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The Coins from the al-Waṭṭa Quarter, Safed (Ẓefat)

Robert Kool and Ariel Berman

Introduction

A total of 666 coins were unearthed during extensive salvage excavations in the densely populated medieval neighborhood al-Waṭṭa (in Arabic: 'the lower'), on the western slope of Safed (Cohen and Lewis 1978:155–161; Cohen 2007; 2008; see Dalali-Amos and Getzov, this volume).[1] After cleaning the coins, 447 were deemed identifiable: 289 single coin finds, and two hoards: one (Hoard A) comprising 125 silver *dirhams* and *grossi* concealed in an earthenware container, and another, smaller hoard (Hoard B) of 33 copper *fulus*.

The coins came from three of the four identified strata (III–I) discovered in three excavated areas (A–C; see Appendix 1).

Stratum III. In this layer, 46 identified coins were found among a dense concentration of collapsed Mamlūk-period structures. According to the excavators, the structures were destroyed in a catastrophic event—an earthquake and subsequent conflagration (see Dalali-Amos and Getzov, this volume). Most of the coins were found concentrated in the remains of a large multi-storied structure (Building B) and in the adjacent fissured remains of rooms, walls and stone collapse. Together with these, a ceramic container with silver coins (Hoard A) was discovered on the lower floor of Building B.

Significantly, virtually all the isolated coins came from a destruction layer of thick ashes covering the above-mentioned remains (L215, L221, L242, L245). The largest group of these are dated coppers of the third reign of Al-Nāṣir Muḥammad (AH 709–741/1309–1341 CE), Manṣūr Abu Bakr (AH 741–742/1341 CE) and al-Ṣāliḥ Ismā'il (AH 743–746/1342–1345 CE). This group of coins also contains scores of difficult to identify Mamlūk coppers, which were roughly dated to the fourteenth–fifteenth centuries CE. The two latest identifiable *fulus* are from of the reigns of Ḥajji and Barqūq and are dated to 1388–1389 CE. According to

[1] This article was written by Robert Kool. Ariel Berman provided the identification of the Islamic coins in the two hoards. The isolated coins of this excavation were identified by Robert Kool and Ariel Berman. The coins were cleaned by Lena Kupershmidt in the IAA metals laboratory and photographed by Clara Amit.

the numismatic material, the destruction of Stratum III does not seem to have occurred prior to the last decade of the fourteenth or early fifteenth centuries CE. Such an event could possibly be linked to the string of seismic shocks and earthquakes documented in Syria in 1399 CE, and during the first decade of the fifteenth century CE (Sbeinati, Darawcheh and Mouty 2005:63–65; Ambraseys 2009:382–383).

Stratum II. This stratum yielded 111 identified coins. These were excavated from among the rebuilt (but fairly few and scanty) remains of structures constructed over the previous stratum. The isolated coin finds come mostly from contexts without noticeable stratigraphy. Despite the considerable number of early fourteenth-century CE *fulus*, the loci in Stratum II mostly contained a repertoire of late fourteenth- and fifteenth-century Mamlūk *fulus* from the reigns of Shaʻbān II (AH 764–778/1363–77 CE) till Faraj (AH 809–815/1406–1412 CE). The latest datable coins in this layer are a single *fals* of one of the last Mamlūk sultans, Qānṣūh al-Ghūri (AH 906–922/1501–1516 CE), and some early Ottoman *manghir* of Sulaymān I (AH 926–974/1520–1566 CE).[2] The dating suggested by the isolated finds is matched by that of a small hoard of 33 coppers (Hoard B) found wedged between two parts of a wall (L125, B1105). This hoard consists of mostly irregular-shaped fifteenth-century CE Mamlūk *fals*. The date of the deposit is based on a single *manghir* of Sulaymān I (AH 926–974/1520–1566 CE) after AH 955/1548 CE.

Stratum I. A total of 132 coins were found in mixed surface layers of erosion and modern debris. The coins are mostly fourteenth–fifteenth-century Mamlūk *fulus* and seem to mirror the date range of the finds in Strata III and II.

ISOLATED COIN FINDS (Catalogues 1, 2; Fig. 1)

Mamlūk Fals

An analysis of the chronological breakdown of the isolated *fals* discovered in the excavations shows a clear concentration of fourteenth-century CE material (76%) vis-à-vis the fifteenth century CE (16%) (Fig. 2).

The distribution pattern of the relatively abundant copper *fulus* of the fourteenth century CE peaks markedly in the third reign of Nāṣir Muḥammad (1310–1341 CE), then declines with yet another momentary peak under Shaʻbān II (1363–1377 CE). Quantities once more peak during the consecutive reigns of Barqūq (1382–1399 CE) and Faraj (1399–1412 CE)—over 60% of the coins identifiable by ruler were minted in the reign of Faraj. This sustained increase in coin finds around the turn of the fifteenth century CE seems to conform with

[2] These coins are common in large numbers in other Ottoman-period strata in Israel.

Fig. 1. Isolated coin finds.

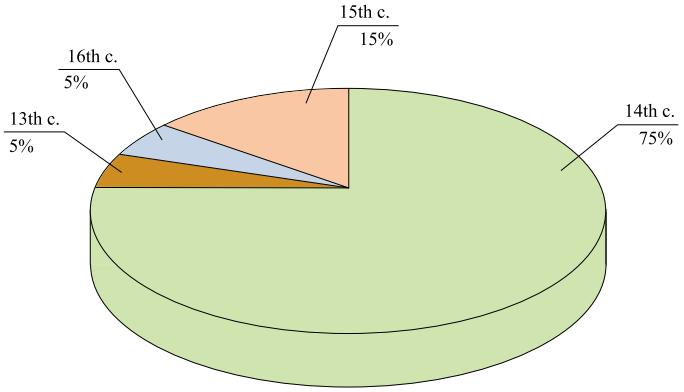

Fig. 2. Chronological distribution of the *fulus* coin finds.

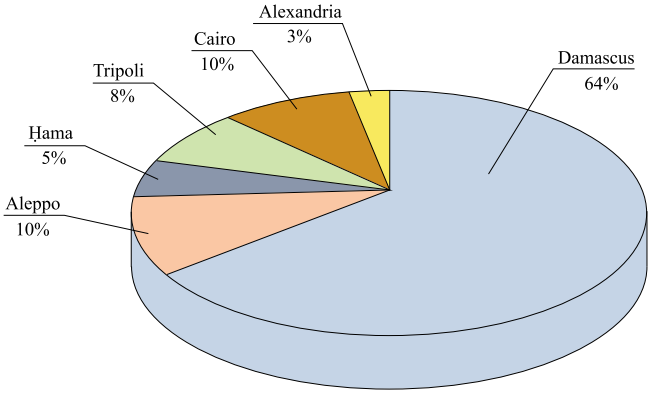

Fig. 3. Mint locations of the Mamluk-period *fulus* coin finds.

further historical and numismatic evidence that the circulation of copper *fulus* multiplied manifold during this period (Schultz 1998:130).

Nevertheless, the number of coins dating to the fifteenth century CE significantly decreases. This seems to be connected to a marked physical contraction of the al-Waṭṭa quarter and its population at the beginning of the fifteenth century, as revealed by the archaeological evidence. Possibly, it also mirrors longer term monetary developments in the Mamlūk state, such as the shortage of copper *fulus* between the 1420s and 1460s CE, resulting from a decline in copper production in central European mines (Shoshan 1982:108–111; Meloy 2001:293–321).

The coins' mint distribution clearly indicates that the overwhelming majority of Mamlūk *fals* circulating in Safed were minted in Damascus (64%) and other Syrian mints (Aleppo, Ḥama, Tripoli) (23%). Only negligible quantities of those circulating coppers were issued in Egypt proper (Cairo, Alexandria; 13%) (Fig. 3).

Such a local 'Syrian' circulation pattern of coins during the Mamlūk period is backed up by the wholly 'Syrian' character of the silver hoard found during the excavations (see below). The mint-location distribution demonstrates the importance of analyzing provenanced coin material from excavations for a detailed understanding of the monetary history of Mamlūk Syria, particularly for the massive issues of copper *fulus*. Scholars were aware of the distinct characteristics of the fiscal and monetary system of Mamlūk Syria, but many of its aspects still lack a systematic study (Humphreys 1991; 2005:224–227). The lion's share of research in Mamlūk numismatics and monetary history, especially relating to copper *fulus*, has been biased toward Egypt proper, and mostly based on written sources, as well as metrological and typological studies from unprovenanced coin collections, and too little rests on excavation material (Kool and Schultz 2009:140).[3]

Mamlūk Dirhams

The isolated finds from the Mamlūk period also include a small, but significant, group of 20 silver coins (7% of the identified specimens from the excavation), including 3 full weight specimens and 17 cut *dirham*s and fractions. These are present for the entire period of Mamlūk rule in Syria, from Qalā'ūn (AH 678–689/1279–1290 CE; No. 25) until Al-Ashraf Aynāl (AH 857–865/1453–1461 CE; No. 182). The data clearly show that these smaller silver fractions played an important role as currency in small daily payments *en par* with the copper *fulus* in Mamlūk Syria for most of the fourteenth and fifteenth centuries CE. This is further illustrated by their massive presence (40%) in the silver hoard. The finds indicate that these cut *dirham*s were especially plentiful during Nāṣir Muḥammad's third reign (AH 709–741/1309–1341 CE) and Faraj's second reign (AH 809–815/1406–1412 CE) (Nos. 30–38; 168–171).

[3] Paul Balog's *Coinage of the Mamlūk Sultans of Egypt and Syria*, published in 1964, and its addendum (Balog 1970), are still the main reference catalogue for research on Mamluk-period coinage. The catalogue is based on coins from all the major collections available at that time together with specimens from his own extensive collection (see below). For the early Bahri period, see Schultz's detailed study of Mamlūk coin circulation, which he admitted was limited to Egyptian coppers (Schultz 1995:165–166). Similarly, for a study of late fourteenth-century CE Egyptian coppers, see Schultz (1998), which is based on unprovenanced material from Egypt and the American Numismatic Collection (ANS) holdings. For studies of the *fulus* of the Circassian period, see Bacharach (1976), whose main source for numismatic material was the Balog catalogue and the collection of the Museum of Islamic Arts in Cairo. The numismatic evidence in Shoshan's article (1982:108) on the transformation to a copper-based monetary economy in the fifteenth century CE was essentially limited to a survey of unprovenanced material at the ANS; likewise, the study of Meloy (2001:293–321) on the copper monetary system of the last five decades of Mamlūk rule (1468–1517) was based on the vintage Balog catalogues and the ANS collection. Three excellent new sylloge catalogues with a considerable number of new varieties of Mamlūk coinages were published in recent years, but these too are based essentially on unprovenanced collections. Two of these are based on the large Tübingen University collection devoted to the mints of Ḥama and Damascus (*SNAT* 2014), and the third is dedicated to the Egyptian Mamlūk mints of Cairo and Alexandria (*SICIM* III), based on the extensive Balog collection, now housed in the Israel Museum.

Other Coins

Among the single finds, six miscellaneous coins were discovered. Two are residual finds from earlier periods: a bronze coin of Alexander Jannaeus (104–80/79 BCE; No. 1) and a coin of Julian II Caesar (355–361 CE; No. 2). These two coins were found together with mostly fourteenth–fifteenth century CE Mamlūk surface finds in unstratified layers of erosion and modern debris.

The four remaining coins are small Cypriot, Venetian and Genoese coppers, dating to the fourteenth century CE. This group includes two Cypriot copper deniers of Henri II (1285–1314; Nos. 3, 4). These small coppers were issued in large quantities in Cyprus and remained in daily use for a long time, as shown by their presence in hoards of the 1370s (Metcalf 1998:101). The above specimens, with the cursive n and pellets in four angles, belong to the last phase of Henri's reign (Metcalf 1998:105). Finds of these small Henri II coppers are regularly found in Mamlūk-period strata in excavations in Israel and are indicative of intensive trading contacts between the Cypriot kingdom and Mamlūk-ruled Syria, even during periods of Papal bans on trade with the Mamlūk empire (Ashtor 1983:38–39, 54–57).[4]

The European currencies also included a single Venetian *soldino* (No. 5)—the standard two-thirds silver alloy coin of Venice minted after 1332 CE for most of the fourteenth century (Stahl 2000:41–47). This coin was used for day-to-day payments in Venetian territory and circulated extensively in mainland Greece and Venetian-ruled Crete, but it was seldom used in the Eastern Mediterranean basin (Stahl 2000:220–221). This is also confirmed by the dearth of *soldini* in sites of the Mamlūk sultanate.[5]

Among the miscellaneous coins is a fourteenth-century CE Genoese *quartari*. This find is particularly intriguing. Despite the dominant presence of Genoese merchants in the Levant for more than 400 years (between the twelfth and the fifteenth centuries CE), hardly any coin finds from Genoa have been noted in the Eastern Mediterranean basin in excavations or hoards.

HOARD A: A MIXED SILVER HOARD OF *GROSSI* AND *DIRHAMS* (Catalogue 3; Fig. 4)

Archaeological Context

The hoard was stored in an earthenware receptacle ('money box') which contained 125 silver *dirham*s and *grossi* (Figs. 5, 6; see Dalali-Amos and Getsov, this volume: Figs. 19; 20; 50:6). The vessel was found in the collapsed multi-storied Building B, below the destruction level of Stratum III. The container was found on the floor in the northern section of

[4] Unpublished data from the IAA coin database show 17 finds of these Cypriot coppers in excavations. Noteworthy is their concentrated appearance in Jerusalem (11 specimens).

[5] The authors of this article are aware of only one other specimen, a *soldino* of Giovanni Dolfin, found during a salvage excavation at Ḥorbat Berekhot (Nof Ẓiyyon neighborhood), Jerusalem (IAA 102378, unpublished); see Zilberbod 2012 for data on the excavation.

Fig. 4. Hoard A.

Fig. 4. (cont.)

Fig. 4. (cont.)

Fig. 4. (cont.)

Fig. 5. The silver hoard (Hoard A) from the al-Waṭṭa quarter, Safed.

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Fig. 6. The restored ceramic money box.

Building B, in a room located along its western wall. It was found broken with some of its coins spread out close-by on the floor.

The Slotted Money Box

The receptacle that held the coins is a small closed conical-shaped vessel (height 9 cm, diam. 10 cm) with a ring base (Fig. 6). It resembles the many smaller wheel-shaped domestic and industrial wares of reddish brown clay from the Mamlūk period (Avissar and Stern 2005:82–83). A slot (2.6 cm in length) near the vessel's buttoned-top was used for depositing coins, clearly indicating its function as a money storage container. This vessel is identical with the slotted globular shaped 'tirelires' money boxes frequently found in urban

contexts in medieval France, starting from the late twelfth century CE onward.[6] Particularly interesting are the finds of two identical money containers among the ceramics excavated in the Hospitaller compound in ʻAkko (Stern 2012), locally produced of simple Acre Ware, dating to the twelfth–thirteenth centuries CE (Stern 2012:31, Nos. 11, 12).[7] Presumably, the custom of keeping cash money in globular ceramic containers reached the Latin East from Western Europe with pilgrims, warriors and merchants. The method of keeping coins in a 'money box' was adopted by the Frankish settlers and their descendants in the Crusader states and, later, found its way into Mamlūk and Ottoman society in the Holy Land (Meir 2005:19).

The coins held in the vessel are a mix of two contemporaneous groups of silver currencies: 43 *grossi* minted in the city-republic of Venice in the 1230s and 1330s CE and 82 *dirhams* issued by six successive Mamlūk sultans between the 1260s and 1341 CE. The earliest dated coin in the hoard is a single *grosso* of the doge Jacopo Tiepolo (1229–1249 CE). The latest coin is a *dirham* of Al-Nāṣir Muḥammad from the last two years of his reign (1339–1341 CE).[8]

Venetian Grossi

The silver *grossi* consist exclusively of the earliest Type I issues, struck in the Venice mint between 1200 and 1355 CE (Stahl 2000:304–307). The Type I obverse shows the full-height facing figure of the robed doge and St. Mark (the city's patron saint), the latter appears haloed, facing and holding a long standard between himself and the doge. The reverse depicts Christ seated on a square-backed throne holding a book (Fig. 7). These coins noticeably contrast with the later, lighter Type II issues (produced after 1379 CE) and Type III series (late fourteenth–early fifteenth centuries CE), on which the doge stands in profile (Stahl 2000:307). These last two types (II and III) are absent from the hoard.

The *grosso*, a medieval Italian shortened version of the Latin *denarius grossus* ('large coin'), was a multiple of the *denier/denaro*, the standard silver-billon coin-type of less than one gram, which circulated in Western Europe between the ninth and thirteenth centuries

[6] The authors are indebted to Herve Barbé of the IAA who pointed out the existence of identical vessels from excavations in Northern France and the Paris region. For examples, arranged in chronological order, see http://www.culture.gouv.fr/fr/arcnat/saint-denis/fr/vignet_fich26.htm (St. Denis, Paris; end of twelfth century CE); Barbé et al. 1996:159 (Saint-Omer; mid-thirteenth century CE context); Ravoire and Monnet 1992:47–48 (Louvre, Paris; second half of the fourteenth century CE); Vêche 1989:246 (Northern France; end of fourteenth–fifteenth centuries CE); Barbé, Debs and Roy 1994:12–17; http://www.inrap.fr/archeologie-preventive/Sites-archeologiques/p-12037-ZAC-Bourgogne.htm (Orleans; Early Middle Ages); http://www.archea.net/index.php?option=com_content&view=article&id=42&Itemid=79 (Limoges; sixteenth–seventeenth centuries CE); Barbieux 1993:43 (Northern France; eighteenth century CE).

[7] The authors wish to thank Edna Stern of the IAA for pointing out the appearance of these vessels in excavations at the Hospitaller Compound in ʻAkko.

[8] The coin reads the first two digits of the Hegira year of 74[--]. However, since Nāṣir Muḥammad reigned till AH 741–742/1341 CE, the date of this coin can be limited to AH 740–742/1339–1341 CE.

Fig. 7. *Grosso* A25. The robed doge and the city's patron saint, St. Mark, holding a long standard between himself and the doge (obverse); the seated Christ on a square-backed throne holding a book (reverse).

CE. This new heavy-weight (2.17–2.18 g) multiple denomination of virtually pure silver (95%–98%) was introduced in Venice during the early 1200s, after the army of the Fourth Crusade agreed to pay the vast sum of 85,000 marks of silver (the equivalent of 19,890 kg high-grade silver) for the building and provisioning of a large fleet in the Venetian Arsenal.[9] Presumably, these new coins were originally struck to pay wages for the numerous *arsenalotti* and mariners mobilized for the effort (Spufford 1988:226; Stahl 2000:16–19). The Venetian *grosso* circulated extensively throughout the entire Italian peninsula from the 1260s till the early fourteenth century CE, including Sicily and Venice's hinterland along the Adriatic and Greece (Stahl 2000:208–209). However, the introduction of the gold *ducat* and smaller fractional silver denominations in 1285 CE resulted in the displacement of the *grosso* by the 1330–1340s. In the fourteenth century CE, the *grosso* was used primarily as an international trade coinage in Frankish Greece and the Eastern Mediterranean (Stahl 2000:210–211).

The hoard lacks the earliest issues of the Type I *grosso* produced since c. 1200 CE, under the doges Enrico Dandolo (1192–1205 CE) and Pietro Zani (1205–1229). This is not unusual for hoards deposited in Western Europe and Greece during the 1340s and 1350s CE.[10] Likewise, single finds of *grossi* from the first half of the twelfth century CE are absent from excavated sites in the Latin East, possibly indicating that these earlier types did not

[9] This is calculated according to the widely accepted *mark* weight measure of the German trade city of Cologne, which was 234 g, and which was the *mark* standard used in Venice.

[10] Only 2 out of 27 similar *grosso* hoards deposited in c. 1340–1350 CE contain the earliest *grosso* of Enrico Dandolo (1192–1205 CE) (Stahl 2000:441–456). Interestingly, the large Aleppo hoard of 276 *grossi* contained two of these early silvers. *Grossi* of his successor, Pietro Zani (1205–1229 CE), are more common; they appear in 22% of the hoards.

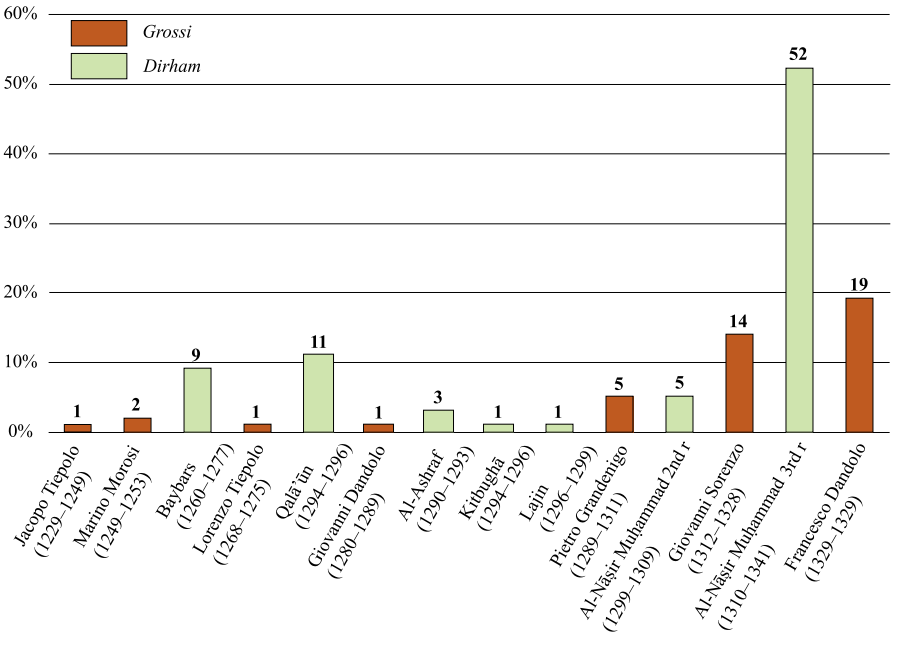

Fig. 8. Chronological distribution of *grossi* and *dirham* in the mixed silver Hoard A.

circulate beyond the immediate territory of the Venetian republic.[11] Otherwise, except for two hiatuses—the reigns of Ranieri Zeno (1253–1268 CE) and Jacopo Contarini (1275–1280 CE)—the hoard contains the entire range of *grossi* produced under seven successive doges between 1229 and 1339 CE at the Venetian *Zecca* (Fig. 8).

The hoard does not contain *grossi* minted under the doges Bartolomeo Gradenigo (1339–1343 CE) and Andrea Dandolo (1343–1354 CE), which only appear regularly in the latest hoards of this period (after c. 1345 CE). After that time, the minting of *grossi* ceases for almost a quarter of a century, until 1379.

The *grossi* in the al-Waṭṭa hoard show a relatively normative pattern of wear and occasional clipping, indicated by weight loss. The earliest coin of the *grossi* group (No. A1), a single silver of Jacopo Tiepolo (1229–1249 CE), had circulated more than a hundred years and showed substantial marks of wear. As a result, it had undergone the most substantial weight loss of the entire group: its weight, a mere 2.03 g, is significantly below the standard range of 2.17–2.18 g rigorously enforced by the minting masters at the *Zecca* during the thirteenth century CE (Stahl 2000:362). In contrast, the average weight of the *grossi* in the

[11] Based on data collected by Robert Kool for his research on the distribution and use of currencies in the territory of the Latin Kingdom of Jerusalem.

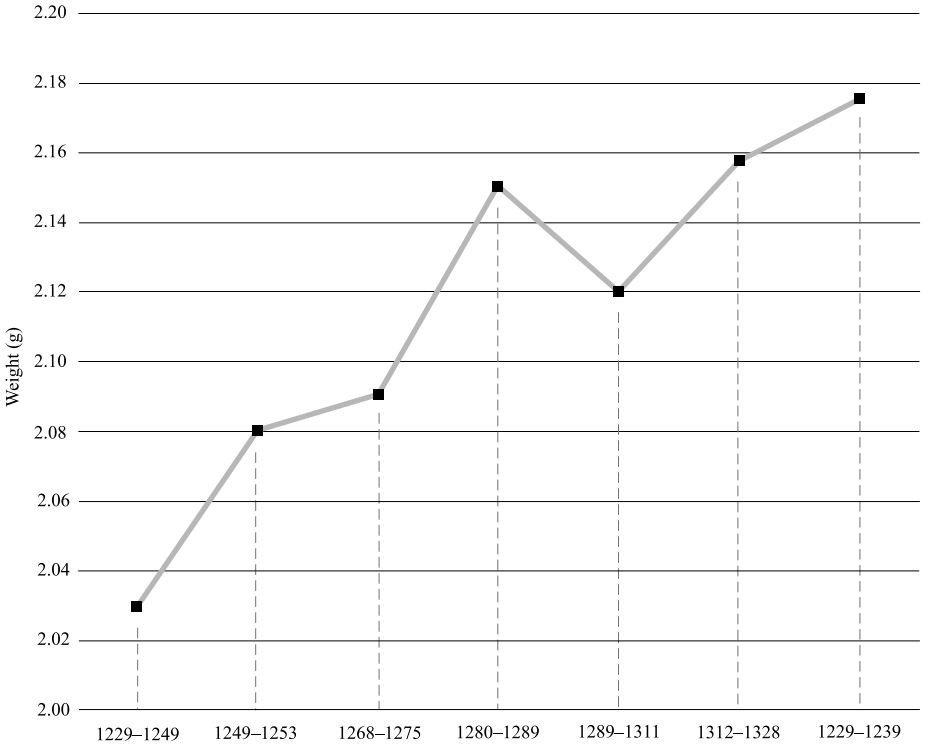

Fig. 9. Average weight of *grossi* by doge-reign in the mixed *grossi/dirham* Hoard A.

hoard till its terminal date (1339 CE) shows a pattern whereby the coin's weight converges with the standard weight and even exceeds it (Fig. 9).

A few of the coins showed signs of clipping, which resulted in the reduction of their weight. These clippings are apparent and clear in the case of two 1289–1311 *grossi* (Nos. A7, A9; 2.10–2.13 g) and an exemplar dated to 1312–1328 CE (No. A14; 2.15 g). Also, signs of wear due to long-time circulation are apparent on some of the fourteenth-century *grossi* (Nos. A10, A17, A23), which obviously resulted in significant thinning of the coin blank (No. A2; 2.17 g).

In this hoard, a large group of fourteenth-century CE *grossi* (11 coins) weigh significantly more than the standard weight range (2.19–2.22 g). This seems to confirm that there was no significant decline in weight and fineness of Venetian *grossi* till the 1350s (Stahl 2000:362). This observation is strengthened by the X-Ray Fluorescence (XRF) analysis of the alloy content of two *grossi* from the hoard (Notis et al. 2007): a *grosso* of Jacopo Tiepolo (1229–1249 CE; No. A1), the earliest one in the hoard, which was compared with one of the nineteen of the latest Francesco Dandolo *grossi* (1329–1339 CE; No. A37). The test showed that the alloy of the silver coins in this particular hoard (96.37–96.50%) seemed

Table 1. Comparison of Alloy Content of the Early and Late *Grossi* in the Mixed Silver *Grossi/Dirham* Hoard (Non-Destructive XRF Analysis)

No.	Description	Arg (Silver) %	Cu (Copper) %
A1	J. Tiepolo, 1229–1249 CE	96.37	3.63
A2	F. Dandolo, 1329–1339 CE	96.50	2.95

to have remained unchanged for more than a century (Table 1).[12] This finding corroborates the evidence provided by both Venetian and non-Venetian sources from the 1350s that the Venetian *Zecca* successfully enforced a single *argentam de bulla* standard for its *grossi* at between 95.2% and 96.9% silver (Stahl 2000:354–361).

Taking into the account the dating of the hoard and the circulation of Venetian *grossi* in the Near East, we shall explore the next question: Does this hoard represent a typical 1340s hoard or not? This question is important, *inter alia,* since the hoard was found in a building presumably destroyed more than half a century later. Comparisons with more than a dozen other *grossi* hoards from all over the Mediterranean Basin similarly dated to 1340–1350s unequivocally shows that the Safed hoard was a typical one: almost half of these hoards have the same date range (1229–1339 CE). Furthermore, 92% of these hoards have a similar profile, including the presence of the earlier thirteenth century CE coins.[13] Particularly striking is the fact that all three of the known *grossi* hoards from fourteenth-century CE Mamlūk Syria, with similar terminal dates, contain thirteenth-century *grossi*. This contrasts with later hoards from the second half of the fourteenth and fifteenth centuries CE, in which such thirteenth-century *grossi* are almost completely absent.[14] This observation is illustrated by a recent find of a similarly mixed hoard near the Mamlūk castle at Safed; the hoard there consists of 37 *grossi* and Mamlūk *dirhams* (Barbé and Damati 2004; 2005). The Safed Castle hoard, deposited after 1457 CE, exclusively contains 18 much lighter-weight Type III *grossi*, all dated to the late fourteenth–early fifteenth centuries CE (Kool, forthcoming a).

[12] The test was conducted during February 2005 in the framework of an X-Ray Fluorescence (XRF) study of over 700 ancient silver coins at the IAA Coin Department (Notis et al. 2007:258–274). The analysis was performed by means of a non-destructive mobile handheld XRF unit. The authors wish to thank Michael Notis and Aaron Shugar of the Archaeometallurgy Laboratory, Department of Material Science and Engineering, Lehigh University, Bethlehem, Penn., USA.

[13] The list is primarily based on an exhaustive list of *grosso* hoards published by Stahl (2000:441–456).

[14] Of the fourteen *grossi* hoards deposited in the 1380s and 1450s, only two hoards contain a very small number of thirteenth-century *grossi* (2–4% of the coins in each hoard). The exception is a large late Byzantine-period hoard discovered in Belgrakapi-Istanbul (Gökyildirim1992:9–20; Stahl 2000:453). Deposited after the 1380s, it contains 2280 coins, mainly 1/16 *hyperpyra* of John V (1341–1391 CE). In this hoard, 319 coins (13%) are Venetian *grossi* and *soldino*. The terminal date of the Venetian money is indicated by the *soldini* of doge Andrea Contarini (1368–1382 CE). The hoard includes 118 *grossi,* of which 79% date to the thirteenth century CE.

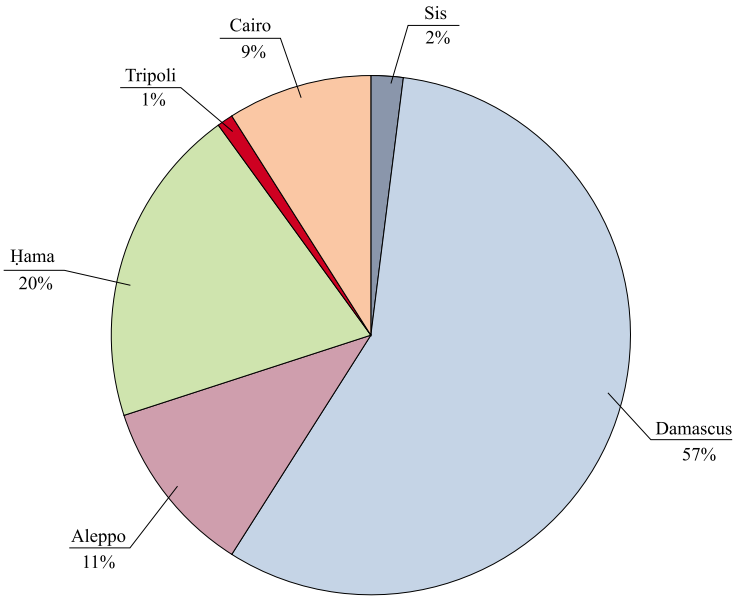

Fig. 10. Mint locations of Mamluk-period *dirhams* in the mixed silver *grossi/dirhams* Hoard A.

Mamlūk Dirhams

The second part of the hoard is composed of 82 Mamlūk *dirhams* issued between the 1260s and 1341: 46 full *dirhams*, 34 *dirham* fractions and 2 silver *takvorin* of Oshin (1307–1320), ruler of Cicilian Armenia, which were overstruck with *dirham* dies used during the third reign of Al-Nāṣir Muḥammad I (AH 709–741/1310–1341 CE).

This part of the hoard contains a small but important assemblage of thirteenth-century CE *dirhams* and fractions that assist in understanding the monetary policies of the Mamlūk state. The earlier group consists of nine *dirhams* and fractions of Baybars (AH 658–676/1260–1277 CE) and eleven *dirhams of* Qalā'ūn (AH 678–689/1279–1290 CE), terminating with three silver coins of the sultans Al-Ashraf Khalil (AH 689–693/1290–1293 CE), Kitbughā (AH 694–696/1294–1296 CE) and Lājīn (AH 696–698/1296–1299 CE). The clear majority of the Mamlūk silver in the hoard though comes from Al-Nāṣir Muḥammad's reign: some 56 pieces, or 70% of the hoard, in particular from the last two decades of his third reign (AH 709–741/1310–1341 CE). This last group also contains the latest datable coin of the entire hoard, a *dirham* minted in Damascus in AH 740–42/1339–1341 CE.

Like the single-coin finds, most of the Mamlūk silver in the hoard was issued almost exclusively in 'local' Syrian mints (91%; Fig. 10). These included two over-struck *takvorin,* originally minted in the Armenian capital of Sis (Nos. A124, A125); these over-struck silver coins do not mention any mint, but it is almost certain that they were re-minted on a massive scale in one of the Syrian mints, possibly Damascus (Balog 1964:147). Very little of the silver was minted in Egypt (9%). Could this indicate that despite the relatively high

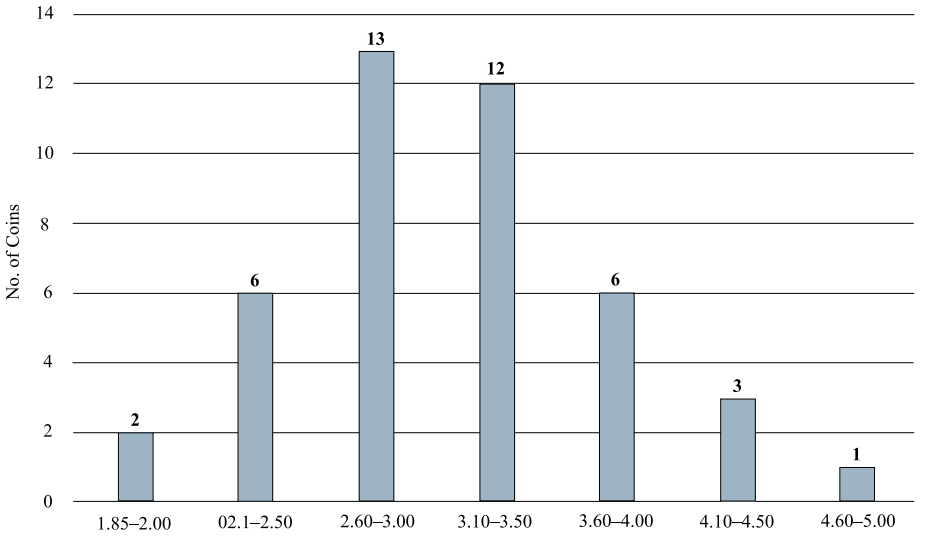

Fig. 11. Weight distribution of whole Mamluk *dirhams* in Hoard A.

centralization of the empire's finances, allowing silver money to flow freely throughout the Mamlūk sultanate (Rabie 1972:133–161; Schultz 2004:237), monetary circulation in Mamlūk Syria was restricted to its own mints? To fully understand this phenomenon more excavation material from other Mamlūk-period sites will need to be examined in detail.

The weight distribution of the Mamlūk *dirhams* in the hoard, even within reigns, varies considerably (Fig. 11). Some of the full *dirhams* weigh less than two grams (Nos. A84, A99), but there are also specimens weighing as much as 4.7 g (No. A90). In general, the majority of these Mamlūk silvers seems to peak between 2.6 and 3.5 g. This lack of weight consistency confirms the conclusions drawn in the groundbreaking study on Mamlūk money from this period (Schultz 1995), that the coins with an average fineness of (65–75%) silver in the Mamlūk monetary system between 1260 and 1400 did not adhere to a precise weight standard, unlike the 'nominal' Venetian system, in which all coins were of the same weight and fineness standard and had similar buying power (Schultz 1995:107). Rather, payments in the Mamlūk monetary system were apparently based on weight: coins were weighted to an ideal 'money of account' standard based on the legally sanctioned *dirham* of 2.97 g.

Another observation concerning the Islamic part of the hoard is the large presence of cut *dirham* fractions with incomplete legends—40% of all the Mamlūk silver. These small 'cut type' *dirhams* are easily distinguishable from the conventional round-flan *dirham*s (Fig. 12). Presumably, they were prepared with the same dies used for the round *dirham,* which were now impressed on large, rectangular cut strips of silver of more or less the same thickness as

Fig. 12. Small 'cut type' *dirham* coin (A102).

the conventional round flans (Balog 1964:146; Schultz 1995:137–138).[15] Their prominence in the hoard undoubtedly confirms that they circulated *en par* with the regular round-flan *dirham* types.

Deposition Date and Circumstances

Though quite different in character, the two groups of Venetian and Mamlūk silver coins in the hoard have conspicuous similar profiles. Both contain an uninterrupted chronological sequence of coins spanning a long period of circulation of c. 80–110 years. Both contain a small group of mostly thirteenth- and early fourteenth-century CE coins, while most of the coins (70–77%) are concentrated between the years 1310 and 1341 CE, close to the hoard's deposition date sometime after the 1340s.

The hoard's profile indicates that it was a typical 'currency' hoard—its contents representing money circulating at the time of its deposition—rather than having been gradually accumulated or saved over one or two person's lifetimes.

Both the numismatic evidence and the archaeological context of the al-Waṭṭa hoard—in particular the posterior dating of the isolated coin finds of Stratum III—clearly indicate that the hoard was deposited half a century *before* the building's collapse due to an earthquake, which occurred after the beginning of the fifteenth century CE. Significantly, the hoard's content and deposition date are identical to a similar mixed Venetian/Mamlūk/Armenian money hoard found in nearby Tiberias, published more than six decades ago (Rahmani and Baer 1964:47–55) (Table 2).

Was the simultaneous deposition of these hoards in the 1340s related to worsening demographic and economic conditions at the end of Nāṣir Muḥammad's reign? The last decade of Nāṣir Muḥammad's reign was marked by a deepening economic crisis with an

[15] Schultz (1995:137) noted that these cut-types were "often thicker than the round flan coins." However, the specimens in the hoard lead us to conclude otherwise: though the two types of coins were produced with different techniques, the flan used in both is virtually the same thickness.

Table 2. Comparison between the Content of the Mixed Silver *Grossi/Dirham* Hoards of Tiberias (1964)[i] and al-Waṭṭa, Safed (2004)

Ruler	Tiberias (N)	Safed (N)
Al-Manṣūr ʻAli (1257–1259)	1	
Baybars (1260–1277)	9	9
Baraka Qān (1277–1279)	2	
Salāmish (1279)	1	
Qalā'ūn (1279–1290)	14	11
Al-Ashraf (1290–1293)	1	3
Kitbughā (1294–1296)	2	1
Lājīn (1296–1299)		1
Al-Naṣir Muḥammad I (1299–1309), 2nd reign		5
Al-Naṣir Muḥammad I (1310–1341), 3nd reign	55	51
Armenian	1	1
Unidentified	3	

[i] After Rahmani and Baer 1964:47–55.

increasingly heavier fiscal burden weighing on the population (Levanoni 1995:141–142). Vast increases in state expenditures to finance the sultan's massive building program and sustain the patronage of his bloating household, led to the depletion of the royal treasure. Indiscriminate measures, such as new taxes and the *masdara* (the confiscation of property of office holders and merchants), were introduced to 'balance' the growing deficit of the sultan's treasury (Levanoni 1995:148–154). These, and predominantly the state's manipulation of the precious metal market in the 1330s (Rabie 1972:196–197), led to a sustained economic crisis marked by inflation and shortages, thus presumably encouraging the hoarding of good quality silver. Thereafter, the breakdown of the established political order after al-Nāṣir Muḥammad's death (1341 CE)—the onset of the Black Death (1347–1349 CE), massively decimating the population in cities and leading to a breakdown of the urban economy (Borsch 2005; Humphreys 2005:223)—must have further contributed to the phenomenon of hoarding.

The Simultaneous Circulation of Grossi and Dirhams

The hoard raises an important monetary issue related to the simultaneous presence of Venetian *grossi*, Mamlūk *dirhams* and Armenian silver. Were these coins hoarded together by mere chance, or did they circulate jointly, mirroring the monetary and economic realities of the Mamlūk empire in the mid-fourteenth century CE?

Schultz (1995:156–57; 2003:223) already underlined that Mamlūk *dirhams* were not the 'standard' coinage of the sultanate, but just one of a multitude of currencies of different metals and fineness in circulation. Noteworthy was the massive entry of Armenian silver

takvorins, alongside Mamlūk *dirhams* and their fractions, after the Mamlūk conquest of Cicilian Armenia (1323 CE). With the capture of the royal treasure, the Armenians had to pay a large annual tribute of 1,200,000 silver coins to their Mamlūk overlords (Ashtor 1971:40). The direct entry of these Armenian silvers into the Mamlūk monetary economy made sense as these coins (though of a divergent 2.2 g standard) were similar to the Mamlūk *dirhams* minted on a two-third silver purity (70%) scale since the fourteenth century CE (Schultz 1995:159).

But what about the simultaneous circulation of *grossi* and *dirhams*? At first glance, the two types of coins seem incompatible, different in almost every aspect. The Venetian *grosso* was a beautifully designed coin, struck in a single central mint, and made of rigidly controlled high-grade silver alloy (95–97%) with a uniform weight (2.17 g). The Mamlūk *dirhams* on the other hand, were carelessly struck silvers of a mere two-third alloy (65–75%) of irregular weight, which needed to be calculated according to a virtual weight standard (standard *dirham* of 2.97 g).

Surprisingly though it may seem, these two different coin systems circulated together in fourteenth-century CE Safed and Syria in the Mamlūk period, as shown by the regular occurrence of such mixed hoards.[16]

The circulation of high-grade European silver (96%) in the Mamlūk territory was certainly an established fact by the first half of the fourteenth century CE. Large volumes of European silver bullion, mostly in the shape of high-grade 'sterling' ingots, were shipped off to the Levant (Watson 1967:14–19; Spufford 1988:209–224). These were supplemented by large shipments of Venetian *grossi* that reached the Near East, particularly Syria and Armenia, where Venetian trade interests increased substantially after the second half of the thirteenth century CE (Lane and Mueller 1985:367–370; Jacoby 2014:261–291). Possibly, large quantities of these *grossi* (in Arabic *bunduqi* 'Venetian') infiltrated during the first decades of the fourteenth century CE into the local money market together with the growing presence of Venetian merchants who played a dominant role in the burgeoning cotton trade in Mamlūk Bilad al-Sham (Ashtor 1976). The Galilee region was one of its three main cotton-growing centers, together with Aleppo and Ḥama (Ashtor 1976:678–681). Its administrative center was the 'Mamlaka' of Safed (Drory 2004). By 1304 CE, Venetian envoys were already present in Safed, negotiating with its Mamlūk governor over concessions related to the cotton trade (Heyd 1879:40). Thereafter, in the course of the fourteenth century, Venetian traders were increasingly involved in the wholesale buying of cotton at the local *mudda* (or fairs), both in port cities and inland towns and transporting it back in Venetian cogs (Ashtor 1983:25–27; Jacoby 2009:67–68). Supposedly, between 1323 and 1344 CE,

[16] Besides the two mixed hoards found in excavations in Safed and the above-mentioned hoard from Tiberias (Rahmani and Baer 1964:47–55), similar hoards were found and excavated in Ḥama (Ploug et al. 1969:149–50) and in Umn Qeis (Gadara). The latter comprised a large mixed hoard, containing 528 Mamlūk silver and 5 Venetian gold coins; for a short note and photograph, see Tawalbeh 2002:625–626.

the Pope demanded the Venetian republic to comply with a strict trade embargo on the Mamlūk empire. But the existence of the Safed treasure and other contemporary *grossi* hoards from Mamlūk-ruled Syria, mixed or not, tells a different story, i.e., that the embargo was not enforced.[17]

The concurrent use of local and foreign money by European traders in Syria is also illustrated by a Genoese document from 1344 that mentions a payment in *dirhams* between two traders from Narbonne and Montpellier residing in Syria (Ashtor 1983:48–49). Also, the concession by the Mamlūk sultan al Ṣāliḥ Isma'il in 1345 to provide Venetian traders with a mint in Alexandria, in which they could convert their high-grade Venetian silver ingots into lower-grade Mamlūk *dirhams* (Tafel and Thomas 1856: Nos. 153–155), obviously to provide local merchants with smaller change, is illustrative of the motivation and skills of the parties involved to connect two inherently different monetary systems. The occurrence of mixed currency transactions also echoes in the *muḥtasib* (market inspector) manuals and *fiqh* (jurisprudence) literature of the period; all warn sternly against deals involving mixed coinages since this could lead to usury—a practice censured by Islamic law (*māl ribawī*), in particular with regard to precious metals (Schacht 1995:509).[18] No doubt, money changers and merchants were aware of the differences in value and purity of the coins involved. Thus, they developed an exchange rate based on a standard *dirham* of account valued at two grams of pure silver. This allowed them to precisely determine the value of the coins to be exchanged by calculating the weight and purity of the silver in each coin, for example in the above case, a Venetian *grosso* of pure silver (96–97%) weighing c. 2 g was the equivalent of a Mamlūk *dirham* with an *accumulated* weight of c. 3 g, but minted on a lower two-third silver standard (66%).

HOARD B: A COPPER HOARD (Catalogue 4; Fig. 13)

The second hoard found in the al-Waṭṭa excavations consists of 33 coppers (Nos. B1–33). This small hoard was found wedged between two parts of a wall (L125, B1105), constructed during the partial rebuilding of several structures after the earthquake's destruction of the area (Stratum II). Its latest datable coin (No. B33) is a *manghir* of the Ottoman Sultan Sulaymān I minted after AH 955/1548 CE. Therefore, the hoard was deposited somewhere after the 1570s, when Safed was already under Ottoman rule. Interestingly, the hoard contains mid- and late-fourteenth century Mamlūk *fals* (Nos. B1–3) and regular and irregular-shaped late fourteenth/fifteenth century fractions (Nos. B4–32), many of them barely identifiable, and only one genuine Ottoman *manghir* copper. Presumably, the hoard functioned as

[17] Contemporaneous mixed and non-mixed hoards are known from Tiberias dating to c. 1340 CE; Aleppo, from c. 1350 CE; and Sheiza, Ḥama, from c. 1350 CE. Schultz (2004:238) registered two additional unprovenanced treasures (Nos. 3 and 5) with similar terminal dates.

[18] The authors thank Warren Schultz for drawing their attention to these written sources.

Fig. 13. Hoard B.

'transition' money: the slow infiltration of the new *manghir* types issued by the Ottoman-administered mint of Damascus during the first half of the sixteenth century probably forced the local population in Safed to continue using Mamlūk coppers in money transactions. This seems somewhat surprising, since (1) a well-organized and efficient bureaucracy sprang up immediately after the Ottoman conquest of the area in 1516, and (2) the fact that by the 1550s, Safed had replaced Gaza as the main commercial center of the area (Cohen and Lewis 1978:50, 155–169).[19] It seems that the transition to a centralized Ottoman rule did

[19] For example, the reorganization of the fiscal system by the Ottomans led to an increase in tax collection of more than 300% in Safed during 1525–1555 CE (Cohen and Lewis 1978:43). Presumably, this was connected to population growth during the first half of the sixteenth century CE in the Holy Land under Ottoman rule (Cohen and Lewis 1978:21–22). In Safed, this was particularly pronounced due to the immigration of large numbers of Jews into the city. Safed's Jewish population grew from almost a quarter of the city's population in 1525 to roughly half by the 1550s (Cohen and Lewis 1978:28–29).

take time. The first Ottoman census (*tahrir*) was not carried out until 1525–1526. A fully functioning and entrenched court and fiscal administrative structure was apparently not in place before the 1530s within the towns and rural areas of Ottoman Palestine subject to the *liwa'* province of Damascus (Bakhit 1982:143–163; Cohen 1989:1–2).

This trend seems also to have been reflected in the circulation and distribution of Ottoman copper. Even though the Damascus mint issued 25 different types of the new Ottoman coppers within a short period between 1512 and 1566 (Kabaklarli 1998:245–393), they apparently penetrated only gradually into the Galilean hinterland. Moreover, the concept of a common currency barely existed during the early period of the Ottoman Empire's existence (Pamuk 2000:88–89). For the Ottoman administration, minting coppers was not just to provide the local economy with a reliable, regular form of currency. Rather, the Ottomans saw consecutive series of rapidly demonetized issues of coppers as a quick way to provide the state with additional tax income by forcing a large number of copper issues on the population in return for silver or as a stable source of seigniorage income (Kabaklarli 1998:40–41; Pamuk 2000:39).[20] The new Ottoman rulers inherited some of these practices from the preceding Mamlūk Circassian rulers, who, during the entire fifteenth century, attempted to manipulate the rates of copper for their own immediate profit (Bacharach 1976:32–47; Shoshan 1982:109–116). Vast quantities of Mamlūk copper *fulus* were still available in what previously comprised Mamlūk Syria and continued to be used as small change for daily use. The Mamlūk *fulus* continued to play an important role in generating such tax money with the newly-established centralized Ottoman treasury or *defterdar* in Aleppo (Bakhit 1982:143–163). *Fulus* were used particularly in areas where the newly-minted Ottoman coppers did not yet penetrate during the first half of the sixteenth century CE.

CONCLUSIONS

The study of the stratified Mamlūk and early Ottoman-period coin finds of the al-Waṭṭa quarter excavations in Safed presents many important and pioneering aspects. The detailed stratigraphy of the coins, combined with information about the distribution pattern of types and mints, provides previously unknown details about the use and circulation of coins within the Mamlūk state and its early Ottoman successors between the fourteenth and early sixteenth centuries CE.

The presence of very large quantities of copper *fulus*, which peaked in the fourteenth century CE, but significantly decreased in the fifteenth century CE, shows that contrary to the previously-accepted impression of a poor stagnant economy, a vibrant diversified

[20] Large mints like the one in Damascus were closely controlled and supervised by the central government (Pamuk 2000:34–36). The Ottoman state obtained a profit of almost 100% after deducting production costs of the copper during the first half of the sixteenth century CE (Kabaklarli 1998:41).

use of money prevailed under Mamlūk and early Ottoman rule. This picture of a surge of economic activity also emerges from other Mamlūk-period urban and rural sites in Bilad al-Sham, such as Jerusalem, Qaqun and Khirbat Burin. Coin evidence from this period consistently shows the widespread and intensive use of small copper denominations for daily use in southern Bilad al-Sham during the fourteenth–sixteenth centuries CE. Such availability of small petty cash was far beyond anything known in the previous 400 years and seems to have been a salient feature of the fourteenth- and early fifteenth-century CE Syrian Mamlūk monetary economy (Kool, forthcoming b, c, d).

The mint distribution analysis of both Mamlūk copper *fulus* and silver *dirhams* clearly indicates that most of the coins circulating in Safed were minted in Damascus and other Syrian mints. The same picture emerges from other Mamlūk-period sites in Bilad al-Sham, particularly for the *fulus* coppers. This seems to reflect the considerable independence of bureaucracies in Syria within the Mamlūk state, operating their own distinct fiscal and monetary traditions for Bilad al-Sham, in place since Ayyūbid times.

The concurrent use of local and foreign silver money in Mamlūk Bilad al-Sham is exemplified by the finding of a well-preserved slotted money box containing a mix of silver Venetian *grossi* and Mamlūk *dirhams*. The simultaneous circulation of high-grade European silver with lower grade Mamlūk specimens was undeniable by the first half of the fourteenth century CE and extended well into the fifteenth century CE. Large volumes of silver bullion and coins accompanied the arrival of Venetian merchants to buy locally grown cotton for export to textile centers in Western Europe.

After the Ottoman conquest of Mamlūk Bilad al-Sham in 1516, the new Ottoman low-value copper types minted in Damascus did not seem to have become available in sufficient numbers during the first half of the sixteenth century CE. As a result, the local population seems to have continued using Mamlūk coppers as 'transition' money.

The conclusions above are based on hard coin evidence from stratified archaeological contexts, which was, until now, sorely lacking in the numismatic and monetary history of the Mamlūk and early Ottoman periods. Even to date, many of the numismatic and monetary studies of these periods are still very much based on written sources or publications of unprovenanced coins in public and private collections in the Middle East, Europe and United States. With the lion's share of research in Mamlūk numismatics and early Ottoman monetary history biased toward Egypt and Constantinople proper, the detailed analysis of the al-Waṭṭa coin material enables us for the first time to fill in a void in the monetary history of Mamlūk and early Ottoman Bilad al-Sham, of which many of its important aspects still lack systematic study.

CATALOGUE 1: ISOLATED FINDS[i]

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
Alexander Yannai (104–76 BCE)											
1	212	2094	1.73	16	Traces of Paleo-Hebrew inscription in wreath	Traces of double cornucopiae, overstruck on lily		Jerusalem	*TJC*:216, Group T1		109500
Julian II Caesar (355–361 CE)											
2	207	2100	1.96	15	DN [IVLIANV-S NOB CAES] Draped bust r.	[SPES REPVBLICAE] Virtus stg. l., holding globe and Scepter			Cf. *LRBC* 2:100, No. 2639		109468
Kingdom of Cyprus Henry II (1285–1324 CE), *denier*											
3*	200	2112	0.52	15	✠[hENRI: REI: D]E Cross, with four dots in angles of field.	✠[IRLM: ED'ChIPR] Lion rampant			Metcalf 1995: Nos. 727, 728; Metcalf 1998:250, Nos. 8, 9		109210
4*	213	2351	0.54	15	✠[hENRI: REI: DE] Same	[✠IRLM: ED'ChIPR] Same			Same		109240
Venice Doge Francesco Dandolo (1329–1339 CE), *soldino*											
5*	214	2249	0.76	17	✠FR·A· DAN [DVLO]·DVX· Doge kneeling	✠·S· MARCVS. VENETI· Lion rampant l., holding banner-staff	1332–1339	Venice	Papadopoli 1893:163, No. 11; *MEC* 12:1014, No. 1109		109277
Commune of Genoa 14th c., *quartari*											
6*	200	2233	0.86	13	✠ [•O•V•A•R•T•A•]R•O• Griffin rampant to r.	✠[•C•O•N•R•AD•V•S•] Cross patée		Genoa	*CNI* 3:38, No. 17; *MEC* 12:880, No. 260		109221

[i] The coins are arranged chronologically, according to coin types. Coin numbers marked with an asterisk(*) appear in Fig. 1.

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
Urtuqids of Mardin Naṣir al Dīn Urtuq Arslān (AH 597–637/1201–1239 CE), *fals*											
7	200	2182	3.11	23	Head l. Outside marginal legend: [- - -]سنة ت	Illegible		Mardin	Cf. Mitchiner 1977:182, Nos. 1056, 1057		109216
Ayyubids Al-Kâmil Nâṣir ad-Dîn Abû al-Ma'âlî Muḥammad I (AH 615–635/1218–1237 CE), *fals*											
8	223	2370	2.93	20	Square in circle type In center: الملك الكا مل ناصر	Illegible		Damascus	Cf. Balog 1980:169, No. 465		109307
Principality of Ḥamâh Al-Manṣûr Sayf ad-Dîn Muḥammad II (AH 642–683/1244–1284 CE), *fals*											
9	215	2242	1.14	15	In center: [- - -] الملك	Illegible		Ḥamāh	Cf. Korn 1998:30, Nos. 107–112		109288
Ilkhanids Abu Said (AH 716–736/1316–1335 CE), *fals*											
10*	232	2539	3.02	22	Illegible	Hexagram in segments Marginal legend: .../ الاة / محمد / رسول /			Cf. *SICA* 9:ix		109385
Ilkhanids, uncertain 13th–14th c., *fals*											
11	242	2595	1.84	17	Illegible symbol in center Marginal legend: [- - -] سامان	Illegible			Same		109396

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
12	Section	2350	0.94	20	Illegible	Inscription: الاة / محمد رسول / [- - -]			Same		109408
13	211	2129	1.54	17	Illegible	Illegible			Same		109483
14	211	2223	1.32	17	Illegible	Illegible			Same		109493
15	213	2272	2.03	15	Inscription	Square within inner circle; surrounded by outer circle of dots			Same		109514
16	223	2457	0.62	17	In center: السلطان [- - -]	Small lion passant to r., tail curled back					109318
Eastern Anatolian, minor dynasty, uncertain, *fals*											
17*	211	2252	0.91	16	In center: الملك الناصر	Ornament with stops					109497
Mamlûks Al-Ẓâhir Rukn ad-Dîn Baybars I (AH 658–676/1260–1277 CE), *fals*											
18	211	2109	1.45	17	Center: lion l. Upper segment: االسلطان Lower segment: الملك الظاهر	Linear Hexagram, in center: [اله] [لااله الا] محمد [رسول الله] [اله]		Damascus	Balog 1964:105, No. 98		109482
19	221	2354	1.61	17	Center: lion l.	Border circular line, in which linear square: لااله الا الله محمد رسول الله		Same	Unpublished? Hybrid type of obverse Balog 1964:105, No. 98 and reverse 105, No. 100		109422

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
20*	1003	10005-2	2.93	20	Linear multilobe in circular line: السلطان الملك	Lion passant to l., facing, long tail swept up and forward, with knot toward tip			Balog 1970:121, No. 103A		109348
Al-Manṣûr Sayf ad-Dîn Qalā'ūn (AH 678–689/1279–1290 CE), *fals*											
21	1003	10005-1	1.22	18	Linear square in circle of dots	Linear square in circle of dots			Balog 1964:118, No. 138		109347
22	205	2098	1.99	17	المنصور الدين	Illegible			Balog 1964:118, No. 139		109460
23	225	2485	1.14	15	Field divided by flexed cable ...و...	Field divided by flexed cable		Damascus	Balog 1970:124, No. 141B		109344
24	236	2573	1.75	18	Center: سيف الملك المنصور قا [- - -]	Illegible		Same	Unpublished?		109390
Dirham fraction											
25*	236	2566	1.13	13	Illegible	Center: [لااله الا] الله محمد رسول الله [ارسله بالهدى] Scroll on top of 'rasul'		Cairo	Balog 1964:115, No. 127		109388
Al-Ashraf Salâh ad-Dîn Khalîl (AH 689–693/1290–1293 CE), *fals*											
26	213	2205	0.71	11	Border of dots الدين ال... حليل	Border of dots Illegible	Undated	[Damascus]	Cf. Balog 1970:128, No. 154A		109507

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
Al-'Adil Zayn ad-Dîn Kitbughā (AH 694–696/1294–1296 CE), *fals*											
27*	200	2232	0.94	15	الملك العادل	اليدين كت[بعا]			Cf. Balog 1980: 128, No. 160		109220
28	213	2413	1.15	15	Illegible	Chalice(?)			Cf. Balog 1980:128, No. 161		109252
Al-Nâṣir Nâṣir ad-Dîn Muḥammad 3rd reign (AH 709–741/1310–1341 CE), *fraction of dirham*											
29*	214	2249	2.1	15	[- - -] [ال]ناصر [- - -]	Illegible			Cf. Balog 1980: 142, No. 196	Half coin	109278
'Black' cut dirham fraction											
30	213	2449	1.35	13	[- - -] السلطاب الملك [- - -]	Illegible			Cf. Balog 1980:196, No. 212		109257
31	215	2171	1.46	15	[- - -] ضرب [- - -]	[- - -] [- - -] و [- - -]			Same		109282
32	219	2410	1.79	11	[- - -] ال [- - -]	Illegible			Same		109293
33	230	2542	1.33	10	Illegible	Same			Same		109383
34	231	2560	0.84	10	Same	Same			Same		109384
35	232	2546	2.32	13	Same	Same			Same		109387
36		2327	2.00	11	Same	Same			Same		109407
37	223	2508	2.24	11	Same	Same			Same		109337
38	200	2229	0.80	12	Same	Same			Same		109217

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
						fals					
39	225	2502	1.55	12	الملك [- - -]	ضرب مسق بد		Damascus	Cf. Balog 1964:148, No. 216		109368
40	215	2305	2.72	20	[- - -] السلطان الملك [- - -] [- - -] [بن] الملك المنصور قالون	Ornament [لا] الة الاؤ Ornament [رسو]ل اللة ارساة [بالهد]ى و[دين]		Cairo	Cf. Balog 1964:149, 150, Nos. 220, 221		109291
41	225	4536	3.47	20	[- - -] السلطان الملك [- - -] [- - -]	[- - -] Ornament لا الة الا اللة[- - -] ... ارساة		Same	Same		109375
42	245	2616	2.76	19	[بدمسق] سنه حمس وتلتين السلطان الملك الناصر ناصر الدنيا و الدين محمد [بن] الملك المنصور قلاون	[- - -] لا الة لاالله محمد رسول اللة ارساة بالهدى ودين احق		Damascus	Cf. Balog 1964:150, No. 222		109401
43		2220	2.76	19	Same	Same		Same	Same		109404
44	213	2499	3.03	19	Same	Same		Same	Same		109262
45	215	2274	3.16	21	Same	Same		Same	Same		109289
46	215	2201	3.45	18	Illegible	Same		Same	Same		109285
47	215	2240	3.05	19	Illegible	Same		Same	Same		109287
48	221	2264	3.80	19	Illegible	Same		Same	Same		109304
49	213	2426	2.91	19	Illegible	Illegible		Same	Same		109256

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
50	-	2219	2.29	18	[- - -] السلطان الملك النا[صر] [- - -]	ما النصر [- - -] لا الة لاالله [- - -]		Damascus	Cf. Balog 1964:150, Nos. 222–225		109405
51	213	2422	2.31	18	In circle, center: محمد	In margins: لا الة الاالله محمد رسول الله [...] In field: ornament [- - -]			Cf. Balog 1964:152, No. 230		109253
52	200	2258	1.22	17	Same	In margins: لا الة الاالله [...] [- - -]			Same		109227
53	223	2396	0.97	15	Within circular line: محمد	Within circular line: قلاون		Cairo	Balog 1964:152, No. 232		109315
54	220	2342	2.15	15	Same	Illegible		Same	Same		109302
55	211	2130	2.22	18	Linear hexagram with rounded edges and pellets	Linear hexagram with rounded edges and pellets		Tripoli	Balog 1964:155, No. 240		109484
56	117	1088	2.39	22	Same	Same		Same	Same		109435
57	215	2328	2.21	18	صر الملك	Linear dodekalobe counter clock-wise circular legend: ضرب/ [- - -]		Cairo	Balog 1964:156, No. 242		109410
58	244	2253	2.49	15	Illegible	Linear dodekalobe		Cairo	Same		109498

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
59	245	2615	3.49	20	الملك النصر ضرب دمشق	Oval cartouche with Small *fleur-de-lis* at both ends Upper segment: سنلة تلت In cartouche: محمد Lower segment: و تلت[ين]	AH 733 = 1332	Damascus	Balog 1964:157, No. 248		109263
60*	213	2536	3.05	20	Same	Same	Same	Same	Same		109400
61	200	2113	2.58	20	Same	Same	Same	Same	Same		109211
62	224	2409	0.71	15	[السلطا] ن [الملك] النا[صر]	Hexalobe of dots; in center, six-petaled rosette			Balog 1964:160, No. 256		109342
63	103	1026	0.41	15	Illegible	Six-petaled rosette in hexalobe			Cf. Balog 1964: 160, Nos. 256–258		109234
64	214	2250	2.25	15	In center: [الملك] الناصر	Six petaled rosette in circle		Aleppo	Balog 1964: 162, No. 260		109279
65	200	2116	2.52	18	Legend between horizontal floral ornament: الملك الن[اصر]	Round shield with five-petaled rosette In margin: [خرب] بدمسق [...]	AH 730 = 1329	Damascus	Balog 1964:162, No. 261		109214
66	202	2017	2.77	20	Legend between horizontal floral ornament: الملك النصر	Round shield with five-petaled rosette	Same	Same	Same		109409

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
67	202	2017	2.77	20	Legend between horizontal floral ornament: ... الملك	Round shield with five-petaled rosette	Same	Same	Same		109440
68	214	2153	1.76	18	Illegible	Five-petaled rosette	Same	Same	Same		109264
Al-Manṣûr Sayf ad-Dîn Abû Bakr (AH 741–742/1341 CE), *fals*											
69	215	2181	3.06	19	Linear hexagram; pellets in external angles In the center: احد سنة ى واربعين	Linear hexagram; pellets in external angles In the center: ب ضر مشق بد	AH 741 = 1341	Damascus	Balog 1964:164, No. 267		109290
70	215	2150	3.10	20	Same	Same	Same	Same	Same		109280
71	215	2179	2.48	22	Same	Same	Same	Same	Same		109283
72	215	2192	3.89	19	Same اتنين سنة واربعين	Same	Same	Same	Same		109284
Al-Ṣâliḥ ʻImâd ad-Dîn Ismâʻil (AH 743–746/1342–1345 CE), AR *dirham*											
73	219	2421	2.36	14	Illegible	Illegible			Balog 1964:172, 2 No. 84		109294

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
					fals						
74	215	2151	3.05	21	Cross-shaped cartouche In center: اسمعيل الصالح الملك	Linear square, arabesque knots in corners; floral scrolls at sides ضرب بالقاهير ولربعين	AH 745 = 1344/45	Cairo	Balog 1964:172, No. 285		109281
75	211	2224	1.78	20	Cross-shaped cartouche In center: .... الصالح	Illegible		Same	Same		109494
76	213	2236	1.04	22	Same	Same		Same	Same		109512
77	211	2131	2.58	17	Circular line in center, six-petaled rosette counter-clock wise marginal legend: السلطان الملك الصالح عمد[- - -]	Circular line in center, six-petaled rosette counter-clock wise marginal legend: [- - -] و [ار]بع[ين]		Aleppo	Balog 1964:174, No. 291		109485
					Al-Muẓaffar Sayf al- Dîn Ḥājji I (AH 747–748/1346–1347 CE), *AR dirham*						
78	200	2568	2.52	20	[- - -] السلطان الملك الموظفرسيف الدينا والدين حاجي [- - -]	ضرب بحامة لاالة الا اللة محمد رسول اللة ارسله بهدي [- - -]		Ḥamāh	Balog 1964:182, No. 311		109230

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
Al- Nâṣir Nâṣir ad-Dîn Ḥasan, 1st reign (AH 748–752/1347–1351 CE), *fals*											
79	223	2522	2.50	18	Field divided in three segments: بن محمد الملك الناصر حسن ضرب دمسق سنة	Interwoven tetralobes Center: تسع واربعين	AH 749 = 1348	Damascus	Balog 1964:187, No. 327		109339
80	223	2510	3.07	17	Same: [- - -] الملك النا[صر] [- - -]	Same: [- - -] و[- - -]ا		Same	Same		109338
81	223	2448	2.04	15	Same	Same: [- - -] و[- - -]		Same	Same		109317
82	213	2460	2.20	17	In center: الملك [الناصر احد]	Hexalobe, field divided by horizontal cable: [بحماة] ضرب	AH 751 = 1350	Aleppo	Korn 1998:42–44, Nos. 505–511		109260
Al- Nâṣir Nâṣir ad-Dîn Ḥasan, 2nd reign (AH 755–762/1354–1361 CE), *fals*											
83	-	2221	0.80	18	Triangle with interwoven sides	Triangle with interwoven sides دمسق /[- - -] /[- - -]		Damascus	Balog 1964:200, No. 374		109406
Al-Manṣûr Sâlaḥ ad-Dîn Muḥammad (AH 762–764/1361–1362CE), *fals*											
84	223	2506	3.75	18	Triangle with peripheric segments, in center: محمد In margins: الملك المنصور [- - -]	Triangle with peripheric segments, in center: ب ضر In margins: بدمسق ا[- - -]		Damascus	Balog 1964:204, No. 388		109336

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
85	202	2012	3.01	20	Same	Same		Same	Same		109232
86	223	2392	2.95	17	Same	Same		Same	Same		109311
87	200	2269	1.12	11	Wheel with six spokes	Eagle l.		Same	Balog 1964:207, No. 395		109229
Al-Ashraf Nâṣir ad-Dîn Sha'bân II (AH 764–778/1363–1377 CE), *fals*											
88	203	2082	2.45	19	In upper and lower segments arabesques In central segment: الملك الاشرف	Three segmented fields: ضرب وسبعماية سنة سبعين [بدمشق]	AH 770 = 1369	Same	Balog 1964:220, No. 454		109450
89	107	1030	1.54	17	Same	Same	Same	Damascus	Same		109236
90	213	2374	2.44	17	Same	Same	Same	Same	Same		109245
91	213	2288	2.77	15	Same	Same	Same	Same	Same		109515
92	203	2082	2.45	19	Same	Same	Same	Same	Same		109450
93	203	2077	2.56	20	Same	Same		Same	Same		109477
94	207	2118	2.31	17	Same	Same	AH 770–772 = 1368–1370	Same	Balog 1964:220, Nos. 454–457		109472
95	206	2043	1.54	18	Same	Same		Same	Cf. Balog 1964:220, Nos. 454–456		109463
96	213	2289	1.18	18	Same	Same		Same	Same		109516
97	213	2425	2.30	20	Same	وسبعين سنة احد	AH 771 = 1369	Same	Cf. Balog 1964:220, No. 455		109255
98	213	2372	2.39	19	Same	Same	Same	Same	Cf. Balog 1964:220, No. 455		109244

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
99	205	2045	2.25	17	Same	Same	Same	Same	Same		109459
100	223	2393	2.81	16	Same	Same	Same	Same	Cf. Balog 1964:220, No. 456		109312
101	20	2010	2.41	19	Same	Same	Same	Same	Same		109197
102	101	1015	0.98	18	Same	Same	Same	Same	Same		109204
103	213	2446	2.91	18	Spindle shaped cartouche with *fleur-de-lis* edges Center: حسن بن	Octolobe with floweret on edges Center: [- - -] مشق بد		Same	Balog 1964:221, No. 458		109258
104	213	2293	2.31	16	Same	Same ضرب [- - -]		Same	Same		109517
105	213	2465	1.19	18	Same Clockwise circular legend: السلطان الملك [- - -]	Same		Same	Same		109261
106	213	2325	2.21	18	Same	Same		Same	Same		109238
107	203	2136	2.94	16	Same	Same		Same	Same		109457
108	203	2096	2.79	17	Same	Same		Same	Same		109453
109	200	2238	3.19	18	Same	Same		Same	Same		109222
110	213	2389	0.54	18	Illegible	Field divided in three horizontal segments, central segment bendy with seven pieces to right Lower segment: ضرب			Balog 1964:222, No. 462		109250

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
111	245	2609	1.84	17	Hexagram in circle; star in center	الملك [الناصر] ب مشق ضر بد			Cf. Balog 1970:169–170, No. 861		109399
112	224	2406	1.84	17	Field divided into three segments: الملك الاشر[ف] ضرب	Linear dodekalobe with flowerets; in center hexagram with crescent		Aleppo	Balog 1964:226, No. 471		109423
113	213	2214	2.55	18	Hexagram, inside: طرابلس	السلطان الملك الاشرف		Tripoli	Balog 1964:226, No. 473		109511
114	214	2155	1.77	19	In center: [- - -]لان [- - -] الملك[- - -] سع[- - -]	Linear hexagram with dot in triangle		Same	Same		109266
115	223	2402	2.26	19	Linear hexagram Center: الملك ف الاشر	Triquetra		Same	Balog 1964:227, No. 474		109316
Al-Manṣûr Alā Al-Din 'Ali (AH 778–783/1377–1381 CE), *fals*											
116	214	2194	2.52	16	Marginal legend: السلطان الملك المن[صور] Small circle, in center: علي	Marginal legend: ضرب بدمشق[- - -] Small circle, with *fleur-de-lis*		Damascus	Cf. Balog 1964:234–235, Nos. 501, 502		109272

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
117	239	2607	2.21	18	Three segmented field: ضرن الملك المنصور اناس	In border of dots, hexagram with concave sides, circle with segments with annulets. In field: *Fleur-de-lis* with Rhomboidal basis		Same	Cf. Balog 1964:235, No. 504		109392
118	213	2378	1.23	18	Field divided by horizontal cable الملك [- - -]	Linear octogram		Tripoli	Balog 1964:236–237, No. 508		109246
119	110	1043	1.47	15	Illegible	Six-petaled flower		Tripoli?	Balog 1964:237, No. 509		109429
120	213	2186	1.08	16	الملك [- - -]	Field divided by bendy with right-down direction		Hamāh	Korn 1998:48, No. 621		109503
Al-Ṣāliḥ Ṣālaḥ Al-Din Ḥājji II, 1st reign (AH 783–784/1381–1382 CE), *fals*											
121	214	2164	2.58	15	Inner circle: حاجي	Inner circle: *Fleur-de-lis*		Damascus	Cf. Balog 1964:243, No. 524		109267
122	220	2291	2.24	15	Same	Same		Same	Same		109299
123	223	2371	1.91	16	Same	Same		Same	Same		109308
124	228	2521	1.41	15	Same	Same		Same	Same		109380
125	213	2245	2.35	16	Same	Same		Same	Same		109513
126	203	2135	1.77	17	Same	Same		Same	Same		109456

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
2nd reign (AH 791–792/1389–1390 CE), *fals*											
127	211	2108	3.34	18	الملك السلطان الصالح	Upper segment: بطرابلس Lower segment: Large stylized fleur-de-lis		Tripoli	Balog 1964:244, No. 525		109481
128	207	2101	2.94	19	Field divided by two horizontal fesses in three segments: المنصور السلطان الملك [- - -]	Linear hexagram with dot in small triangles In center: [ضرب] مشق بد		Damascus	Balog 1964:246, No. 532		109469
129	200	2266	1.26	19	Same Central segment: السلطان الملك	Same		Same	Same		109228
130	200	2114	2.62	17	Same	Same		Same	Same		109212
131	214	2168	2.71	15	Same	Same		Same	Same		109269
132	207	2076	1.56	17	Same	Same		Same	Balog 1964:246, Nos. 532, 533		109465
133	221	2309	1.05	18	Upper segment: المنصور	Same		Same	Same		109419
134	203	2097	3.22	15	Same	In external segments: [- - -] في/سنة/سين Same		Same	Balog 1964:246, No. 533		109454

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
Al-Zâhir Sayf ad-Dîn Barqûq, 1st reign (AH 784–791/1382–1389 CE), *fraction of dirham*											
135	223	2364	1.25	11	[- - -] سيف	[- - -] اللة[- - -] Floral scroll		Aleppo	Balog 1964:255, No. 552		109306
fals											
136	207	2104	3.20	20	Fesse with three segments: برقوق الملك الظاهر [- - -]	Linear hexagram with pellets in center: قي سبع و ثمانين	AH 787 = 1385 CE	Damascus	Balog 1964:258, No. 560		109471
137	220	2292	1.28	15	Same [- - -] الملك[الظاهر] [بر]قوق	Same [- - -]/تسعين	AH 790 = 1388 CE	Same	Balog 1964:258, No. 561		109300
138	202	2020	2.61	16	Same الظاهر السلطان الملك [- - -]	Same [- - -]سبعما/ ية In center: ضرب مشق [بد]	Same	Same	Same		109444
139	202	2024	2.32	17	Same الظاهر السلطان الملك [- - -]	Same	Same	Same	Same	Overstrike	109446
140	225	2489	2.50	18	[- - -] الملك ابو [- - -]	In center: [بر] قوق		Same	Balog 1964:259, No. 562		109346

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
141	109	1041	0.99	15	Illegible	Hexagonal cartouche			Balog 1964:260–261, No. 564		109428
2nd reign (AH 792–801/1390–1399 CE), *fals*											
142	211	2071	4.57	19	الظاهر سيف الدنيا و الدين برقو... ...	Illegible			Cf. Balog 1964:264, No. 581		109475
143	202	2020	3.63	19	برقوق السلطان الملك [- - -]	Illegible			Cf. Balog 1964:265, No. 585		109443
144	200	2062	4.22	19	Illegible	Illegible			Same		109209
145	207	2085	4.27	18	[- - -] [- - -]ابو برقوق	[با] قاهرة المحروسة		Cairo	Same		109466
146	200	2231	4.26	20	[- - -] السلطان [- - -]	[- - -] [- - -]ند [- - -]رية		Alexandria	Cf. Balog 1964:265, No. 586		109466
147	117	1089	3.77	19	Same	[- - -] [- - -]كند [- - -]		Same	Cf. Balog 1964:265, No. 587		109436
148	-	2061/a	3.93	20	Same	Same		Same	Same		109403
149	213	2204	2.07	17	الملك ا لظاهر لبو سعيد	ضرب سنة و تسعين		Same	Cf. Balog 1964:265, No. 588		109506
150	200	2047	4.33	20	... الملك الظاهر برقوق	Illegible		Damascus	Cf. Balog 1964:266, No. 589		109208

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
151	221	2301	3.57	20	Lion walking left	Illegible		Same	Cf. Balog 1964:268, No. 595b		109417
152	213	2362	4.43	22	Octolobe?	In center: *fleur-de-lis* chalice		Same	Balog 1964:266, Nos. 590, 591		109242
153	200	2117	2.15	14	In margin: [- - -]السلطان	In center: *fleur-de-lis*		Aleppo	Balog 1964:267, No. 593		109215
154	213	2379	0.80	17	Floweret border; circular line in circle of dots	Lion passant l., long tail curled back		Same	Cf. Balog 1964:268, No. 595		109247
155	213	2424	1.43	15	Three segments, fesse: [- - -] الملك الظ[اهر] [- - -]	Waterwheel, curved clockwise		Ḥamāh	Cf. Balog 1964:270, No. 600		109254
156	110	1061	1.84	15	Field divided in three segments: [- - -] الملك [الظاهر] [- - -]	*Fleur-de-lis* in circle		Tripoli	Cf. Balog 1964:271, No. 603b		109432
157	213	2363	1.90	13	Same [- - -] [الملك] الظا[هر] طاربلس	Arabesque knot		Same	Cf. Balog 1964:272, No. 605		109243
158	202	2021	1.79	17	Field divided by horizontal bar, bendy of eleven pieces to l., in three segments	Eagle head turned r., wings inverted			Cf. Balog 1964:273, No. 608b/c		109445

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
159	203	2084	2.12	13	Field divided in two: الملك الظاهر	Six-petaled rosette			Balog 1964:273, No. 609		109452
160	211	2211	1.92	16	Same	Same			Same		109490
161	214	2250	2.25	15	Field divided in two: الملك الظاهر	Six-petaled rosette			Same		109452
Al-Ẓâhir Sayf ad-Dîn Barqûq(?)											
162	240	2578	4.18	21	Illegible	[- - -]اعا			Cf. Balog 1964: 263–265, Nos. 578–587		109393
163	200	2254a	1.78	15	Same	[- - -]مح		Cairo(?)			109223
164	202	2016	3.15	21	Same	Illegible					109439
Al-Nâṣir Nâṣir ad-Dîn Muhammad 3rd reign (AH 709–741/1310–1341 CE), *fals*											
165	221	2307	1.75	13	بن الناصر ب ر المنصو	Hexagram within circle			Cf. Balog 1964: 161, No. 257		109418
Anonymous (c. AH 792/1389 CE), *fals*											
166	207	2139	1.54	15	Central bendy to r. Lower field: بحماة	Upper segment: square with pin Central segment: cup Lower segment empty		Ḥamāh	Korn 1998:50–51, No. 662		109473
End of the 14th c., *fals*											
167	200	2230	2.44	16	Illegible	In center: cable with illegible legend		Damascus	Balog 1964:237, No. 508b		109218

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
Al-Nâṣir Nâṣir ad-Dîn Abû al-Sa‘adât Faraj, 2nd reign (AH 809–815/1406–1412 CE), *cut dirham*											
168	214	2156	1.99	16	السلطان الملك الناصر فرج خاد اللة ملكة	لاالةالا[- - -] محمد رسول [- - -]		Cairo	Balog 1964:284, No. 640		109268
169	202	2018	1.92	15	السلطان[الملك] [الناصر] فرج [- - -]	Illegible			Unpublished		109441
170	213	2447	1.71	11	Inner circle: فرج	Illegible		Damascus	Balog 1964:284, No. 642	Cut fragment	109259
171	214	2248	1.63	12	Same	Same		Same	Same	Same	109275
fals											
172	213	2352	3.42	20	Tetralobe with inscription	*Fleur-de-lis* chalice		Same	Balog 1964:286, No. 647		109241
173	202	2014	2.37	25	Circular line in circle of dots: الملك الناصر [- - -]	Circular line in circle of dots. Upper segment: [- - -] يحلب.. Lower segment: ن و [ز] اتنا ثا مية		Aleppo	Balog 1964:288, No. 653		109233
174	213	2183	3.10	22	Illegible	Center: *fleur-de-lis*		Same	Balog 1964:288, No. 654		109501
175	214	2184	3.13	21	Field divided in three segments	Four intersecting semicircles in cross-shaped design		Same	Balog 1964:289–290, No. 657		109504

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
176	203	2083	2.93	16	فرخ الملك [- - -]	Illegible		Ḥamāh	Balog 1964:291, No. 659		109451
177	213	2207	1.91	15	In margins: السلطان الملك In center: علي(?)	Illegible		Ḥamāh	Cf. *SNAT* 1998: No. 700		109508
178	214	2155/a	3.15	21	Field divided by double horizontal line; in upper segment: حلب	Chalice(?)		Aleppo	Unpublished variant		109265
179	214	2235	2.21	16	الملك Below segment with ornament	Linear square in scalloped circle مشق بد		Damascus	Unpublished?		109273
Al-Ẓahir Abū Sa'id Jaqmaq (AH 842–857/1438–1453 CE), *fals*											
180	225	2490	2.31	15	Linear hexagram In center: جقمق	Field divided by horizontal lines: ضرب بحلب [- - -]		Aleppo	Balog 1964:326, No. 752		109349
181	100	1035a	2.34	15	Central spindle shaped fragment [ا] بوسعيد	Chalice with two dots on either side			Balog 1964:327, No. 754		109199
Al-Ashraf Abū al-Naṣr Aynâl (AH 857–865/1453–1461 CE), *dirham*											
182	202	2015	1.34	13	Within inner circle: اينال	Within cartouche: حلب	AH 862 = 1458	Aleppo	Cf. Balog 1964:334, No. 771		109438

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
fals											
183	101	1014	2.08	15	Arabesque knot	Field divided by two horizontal lines		Cairo	Cf. Balog 1964:336, No. 775		109203
Al-Ẓahir Abū Sa‘id Temirbughā(?) (AH 872–873/1467–1468 CE), *fals*											
184	223	2478	1.50	18	Hexagram with dots	Within circle: cup			Cf. Balog 1964:347, No. 805	Half coin	109319
Al-Ashraf Abū al-Naṣr Qa’itbāy (AH 873–901/1468–1496 CE), *fals*											
185	207	2086	1.40	19	Linear hexagram, pellets in spaces: قا[يتباي]	In center: المنصور الاسر]ف الد[ينا و الدين [- - -]			Cf. Balog 1964:358, No. 836		109467
186	225	2512	4.87	17	Field divided by three horizontal lines: الملك الاسرف ابو المنصور	Within linear square: قايتباي			Cf. Balog 1964:358, No. 841		109371
Al-Nâsir Abû al-Sa‘adât Muḥammad (AH 901–904/1496–1498 CE), *fals*											
187	225	2491	4.06	21	Between two circles, eight pellets. In center: pellet	Double linear square, in center: محمد			Cf. Balog 1964:364, No. 853		109367
Al-Ashraf Abû al-Naṣr Qānṣūh al-Ghūri(?) (AH 906–922/1501–1516 CE), *fals*											
188	211	2105	2.08	17	Field divided by cable to r., between two horizontal lines: الملك السلطان بطرابلس	Linear octogram within circular lined border; in center six-petaled rosette		Tripoli	Cf. Balog 1970: 71, No. 905B, C		

CATALOGUE 1. (cont.)

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	Notes	IAA No.
Mamlūks, 14th–15th c., *fals*											
189–281	see Catalogue 2										
Ottomans Sulaymân I (*Qanuni*) (AH 926–974/1520–1566 CE), *mangir*											
282	228	2477	1.96	14	عز نصره ضرب دمشق	Illegible		Damascus			109378
283	236	2572	2.15	15	عز نصره ضرب	محروسة مصر		Misr Mahrusa	Valentine 1911:30, No. 4		109389
284	214	2249	0.74	20	Illegible	Illegible	14–15th c.				109276
285	110	1050	0.67	11	Hexagram	Arabesque	16th c.				109431
286	225	2513	2.75	18	Illegible	Arabesque	16–17th c.				109372
287	211	2072	1.07	15	Illegible	Arabesque	16–17th c.				109476
288	230	2527	1.02	17	Square in circular line	Lozenge with concave sides	Same				109381
289	101	1032	0.38	15	Illegible	Illegible	17–18th c.				109206

CATALOGUE 2: ISOLATED COINS, FOURTEENTH–FIFTEENTH-CENTURY *FALS*.

No.	Area/ Locus	Basket	Weight (g)	Diam. (mm.)	IAA No.
189	211	2222	2.86	20	109492
190	242	2592	3.94	15	109487
191	211	2132	0.89	15	109486
192	228	2496	0.88	18	109379
193	270	2060	2.04	20	109402
194	117	1091	3.82	17	109437
195	100	1034	1.98	14	109198
196	101	1007	2.15	18	109201
197	200	2115	4.11	16	109213
198	213	2390	2.58	20	109251
199	214	2170	2.21	18	109270
200	214	2247	2.43	16	109274
201	215	2239	0.59		109286
202	220	2271	3.32	18	109295
203	220	2285	1.09	16	109296
204	220	2286	1.88	15	109297
205	220	2287	1.20	19	109298
206	220	2310	2.91	15	109301
207	221	2335	0.70	17	109305
208	223	2377	1.25	15	109309
209	223	2395	1.37	15	109314
210	223	2481	2.18	17	109335
211	225	2486	1.38	21	109345
212	225	2514	3.38	18	109373
213	242	2604	2.80	20	109397
214	221	2277	1.17	16	109412
215	107	1056	1.20	19	109427
216	225	2503	3.47	17	109369
217	202	2019	1.93	20	109442
218	203	2080	0.63	19	109448
219	206	2041	1.75	20	109462
220	207	2103	3.43	17	109470
221	242	2592	3.94	15	109395
222	213	2209	0.85	19	109510
223	211	2088	2.56	20	109477
224	203	2137	1.67	15	109458
225	209	2061/b	4.36	17	109474
226	211	2106	5.37	21	109479
227	207	2059	3.32	20	109464
228	242	2592	3.94	15	109455
229	223	2394	0.87	16	109313
230	223	2391	1.12	14	109310
231	232	2540	1.82	18	109386
232	211	2107	0.35	12	109480
233	Surface	1095	0.42	17	109200
234	213	2198	3.54	18	109505
235	101	1019			109205
236	101	1038	1.23	18	109207
237	200	2255	1.30	16	109224
238	200	2256	1.68	15	109225
239	200	2257	1.03	18	109226
240	202	2011	3.34	23	109231
241	107	1029	1.28	14	109235
242	213	2388	2.28	15	109237
243	213	2326	1.44	15	109239
244	213	2387	1.04	13	109248
245	213	2388	2.28	15	109249
246	225	2484	2.03	14	109343
247	225	2504	0.84	15	109370
248	225	2526	0.57	15	109374
249	225	2544	0.64	15	109376
250	225	2550	0.76	13	109377
251	230	5302	0.39	14	109382
252	239	2605	0.78	15	109391
253	242	2588	2.06	23	109394
254	245	2608	0.84	15	109398
255	221	2270	0.96	13	109411
256	221	2282	0.88	17	109413
257	221	2283	0.66	13	109414
258	221	2284	0.71	14	109415
259	221	2295	0.44	15	109416
260	221	2319	0.56	13	109420
261	221	2334	1.06	15	109421
262	107	1031	0.33	13	109424
263	107	1044	3.15	17	109425
264	107	1052	1.57	21	109426
265	203	2081	0.99	15	109449
266	205	2099	0.53	15	109461
267	211	2175	0.89	20	109488
268	211	2210	1.21	20	109489
269	211	2212	1.39	17	109491
270	211	2225	1.84	13	109495
271	211	2227	1.26	18	109496
272	211	2254/b	2.18	15	109499
273	113	1069	1.42	15	109433
274	113	1072	1.05	15	109434
275	213	2185	0.40	16	109502
276	213	2208	1.39	16	109509
277	110	1048	1.60	17	109430
278	224	2366	0.74	13	109340
279	214	2178	0.92	18	109271
280	224	2405	0.51	17	109341
281	101	1008	0.45		109202

CATALOGUE 3. The Mixed Silver *Grossi* and *Dirhams* Hoard A.[i]

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
DOGES OF VENICE								
Jacopo Tiepolo (1229–1249), *grosso*								
A1*	2.03	20	·IĀ·TEVPL'· – ·S·M VENETI· Doge stg. r. facing front, holding cylindrical object with l. hand, standard in r. hand; St. Mark stg. l. holding standard with r. hand and book in l. In field: D/V/X	Christ seated on square-backed throne with book on knee In field above: IC – XC		Venice	Papadopoli 1893:98, No. 3; Cf. *MEC* 12:1004, No. 1011	108274
Marino Morosi (1249–1253), *grosso*								
A2*	2.08	20	·M·MA/ROC (two pellets with horizontal bar above) – S·M· VENETI·	Same		Same	Papadopoli 1893:103, No.1; Cf. *MEC* 12:1006, No. 1020	108256
A3*	2.08	20	·M·MA/ROC (two pellets with horizontal bar above) – ·S·M· VENETI·	Same	Same	Same	Same; signs of teeth impression on reverse	108258
Lorenzo Tiepolo (1268–), *grosso*								
A4*	2.09	20	·LA·TEVPL· – ·S·M· VENETI	Same		Same	Papadopoli 1893:112, No. 1; Cf. *MEC* 12:1008, No. 1040	108289
Giovanni Dandolo (1280–1289), *grosso*								
A5*	2.15	21	IO· DĀNDVL'– ·S·M: VENETI	Same		Same	Papadopoli 1893:137, No. 2; Cf. *MEC* 12:1010, No. 1063	108276
Pietro Gradenigo (1289–1311), *grosso*								
A6*	2.16	22	·PE· GRĀDONICO– ·S·M· VENETI·	Same		Same	Papadopoli 1893:144, No. 2 Cf. *MEC* 12:1010, No. 1076	108262
A7	2.11	21	·PE· GRĀDONICO– ·S·M· VENETI·	Same		Same	Same	108269

[i] Obverse and reverse of the Venetian *grossi* are according to A1. Axes are ↓ unless otherwise noted. Coins bearing an asterisk appear in Fig. 4.

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A8	2.09	21	·PЄ· GRĀDONICO – [S M] VЄNЄTI·	Same		Same	Same	108283
A9	2.10	22	PЄ· GRĀDONICO· – ·S·M· VЄNЄTI·	Same		Same	Same	108288
A10	2.13	20	[P]Є· GRĀDONICO· – ·S·M· VЄNЄTI·	Same		Same	Same	108294
Giovanni Soranzo (1312–1328), *grosso*								
A11*	2.16	21	·IO·SVPANTIO· – ·S·M· VЄNЄTI·	Same		Same	Papadopoli 1893:154, No. 2; Cf. MEC 12:1012, No. 1092	108267
A12	2.17	21	·IO·SVPĀNTIO· – [S·M] VЄNЄTI·	Same		Same	Same	108271
A13	2.15	21	·IO·SVPĀNTIO – ·S·M· VЄNЄTI	Same		Same	Same	108273
A14	2.15	21	[I]O·SVPĀNTIO – ·S·M· VЄNЄTI·	Same		Same	Same	108279
A15	2.20	21	·IO·SVPĀNTIO – ·S·M. VЄNЄTI	Same		Same	Same	108280
A16	2.15	21	·IO·SVPĀTIO· – ·S·M· VЄNЄTI·	Same		Same	Same	108282
A17	2.01	20	·IOSVPĀTIO – ·S M· VЄNЄTI·	Same		Same	Same	108285
A18	2.19	21	·IOSVPĀTIO· – [S M] VЄNЄTI·	Same		Same	Same	108291
A19	2.16	20	·IO·SVPĀTIO· – ·S M VЄNЄTI·	Same		Same	Same	108293
A20	2.20	20	·I·O·SVPĀTIO – ·S.M. VЄNЄTI	Same		Same	Same	108296
A21	2.16	21	IO·SVPĀTIO· – ·S.M. VЄNЄTI	Same		Same	Same; perforated	108298
A22*	2.19	20	·IO·SVPĀTIO· – :: S·M. VЄNЄTI·	Same		Same	Papadopoli 1893:154, No. 3 (var. 11)	108261
A23	2.14	21	·IO·SVPĀTIO· – :: S M· VЄNЄTI·	Same		Same	Same	108264
A24	2.17	21	[·I]O·SVPĀTIO – :: S·M· VЄNЄTI	Same		Same	Same; perforated	108297
Francesco Dandolo (1329–1339), *grosso*								
A25*	2.14	20	·FRĀ· DĀNDVLO· – S· M· VЄNЄTI ·	Same		Same	Papadopoli 1893:162, No. 4; Cf. *MEC* 12:1014, No.1103	108257
A26	2.21	21	FRĀ· DĀNDVLO· –·S M VЄNЄ·TI·	Same		Same	Same	108259
A27	2.16	20	FRĀ DĀNDVLO· – ·S M· VЄNЄTI·	Same		Same	Same	108268

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A28	2.17	20	FRA DANDVLO – S M VENETI	Same		Same	Same	108270
A29	2.17	20	·FRA DANDVLO – ·S M VENETI·	Same		Same	Same; axis ↓	108275
A30	2.19	21	·FRA DANDVLO –·S M. VENETI	Same		Same	Same	108284
A31	2.18	21	·FRA· DANDVLO –·S· M. VENETI	Same		Same	Same	108287
A32*	2.19	20	·FRA DANDVLO – S M VENETI	Same		Same	Papadopoli 1893:162, No. 4 (var. 5)	108260
A33	2.21	20	Same	Same		Same	Same	108265
A34	2.14	21	Same	Same		Same	Same	108266
A35	2.22	20	Same	Same		Same	Same	108286
A36*	2.16	20	·FRA·DANDVLO· – ·: S·M· VENETI·	Same		Same	Papadopoli 1893:162, No. 6; axis ↑	108263
A37	2.16	20	·FRA·DANDVLO – ·: S·M· VENETI·	Same		Same	Same	108272
A38	2.15	21	·FRA·DANDVLO· – ·: S·M· VENETI·	Same		Same	Same	108277
A39	2.19	21	FRA·DANDVLO· – ·: S·M· VENETI·	Same		Same	Same; signs of blackish oxidation	108278
A40	2.16	21	·FRA·DANDVLO· – ·: S·M· VENETI·	Same		Same	Same	108281
A41	2.22	21	FRA·DANDVLO· – ·: S·M· VENETI·	Same		Same	Same	108290
A42	2.14	21	·FRA·DANDVLO· – ·: S·M· VENETI·	Same		Same	Same	108292
A43	2.16	20	·FRA·DANDVLO· – ·: S·M· VENETI·	Same		Same	Same; axis ↑	108295
MAMLUKS Al-Ẓāhir Baybars I Rukn al-Dīn (AH 658–676/1260–1277 CE) Citing the Caliph Aḥmad Abū'l Qasim al-Mustanṣir (AH 659–661/1261–1262 CE), *dirham*								
A44*	2.75	22	الصالحى \ السلطان الملك \ الظاهر ركن الدنيا والدين \ بيبرس قسيم امير المؤمنين Lion to l.	امير المؤمنين \ الامام المستنصر بالله\ ابو لقسيم احمد بن \ الامام الظاهر	Undated	Ḥamāh	*SNAT* 1998:24, Nos. 160, 161	108322

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
Citing the Caliph Aḥmad Abū'l-ʿAbbās al-Ḥakim (AH 661–701/1262–1302 CE), *dirham*								
A45*	2.75	21	[---] \ السلطان [---] \ بيبرس قسيم امير المؤمنين Lion to l.	الامام الحاكم \ [---] \ʿالعباس احمد Margin: ضرب بدمشق سنة اربع [---]	AH 674 = 1275	Damascus	Balog 1964:94, No. 53	108317
A46*	2.85	20	الصالحى \ السلطان الملك \ الظاهر ركن الدنيا والدين بيبرس قسيم امير المؤمنين Lion to l.	الامام الحاكم \بامر الله ابو \ العباس احمد Margin: [---] سبعين [---]	AH 67[-] = 1276?	Damascus	Balog 1964:94, No. 54	108336
A47*	2.20	20×22	Same	Same	Same	[Ḥamāh]	Balog 1964: 97, Nos. 64–66	108327
Bearing Religious Legend								
A48*	2.70	22	Same	لااله الا الله \ محمد رسول الله \ ارسله بالهدى (Adaptation of Qur'an XLVII and IX, 33) Margin: [---]و سبعين [---]	AH 67[-] = 1272–77	Cairo	Balog 1964:102, Nos. 87–91	108304
A49	2.45	20	Same	Same	Same	Same	Same	108343
Fraction of *dirham*								
A50*	1.30	14	[---] قسيم امير [---] Lion to l.	Effaced	Missing	[Damascus]	Balog 1964:95, No. 55	108378
A51	1.25	15	Same	Same	Same	Same	Same	108377
A52	1.70	15	Same	Same	Same	Same	Same	108376
Al-Manṣūr Qalā'ūn Sayf al-Dīn (AH 678–689/1279–1290 CE), *dirham*								
A53*	2.20	21	قسيم امير \ السلطان الملك \ المنصور سيف الدنيا والدين \ قلاون الصالحى \ المؤمنين	لااله الا الله \ محمد رسول الله \ ارسله بالهدى Margin: ضرب بالقاهره [---] اثنين وثمانين و	AH 682 = 1283	Cairo	Balog 1964:115, Nos. 122, 123 (diff. date)	108321

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A54*	2.90	23	السلطان الملك \ [---] المنصور سيف الدنيا والدين \ قلاون قسيم امير \ ] المؤمنين[	لااله الا الله \ محمد رسول الله \ ارسله بالهدى ودين الحق [- - -]	Missing	Same	Balog 1964:115, No. 126	108326
A55*	2.85	22	[امير المؤ]منين \[السلطان] الملك \[المنصور سيف] الدنيا والدين قلاون الصالحى \[قسيم]	الله الا الله \ محمد رسول الله \ ارسله بالهدى [- - -] Margin: ضرب بدمشق [---]	Same	Damascus	Balog 1964:116, No. 131c	108303
A56	2.80	21	Same, effaced	Same, effaced	Same	[Damascus]	Cf. Balog 1964:116, Nos. 129–132	108345
A57	3.10	21	Same	Same	Same	Same	Cf. Balog 1964:117, Nos. 132–134	108309
A58*	2.70	22	Same	Same Margin: [---] سنة ثمان و ثمنين [---]	AH 688 = 1289	Same	Cf. Balog 1964:117, No. 133	108335
Fraction of *dirham*								
A59*	1.70	14×16	Same	Same	Missing	Same	Cf. Balog 1964:116, No. 131	108347
A60	1.10	15	Same	Same	Same	Same	Same	108351
A61*	1.90	13×17	Same	Same	Same	Same	Same	108352
A62	1.90	14	Same	Same	Same	Same	Same	108369
A63	1.50	13	Same	Same	Same	Same	Same	108380
Al-Ashraf Khalīl Ṣalāḥ al-Dīn (AH 689–693/1290–1293 CE), *dirham*								
A64*	3.10	22	بن قلاون \ السلطان الملك الاشرف\ صلاح الدين ناصر الملة المحمدية محى الدولة العباسية \ [خليل]	لااله الا الله \ محمد رسول الله \ ارسله بالهدى ودين الحق Margin: [---] سنة احد و تسعين [---]	AH 691 = 1291	Damascus	Cf. Balog 1964:123, No. 152	108305

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A65	3.05	21	[---] خليل \ [---] Effaced	Same, effaced	Missing	Same	Cf. Balog 1964:123, No. 151	108334
Fraction of *dirham*								
A66*	1.35	12	[---] السلطان الملك \ [---]	Same Margin: [---]تسعين [---]	AH [6]9[-] 1291–93	[Damascus]	Cf. Balog 1964:123, No. 153 (diff. denomination)	108364
Al-ʿĀdil Kitbughā Zayn al-Dīn (AH 694–696/1294–1296 CE), *dirham*								
A67*	2.90	22	كتبغا\ السلطان الملك \العادل [---] ناصر	لااله الا الله \ [محمد] رسول [الله] \ ارسله بالهدى ودين [الحق] Margin: [---]و تسعين وستماية	AH 695 = 1295	Damascus	Cf. Balog 1964:127, No. 159 (variant)	108314
Al-Manṣūr Lājīn Ḥusām al-Dīn (AH 696–698/1296–1299 CE), *dirham*								
A68*	3.30	18×21	ضرب بحماة\ السلطان الملك \ [---] المنصورحسّام الدنيا Margin: ستماية [---]	لااله الا الله \ محمد رسول الله \ [ارسله بالهدى]	AH 69[-] = 1296–99	Ḥamāh	Unpublished	108319
Al-Nāṣir Muḥammad I Nāṣir al-Dīn, 2nd reign (AH 698–708/1299–1309 CE), *dirham*								
A69*	2.70	21	السلطان الملك \ الناصر [---] ناصر] الدنيا والدين محمد \[بن] [---]السلطان المنصور سيف	لااله[الا الله] \ محمد رسول الله \ ارسله بالهدى ودين الحق /[- - -] علي الدين كاله The continuation of sentence on margin	Missing	Cairo	Unpublished	108340

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A70*	3.10	21	السلطان الملك [---] \ الناصر ناصر الدنيا [---] Margin: [---]تسعين [---]	[لااله الا الله] \ محمد رسول الله \ارسله بالهدى	AH 69[-] = 1299	Same	Unpublished	108330
A71	2.85	20×23	[---]\[---]\قلاون	لااله الا الله \ [---] سول /[- - -] علي الدين [كاله]	Missing	Same	Unpublished	108329
Fraction of *dirham*								
A72*	1.20	12	السلطان الملك [---]\ والدين محمد [---]	Same	Same	[Ḥamāh]?	Unpublished	108368
A73	0.90	13	السلطان الملك\ [---] لناصر ناصر [---]	Same	Same	Same	Unpublished	108375
3rd reign (AH 709–741/1310–1341 CE), *dirham*								
A74*	3.40	19	لسلطان الملك \ الناصر \ [---] ناصر الدنيا [---] \ محمد بن الملك [---] Same, with an additional sentence: Qur'an III, 122	[- - -]\الا من عند / [---] رسول الله \ ارسله بالهدى [---] Margin: [---]اربعين [---]	AH 74[-] = 1339–48	[Damascus]	Cf. Balog 1964:142, No. 197	108312
A75*	3.60	21	[- - -] عند\ لسلطان الملك \ الناصر \ ناصر الدنيا و \ الدين محمد [---]	Same, Margin: [---]سبعماية	AH 7[-] = 1310–41	Same	Same	108310
A76	3.30	19×20	Same	Same	Missing	Same	Same	108307
A77	3.40	18×22	Same	Same	Same	Same	Same	108311
A78	4.00	22	Same	Same	Same	Same	Same	108315

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A79	3.77	18×21	Same	Same	Same	Same	Same	108333
A80	2.90	17×21	Same	Same	Same	Same	Same	108332
A81*	3.00	18×21	Same	Same	Same	Same	Same (Teeth biting marks)	108328
A82*	2.90	21	[---] السلطان الملك \ناصر الدنيا والدين [---] الملك المنصور [---]	ضرب بطرابلس [---] لااله الا الله \ [محمد] رسول الله [---]	Same	Tripoli	Cf. Balog 1964:143, No. 198	108325
A83*	4.10	19×21	قلاون \ السلطان الملك \الناصر ناصر \ الدنيا و \الدين محمد من المنصور	لااله الا الله \ محمد رسول الله \ ارسله بالهدى Circular legend: ضرب بحلب سنة ثلاثين و سبعماية	AH 730 = 1329	Aleppo	Balog 1964:143, No. 199	108306
A84	1.90	21	Same	Same	Same	Same	Same	108302
A85*	3.40	20	Same	[ضرب] بحلب \ لااله الا الله \ محمد رسول الله \ ارسله بالهدى Same but date starts at bottom: سنة احد و [---]	AH 731 = 1330	Same	Balog 1964:143, No. 200	108339
A86	3.90	21	Same	Same Circular legend: [---] و ثلا[ثين ---]	AH [-]3[-] = 1329–38	Same	Balog 1964:143, Nos. 199–202	108316
A87	3.20	21	Same	Same	Same	Same	Same	108318
A88	2.70	20	Same	Same	Missing	Same	Same	108338
A89	4.10	20	Same	Same	Same	Same	Same	108344
A90*	4.70	21	Same	Same Date at the last line: ثلاثين وسبعماية	AH 730 = 1329	Ḥamāh	Balog 1964:144, No. 206	108301
A91	3.70	23	Same	Same Circular legend: [---]وسبعماية	AH 7[-] = 1329–38	Same	Balog 1964:144, Nos. 204–210	108320

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A92	4.10	20	Same	Same Circular legend: [---]وسبعماية	Same	Same	Same	108337
A93	3.00	19×21	Same	Same [---] بحماة [---]	Missing	Same	Same	108323
A94	2.90	19	Same	Same خرب بحماة	Same	Same	Same	108324
A95	4.00	20	Same	Same	Same	Same	Same	108341
A96	3.10	20×22	Same	Same خرب [---]	Same	Same	Same	108308
A97	2.45	18×21	Same	Same	Same	Same	Same	108331
A98	3.00	15×18	Same	Same	Same	Same	Same	108346
A99*	1.85	17×20	ضرب بحماة السلطان الملك \ الناصر ناصر\ [---]	Same Bottom reverse: [---] و دين الحق	Missing	Same	Cf. Balog 1964:145, No. 211	108313
A100	3.10	18	Same	Same	Same	Same	Same	108342
Fraction of *dirham*								
A101*	1.20	13	السلطان [---]\ الناصر ناصر\ [---] محمد [---]	لااله ا [---] محمد رسول [---]	Missing	Aleppo	Cf. Balog 1964:143, Nos. 199–202; 146: No. 212	108357
A102	1.80	13	Same	Same	Same	Same	Same	108359
A103*	1.60	13×15	Same	Same Below: [---]دمشق سنة [---]	Same	Damascus	Same	108354
A104	1.90	14	Same	Illegible	Same	[Damascus]	Same	108348

CATALOGUE 3. (cont.)

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	References and remarks	IAA No.
A105*	1.70	13×16	السلطان الملك [---] الناصر ناصر محمد [---]	لااله ا [---] محمد رسول [---]	Same	Same	Same	108350
A106	1.80	14	Same	Same	Same	Same	Same	108349
A107	1.20	13×15	Same	Same	Same	Same	Same	108355
A108	2.30	11×14	Same	Same	Same	Same	Same	108356
A109	2.00	13×16	Same	Same	Same	Same	Same	108358
A110	1.40	10×14	Same	Same	Same	Same	Same	108360
A111	0.90	11	Same	Same	Same	Same	Same	108370
A112	1.85	13×15	Same	Same	Same	Same	Same	108361
A113	1.60	13	Same	Same	Same	Same	Same	108362
A114	1.00	13	Same	Same	Same	Same	Same	108363
A115	1.50	11×12	Same	Same	Same	Same	Same	108365
A116	1.20	12	Same	Same	Same	Same	Same	108366
A117	0.90	11	Same	Same	Same	Same	Same	108367
A118	1.40	12	Same	Same	Same	Same	Same	108371
A119	2.00	13	Same	Same	Same	Same	Same	108372
A120	1.50	13	Same	Same	Same	Same	Same	108379
A121	2.00	13	Same	Same	Same	Same	Same, double struck	108353
A122	0.70	10	Same	Same	Same	Same	Same	108373
A123	1.70	12	Same	Same	Same	Same	Same	108374
Al-Nāṣir Muḥammad I *dirham* Overstruck on Oshin 1307–1320, *takvorin*								
A124*	2.38	21	السلطان الملك \ نااصر الديا [---]\ بن الملك المنصور [---] Lion to r., Armenian legend around	لااله الا الله \ [---] الله [---] Horseman to r., Armenian legend around	Missing	[Sis]	Cf. Balog 1964:147, No. 213b	108299
A125*	2.40	20	Same	Same	Missing	Same	Same	108300

CATALOGUE 4. Sixteenth-Century Copper Hoard B.[i]

No.	Weight (g)	Diam. (mm)	Obverse	Reverse	Date (CE)	Mint	Reference	IAA No.
Mamlūks Al-Nāṣir Muḥammad I Nāṣir al-Dīn, 3rd Reign (AH 709–741/1310–1341 CE)								
B1*	2.75	21	بدمشق \ سنة ست وثلثين \ [---] السلطان الملك الناصر \ ناصر بن الملك المنصور \ قلاون	[---]الله \ وما الناصر الامن عند بالهدى ودين \ الحق	AH 736 = 1335	Damascus	Balog 1964:150, No. 223	108382
B2*	2.25	19	[---]بن الملك المنصور \ [- --]	[---]ودين [---]		Same	Same	108383
Al-Ashraf Shaʿban II Naṣir al-Dīn (AH 764–778/1363–1377 CE)								
B3*	2.25	19	Margin: السلطان الملك الاشرف شعبان In cartouche: حسن \ بن	In center: ضرب \ مشق \ بد	AH 736 = 1335	Same	Balog 1964:221, No. 458	108381
Uncertain, 15th c. CE								
B4*	2.95	17–18	Margin: [---] السلطان	Illegible				108385
B5	1.55	17	Illegible	Illegible				108384
Irregular Fractions of *Fals* (c. end 14th–15th c. CE)								
B6*	0.50	7–12	Illegible	Illegible				108388
B7	0.70	8–13	Illegible	Illegible				108389
B8	0.55	8–12	Illegible	Illegible				108390
B9	1.20	9–12	Illegible	Illegible				108392
B10	0.40	7–12	Illegible	Illegible				108393
B11	0.40	8–12	Illegible	Illegible				108394
B12	0.55	11	Illegible	Illegible				108395
B13	0.38	11–15	Illegible	Illegible				108396
B14	0.60	14–15	Illegible	Illegible				108397
Irregular Fractions of Plain Copper Sheet								
B15*	2.00	11–13	Illegible	Illegible				108391
B16	1.35	12–15	Illegible	Illegible				108387
Unidentified Small Fractions of *Fulus* and Plain Copper Sheets, c. 11.20 g								
B17–32			Illegible	Illegible				
OTTOMANS Sulaymān I, Qānūnī (AH 926–974/1520–1566 CE), *manghir*								
B33*	2.14	12–14	ضرب \ بمصر \ سنة \٩٥٥	Arabesque ornament		Misr	Kabaklarli 1998:358, No. 69	108386

[i] The coins are arranged chronologically, according to coin types. All are copper. Coins bearing an asterisk appear in Fig. 13.

APPENDIX 1: COIN FINDS ACCORDING TO FINDSPOT[i]

Locus	N	Date (CE)	Cat. No.	Total Per Locus
20	1	1369	101	1
100	1	1438–1453	181	
	1	14th–15th c.	195	2
101	1	1369	102	
	1	1453–1461	183	
	1	14th–15th c.	196	
	1	14th–15th c,	235	
	1	14th–15th c,	236	
	1	14th–15th c.	281	
	1	17th–18th c.	289	7
103	1	1310–1341	63	1
107	1	1369	89	
	1	14th–15th c.	215	
	1	14th–15th c.	241	
	1	14th–15th c.	262	
	1	14th–15th c.	263	
	1	14th–15th c.	264	6
109	1	1382–1389	141	1
110	1	1363–1377	119	
	1	1390–1399	156	
	1	14th–15th c.	277	
	1	16th c.	285	4
113	1	14th–15th c.	273	
	1	14th–15th c.	274	2
117	1	1310–1341	56	
	1	1390–1399	147	
	1	14th–15th c.	194	3
200	1	1285–1324	3*	
	1	14th c.	6*	
	1	1201–1239	7	
	1	1294–1296	27*	
	1	1310–1341	38	
	1	1310–1341	52	
	1	1310–1341	61	
	1	1310–1341	65	
	1	1342–1345	78	
	1	1361–1362	87	
	1	1363–1377	109	
	1	1389–1390	129	
	1	1389–1390	130	
	1	1390–1399	144	
	1	1390–1399	146	
	1	1390–1399	150	
	1	1390–1399	153	
	1	1382–1399	163	
	1	End 14th c.	167	
	1	14th–15th c.	197	
	1	14th–15th c.	237	
	1	14th–15th c.	238	
	1	14th–15th c.	239	23
202	1	1310–1341	66	
	1	1310–1341	67	
	1	1361–1362	85	
	1	1388	138	
	1	1388	139	
	1	1390–1399	143	
	1	1390–1399	158	
	1	1382–1399	165	
	1	1406–1412	169	
	1	1406–1412	173	
	1	1458	182	
	1	14th–15th c.	217	
	1	14th–15th c.	240	13
203	1	1369	88	
	1	1369	92	
	1	1369	93	
	1	1363–1377	107	
	1	1363–1377	108	
	1	1381–1382	126	
	1	1389–1390	134	
	1	1390–1399	159	
	1	1406–1412	176	
	1	14th–15th c.	218	
	1	14th–15th c.	224	
	1	14th–15th c.	265	12
205	1	1279–1290	22	
	1	1369	99	
	1	14th–15th c.	266	3
206	1	1368–1370	95	
	1	14th–15th c.	219	2

[i] Coins bearing an asterisk appear in Figs. 1, 4, 13.

APPENDIX 1. (cont.)

Locus	N	Date (CE)	Cat. No.	Total Per Locus
207	1	355–361	2	
	1	1368–1370	94	
	1	1389–1390	128	
	1	1389–1390	132	
	1	1385	136	
	1	1390–1399	145	
	1	1389	166	
	1	1468–1496	185	
	1	14th–15th c.	220	
	1	14th–15th c.	227	10
209	1	14th–15th c.	225	1
211	1	13th–14th c.	13	
	1	13th–14th c.	14	
	1	13th–14th c.	17*	
	1	1260–1277	18	
	1	1310–1341	55	
	1	1342–1345	75	
	1	1342–1345	76	
	1	1342–1345	77	
	1	1389–1390	127	
	1	1390–1399	142	
	1	1390–1399	160	
	1	14th–15th c.	189	
	1	14th–15th c.	191	
	1	14th–15th c.	223	
	1	14th–15th c.	226	
	1	14th–15th c.	232	
	1	14th–15th c.	267	
	1	14th–15th c.	268	
	1	14th–15th c.	269	
	1	14th–15th c.	270	
	1	14th–15th c.	271	
	1	14th–15th c.	272	
	1	16th–17th c.	287	23
212	1	104–76 BCE	1	1
213	1	1285–1324	4*	
	1	13th–14th c.	15	
	1	1290–1293	26	
	1	1294–1296	28	
	1	1310–1341	30	
	1	1310–1341	44	
	1	1310–1341	49	
	1	1310–1341	51	
	1	1310–1341	60*	
	1	1350	82	
	1	1369	90	
	1	1369	91	
	1	1368–1370	96	
	1	1369	97	
	1	1369	98	
	1	1363–1377	103	
	1	1363–1377	104	
	1	1363–1377	105	
	1	1363–1377	106	
	1	1363–1377	110	
	1	1363–1377	111	
	1	1363–1377	113	
	1	1363–1377	118	
	1	1363–1377	120	
	1	1381–1382	125	
	1	1390–1399	149	
	1	1390–1399	152	
	1	1390–1399	154	
	1	1390–1399	155	
	1	1390–1399	157	
	1	1406–1412	170	
	1	1406–1412	172	
	1	1406–1412	174	
	1	1406–1412	177	
	1	14th–15th c.	198	
	1	14th–15th c.	222	
	1	14th–15th c.	234	
	1	14th–15th c.	242	
	1	14th–15th c.	243	
	1	14th–15th c.	244	
	1	14th–15th c.	245	
	1	14th–15th c.	275	
	1	14th–15th c.	276	43
214	1	1332–1339	5*	
	1	1310–1341	29*	
	1	1310–1341	64	
	1	1310–1341	68	

APPENDIX 1. (cont.)

Locus	N	Date (CE)	Cat. No.	Total Per Locus
	1	1363–1377	114	
	1	1363–1377	116	
	1	1381–1382	121	
	1	1389–1390	131	
	1	1382–1399	161	
	1	1406–1412	168	
	1	1406–1412	171	
	1	1406–1412	175	
	1	1406–1412	178	
	1	1406–1412	179	
	1	14th–15th c.	199	
	1	14th–15th c.	200	
	1	14th–15th c.	279	
	1	14th–15th c.	284	18
215	1	1244–1284	9	
	1	1310–1341	31	
	1	1310–1341	40	
	1	1310–1341	45	
	1	1310–1341	46	
	1	1310–1341	47	
	1	1310–1341	57	
	1	1310–1341	69	
	1	1310–1341	70	
	1	1310–1341	71	
	1	1310–1341	72	
	1	1342–1345	74	
	1	14th–15th c.	201	13
219	1	1310–1341	32	
	1	1342–1345	73	2
220	1	1310–1341	54	
	1	1381–1382	122	
	1	1388	137	
	1	14th–15th c.	202	
	1	14th–15th c.	203	
	1	14th–15th c.	204	
	1	14th–15th c.	205	
	1	14th–15th c.	206	8
221	1	1260–1277	19	
	1	1310–1341	48	
	1	1389–1390	133	
	1	1390–1399	151	

Locus	N	Date (CE)	Cat. No.	Total Per Locus
	1	14th–15th c.	207	
	1	14th–15th c.	214	
	1	14th–15th c.	255	
	1	14th–15th c.	256	
	1	14th–15th c.	257	
	1	14th–15th c.	258	
	1	14th–15th c.	259	
	1	14th–15th c.	260	
	1	14th–15th c.	261	13
222	1	1382–1399	164	1
223	1	1218–1237	8	
	1	13th –14th c.	16	
	1	1310–1341	37	
	1	1310–1341	53	
	1	1348	79	
	1	1347–1351	80	
	1	1347–1351	81	
	1	1361–1362	84	
	1	1361–1362	86	
	1	1369	100	
	1	1363–1377	115	
	1	1381–1382	123	
	1	1382–1389	135	
	1	1467–1468	184	
	1	14th–15th c.	208	
	1	14th–15th c.	209	
	1	14th–15th c.	210	
	1	14th–15th c.	229	
	1	14th–15th c.	230	19
224	1	1310–1341	62	
	1	1363–1377	112	
	1	14th–15th c.	278	
	1	14th–15th c.	280	4
225	1	1279–1290	23	
	1	1310–1341	39	
	1	1310–1341	41	
	1	1382–1389	140	
	1	1438–1453	180	
	1	1468–1496	186	
	1	1496–1498	187	
	1	1501–1516	188	

APPENDIX 1. (cont.)

Locus	N	Date (CE)	Cat. No.	Total Per Locus
	1	14th–15th c.	211	
	1	14th–15th c.	212	
	1	14th–15th c.	216	
	1	14th–15th c.	246	
	1	14th–15th c.	247	
	1	14th–15th c.	248	
	1	14th–15th c.	249	
	1	14th–15th c.	250	
	1	16th–17th c.	286	17
228	1	1381–1382	124	
	1	14th–15th c.	192	
	1	1520–1566	282	3
230	1	1310–1341	33	
	1	14th–15th c.	251	
	1	16th–17th c.	288	3
231	1	1310–1341	34	1
232	1	1316–1335	10*	
	1	1310–1341	35	
	1	14th–15th c.	231	3
236	1	1279–1290	24	
	1	1279–1290	25*	
	1	1520–1566	283	3
239	1	1363–1377	117	
	1	14th–15th c.	252	2

Locus	N	Date (CE)	Cat. No.	Total Per Locus
240	1	1382–1399	162	1
242	1	13th–14th c.	11	
	1	14th–15th c.	190	
	1	14th–15th c.	213	
	1	14th–15th c.	221	
	1	14th–15th c.	228	
	1	14th–15th c.	253	6
244	1	1310–1341	58	1
245	1	1310–1341	42	
	1	1310–1341	59*	
	1	14th–15th c.	254	3
270	1	14th–15th c.	193	1
1003	1	1260–1277	20*	
	1	1279–1290	21	2
	1	1310–1341	36	
	1	1310–1341	43	
	1	1310–1341	50	
	1	1354–1361	83	
	1	1390–1399	148	
Section	1	13th–14th c.	12	1
Surface, 100	1	14th–15th c.	233	1

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