place in the local monetary systems, judging by the abundance of surviving specimens. The large coppers gradually disappear during the thirteenth century, subsequent to (perhaps because of) the introduction of dirhams in their region.⁵⁵

Copper coinage was reintroduced to Egypt in 622 (1225) by the Aiyūbid sultan al-Kāmil. Initial difficulties resulted in several withdrawals of the new currency under the Aiyūbids, but by the time of the Mamluks copper *fulūs* were an accepted part of Egypt's currency. These Egyptian coppers, however, do not seem to have circulated outside Egypt and have little relevance to the crusaders.⁵⁶

B. Crusader Arabic Gold Issues⁵⁷

The kings of Jerusalem and the counts of Tripoli struck, in addition to billon deniers of western pattern, gold coinages for their domains. These coins, called *bizantii saraceni* or *bizantii saracenati* in the Latin sources, were issued in considerable quantities. From sometime before the reign of Baldwin III (1143–1163) until 1251 these bezants imitated more or less faithfully Moslem dinars, especially those of the Fāṭimid caliphs al-Mustanşir and al-Āmir. The issues of these long-reigning caliphs can be presumed, although there is no useful archaeological evidence, to have been the normal currency in Syria in the first decades after the establishment of the Latin kingdom. After 1251 the inscriptions on the coins were Christian, but still in Arabic. The imitations of al-Mustanşir's coinage (prototype, pl. XII, nos. 3, 5) are probably to be attributed to the northern principalities, while the coinage of the kingdom of Jerusalem was exclusively of the type of al-Āmir (prototype, pl. XII, no. 6). The best of the imitations are

55. The best general catalogue and discussion of this series in its historical context is *idem*, *The Public Figure: Political Iconography in Medieval Mesopotamia*, Ph.D. dissertation, New York University, 1979.

56. Hassanein Rabie, *The Financial System of Egypt, A.H. 564–741/A.D. 1169–1341* (London, 1972), pp. 182–184, 188–189, 195–197; Jere L. Bacharach, "Circassian Monetary Policy: Copper," *Journal of the Economic and Social History of the Orient*, XIX (1976), 32–47; Balog, *Ayyubids*, pp. 156–160. The argument put forward by Balog and others that glass jetons were used as small change in Egypt is contested by Bates, "The Function," *passim*.

57. This section was written by Metcalf, with additions and modifications by Bates.

elegant and legible, but the inscriptions and dates they bear are those of the prototype and irrelevant to their historical interpretation. Other specimens are blundered and meaningless to varying degrees. The evidence for their geographical and chronological attribution is therefore from finds of these coins in association in hoards; from analyses of their metal fineness, the relative proportions of trace elements in their alloys, and their weight standards; and from contemporary literary texts, Latin and Arabic.⁵⁸

The official status of these coins (which have long been recognized as belonging in some sense to the crusader principalities)⁵⁹ is proved by documentary sources, in which they are sometimes referred to explicitly as, for example, *bisancii auri saracenati de moneta regis Hierusalem* (gold saracenate bezants of the coinage of the king of Jerusalem). They were intended to circulate within the Latin states, and there is little if any evidence to suggest that they enjoyed an international role, except that they are sometimes found in Cilician Armenia, and finds and literary references show that they were used in the Moslem hinterland of the crusader states, for Moslem Syria had little gold coinage of its own in the twelfth and thirteenth centuries. The idea that they were widely current in the Mediterranean world, however, is a *canard*. They were, rather, one element (the other being billon) in a national coinage under tight control.

Although the bezants were imitations, they were not intended to deceive.⁶⁰ Their weight standards were less than the nominal Islamic dinar of 4.25 grams, and although Moslem gold coins of the twelfth and thirteenth centuries fluctuate in weight, few drop below 4.0 grams, while the bezants virtually never exceed that weight. Those who were wealthy enough to use gold coins would have had no trouble in distinguishing the two currencies, which in any case did not normally mingle in circulation. Moreover, the alloy of the bezant was quite different from that of the dinar. Fāṭimid dinars of the crusader period, including the prototypes of the crusader imitations, were usually as pure as the workmen's skill could make them, while nearly all of the imitations have finenesses of 80 percent or less. The debased alloys of the bezants were in no way either fraudulent or incompetent: they reflected decisions to give the coins a certain intrinsic value.

58. For a more detailed discussion of the evidence for the attributions to be proposed here see Gordus and Metcalf, *op. cit.*, and Metcalf, *Coinage of the Crusades*, pp. 9-14, 42-44.

59. The first to identify them was Henri Lavoix, in 1865; see Balog and Yvon, *op. cit.*, p. 133.

60. Cf. Ehrenkreutz, "Arabic Dinars Struck by the Crusaders, a Case of Ignorance or of Economic Subversion," *Journal of the Economic and Social History of the Orient*, VII (1964), 165-182.

For the most part, the alloy variations were parallel in the northern and southern crusader states. From about the middle of the twelfth century the alloy was, by medieval standards, controlled within a perfectly acceptable variation of 1–2 percent, and the bezant deserved its high reputation. It was a far more valuable coin than the silver or billon deniers that were universal in western Christendom, and it answered the needs, no doubt, of a merchant class that would otherwise have found it convenient to use Byzantine or Arabic gold pieces. To the economic historian, the significant aspect of the evidence of the bezants is that gold should have flowed into the mints of the Latin east in quantities sufficient to strike so many coins.

THE GOLD COINAGE OF THE KINGDOM OF JERUSALEM

The most important evidence for the relative chronology of the gold coinage of the kingdom of Jerusalem is furnished by analysis of the gold content of the bezants. Nearly all the bezants imitating the coinage of al-Āmir can be divided into two groups, one of close to 80 percent fineness and another of about 68 percent. Hoard evidence, as well as the fact that the dated Christian Arabic coinage of 1251 and after is also of about 68 percent fineness, indicate that the latter coins are the later in time. The small remaining body of coins with fineness above 80 percent can reasonably be placed at the beginning of the sequence. Establishing an absolute chronology for these series is more problematic.

The date of the beginning of gold coinage in the kingdom is difficult to estimate. Ibn-Khallikān, a century and a half later (but presumably using an earlier source), records that when the city of Tyre eventually fell to the Franks in 1124 the crusaders continued for three years to strike coins in the name of al-Āmir, at the end of which time they ceased to do so.⁶¹ Since no coins of Tyre have survived bearing the year 518, the Moslem date of the capture of the city, and only one is known of the previous year, it is difficult to assume that the crusaders simply continued to strike the Moslem issue current at the time of the conquest, for at least one or two might be expected to have survived. In any case Acre, which seems to have been a more important mint for the crusaders than Tyre, was conquered in 1104, and had had a Moslem mint at least until 1101. It is theoretically possible that the minting of gold by the crusaders might have begun at Acre even before the conquest of Tyre. The earliest evidence from the Latin side

61. Ibn-Khallikān, *Wafāyat*, loc. cit. (n. 21).

is a *colleganza* of July 1142, which makes it certain that crusader bezants were already being struck in the kingdom of Jerusalem before the accession of Baldwin III: it refers to a debt to be paid at Acre in *bizancios saracenatos bonos auri de rege illius terrae de pesa secundum consuetudinem illius terrae*⁶² (saracenate bezants of good gold of the king of that country and of a weight according to the custom of that country).

If, then, the crusaders began issuing gold coins sometime between 1104 and 1142, what were these coins? Among issues identified so far as crusader imitations, there is only one variety which, by reason of its high gold content, is a likely candidate for an issue of the kingdom of Jerusalem in the period before the introduction of coins of 80 percent fineness about the middle of the twelfth century. This is BY 26, a relatively rare group, which amalgamates two very different styles of coinage, one small and compact (pl. XV, no. 30), the other on larger flans, with stiff, thin lettering and a wide empty border between the two circles of the legend (pl. XV, no. 31). Four specimens of the large-flan variety range from 91 to 97.4 percent in fineness, while three small-flan coins are lower, from 82.5 to 88.1 percent.⁶³ Both styles imitate the coinage of al-Āmir, but they are rather different from one another in appearance. The tall, elegant script and wide border of the large-flan coins is unlike any other crusader imitations, and indeed rather unlike the Fāṭimid prototype; the very earliest issues of al-Āmir, just after 1101, have a wider space between inner and outer inscriptions than his later dinars, but their script is nothing like the large-flan BY 26. The small-flan coins included in BY 26 are, on the contrary, much like the later crusader issues and resemble also their Fāṭimid prototypes. Probably the two varieties should be reclassified separately, with the small-flan coins seen as precursors of the Acre coinage of the kingdom of Jerusalem, and the large-flan coins reserved for further consideration. This small handful of known specimens seems insufficient to fill the entire span of years during which they may have been issued. It may be, however, that there were originally many more, and that the adoption of the 80 percent standard was accompanied by a recoinage that called in most of the existing bezants to the melting pot.

The date of the introduction of the 80 percent standard is quite uncertain. The aftermath of the Second Crusade, 1148, seems to be the earliest possible occasion. A later date, up to just before 1165, would

62. Raimondo Morozzo della Rocca and Antonino Lombardo, eds., *Documenti del commercio veneziano nei secoli XI–XIII* (Regesta chartarum Italiae, XXVIII [1940]), no. 81.

63. More fully discussed in Gordus and Metcalf, *op. cit.*, pp. 139–140.

fit the numismatic evidence as well, and perhaps accord with the references to *bisancios* . . . *de moneta regis Hierusalem* which begin in 1161.⁶⁴ The date 1165 as *ante quem* is suggested by a document of that year which speaks of *bisancios* . . . *novos* and *veteres*; the *novi* are perhaps the 80 percent coins, while *veteres* are those of higher fineness. It must be admitted, however, that *novi* is a term used over a wide range of dates, and its interpretation is not without difficulties. Still, it seems safe at least to say that the bezants of 80 percent fineness were introduced probably in the reign of Baldwin III, or under Amalric (1163–1174) at the latest.

The date of the reduction in fineness from 80 to 68 percent can almost certainly be put in the second half of the twelfth century, and one historical occasion immediately presents itself as probable: the time of Saladin's conquests, or about 1186–1188. The events of 1187 and 1188 shattered the Latin kingdom; Guy (1186–1192) evidently found it impossible to issue proper silver coinage, and the financial crisis may have necessitated a change in the gold currency as well. The date is supported by further references in documents of 1190, 1192, and 1194 to "new bezants". Further possible support is provided by a hoard said to be from Latakia, if this provenance is reliable, for that city fell to Saladin in July 1188 and the hoard contained two coins of the reduced standard along with thirty-nine of the 80 percent standard. It seems likely, therefore, to have been concealed just at the time of danger from Saladin, placing the beginning of the new coinage at least some months earlier.⁶⁵

The coins to be attributed to this phase are BY 25 (pl. XV, no. 32), BY 27a–d (pl. XV, no. 33), BY 27f, BY 20–21 (pl. XV, no. 34), and BY 22–24 (pl. XV, no. 35). All of these are imitations of the coinage of al-Āmir, although the type was standard in Egypt throughout most of the twelfth century. They can be divided, largely on the basis of differences in the ratio of silver to copper as minor constituents of the alloy, into three groups which probably correspond to different mints: Acre and Tyre no doubt account for most of the production, but there are problems in deciding which group belongs to which mint. Perhaps BY 25 and 27 belong to Acre, BY 20–21 possibly to Tyre, while BY 22–24 remain uncertain and may be the product either of the same mint as BY 20–21 or of a third mint.⁶⁶ BY 25 is listed by Balog and

64. Yvon, "Besants sarracénats du roi de Jérusalem," *Bulletin de la Société française de numismatique* (1961), pp. 81–82; Gordus and Metcalf, *op. cit.*, p. 138.

65. Gordus and Metcalf, *op. cit.*, pp. 130–131.

66. The rather complicated arguments for mint attribution are set out in detail by Gordus and Metcalf, *op. cit.*, pp. 132–136.

Yvon among the "legible" imitations, while BY 27 begins the listing of "imitations grossières", completely illegible, but there is little obvious difference among the many bezants assigned to these two classes. Nor for that matter is there any great visual distinction between the groups assigned to Acre, Tyre, and a possible uncertain mint. They are tentatively assigned on the basis of consistent differences in the ratio of silver to copper as alloying elements, and, in the case of BY 20-21, on the fact that a large proportion of these coins were in a hoard said to have been found near Tyre.⁶⁷ The existence of a mint at Tyre at least until 1190-1192 is shown by a Venetian document of a later date referring to its closure or relocation in this period.⁶⁸ Probably a definitive classification of these coins can be made only on the basis of a complete die study in conjunction with the results of metal analysis. It seems likely that the bezants of the second phase initially were intended to be of 20 Byzantine carats weight, about 3.74 grams, and to contain 16 carats of gold, 3½ carats of silver, and ½ carat of copper, with some falling away from these standards as time went on.⁶⁹

The bezants of the third phase of the coinage of the kingdom of Jerusalem have the same prototype as those of the second phase and are superficially similar, but in this instance it is easy to distinguish the two phases visually: the coins of phase 3 (BY 27e-f and 28-32; pl. XV, no. 36) are markedly more barbarous in execution, with much thicker letters, executed as it were with a blunt instrument. Many of them have little symbols added in the central field of the obverse or reverse, such as a point, a pair of points, or a small crescent. They are also distinguished by their lower fineness, ranging mostly from 67 to 70 percent gold, with a few specimens as low as 64 percent, and by generally lower weights, ranging mostly from 3.25 to 3.5 grams. It seems possible that the mint intended to produce a coin of 18 carats weight, with 12 carats of gold, 4 carats of silver, and 2 of copper, resulting in a fineness of two-thirds gold, although the coins in general contain slightly more gold and less copper than this prescription would yield. The discrepancy may be explained by error in the analytical technique, by irregularities at the mint, or by use of a different alloy formula.⁷⁰ Another indication of the assumed fineness of these coins is provided by the Moslem writer an-Nābulusī, who in his discussion of problems in the Egyptian mint written about 1242 men-

67. Balog and Yvon, "Deux trésors de monnaies d'or des croisés," *ANS, Museum Notes*, XI (1964), 301-302. See above, note 22.

68. Metcalf, *Coinage of the Crusades*, p. 12.

69. Gordus and Metcalf, *op. cit.*, p. 143.

70. See *ibid.*, pp. 141-142, for full discussion.

tions that Šūrī dinars were accepted by the mint at a rate of 60 Egyptian mithqals per 100 Šūrī mithqals;⁷¹ that is, a given weight of Šūrī dinars was valued at 60 percent of the value of an equal weight of Egyptian dinars (which were assumed by the mint to be pure gold). If we assume that this figure was the final result to the customer, taking into account the 5 percent minting charge which was standard a few years earlier (according to Ibn-Ba'rah⁷²), it appears that the Šūrī dinar was rated as if 65 percent gold. This is well within the actual fineness range of phase 3 dinars, and if one assumes also that the Egyptian mint slightly underestimated the fineness of foreign dinars, as appears from Ibn-Ba'rah's tabulation, the figure is not inconsistent with an estimated intended fineness of two-thirds gold.

Probably nearly all these are products of the Acre mint, an assumption based on their similarity in weight, fineness, and silver/copper ratio

71. An-Nābulusī, *Luma' al-qawāwīn al-mudīyah*, ed. Cahen, *Bulletin des études orientales*, XVI (1958-1960), 53.

72. Ibn-Ba'rah, *op. cit.*, pp. 58-61; Ehrenkreutz, "Standard," p. 163. Ehrenkreutz's proposal that Ibn-Ba'rah also refers to the Šūrī dinar is in error. The very obscure word that Ehrenkreutz read "Šūrī" has been read "Ya'qūbī" by two subsequent editors of the text (Fahmī, editor of the complete manuscript, and Ḥusayn Mu'nis, who edited this passage in his edition of 'Alī ibn-Yūsuf al-Ḥākim, *Ad-dawḥah al-mustabakah fī dawābiṭ dār as-sikkah* [Madrid, 1960], p. 58, no. 2); that is, the term "Ya'qūbī" is used twice in the text, and the two first lines of the tabulation by Ehrenkreutz both refer to the same issue, which is to be identified as North African, not crusader. On the other hand, another entry in Ibn-Ba'rah's list of the values of various gold issues set by the Egyptian mint may conceal, within some apparent corruption of the text, a reference to the Šūrī dinar. This is the next to last coin, named in the manuscript "tūrī" or "thūrī" dinar, neither term having any evident meaning. Fahmī and Mu'nis, the editors of the text, both suggest emending this term to "Nūrī", meaning dinars struck by a ruler named Nūr-ad-Dīn; the issues of the Zengid atabegs of Mosul might be meant, but these seem to be mentioned already under the term "atabākī". Ehrenkreutz suggested a similarity of "tūrī" with the word he read "tūrī" in an-Nābulusī's text, which is in fact Šūrī (it is the reference under discussion above). It is barely possible that Šūrī could somehow be transformed by a copyist into "tūrī"; the letters š and t are not similar in Arabic, but the rest of the word is the same.

A peculiarity of this passage is that, in this one instance, the various figures given by Ibn-Ba'rah do not jibe. He says that this coin lost 10 percent in refining which, after deduction of the standard 5 percent mint charges, left 85 mithqals per hundred to the customer. This figure is anomalous because Ibn-Ba'rah's listing is in order of fineness; 85 percent should come near the top of the list, not at the bottom. Moreover, Ibn-Ba'rah gives the dirham value of each of the coins he lists, based on a standard of 40 dirhams per Egyptian mithqal; the "tūrī" dinar is said to be worth 24 dirhams, but this figure is quite wrong if the coin is valued at 85 percent of the Egyptian mithqal. Ehrenkreutz resolved these contradictions by emending the loss in minting from 10 to 35, but this is opposed by the text's statement that 85 mithqals were left to the customer. We would propose another solution, based on the fact that the 24-dirham ratio given by the text corresponds exactly to a value of 60 mithqals per hundred, the same as the figure found in an-Nābulusī for the Šūrī dinar. It may be that the original text of Ibn-Ba'rah had entries for both a Nūrī and a Šūrī dinar. The mithqal values given in the present manuscript are not unreasonable for the dinars of Mosul (if that is the correct identification of the tūrī/thūrī/nūrī dinar) while the dirham value given could have pertained originally to the Šūrī dinar. The similarity of the two words may well have led some copyist to conflate the two entries.

to the bezants with Christian Arabic inscriptions, which bear the authentic mint name Acre. One analyzed example of the class BY 20–21 has only a 58 percent fineness, and may represent the phase 3 coinage of the Tyre mint. As suggested, this series comes after the imitations with 80 percent and begins probably shortly before the concealment of the Latakia hoard (1188?). The date may also have been not long before the closure of the Tyre mint (1190–1192), but the new bezants need not have been introduced immediately after the termination of the old, especially considering the sharp break in style between the two. There may have been a period of months or years between the end of one and the beginning of the next, while the crusaders reorganized after the defeats of 1187. As for the termination of phase 3, it is reasonable to believe that it continued until the visit of the papal legate Odo in 1250, because the introduction of Christian Arabic crusader gold immediately afterward makes no sense otherwise.

In the spring of 1250 Odo, bishop of Châteauroux, arrived in Syria in the entourage of Louis IX and reported to pope Innocent IV on the monetary practices of the Franks in Syria. His report has not survived, but the response of Innocent IV is still extant.⁷³ In it the pope takes notice of the striking of bezants and drachms (silver coins) by the Christians of Acre and Tripoli with the name of Mohammed and the date of the era of his birth (*sic*). The practice was forbidden, under pain of excommunication.

Even before Innocent's letter arrived, Odo, probably with Louis's support, put a stop to the purely imitative coinage. In response, the mint of Acre began the production of a new type of bezant, much like the old in its general appearance,⁷⁴ weight standard, and fineness, but bearing inscriptions in legible Arabic proclaiming Christian instead of Moslem doctrines (pl. XV, no. 37). On one side, the outer margin states the place and date of issue: "struck in Acre in the year one thousand two hundred, one and fifty, of the Incarnation of our Lord the Messiah." The inner circular inscription proclaims "Father, Son, and Holy Ghost" and the central inscription continues, in two lines, "one

73. It is quoted by Lavoix, *Monnaies à légendes arabes frappées en Syrie par les croisés* (Paris, 1877), pp. 52–53.

74. Balog and Yvon, "Monnaies," p. 158, take issue with Lavoix's statement that the prototype for these coins is the same dinar of al-Āmir that served as prototype for the imitations. They assert rather that the prototype is the "contemporary" Aiyūbid gold coinage. This is nonsense; the coins are nothing like contemporary Aiyūbid coins except in their cursive Arabic script, but this latter feature is only a result of the fact that the inscriptions for the first time are original, not copied from an old prototype, and therefore naturally in contemporary script. Otherwise the design, with a small central field surrounded by two circular inscriptions, is identical to that of the imitations that preceded them.

godhead".⁷⁵ On the other side, the outer and inner circular inscriptions read: "We are glorified by the Cross of our Lord Jesus the Messiah, in whom is our salvation and our life and our resurrection, and in whom is our deliverance and pardon."⁷⁶ On this same side, the central inscription of the imitations is replaced by a cross, and smaller crosses mark the beginnings of all circular inscriptions on both sides of the coin. The year 1251 is the earliest known for this series; none are yet known with the date 1252, but the years 1253–1258 are all represented.⁷⁷ If these dates are authentic, it would appear that the devastation of Acre by the war of Saint Sabas brought the minting of gold to an end.

The fineness of these coins seems to be the same as the preceding series, ranging from 62.4 to 68.7 percent. An Italian list of Mediterranean gold coins and their finenesses⁷⁸ gives for the *bisanti d'Acricolla croce* a fineness of 16½ carats, or in some manuscripts 15½ (also 16 *meno* ½). The former figure, in the earliest manuscript, is equivalent to 68 percent, which seems rather high in comparison to the coins' average fineness of 65.85 percent. The lower figure, in the next three manuscripts in chronological order, corresponds better at 65.28 percent. Possibly the copyist of the earliest of the extant manuscripts mistakenly substituted *et* for *meno*.

The only crusader gold issue which might be attributable to the years after 1258 is the very rare Agnus Dei coinage (pl. XV, no. 38), which is neither an imitation nor inspired by a Moslem issue, but which has the same fineness and silver/copper ratio as the Christian Arabic issues of Acre. It has been attributed by Grierson⁷⁹ to Antioch, and to the period of Louis's stay in Syria, 1250–1254. It seems unlikely, however,

75. The latter phrase has been gratuitously corrected by earlier catalogers, who assumed that the Arabic word *ilāh*, "god, divinity, godhead", was an error for *Allāh*, "God". Considering that the remainder of the inscriptions on the coins are perfectly literate, there is no reason to think that the spelling was accidental in this one instance.

76. The word *takhalluṣ*, "deliverance", is misspelled *taḥalluṣ* in the Arabic version of the inscriptions by both Lavoix, *op. cit.*, p. 54, and Balog and Yvon, "Monnaies," p. 158. Presumably the latter merely copied a typographical error in the earlier work. The difference is only a single dot.

77. In comparison, the corresponding silver coins, discussed below, are known only for the year 1251.

78. Found in six manuscripts ranging in date from *ca.* 1350 to *ca.* 1480, edited by the late Allan Evans in an unpublished typescript deposited after his death in the American Numismatic Society. The earliest of these manuscripts is Riccardiano 2236, fol. 43^r, giving 16½ carats as the fineness of the coin; those with variant forms of the fineness are Datini 1174, fol. 24^v (dated *ca.* 1380, with 15½ carats) and Conventi G, VII, 1137, fol. 249^r (dated 1418, with 16 less ½ carats). The authors are grateful to Dr. Alan Stahl for bringing this material to their attention.

79. Philip Grierson, "A Rare Crusader Bezan with the *Christus vincit* Legend," *ANS, Museum Notes*, VI (1954), 169–178.

that Antioch, which so far as we can judge had never minted gold bezants, would have initiated such a major departure from the traditional bezant at so early a date. Rather than a precedent for the design of the gros tournois and the French *écu d'or*, might the Agnus Dei issue not have been rather an echo of the latter coin, introduced perhaps at Acre in 1266 or more probably at Tripoli after 1268? There seems no compelling reason against a date after 1266, and the Agnus Dei issue might well be a parallel to the silver gros of Tripoli of that era.⁸⁰

There are numerous references in the documents and histories to saracenate bezants and *Ṣūrī* dinars after 1258 up into the 1280's, with the latest in 1302–1303.⁸¹ It seems possible that the crusader bezants, in the absence of any abundant competitor, continued to circulate for some time after their minting ceased. Damascus began to mint gold coins in the reign of Baybars, after 1260, but Mamluk Syrian dinars seem to have been produced only irregularly and in small quantities.

THE GOLD COINAGE OF THE NORTHERN CRUSADER STATES

The coins discussed so far are all imitations or adaptations of a single prototype, the dinars of the Fātimid caliph al-Āmir. All these have been attributed to the kingdom of Jerusalem. There is another group of bezants, copied from the coinage of the eleventh-century caliph al-Mustanşir, which seem to represent a regular and substantive series, struck over a long period of time in large quantities, although they are not so abundant as the al-Āmir imitations. These are evidently the official gold coinage of another of the crusader principalities, and the only question is whether they were minted at Antioch or Tripoli, or both. Thirteenth-century documents mention both *bisantii tripolitani* and *bisantii antiocheni*, but it is not quite certain — since the territories were under united rule — whether these imply a mint in each place or are merely legal phrases. The analytical evidence makes the hypothesis of two mints unlikely, although it does not rule it out. Stylistically, the al-Mustanşir imitations all seem to belong to a single series; numismatists would be at a loss to know how they could be attributed to two mints. Most decisive, at least for the mid-thirteenth century, is the papal letter responding to the complaints of Odo of Châteaurox, for while it forbids the manufacture of imitations in all the cru-

80. Gordus and Metcalf, *op. cit.*, p. 133.

81. Irwin, *op. cit.*, p. 92.

sader territories — Jerusalem, Tripoli, and Antioch — it mentions only Acre and Tripoli as the cities where they were being made. The actual coins used in Antioch, described for legal purposes as bezants of Antioch, were most likely issues of the prince of that principality (who also was count of Tripoli), struck at Tripoli.⁸²

Similarly the *bissancii sarracinati d'Armenie* that are frequently referred to in notarial acts from the port of Ayas in Cilician Armenia⁸³ are, we may be sure, the expression of a legal standard of quality rather than coins minted in Cilicia. Later in the thirteenth century they may even have become merely "ghost monies", an accounting device for recording sums that were paid in silver currencies.

The prototype for the imitations of al-Mustansir's dinars, as discussed in the previous section, is not precisely identifiable. They resemble any of several of his dinar varieties with broad central fields containing several horizontal inscriptions.⁸⁴ All the imitations have a semblance, at least, of the words "Ma'add" and "Ali" at the top of the field; these are usually the only words that can be read except by direct comparison to one of the originals. All have an empty band surrounding the field and an outer marginal inscription which is also nearly illegible. They can be divided into several groups on the basis of their gold content, and this classification, as well as increasing barbarity of style, suggests a chronological arrangement from highest to lowest gold fineness, like the bezants of Jerusalem. The hoard evidence, slender as it is, supports this hypothesis, suggesting also that the sequence of reductions was at least roughly parallel.⁸⁵

The earliest gold coinage of Tripoli is probably BY 2, characterized by high fineness and relatively careful workmanship. Unlike the remainder of the al-Mustansir imitations, BY 2 has five horizontal lines of inscription on each side, and stylistically it also stands out. It can be divided into two subvarieties which are similar in their rendering of the letter shapes but with subtle differentiation in style, best seen on the illustration. Among those analyzed by Gordus, the two ANS specimens represent one subvariety, with finenesses of 97.9 (pl. XVI, no. 39) and 86.6 percent, while the Paris specimen, representing the other subvariety (the one illustrated by Balog and Yvon), falls between them

82. Gordus and Metcalf, *op. cit.*, pp. 132–133.

83. Paul Z. Bedoukian, *The Coinage of Cilician Armenia* (ANS, Numismatic Notes and Monographs, no. 147; New York, 1962), p. 45. On "ghost monies" see Carlo M. Cipolla, *Money, Prices, and Civilization in the Mediterranean World* (Princeton, 1956), pp. 38–51.

84. A single coin imitates al-Mustansir's concentric legend issue; it is doubtful whether it belongs with the other imitations of his dinars. See below, p. 455.

85. Gordus and Metcalf, *op. cit.*, pp. 128–131.

with a fineness of 92.5 percent (another example of this subvariety, not the one analyzed, pl. XVI, no. 40). It differs markedly from the other two in its ratio of silver to copper. The coins of this group, however, are definitively linked as the products of a single mint not only by certain idiosyncrasies of letter form but also by the presence of three oblique strokes crossing the empty band between field and margin on both sides of the coin. These strokes link this group, in turn, to the remainder of the issues attributed to Tripoli, many of which also have markings in this area (although not oblique strokes).⁸⁶

The remaining bezants of Tripoli form a fairly homogeneous series. All have only four lines of inscription on obverse and reverse, and many, though not all, have marks of some kind—small circles or dots—in the empty band around the field. Neither the presence or absence of markings nor their arrangement when present seems to have any relationship to differences that can be established on other grounds, but the marks nevertheless may have had some secret significance for mint personnel and others. Although the field inscriptions, except for the words “Alī” and “Ma’add”, are complete gibberish, they are nonetheless regular from one coin to the next. For example, the last line of the reverse (arbitrarily defined as the side with “Ma’add”) always has a distinctive pattern which can best be described as two vertical wedge-shaped lines, a circle with a tail, a circle, and two more wedge shapes (reading Arabic-fashion from right to left). This simplified rendering of the Arabic becomes more condensed on the latest issues, but its gradual evolution can be easily traced when a number of specimens are examined. From their style one may judge that this is a continuous series of coins from a single mint.

It can be subdivided into four groups. The first (BY 3 and BY 4?) is of relatively finer workmanship. Only two of these were analyzed by Gordus and Metcalf; both were examples of BY 3 with 89.7 and 82.9 percent gold. This level of gold fineness overlaps with the fineness of BY 2 and suggests that BY 3 followed it very closely. Both BY 2 and BY 3 can be seen as analogues of the phase I coinage of the kingdom of Jerusalem, and probably can be assigned to the first half, or at least to the first two-thirds, of the twelfth century. BY 4 is associated with BY 3 on the basis of style.

The next group, BY 5–6, resembles BY 3–4 greatly, but there is a distinct decline from one to the next in workmanship. BY 5–6 are classified by Balog and Yvon as the first in the series “monnaies d’imita-

86. *Ibid.*, p. 140. BY 1 is there included with BY 2 as a possible early production of the Tripoli mint, but it cannot be that early, as it has Saladin’s name on it. See below, p. 455.

tion grossière". One example of each of BY 5 and 6 was analyzed, with 71.3 and 73.6 percent gold, respectively. The number of coins so far analyzed is small, making definitive conclusions hazardous, but if, as seems almost certain from comparison of the engraving of the two groups, BY 3-4 was followed chronologically by BY 5-6, then there was, as in the kingdom of Jerusalem, a change from a higher but irregular standard of alloy to one that was lower but more tightly controlled. It appears probable that BY 5-6 are analogous to the phase 2 bezants of Jerusalem. The change in gold standard may have taken place at about the same time.

The last two groups have in common a much cruder style than the previous issues (Balog and Yvon introduce them as "plus grossière encore") and a considerable reduction in gold content, ranging for the two groups together from 57 to 67 percent, with the first group concentrated around 62 percent and the second about 60.6 percent. On both the letters are much thicker and more abbreviated than before—like the phase 3 coins of the kingdom, they seem to have been engraved with a blunt instrument. The first of these two groups (BY 7-12; pl. XVI, no. 41) can be easily distinguished from the second (BY 13-16; pl. XVI, no. 42) by the presence on the latter of the letters B and T on obverse and reverse in the same position as the words "Ma'add" and "Alī" on earlier issues. Some of the B-T bezants also have a small cross on one side or the other, worked inconspicuously into the pseudo-Arabic inscription.⁸⁷ These two groups can plausibly be assigned to the era of Jerusalem's phase 3, that is, to the period between Saladin's conquests and the edict of Innocent IV forbidding imitations of Moslem coins.

These Tripoli bezants, although lower in fineness than those of Acre, are heavier on the average; it seems possible at least that they were also intended to contain 12 carats of gold, but to weigh 19 instead of 18 carats (with 4½ carats of silver and 2½ of copper).⁸⁸ These are quite possibly the same *bisante saracinato* mentioned in the Italian merchants' list previously cited⁸⁹ with a fineness of 15 carats (62.5 percent) and a value of 12 per ounce (of Florentine florins). This latter relation-

87. There is no significant distinction to be drawn between the B-T bezants with and without the cross; both dies of at least one specimen without cross were used separately in combination with other dies containing the cross (Balog and Yvon, "Monnaies," pp. 142-143).

88. Gordus and Metcalf, *op. cit.*, pp. 132, 142.

89. Above, note 78. *Bisanti saracinati d'oro* of the same fineness are also in another merchants' list edited by Evans from several manuscripts, of which the earliest is Archivio di Stato di Firenze, Manoscritti 75, fol. 288^r, assigned by him to 1320; another is that of Pegolotti's *La Pratica della mercatura* of 1320-1340 (ed. Evans, Cambridge, Mass., 1936, p. 288). This latter tradition does not give the relationship to the florin.

ship, according to Evans's calculations, indicates a weight standard of 3.78 grams, since the florin, 24 carats fine, weighed one-eighth of an ounce of 28.33 grams.

The letters B and T have been much discussed, without any definitive conclusion. Most previous proposals are eliminated by the analysis data, which put these coins clearly in the thirteenth century, probably at the very end of the series of imitations. The coins with B and T may, indeed, be contemporary with the Christian Arabic bezants of Acre, issued 1251–1258.⁹⁰ This attribution makes it reasonable to conjecture that B and T stand for *Boemundus* and *Tripolis* (as found in the obverse and reverse of the Latin silver coins). They are still essentially imitations, it is true, but their inscriptions are so completely barbarous that no real trace of their original Islamic import remains, so they may have been considered permissible within the terms of the papal edict. If they do in fact come from the period after the edict, there is no reason to assume that they ended in precisely the same year as the gold coinage of Acre; Tripoli did not fall to the Mamluks until 1289.

OTHER GOLD ISSUES OF THE CRUSADERS

The arrangement proposed above accounts for the great majority of the surviving bezants: roughly 160 out of about 200 published specimens. There remain a number of coins that seem certainly to be attributable to the crusaders, but cannot be fitted into the two major minting sequences. One such group are the coins in the Latakia hoard which seem to be dinars of 'Alī ibn-Muḥammad (an eleventh-century ruler of Yemen) bearing the mint name Zabīd and the date 451 (1059/60; pl. XVI, no. 43). Although Balog and Yvon considered these authentic, Miles already in 1967 labeled them imitations which he suspected would eventually be classed as crusader coins.⁹¹ Their presence in a hoard of the late twelfth century, as well as their gold content of 77.2 to 81.1 percent, is sufficient evidence for their identification as crusader issues. The gold content is the same as the issues of the kingdom of Jerusalem in the second half of the twelfth century, but it seems very unlikely that any of the royal mints would have struck a quite different type of bezant. Tentatively, one might suggest that the

90. The two series are found together in at least one hoard, described by Grierson, "Rare Crusader Bezant," p. 174.

91. Balog and Yvon, "Deux trésors," p. 299; Miles, "Some Hoards," p. 190.

Yemeni imitations were issued by Reginald of Châtillon from a mint at his fortress Kerak. Reginald's strategic ambitions in the Red Sea might accord with the choice of a Yemeni issue as prototype, and his independent character would make him an appropriate candidate to flout the royal minting rights of the young leper king Baldwin IV (1174–1185).⁹² Possibly other dinars currently attributed to Yemen in the eleventh and twelfth centuries will prove on reëxamination to be crusader imitations also.

Another mysterious group of objects are the cut gold fragments that have been found in several hoards, often in association with full-size bezants. These include both imitations of Fātimid dinars and pieces with Latin inscriptions and geometric designs. These latter are known only as fragments, never as full coins. They have been interpreted as coins of the Latin kingdom from the time of Baldwin III and Amalric,⁹³ but this identification remains problematic.

It is extremely unlikely that these curious pieces were an official coinage. Although many have a wedge shape with one circular edge, suggesting a fragment cut from a circular disc like a coin, the majority are four-sided or irregular as if cut from strips or plates. They seem to come from a period (contemporary with the second phase of the bezants) when there was a regular and plentiful gold coinage. The alloy of the cut pieces that have been analyzed is from 50.4 to 62.1 percent,⁹⁴ lower than in any of the full-size bezants, and their weight is quite irregular, from 0.34 to 1.08 grams. The style and quality of the engraving of the Latin pieces, however, are typical of the royal mints. Several letters can be closely matched on deniers of Baldwin III, pointing to a date before 1167 for these objects. None of the Arabic fragments has been die-linked or matched with any specific variety of the full-size bezants, but the relatively fine style of the small fragments of inscription that can be seen is typical of the bezants of the twelfth

92. Gordus and Metcalf, *op. cit.*, p. 136.

93. Jeremiah D. Brady, "A Firm Attribution of Latin Gold Coinage to Twelfth-Century Jerusalem," *ANS, Museum Notes*, XXIII (1978), 133–147; *idem*, "A Hoard of Latin Gold Fragments of Baldwin of Jerusalem," in *Actes du 9ème Congrès International de Numismatique (Berne, Septembre 1979, II: Numismatique du Moyen Âge et des Temps Modernes*, ed. Tony Hackens and Raymond Weiller (Louvain-la-Neuve and Luxembourg, 1982), pp. 829–840; *idem*, "A Statistical Analysis of the Gold Fineness of a New Hoard of Crusader Latin Coinage of the Twelfth Century," *PACT: Revue du groupe européen d'études pour les techniques physiques, chimiques, et mathématiques appliquées à l'archéologie*, V (1981): *Statistics and Numismatics: Table ronde . . .*, ed. Charlotte Carcassonne and Tony Hackens, pp. 391–398. Despite the fact that some of these pieces have the royal titlature *de Iervsalem*, it does not follow that they were struck in that city.

94. Gordus and Metcalf, *op. cit.*, p. 150. Another group, analyzed by Brady, "Hoard," p. 832, and "Analysis," *passim*, had a fineness range of 55.6 to 70.3 percent, leading him to suggest that these are earlier in date than the cut pieces from the Marash hoard.

century (some of the fragments may be pieces of genuine Moslem coins, although none has yet been so identified). There are several examples of fragments with Arabic on one side and Latin on the other, of which one in the ANS is the largest.⁹⁵ The latter is apparently of the type with several horizontal lines of inscription characteristic of Tripoli bezants, but other fragments are clearly of the small-central-field type of the kingdom of Jerusalem.

Even though these may be a product of one or more official mints, it does not follow that they were intended as coins. It has been suggested that they were made to be used in making payments by weight, to make up small deficiencies, or that they were used for payments of a fraction of a bezant, but this hardly can account for the creation of a large variety of Latin designs which were never struck as full-size coins. Another suggestion, which perhaps makes more sense, is that they were made for sale to pilgrims who wanted to offer gold at a shrine without a substantial expenditure.⁹⁶ At the same time, finds of these pieces with bezants in hoards suggest that the fragments had some monetary value. They may be related to the *pezzetti di bisanti*, "little pieces of bezants", with a fineness of 11¾ carats (48.96 percent) mentioned in the series of merchants' lists of 1350–1480.⁹⁷ The twelfth-century fragments are unlikely to be the same pieces mentioned in the fourteenth-century texts (in any case their fineness is slightly higher than any stated by the lists), but might be their monetary ancestors.

Only the Latin fragments have been studied in detail. The central designs on the majority are a "matrix" or "grid" on the obverse and a "star" on the reverse. These rather complicated interlaced figures have been drawn in full only by Miles.⁹⁸ The inscriptions include, on the obverse, BALDVINVS or AMALRICVS (REX), or SIGNUM AMALRICI or BALDVINI REGIS. The most common reverse inscription is IERUSALEM or HIERUSALEM CIVITAS, with variants. A number of fragments have letter combinations which cannot be fitted into

95. ANS 1981.36.1 (pl. XVI, no. 44; *Annual Report of the American Numismatic Society*, 1981, p. 19, no. 32), part of a group (from a hoard?) of 19 fragments. Others are in Metcalf, *Coinage of the Crusades*, plates 8–9, nos. 141, 225.

96. First suggested by Arthur J. Seltman, "Coins of the Crusades," *Spink's Numismatic Circular*, LXXIV (1966), 32–33; see Metcalf, *Coinage of the Crusades*, p. 31.

97. Edited by Evans, as cited above, note 78. *Pezzi di bisanti*, with a fineness of 12 carats, are also mentioned by the other manuscript tradition, including Pegolotti, *loc. cit.*, along with *pezzi di Tripoli* of 11 carats (45.83 percent). Another money in the former list is the *roelle senza crocie . . . cioe bisanti* with a fineness of 11⅞ carats (48.25 percent), which are listed in only one of the six manuscripts, Datini 1174, the same one that describes the bezants with cross as *bisanti roelle* and gives the fineness of the latter as 15⅜ carats.

98. "Some Hoards," p. 195; these are only examples, as the designs on the fragments studied later often differ in detail.

the commonly found inscriptions; these may be parts of additional titulature, or of other names, possibly COMES HENRICVS or COMES RAIMVNDVS (Raymond III of Tripoli as regent of the kingdom, 1184–1186?).⁹⁹

As for the Arabic fragments, the prevailing type is an imitation of the coinage of al-Āmir, like the full-size bezants of the Latin kingdom, and the fine style is like the bezants of the twelfth century. The Arabic fragments are like the Latin ones, however, in that no fragment has yet been observed to correspond precisely to any known full-size bezant – that is, it looks as if special dies were engraved to strike the Arabic fragments just as for the Latin ones (but a rigorous study has yet to be made). The Arabic side of the ANS bilingual piece (pl. XVI, no. 44) appears most similar to BY 2, identified as an early issue of Tripoli, but in truth the two widely separated pointillate circles surrounding the central area are paralleled on no other bezant, prototypical dinar, or fragment, and the same feature on the Latin side of the piece is also found on no other fragment. Obviously a great deal of study and much new material will be needed before it will be possible to speak with confidence of the full range of designs and inscriptions of these mysterious little bits.

The remaining imitations not yet attributed are all isolated small groups or unique coins with no obvious connection to any other issues. These include:

1. BY 1, a coin in the American Numismatic Society (0000.999.14974; pl. XVI, no. 45), which is unique among all the known imitations in copying the design of al-Mustansir's issue of 1048–1082, with three concentric circular inscriptions and no central field inscriptions. The inscriptions (which Balog and Yvon ignored as having “aucune signification, l'artisan franc n'ayant pas connu l'arabe”) are legible, copied from the dinars of Saladin during the caliphate of the 'Abbāsid al-Mustaḍī (1174–1180). The visual difference between this latter coinage and the concentric type of al-Mustansir is that Saladin's coinage has two short lines of inscription in the center, which the imitation omits. BY 1 also has less silver than copper as alloying element, quite different from any crusader imitation analyzed, and finally its epigraphical style is unlike that of the other imitations. Since it is clearly not a genuine Moslem coin, it seems reasonable to attribute it to the Franks, but it may well be an issue of a very short-lived mint, perhaps private, from a place and time unguessable. Its fineness, 94.3 percent, suggests an early date, but it cannot be earlier than the accession of Saladin (1174).

99. Metcalf, *Coinage of the Crusades*, p. 32.

2. A bezant imitating with some fidelity the Egyptian dinars of Saladin with the name of the caliph an-Nāṣir, struck from 1180 to 1193. The imitation is described but not assigned a number by Balog and Yvon.¹⁰⁰ The alloy of the piece is not known. Its weight is 3.31 grams, within the range of the phase 3 bezants attributed above to the late twelfth and thirteenth centuries. This is the only imitation of an Aiyūbid dinar identified so far. Its existence raises the possibility that other dinars now attributed to Saladin, less crude in execution, might upon reexamination turn out to be crusader imitations, which in turn may explain in part the debasement and irregular, often low, weight of the Egyptian dinar in Saladin's reign noted by Ehrenkreutz.¹⁰¹

3. A number of coins, mostly found in hoards along with bezants, as for example the five "authentic Fāṭimid" dinars of the Latakia hoard, which can now be confidently attributed as bezants on the basis of the results of neutron activation analysis and a reexamination of the pieces.¹⁰² These bezants are rather diverse, with mint names including Miṣr, al-Iskandariyah (Alexandria), and al-Mu'izzīyah al-Qāhirah (Cairo), and dates including 508, 510, 514, 515, 516, and 518 (1114–1125; all within the reign of al-Āmir). Their weights and fineness are typical of bezants of the second phase at Acre. The engraving of their dies is, obviously, sufficiently skillful to fool experienced numismatists, but armed with the knowledge of their deficient weight and alloy, one can see that they do not have the finished appearance of similar dinars of full weight and alloy.

These good-quality imitations seem likely to be attributable to a subsidiary mint of the Latin kingdom, perhaps Tyre, but there is no certainty that all should be assigned to the same mint or era. Once again, further study is needed. These are surely not the only crusader imitations to be found among Fāṭimid dinars hitherto considered authentic. Oddy's tables show a number of debased issues, many of which were catalogued as Fāṭimid by Lane-Poole.¹⁰³ It seems likely that most of these are crusader bezants. Of special interest are the low-alloy dinars

100. "Monnaies," pp. 152–153, fig. 52.

101. Ehrenkreutz, "The Crisis of *Dinar* in the Egypt of Saladin," *Journal of the American Oriental Society*, LXXVI (1956), 178–184.

102. Balog and Yvon, "Deux trésors," p. 299; Gordus and Metcalf, *op. cit.*, pp. 129–130. Miles, in 1970, accepted the reattribution of four of these five coins, but considered one of them, no. 5 of the hoard, "unmistakably a genuine dinar". Despite his authoritative opinion, a careful comparison of this coin with other dinars of the same mint and period has convinced Bates that this dinar is indeed an imitation. The other analyzed bezants of the same category are Gordus and Metcalf, nos. 80–90.

103. Oddy, *op. cit.*, tables 3, 4, and 5; Oddy (pp. 107, 109) raises the possibility of a crusader attribution of these coins.

of Tripoli with dates around 460 (1067/8); if these can be proven to be imitations, they would represent a new major variety in the bezant series.

In summary, then, the combined evidence of metal analysis, metrology, hoards, visual examination of the coins, Latin documents, and Arabic texts indicates the general organization and evolution of the crusader imitation bezants. Two major series, from the kingdom of Jerusalem and the county of Tripoli, can be identified and put into a reasonably well-defined chronological sequence from the mid-twelfth century until after the middle of the thirteenth. At the same time this new understanding of the history of the crusader bezant raises further questions and problems for numismatic research.

*C. Crusader Arabic Silver Issues*¹⁰⁴

Within a generation or two after the arrival of the first crusaders in Syria, they had begun to issue gold coins imitating those of the Moslems and copper coins analogous to those of Byzantium and northern Syria (although with Latin inscriptions), but there were no crusader imitation silver coins in the twelfth century. This is not surprising, for two simple reasons. First, the silver coinage of the Moslem world at the time of the first crusades, especially in Syria, was evidently scanty, consisted of small coins considerably alloyed and low in value, and was unlikely to make any impression on newcomers. Second, and probably more important, the crusaders already had their own silver coinage in western Europe, the penny, also a small and often debased coin. The gold and copper coins of Syria were new to the crusaders, but the little debased dirhams filled no role that could not be played by pennies imported from Europe or struck by the crusaders themselves.

The situation changed radically after Saladin's invasion of Syria in 1174. One of his earliest innovations was the initiation of minting of full-weight good silver dirhams at Damascus, Homs, Hamah, and Aleppo. Judging by the quantity of surviving examples, Saladin's new dirham coinage was not issued in large amounts at first, but increased in volume during his reign and under his immediate successors. From the turn of the thirteenth century, Aiyūbid Syrian dirhams become quite common. Minting of full dirhams also spread to other Moslem

104. This section was written by Bates.

lands: Egypt, Anatolia, and Mesopotamia. One possible interpretation of the process is that the new dirhams in the late twelfth century took some time to become established as an important part of the monetary system, but as they did so, they created a demand for silver coinage which had the effect of drawing silver to the mints from bullion stocks in Syria itself and from outside. This hypothesis has its importance for the understanding of the crusader Arabic silver coinage, as will be seen.

The Frankish states on the Syrian littoral must inevitably have been drawn into the process of expansion of the use of full dirhams in Syria. It seems reasonable to assume that Aiyūbid dirhams would have come to the Franks in transactions with the Moslems, and that these coins would come to be used not only for return transactions but also in exchanges among Franks — not, to be sure, for the transactions of daily life in the marketplace, but in large commercial dealings. At any rate, it is certain that the minting of dirhams spread not only to Aiyūbid Syria's Moslem neighbors but also to the crusaders, beginning in 1216. It is also certain that these crusader dirhams were issued in large quantity and had an important economic role.

Who precisely issued these coins, and what exactly their economic role was, are questions the answers to which are less clear. Three major series of crusader dirhams exist, two that imitate Aiyūbid dirhams and one of Aiyūbid type but with Christian inscriptions.¹⁰⁵ The dates on these coins are not those of the prototypes, but follow a regular sequence and seem to be authentic in most cases. The three series follow in chronological sequence without overlapping. Until about 1245, the crusader dirhams are homogeneous at any given time, without sub-varieties, indicating production from a single mint. It seems plausible, therefore, that the dirhams were produced either by an official mint or with official authorization. Since the third series (that with Christian inscriptions) bears the mint-name 'Akkā (Acre), it seems plausible that this was the mint for all the crusader dirhams. In sum, the dirhams, like the crusader gold bezants, seem to have been an officially sanctioned coinage of the kingdom of Jerusalem.

The economic role of the dirhams, however, was different from that of the bezants. The bezant, as argued previously, was intended as a

105. Metcalf, *Coinage of the Crusades*, p. 29, lists two additional series as possible crusader dirhams, possibly at the suggestion of Mr. Stephen Album. It should be made clear that series B and D on that page were not identified as such by Bates, "Thirteenth Century Crusader Imitations," although Metcalf's note 8 on page 28 might seem to imply otherwise. No evidence has been presented for the attribution of these two series to the crusaders, or even for the existence of Metcalf's series D.

separate currency from the Fātimid dinars it imitated. The crusader dirhams, in contrast, were clearly intended to circulate along with Aiyūbid dirhams. The imitations, until about 1245, are visually indistinguishable from their prototypes except by their anomalous dates, which in any case are often not visible because of irregularities of striking. When the date is illegible, it is impossible today to identify any single dirham by itself as an imitation or a prototype; it must have been impossible for contemporaries as well. Unlike the bezants, these dirhams are found in hoards mixed with authentic Moslem issues.¹⁰⁶

There is nothing deceptive or fraudulent in this close similarity. Aiyūbid dirhams from different mints, with different designs and inscriptions, circulated indiscriminately together, if hoard evidence is to be believed, and mixed with these are found also dirhams of another dynasty, the Artukids, with designs like those of the Aiyūbids but with clear inscriptional indication of their origin. Since any dirham with one of the few Aiyūbid designs seems to have been accepted at parity, it was rational for the crusaders also to issue their version of this standard coinage. By doing so they could convert silver into coinage without the disadvantage of having to transport it to a Moslem mint and pay mint charges to Moslems. Although the system by which the crusaders regulated the weight of their dirhams was different from the Moslem system, and their average weight was slightly lower, the silver content of a typical crusader dirham was roughly the same as that of the Moslem issues. The only element of deception was the use of Moslem designs and inscriptions to ensure acceptance of the coins. Had the crusaders used distinctive designs, or even the same design with overtly Christian inscriptions, the coins would probably have been treated as a separate currency by Moslems and not accepted at parity. This consideration perhaps explains why the last crusader dirham series, issued with crosses and Christian inscriptions in conformity with the letter of pope Innocent, was short-lived and soon replaced by a revival of the imitative coinage, slightly modified to comply with the papal injunction while passing unrecognized by the Moslems.

The first series of crusader dirhams, so far as is now known, were imitations of the coinage of az-Zāhir Ghāzī, son of Saladin and ruler of Aleppo from 1186 until his death in 1216. The specific prototype was struck from 598 to 613 (1201–1216; pl. XIV, no. 21). It has the hexagram or "seal of Solomon" design which was standard at Aleppo,

106. Balog, "La Trouvaille du Fayoum," *Bulletin de l'Institut d'Égypte* XXXIV (1951–1952), 17–55; Bates, "Crusader Imitations," p. 395; Enrico Leuthold, Jr., "Monete con leggende in arabo—islamiche e de' Crociati—in un ripostiglio del XIII secolo," *Rivista italiana di numismatica*, 5th ser., XIX (1971), 175–184.

with the main inscriptions framed in a six-pointed star enclosed in a circle. Az-Zāhir's name and titles are in the star on one side of the coin, and those of his overlords, the Aiyūbid sultan al-ʿĀdil and the ʿAbbāsīd caliph an-Nāṣir, are on the other. The mint name and date are on the side with az-Zāhir's name in the six small triangular segments between the points of the star and the circle, and the Moslem declaration of faith is on the other side in the same location.¹⁰⁷ The coinage included smaller half dirhams as well. These include half dirhams with the same hexagram design but with abbreviated versions of the titles of az-Zāhir and an-Nāṣir on the two sides, without al-ʿĀdil's name, and also halves struck with full-dirham dies.

Crusader imitations of both dirhams and half dirhams are known, differing from the prototype only in bearing dates after 613 (1216; pl. XVI, nos. 47–48). Every year from 614 to 630 (1217–1233) is represented, and also the year 638 (1240/1).¹⁰⁸ These coins have the mint name "Ḥalab" (Aleppo) and the names of az-Zāhir, who died in 1216, al-ʿĀdil, who died in 1218, and the caliph an-Nāṣir, who died in 1225. Meanwhile, Aleppo itself produced normal dirhams covering the same span of years bearing the names of az-Zāhir's successors al-ʿAzīz (1216–1236) and an-Nāṣir (1236–1260), along with the appropriate names of their overlords and the caliphs.¹⁰⁹ It is impossible, therefore, that the dirhams with az-Zāhir's name and dates after 613 could have been issues of the Aleppo mint, or official issues of any Moslem mint.

Their anachronistic dates are the principal basis for the attribution of the posthumous Aleppo dirhams to the crusaders, by analogy with the subsequent crusader issue imitating Damiascus dirhams, which also has impossible dates along with, on some examples, small crosses as definitive proof of Christian origin; but the dates are not the only evidence. Further support is provided by statistical study of their metrology and metal content. The data on which this study was based are as yet unpublished, but can be summarized here. Numismatists determine the weight standard of a coinage issue by the frequency-distribution method, which consists essentially of dividing the weight range of known examples into equal intervals (usually 0.05 gram) and counting the number of coins in each interval. The resulting series can be set out in tabular form or graphed. This technique indicates the mode, that is, the interval including most coins, which is the safest indicator of the mint's intended weight standard. The distribution of weights also

107. Balog, *Coinage of the Ayyubids*, nos. 599, 601–628.

108. *Ibid.*, nos. 629–654, lists representative specimens of each date.

109. *Ibid.*, nos. 686–706, 724–757.

provides evidence as to the means by which the weights of individual coins were controlled by the mint. The result of such studies on genuine Aiyūbid dirhams is always the same if the number of specimens is sufficient: the number of coins in each interval increases gradually as the weight increases, up to the modal weight range, and then drops off sharply. In other words, there are many coins with less than the modal weight, the presumed weight standard of the mint, and few coins with more. This distribution, which produces an asymmetrical ("skewed") graph, is an indication that the weight of coins was controlled individually by the mint, or else that people culled the coins that they found in circulation. Overweight coins were trimmed down to standard, or remelted and restruck, while underweight coins were allowed to be issued.

Similar studies of the crusader dirhams that imitate Aiyūbid issues of Damascus, the attribution of which is certain, produce a different distribution: the graph, depending on the number of specimens in the sample, approaches the shape of the classical bell-shaped curve, with nearly equal numbers of coins above and below the modal interval. This curve is characteristic of mint regulation of weight in mass, with a certain number of coins per weight unit (pound or mark of silver) regardless of the weight of individual specimens. The contrast between the Aiyūbid and the crusader dirhams, given that they often circulated together, allows us to deduce that the heavy coins were removed by the mint before entering circulation. In the specific instance at hand, the weight distribution of the dirhams of aẓ-Zāhir's lifetime and those of his son al-'Azīz both conform to the highly skewed curve of other Aiyūbid dirhams, while the distribution of the weights of the posthumously dated dirhams is quite symmetrical, as on the other dirham issues of the crusaders. The quantitative results of the two studies show that the standard in aẓ-Zāhir's lifetime was 2.95–3.00 grams, while the imitations (considering only those up to 630) were issued at an average weight of about 2.83 grams.

As to fineness,¹¹⁰ analyses of eighteen dirhams of aẓ-Zāhir Ghāzī and seven of his son al-'Azīz Muḥammad show that, between the Moslem years A.H. 600 and 625, the standard of fineness at the Aleppo mint was maintained at a very high level, with none of the coins below 97.2 percent silver; sixteen of the twenty-five imitations analyzed were below this figure, ranging in all from 98.6 down to 94.2 percent until

110. The analyses discussed here and throughout this section were made by Professor Adon A. Gordus of the University of Michigan Department of Chemistry, by neutron activation analysis of streaks. Professor Gordus is not responsible for any of the present interpretations of his data.

626, and between 90.5 and 95.5 percent from 628 to 638. This difference does not prove, in itself, that the imitations were produced by the crusaders, but it makes it unlikely that they were issues of the Aleppo mint. Moreover, this difference in fineness is the clue to the precise beginning of the imitations. One might expect at first that the imitations began during az-Zāhir's lifetime, but judging by the consistent and tightly controlled fineness of the dirhams issued in his lifetime, compared to the lower fineness of the posthumous dirhams, this is not the case—except for the year of his death, 613. Five dirhams of that year were analyzed, of which four were struck with the same dies (proof of origin from the same mint); their fineness range, from 93.6 to 97.4 percent silver, is decidedly lower than that of the preceding dirhams of az-Zāhir and the subsequent dirhams of al-'Azīz, while at the same time congruent with the range of the posthumous dirhams. It would seem, therefore, that all five coins are imitations; these represent the entire holdings of the ANS for the year 613.

One may conclude that the imitation dirhams began to be struck in precisely the year that az-Zāhir died, 613 (1216).¹¹¹ In this date lies the clue to the possible reason for the beginning of the imitative coinage. In the early years of the thirteenth century az-Zāhir was in alliance with the crusaders, specifically with the counts of Tripoli, Bohemond III and IV. Among his various agreements was a treaty with Venice in 604 (1207/8) which provided that Venetian merchants could have access to the mint at Aleppo to have coins struck from any silver bullion they might bring to the city.¹¹² This was probably the most convenient and cheapest access to a dirham mint available to the Franks at the time. Indeed, the existence of this clause in the treaty implies that without treaty rights, the Franks had no direct access to Moslem

111. It is not impossible that authentic dirhams of az-Zāhir of 613 will be found (he died nearly at the middle of that year), but they will be identifiable only by their higher silver fineness, and then only tentatively because the range of fineness of the two coinages overlaps somewhat.

112. Wilhelm Heyd, "Ueber die angeblichen Münzprägungen der Venetianer in Accon, Tyrus, and Tripolis," *Numismatische Zeitschrift*, XI (1979), 239, is the best discussion of this clause of the treaty; see also Irwin, "Supply," p. 88. Heyd, whose article in a somewhat obscure publication has been widely ignored, demolishes the assumption that this treaty and others like it gave the Franks the right to operate mints. From this treaty, and another with the king of Cilician Armenia that gives the Venetians the right to strike coins on the same terms as they did in Acre, Schlumberger (*Numismatique de l'Orient latin*, pp. 137–138) argued that the Venetians not only operated mints in various Moslem and Armenian cities, but operated the mint in Acre that struck the imitative coinages, both gold and silver. Heyd demonstrates that these treaties gave the Venetians only the valuable right to take gold or silver to the local mint to be struck into local coinage on regulated terms; otherwise, their bullion would have had to be sold to middlemen. The treaty with az-Zāhir, for example, specifies a charge of 5 percent.

mints,¹¹³ leaving them with the alternative of selling bullion for what it would bring in dirhams in the marketplace.

Relations between aḏ-Zāhir and the crusaders began to cool in his later years, and the alliance with Tripoli was definitely ended at his death in 1216.¹¹⁴ Probably the arrangement with the Venetians also terminated at this time. It seems entirely possible that the Venetians, or other crusaders, had become familiar with the dirhams they had been obtaining from the Aleppo mint and decided to begin making their own. It was proposed above, because of the continuity of this series of imitations with the later ones culminating in an issue with the mint-name Acre, that all these imitations should be regarded as issues of the mint there of the kingdom of Jerusalem. If so, it would seem that the Venetian privileges at the mint of Aleppo from 1207 to 1216 had a wide monetary impact for all the crusader states, sufficient to induce the royal mint to take up production of these coins after the termination of the agreement, or that the Venetians depended on these coins to the extent that they insisted on their minting in Acre. Alternatively, however, it must be admitted that the possibility of a north Syrian mint such as Tripoli for the Aleppo imitations is attractive. It cannot be excluded that these dirhams may not be directly connected with the imitations of Damascus coinage that followed them so closely in time.

The first period of issue of Aleppo imitations extended, then, from 613 to 630 (1216–1233). Toward the end of this span of years, in 628 and 629, the fineness of these dirhams had begun to decline, judging by one specimen from each of those years with 90.6 and 93.0 percent silver respectively. The last year of minting in 630 is also the beginning of a general dearth of Moslem dirhams until 637, suggesting that silver had become scarce in those years throughout Syria. In 638 (1240/1), however, imitations of Aleppo dirhams appear again, still with the same design and inscriptions (pl. XVI, no. 49). The occasion for this reappearance is suggested by a comparison of the metal content of these imitations with that of the coinage of Damascus in the same year. A feature of silver coins in the pre-modern era is the presence of small amounts of gold, ranging sometimes to more than 1 percent. This occurs because gold is a normal trace element in silver ore, but usually in amounts not detectable by medieval technology. Because it is chemically similar to silver, it is not removed by the refining process. As a

113. Such clauses were frequent in treaties between Franks and Moslems; see Irwin, *loc. cit.*, and Heyd, *passim*.

114. Mary Nickerson Hardwicke, "The Crusader States, 1192–1243," in volume II of the present work, pp. 526–540.

result, coins that come from a single source of silver will have a small but consistent amount of gold as an impurity. This may indicate that the coins in question were all made from ore from a single mine or ore vein, but it is of course also true that coins from the same batch of melted silver will have approximately the same level of gold content, even if that silver came from disparate sources. Four Aleppo imitations and nine dirhams of Damascus have been analyzed, and all fell into the same narrow range of gold impurity level, from 0.29 to 0.36 percent for the imitations and 0.26 to 0.36 for the Damascene coins. In no other instance was there such a close correspondence between crusader and Moslem coins. In fact, the range of gold impurity for Syrian dirhams in the Aiyūbid era is normally quite wide, ranging from 0.30 to 1.20 percent, with issues of every mint spread throughout this range. This diversity is not surprising, as Syria has no native source of silver and must have imported its bullion from a variety of sources. In this context, the similarity of the imitations and the coinage of Damascus in 638 is remarkable.

There is an obvious historical explanation for this phenomenon: in early 638 (July–August 1240) aṣ-Ṣāliḥ Ismāʿīl, the Aiyūbid ruler of Damascus, entered into an alliance with the crusaders, which continued in force for a few months only. Under the terms of the treaty, the crusaders were permitted to come to Damascus to buy arms and supplies.¹¹⁵ It seems likely that it was specifically to provide funds for this “shopping expedition” that the minting of Aleppo imitations was revived, and it would seem furthermore that the bulk of the silver brought to the mint at Damascus in this year was made up of these crusader dirhams. The fineness of the imitations, ranging from 90.5 to 95.5 percent silver, is no worse than that of the coinage of Damascus itself in the same year, from 89.5 to 96.5 percent, but one can imagine that the imitation dirhams, by this time obsolete in type by a quarter-century, were discriminated against by the Damascenes, who converted them as rapidly as possible into current coin (possibly the crusaders themselves were allowed to bring silver to the Damascus mint, although this is not explicitly stated).

The second series of crusader Arabic dirhams imitates the Damascus issue begun by aṣ-Ṣāliḥ Ismāʿīl in the year of his first alliance with

115. R. Stephen Humphreys, *From Saladin to the Mongols: the Ayyūbids of Damascus, 1193–1260* (Albany, N.Y., 1977), pp. 265–269; cf. Sidney Painter, “The Crusade of Theobald of Champagne and Richard of Cornwall, 1239–1241,” in volume II of the present work, p. 479, and Hamilton A.R. Gibb, “The Aiyubids,” *ibid.*, p. 707. Humphreys’ dating is used here, because the alliance was formed after the accession of aṣ-Ṣāliḥ Aiyūb as sultan in the last month of 637 (July 1240).

the crusaders (pl. XIII, no. 19). Both prototype and imitation have the main inscriptions in a square enclosed in a circle at the rim of the coin. One side has the name and titles of aṣ-Ṣāliḥ in the square, with the mint city and the date in the four segments between the square and outer circle. The other side has the name and titles of the caliph al-Mustanṣir in the square and the Moslem profession of faith in the segments. This issue was struck from 638 (1240/1) until 640 (1242), when al-Mustanṣir died. As normal in Syria, the issue was accompanied by half dirhams of the same pattern, struck with special half-dirham dies with abbreviated inscriptions or with full-dirham dies.¹¹⁶

The crusader imitations of this issue closely reproduce the central inscriptions of the prototype, but vary in one way or another in their marginal inscriptions. On the basis of these variations the imitations can be classified into six types, which should be regarded as separate issues and will be discussed individually. Since the distinguishing inscriptions are small and at the edge of the coins, they are easily effaced by carelessness in striking, which was usual at both the crusader and the Moslem mints, and when this happens it is impossible to distinguish visually an imitation from the prototype. Even when visible, the distinguishing characteristics of the imitations are inconspicuous, and were probably not noticed by the people who used these coins. The modern numismatist who knows what to look for can sort out a few imitations and a few authentic prototypes from any large groups of coins of this type, but the rest can be identified as crusader or Moslem only by close comparison of unidentified with identified coins to establish die identities. The majority of known specimens of the cru-

116. All these are listed in Balog, *Ayyubids*, nos. 801–807, along with dirhams of 635 and 637, but it is doubtful that these earlier dates really exist, because of the intrusion of crusader imitations into the corpus of dirhams attributed to aṣ-Ṣāliḥ (see the listing in Bates, “Crusader Imitations,” p. 403; at least two of the imitations in that list are cataloged by Balog as genuine), and because of the similarity of the numerals “seven” and “nine” as written on these coins. Although aṣ-Ṣāliḥ was ruler of Damascus for some months in 635, it is probable that he, like his brother al-Ashraf Mūsā before him, acknowledged al-Kāmil as overlord on coins, even though al-Kāmil did not recognize his accession, besieged the city, and took it from him. No Arabic source mentions that aṣ-Ṣāliḥ issued coins in his own name, and had he done so, thereby openly rebelling against al-Kāmil, it is unlikely that the two would have come to terms as they did (Humphreys, *op. cit.*, pp. 232–237). When aṣ-Ṣāliḥ came to power in Damascus again in 637, he acknowledged al-ʿĀdil II of Egypt as overlord and is specifically said to have kept his name on the coins (Humphreys, *op. cit.*, pp. 257–258). It is unlikely that aṣ-Ṣāliḥ began issuing coins with his own name until after the overthrow of al-ʿĀdil II and the accession of his enemy aṣ-Ṣāliḥ Aiyūb on the eighth day of the last month of 637 (Humphreys, *op. cit.*, p. 264). Allowing some time for the news to reach Damascus and for aṣ-Ṣāliḥ Ismāʿīl to decide on a policy, it becomes unlikely that coins in his name began before 638. At least one of Balog’s entries for 635, the British Museum specimen, is a crusader imitation and the readings of the other two have yet to be confirmed. The coins Balog assigned to 637 could just as well be 639.

sader imitations have been identified and classified through die identities with fully legible examples.

Type I (pl. XVII, no. 50): this is by far the largest issue among the Damascus imitations, comprising about 65 percent of all identified specimens.¹¹⁷ Dirhams of this type are identical in every respect to the prototype, including the mint identification *Dimashq*, "Damascus", but they have the dates 641, 644, and perhaps 647,¹¹⁸ which are all after the death of the caliph al-Mustansir named on them; at the same time the Damascus mint produced dirhams with the name of his successor. This anachronism is odd, but does not in itself prove a crusader origin for these coins. There are numerous instances of such anachronisms resulting at Moslem mints from the accidental combination of old and new dies ("muling"), although these are mostly isolated single coins. In the case of the aṣ-Ṣāliḥ imitations of Type I, however, there are hundreds of examples. The attribution to the crusaders is further supported by analogy with other types that have clear indication of Christian origin, by a high incidence of barbarity or illiteracy in the marginal inscriptions, and by metrological and metallurgical differences from the prototype. There are also analogous half dirhams, like the prototype half dirhams.

The various dates of Type I are closely linked by shared dies for the undated side of the coin, suggesting that minting was more or less continuous throughout the years 641 to 644 or 647 (1243–1247 or 1243–1250).¹¹⁹ The dates then might sometimes be fictitious, but it seems obvious that 641 (1243/4) would not be the earliest year found on the imitations if it was not in fact the first year of issue. The reasonable supposition that imitations might have begun while the prototype was still being issued, and thus be indistinguishable by date from the prototypes, is simply not supported by the die evidence, for nearly all the

117. Judging by the number of specimens recorded by Bates, "Crusader Imitations," p. 404. The number of surviving specimens today is largely a result of hoard finds; a single find of a large hoard including a particular issue can change the proportions overnight. Nevertheless, the number of dies reported for the different types of the Damascus imitations is proportional in most cases to the number of existing specimens, suggesting that the number of surviving coins is roughly proportional to the original size of the issues. The exception is Type V, with a much higher proportion of dies to number of specimens than the others, indicating that this issue may have been larger than its representation in 1974 would indicate.

118. Leuthold, *op. cit.*, p. 183, read the dates 642, 643, 645, and 648 as well, but these readings are rejected by Bates, *op. cit.*, pp. 406–407, where the questions involved are discussed in full. The dates 641 and 644 are clear and generally accepted by all scholars. The cursive script makes the reading 647 speculative.

119. This conclusion lends support to the dates suggested by Leuthold, but unfortunately all the coins on which he reads these dates have more clearly legible die duplicates that disprove his readings.

coins of this type with dates of 640 and before are interlinked by the use of a small number of obverse and reverse dies, and none of them as yet can be linked to any of the coins with posthumous dates. Moreover, there are metallurgical differences between the coins dated 640 and earlier, as a group, and those dated 641 and after. It would seem, therefore, that as in the case of the Aleppo imitations, the issuers of the Damascus imitations deliberately selected an obsolete prototype. It is not obvious why this particular prototype was chosen, but there may be some connection with the renewed alliance between aṣ-Ṣāliḥ and the Franks of Acre in spring 1244 (late 641).¹²⁰

The date 647, if it is rightly read, has support from historical circumstances as the terminal date for Type I (and for the first phase of issue of all the Damascus imitations), because it was in late 647 (spring 1250) that bishop Odo of Châteauroux arrived in Syria to find the Franks striking coins bearing the names of Moslem rulers and Moslem religious inscriptions. There are no crusader coins with Moslem dates after 647, or any with the Christian year 1250, suggesting that Odo's intervention put a stop to all minting for a time.

Types II, III, and IV: all three of these types are known only in small quantities (6, 8, and 2 respectively were known in 1974¹²¹). Their economic importance is therefore slight, but they are of interest because their marked divergences from the common Type I issue and the absence of any die links between any of these types raise the possibility that they were issued at different mints (which might mean only different workshops in the same city). Type II (pl. XVII, no. 51), which seems to be dated 643 (1245/6, a very problematic reading), differs from Type I only in having differently arranged and very barbarous marginal inscriptions.

Type III (pl. XVII, no. 52) is more interesting: the date 643 on it is almost certain, and the dirhams of this type are characterized by the presence of inconspicuous crosses in the margins. All known die varieties have a cross in the topmost segment of the side with the date, between the two Arabic words for "in the name of" and "God" that precede the statement of place and date of minting. On the other side, all have also an interesting modification of the name of the Moslem prophet in the marginal inscription "Mohammed is the messenger of God." As modified, the only possible reading of the name is *Mikhā'il*, the Arabic equivalent of the name Michael. Did the die cutters, or

120. Humphreys, *op. cit.*, p. 274; Steven Runciman, "The Crusader States, 1243-1291," in volume II of the present work, p. 561; Gibb, *op. cit.*, p. 709.

121. Bates, "Crusader Imitations," p. 404.

their superintendents, really intend to say that "Michael is the messenger of God"? Could this refer to the archangel Michael? Since on some of these coins the name *Mikhā'il* (which is written in two separate letter groups in Arabic) is divided by a small cross, it would seem likely that the engravers knew what they were doing. Even before Odo, it seems, some Christians were uncomfortable with a coinage that completely aped Moslem practice, or perhaps the date is fictitious and the type to be assigned to the period after the papal interdiction of Moslem inscriptions. This series also was accompanied by an analogous half-dirham issue (pl. XVII, no. 53).

Type IV (pl. XVII, no. 54) is quite anomalous, as the only imitation with modified central inscriptions, shortening one of aṣ-Ṣāliḥ's titles from *ʿImād-ad-Dunyā wa-d-Dīn* (pillar of society and religion) to *ʿImād-ad-Dīn*, a common and perfectly legitimate elision among Moslems. The date is apparently to be read 644 (1246/7). Given that only two examples are known, it is only analogy that supports the attribution of this issue to the crusaders, but unless the date is fictitious, it suggests the existence of a third mint in addition to the main Type I mint.

Types V and VI come after an intervening issue with Christian inscriptions, making it appropriate to postpone their discussion.

Bishop Odo's intervention led to the introduction of a third crusader dirham series with overtly Christian inscriptions and with crosses, corresponding to the similar issue in gold of 1251–1258 described in the previous section of this chapter. The silver coinage had a much shorter life span, limited to 1251 only.¹²² The relative success of the new bezants as compared to the dirhams may be explained by the different monetary roles of the two currencies. The bezants, which imitated obsolete Fāṭimid coins, were unlike any contemporary issue and were well known to Moslems as Frankish in origin. The new bezants, therefore, may well have been equally acceptable despite their overtly Christian symbols. The imitative crusader dirhams, however, closely resembled current Moslem coins and were evidently meant to circulate indiscriminately with them (as they successfully did, if hoard evidence is to be believed). The new crusader dirhams with Christian inscriptions and crosses could not pass as ordinary Moslem coins, resulting in their rejection by Moslems, or at best in their being discounted against current Moslem dirhams.

Balog and Yvon list thirteen varieties of Christian dirhams and four

122. A dirham of 1252 and another of 1253 have been mentioned in print, but these readings cannot be accepted (*ibid.*, p. 408). The marginal inscriptions of these coins are cursively engraved and often poorly impressed, making it easy to be misled in reading them.

varieties of the accompanying half dirhams,¹²³ but the principal division is into three groups: those with a central cross on one side surrounded by a circle, those with a central cross but no circle, and those without a cross (pl. XVII, nos. 55–58). All these have the same Arabic inscriptions, which are mostly different from those on the bezants. The design is the same as that of the second series of Damascus imitations, with central inscriptions in a square surrounded by a circle and subsidiary inscriptions in the spaces between the square and the circle, a very common type for thirteenth-century Syrian dirhams. On the side designated by Balog and Yvon as the obverse, the inscription in the margin states the place and date of issue: “struck in Acre in the year one thousand two hundred, one and fifty, of the Incarnation (of the Messiah)” (some varieties omit the words in parentheses). The central inscription on this side is not found on the bezants: “one God, one faith, one baptism.” On the other side, the central inscription proclaims “Father, Son, and Holy Ghost: one godhead”,¹²⁴ and the marginal inscription states “His is the glory forever and ever, amen amen.”¹²⁵ The half dirhams omit the obverse central inscription as well as the mint date formula; instead the reverse central inscription is divided between the two sides and the reverse marginal inscription is repeated on both margins (pl. XVII, no. 58). In addition to these inscriptions and the crosses, these coins are extensively ornamented with a variety of fleurs-de-lys, small crescents, arabesques, and diacritical marks drawn from the repertoires of both Moslem and Christian craftsmen.

Presumably because these dirhams were not readily accepted by Moslems, the crusader mint revived the issue of imitations of aṣ-Ṣāliḥ Ismāʿīl's coinage of Damascus, but with some modifications. It is probably no coincidence that one type of these renewed imitations bears the date 1253, when Innocent's letter arrived in Syria; taken literally, it forbade only the emission of coins with the name of Mohammed and his “birth date” (the Moslem year), and thereby opened the way to revival of imitative coins without the objectionable features. These are classified as Types V and VI of the second series. Both replace the Moslem profession of faith in the margin with the simple statement “in the name of God the merciful, the compassionate”, a very common Moslem formula but one to which no monotheist could object. Type V (pl. XVII, no. 59) has the Christian date “one thousand and

123. Balog and Yvon, “Monnaies,” pp. 161–167, nos. 42–48.

124. As with the corresponding gold issue, the Arabic word *ilāh*, “godhead”, has been falsely corrected by previous catalogers to *Allāh*; see note 75 above.

125. This inscription also has previously been misread: the first word is not *Allāh*, which would result in the meaning “God is the glory”, but simply *lahu*, “To Him is the glory.”

two hundred and three and fifty", but with the fictitious mint name Damascus, while Type VI (pl. XVII, no. 60) reverts to the original Moslem year of the Damascus imitations, 641. Despite this latter date, Type VI clearly belongs to the same period as Type V, not only because of the shared religious formula but also because of similarities of style in the engraving of the marginal inscriptions on both sides of the coins. Possibly the date 641 was acceptable because it was fictitious, or possibly no one cared enough to enforce the papal injunction on this point. Because there are no die links between the two types, the possibility of two separate mints or workshops is raised again, but the similarity of the types indicates that there was no great distance between their places of manufacture. One would even say that the same die engravers were at work. It is also possible that the dirhams dated 641 came after those dated 1253, and continued to be struck for a while, perhaps until the end of the Christian bezants in 1258, or even later.

In weight standard and fineness, the Damascus-type crusader dirhams were lower than their prototype, the coins of Damascus 1239–1242, but about equal to contemporary issues of Damascus and Aleppo after 1243. The general pattern for all three of these mints (Damascus, Aleppo, and the crusader mint) is similar: weight and fineness decline in the 640's (1242–1252) and decline further after 650 (1252/3). For Damascus, 637–640, the weight standard indicated by the mode is about 2.90–2.95 grams, while for the first large crusader issue, Type I, it is about 2.80–2.85, but the two coinages are closer in average weight, at 2.87 and 2.83 grams respectively. Moreover, the modal weight of the issues of Damascus, 641–647, the same Moslem years as Type I, is 2.85–2.90, much nearer to the crusader standard. In fineness, the crusader Type I coins range from 79.6 to 94.2 percent silver, while the prototypes range from 84.9 to 96.5 and the coinage of Damascus in the same years as the crusader issue ranges from 78.6 to 96.7 percent. The crusader dirhams with Christian inscriptions are higher in fineness than the close imitations, ranging from 85.8 to 96.9 percent, but the subsequent imitations, Types V and VI, return to the range of Type I, from 70.5 to 91.9 percent, with only one coin out of twenty above 90 percent. Similarly at Damascus, the four analyzed dirhams after 650 (1252/3) range only from 73.1 to 80.2 percent, while at Aleppo in the same era the range is from 74.4 to 83.2.

Several features of these data are remarkable: the wide range in fineness among all these dirhams, the apparent general decline, and the close correspondence of issues at the three major Syrian mints. Since all these coins are found mixed together in hoards, contemporaries must have ignored the differences between individual coins, but

it would seem likely that the value of all these dirhams was discounted to compensate for the unreliability of weight and fineness. By 1260 the monetary situation had reached a crisis. According to Abū-Shāmah, Damascus was flooded with Frankish dirhams reported to contain only 15 percent silver, and the danger that these dirhams would be suppressed caused everyone to spend them as quickly as possible, which made prices rise to extraordinary levels. At the end of the year these dirhams were prohibited and exchanged for current Damascus coin, but at a considerable discount.¹²⁶ According to the manuscripts of Abū-Shāmah's history, these dirhams were known as *bāqīyah* or *bāfiyah*, a word which is not understood but which must be a name denoting the origin of the coins, either by place or by issuing authority. It has been emended more than once to *yāfiyah*, "Jaffa", but it hardly seems likely that a place as small as Jaffa, and so far away, could have emitted enough dirhams to flood the market in Damascus.

The only Frankish silver coins of the time were the Arabic imitations and the Frankish pennies, which might have been called dirhams by the Moslems. It seems improbable that the pennies would have circulated to any extent among Moslems, but as far as is now known, the imitations never dropped so low as 15 percent silver. On the other hand, no crusader imitations of about 1260 have been analyzed, or even identified as such. Type VI, which was attributed above to about the same period as Type V, dated 1253, might still have been issued as late as 1260. The lowest fineness of the eight Type VI dirhams analyzed was 75.6 percent, but all these specimens came from a hoard datable to about 1255, before the time of which Abū-Shāmah writes. At present, the identity of the *bāqīyah* dirhams remains a mystery.¹²⁷

At the least, Abū-Shāmah's passage is evidence that crusader dirhams were still being issued as late as 1260, that by that time they had an important role in the monetary economy of Damascus (if not all of Moslem Syria), and that the Moslems were aware that these coins came from the Franks but used them anyway. The importance of the crusader dirhams is not surprising. A preliminary die study of the crusader issues has counted so far 94 obverse and 110 reverse dies for the imitations of Aleppo dirhams, and 142 obverse and 142 reverse dies for the Damascus imitations. The current consensus among numisma-

126. Abū-Shāmah, *Tarājim riḡāl al-qarnain (as-sādis wa-s-sābi')* (also known as *Dhail 'alā ar-rauḡatain*), ed. Muḡammad Zahīd ibn-al-Ḥasan al-Kautharī (Cairo, 1947), p. 211; *RHC, Or.*, V, 203.

127. The passage and its analogues in other Arab writers are discussed in more detail by Irwin, *op. cit.*, pp. 94-95. Also a mystery are the Beirut dirhams of 1261 mentioned by a historian cited by Irwin.

tists estimates a possible production for a single die of ten to twenty thousand coins, suggesting at least one to two million Aleppo imitations and about 1,400,000 to 2,800,000 Damascus-type dirhams. These are conservative estimates, because it is likely that many dies remain to be discovered, and the number of dies does not include those for the half dirhams of each series. Also, the dies of the dirhams with Christian inscriptions have not been studied and counted. Assuming an average weight of about 2.8 grams, and an average fineness of 95 percent for the Aleppo coins, the silver content of the Aleppo imitations would amount to about 2.5 to 5 metric tons, while for the Damascus coins, with the same average weight but an average fineness of only 85 percent, the total issue would be about 3.4 to 6.8 metric tons of silver.

These figures should not be taken with great seriousness, considering the many assumptions that went into their calculation, but it seems safe to say that at least five to ten metric tons of silver went into the making of the crusader Arabic dirhams. This silver did not come from Syria, which has no mines. Some of it might have come from Anatolia, imported by the crusaders through Cilician Armenia, and some might also have come from Byzantine territory, but it seems reasonable to deduce that the bulk of this silver came from western Europe. There is direct evidence for movement of silver from Europe to Syria in the form of coins found in the latter region, and indirect evidence in the existence of special taxes collected in many European countries for the support of the crusaders and in documents referring to the export of silver.¹²⁸ It does not necessarily follow that all the silver that supplied the thirteenth-century Islamic revival of silver coinage came from Europe, but it does seem clear that the crusader imitations of Aiyūbid silver coinage must have contributed substantially to the stock of silver in Moslem Syria.

There are in addition a few other crusader Arabic coins that can only be mentioned here. These exist in only one or two specimens, and have not been studied beyond their first publication by Balog and Yvon.¹²⁹ Two examples are known of an issue of billon, BY 49, which has on one side an equal-armed barred cross with small wedge-shaped figures, described as crosses, in the four quadrants, and on the other side an Arabic inscription that has been read *ḍuriba bi-Quds*, "struck in Jerusalem". The reading is not entirely certain, but the language of the inscription together with the cross is perhaps sufficient evidence

128. Much of this evidence is collected by Andrew M. Watson, "Back to Gold—and Silver," *Economic History Review*, 2nd ser., XX (1967), 7–21.

129. Balog and Yvon, "Monnaies," pp. 167–168.

for the attribution of these two little coins to the crusaders; they might have been tokens of some sort rather than true coins. Somewhat similar is a unique copper coin, BY 50, with an equal-armed cross, the branches ending in fleurs-de-lys, and on the other side an Arabic inscription read as "struck in Acre". Again, the reading is not completely satisfactory. One further copper, BY 51, has been struck with dinar dies; it is probably a counterfeit.