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Contents

- 3 JAROSLAW BODZEK: Tiarate Heads on Samaritan Coins
- 21 HAIM GITLER: The Earliest Coin of Judah
- 35 ALLA KUSHNIR-STEIN: Inscribed Hellenistic Weights of Palestine
- 61 DONALD T. ARIEL and OLIVER D. HOOVER: A New Coin of the Mint of Marisa
- 79 ROSA M. MOTTA: Zeus on Dora's Coins
- 93 DAVID HENDIN, CRAIG LUNDSTROM, ZACHARY WHITE and NATHAN W. BOWER: Preliminary Sequencing of Herod I's Undated Coins Based on Alloy Changes over Time
- 105 JEAN-PHILIPPE FONTANILLE: Herod Philip: The First Jewish Portrait
- 121 ANDREW M. BURNETT: Wife, Sister, or Daughter?
- 127 KENNETH MILLER: A First Jewish Revolt *Prutah* Overstrike
- 133 SHAI HENDLER AND LIONEL HOLLAND: Three Small Coins (*minimi*) from Caesarea Maritima
- 135 RAMI ARAV AND CARL SAVAGE: A Rare *Aureus* of Antoninus Pius at Bethsaida
- 139 NATHAN T. ELKINS: A Mid-Fourth Century Purse Hoard from the Roman Auxiliary Fort at Yotvata
- 147 ERMANNO A. ARSLAN: The L812 Trench Deposit inside the Synagogue and the Isolated Finds of Coins in Capernaum, Israel: A Comparison of the Two Groups
- 163 GABRIELA BIJOVSKY: From Carthage to the Holy Land: The 'Palm Tree' *Nummus*
- 175 NITZAN AMITAI-PREISS and L. ALEXANDER WOLFE: Amuletic Bronze Rings from the Arab-Byzantine Transitional Period
- 187 YOAV FARHI: A Fāṭimid Coin Die from Israel
- 191 REVIEW: Oliver D. Hoover, Andrew Meadows and Ute Wartenberg-Kagan (eds.), *Coin Hoards. Vol. X. Greek Hoards*. New York, 2010. (François de Callatay)
- 197 Abbreviations

The L812 Trench Deposit inside the Synagogue and the Isolated Finds of Coins in Capernaum, Israel: a Comparison of the Two Groups

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Abstract

This article analyzes the methods and periods of formation of the monetary assemblage of Trench L812 of the Capernaum synagogue. Comparison of the coin profiles of the synagogue with the recently published profile of the city fostered further investigation into the problems in relating hoards and urban assemblages.

INTRODUCTION

The recent publication by Bruno Callegher (2007) on the coin finds (excluding those from the synagogue) from excavations until 2003 in the urban area of Capernaum on Sea of Galilee, is part of a growing body of publications relating to that site. This is also probably the only book synthesizing the numismatic material from a large site in the Middle East.¹ Thus it allows a more in-depth investigation of some aspects of the local circulation of bronze fractional denominations² between the fourth and sixth centuries. It is now possible to conduct a more thorough comparison — which I began back in 1997³ — with the finds from

1 Major monographs on Capernaum published by the *Studium Biblicum Franciscanum* in Jerusalem include works by Corbo (1972 and 1975), Loffreda (1995), Testa (1972) and Spijkerman (1975). Callegher 2007 includes a wealth of bibliographical references for an in-depth study of the subject.

This article was translated by Virginia Ridsdale. All of my articles cited here may be accessed from <http://www.ermannoarслан.eu>.

2 The finds from the excavations of the city comprised small fractional nominals, characteristic of random losses of coins collected individually during excavations. Separately, Callegher also studied the coins as assemblages within the associated complexes found on the site. These include coins of higher nominal value not covered in this article.

3 In that publication (Arslan 1997), Bruno Callegher made available to me a preliminary catalogue of coins from the city which I then analyzed statistically. I wish to thank him again for his generosity. At the same time, I provided him with the preliminary identifications of the coins from Trench L814 in the synagogue, which he used in his analysis. I am currently cataloguing the coins from the entire synagogue, with the temporary exclusion of those from Trench L812, while awaiting the full publication.

Trench XII (currently denoted Trench L812) within the synagogue,⁴ consisting of 20,323 coins found sealed beneath the large stone slabs of the floor.

An analysis was conducted on a strictly random, statistically reliable sample of those coins. I selected 3,058 specimens, or 15% of the total, generating 1,925 coins that could be catalogued in some way: either fully or by issuing authority or type.⁵ On the basis of either the date of issue of fully legible coins, the issuing authority's period of reign or the period of issue of the type,⁶ I could thus calculate the yearly incidence of fractional currency within Trench L812 of the synagogue and in the city, and enter them on two curves that could then be compared (Fig. 1).⁷

4 For the coins from Trench XII (=L812) in the synagogue courtyard see Arslan 1996a and Arslan 1997. I have analyzed specific aspects of the Trench L812 complex (in some cases I have cited individual coins found in other trenches inside the synagogue) in Arslan 1996b (imitations of Axumite coins) and Arslan 2003d ('Isis' coins from the mint of Alexandria). The difficulties concerning finds of analogous currency classes are covered in Arslan 2003a (finds at Bet Jimal) and Arslan 2003b (possibly a hoard from the first quarter of the fifth century in Migdal).

5 For the methodology of such an approach, and how broad phenomena are statistically analyzed with large numbers of coins, see Arslan 1996a; Arslan 1997:247–250. Anomalous results created by small data populations require a comprehensive analysis of all finds. The sample of 15% of the material from the Trench L812 deposit, dating to the early years of Zeno's second reign, may be considered statistically significant and provides not only the date of the deposit but also allows for a reconstruction of the process of its formation.

6 Specific problems concerning each series cannot be explored in this article. The coins are therefore referred to here according to their *RIC* identifications and the dating given there is used. The dating scheme in *RIC X* has been accepted over that of *RIC IX* when the former diverged from the latter. Callegher did the same in 2007 for legible specimens. For specimens that could only be classified by type, he cited *LRBC I* and *II*, which I had tried to avoid in 1997. Obviously, the date of loss or concealment of each coin from a class with a long-term circulation may — as happens in most cases — (sometimes considerably) differ and be later than their date of issue as indicated in these publications.

7 The distribution of coins by year from Trenches XII and XIV and the city was calculated by Callegher (2007:56, Table 11), who developed a graph that reflects the coin distribution. Asolati (2009:590–591) referred to Callegher's histograms and applied the Raverz and Casey equations to the data to generate "annual loss indices." The new graphs relating to the two trenches are radically different. This is because the trenches did not contain two "hoards" quickly withdrawn from circulation. Rather, the coins are predominantly a deposit accumulated over a long period of time, as shown in this article. The reconstruction of the currency at the time of the completion of the accumulation process (presumably 470–480 CE) is thus further distorted by the graphs.

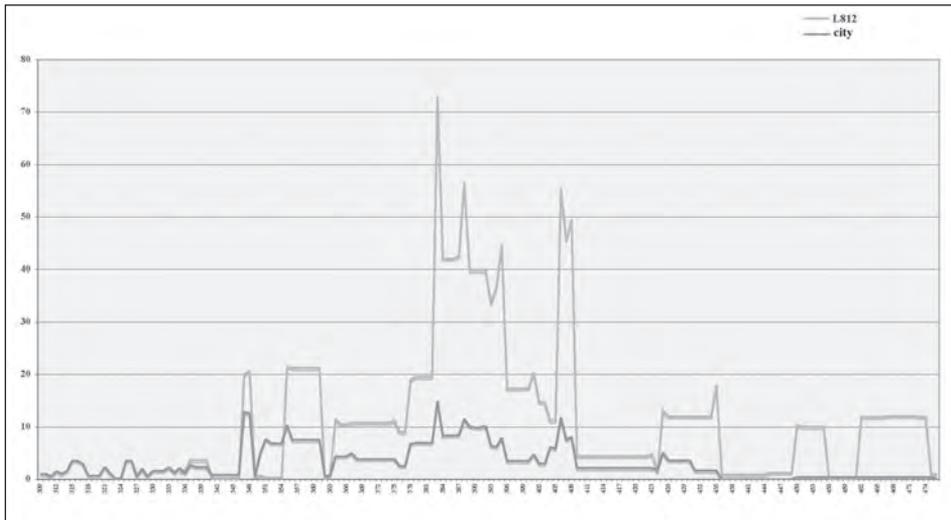


Fig. 1. Capernaum coins: chronological distribution (synagogue vs. city)

One must bear in mind that the coins were found in the synagogue in well-defined layers of secondary deposit. This means that the coins had been ‘accumulated’ in a different place and then brought there to be included in the sub-foundation of the pavement, where they were divided up and small groups deposited in different places. Similar small groups of coins have, in fact, been found in all the other trenches.

I do not know how much time elapsed between the completion of the ‘accumulation’ and its re-use. The date of the most recent coins provides only a *terminus post quem* for the date for the laying of the paving stones. One cannot rule out that some coins that are later than most of the others in the assemblage slipped in among those placed into the foundations. Luckily, there are very few of these. The curves of the histograms indicate the presence of coins minted during those years, but not whether they were necessarily lost, concealed or deposited soon after their arrival at the site. The curves also do not indicate the amount of money in circulation at any point in time, nor how much of that consisted of recent emissions arriving at Capernaum after a certain delay owing to their transportation to the site. This means that more recent coins were in circulation at the same time as older currencies, usually in decreasing quantities (in geometric terms). The older currencies had the same acceptance as the most recent issues, in a regime where withdrawal from circulation, at least for these types of currencies, was not a usual practice.

No indication of the above appears on the histograms of Fig. 1. On the contrary, the assemblages or hoards resulting from the withdrawal from circulation of coins over a short period of time indicate that various currencies decreased over

time.⁸ Clearly, series characterized by high output (such as the debased silver *antoniniani* for *Divus Claudius*), or series that were particularly popular in the marketplace (such as the *Fel Temp Reparatio* fallen horseman type) could remain in circulation for longer and appear to be quite high in the histograms in Figs. 1–2. Similarly, other series quickly disappeared from the marketplace (following their withdrawal or as a result of market laws⁹) — and therefore have a reduced presence in the histograms. This applies to issues such as gold or silver, the intrinsic value of which (i.e., the value of their metal content) exceeded the denominational value assigned to them while in circulation, leading to their systematic withdrawal from circulation. Only currency that was not undervalued remained in circulation, according to the well-known Gresham's law.

A comparison between the full coin profiles of both Trench L812 in the synagogue, and the city as a whole, clearly shows that the occupation of the city covered a much longer time frame. For Fig. 1, I have shown only the main period of overlap: beginning with 309 CE and ending with Zeno's second reign, with 476 CE as a possible date of issue of the most recent coins from Trench L812. Eight Hellenistic, Jewish and Roman coins and five *antoniniani* (Arslan 1997:305; including two counterfeits for *Divus Claudius* II [Arslan 1997:306, Nos. 12–13: 270–272 CE]) from Trench L812 were left off the graph. The weights and diameters of all the Trench L812 coins not on the graph are similar to the fourth-century currency that began with an Antiochene coin depicting the personification of Constantinople and dated between 335 and 337 CE (Arslan 1997:306, No. 14; *RIC* VII:697, No. 114).

Coins of the time between *Divus Claudius* II and 335–337 CE are missing. There is an extremely low incidence of subsequent issues¹⁰ until those of the period of 347–348. These latter coins seem to still have been in circulation at the onset of the systematic accumulation that led to the formation of the Trench L812 deposit.

Coins dating to those phases (between 270–272 and the middle of the fourth century CE) were, on the other hand, present in the city, albeit in significantly decreasing numbers, and this should be attributed to some now unknown event in the history of Capernaum.

8 As to a progressive reduction of the oldest issues inside the hoards, see Arslan 1983. Notably, the curve is altered by phases of high/low volumes of currency issue or by changes in supplies. Transport costs affected the distribution of copper fractional nominals, as supplying distant areas could become too expensive. See further information in the notes below.

9 See the contributions in Asolati and Gorini 2006, containing conclusions sometimes conflicting with my positions.

10 Arslan 1997:306–307, Nos. 14–32: 0.99 % of all the specimens considered.

Several problems arose while compiling data for the two curves in Fig. 1 (and the one juxtaposed with the Sardis hoard covered below in Fig. 4). A large part of the material was difficult to identify and I would only have been able to include them on the graph in the most imprecise terms. As the coins from both the trench and the city are accumulations of isolated finds from many different periods, these potential inaccuracies are statistically insignificant and one may assume that the illegible specimens were evenly distributed over time.

Another difficulty is the occurrence of a number of ancient counterfeits, which are not always easy to detect. On the graph I have assigned them the same date of issue as their prototypes. The complexity of the counterfeit material and its dating, primarily to the fifth century CE, can only be resolved by an in-depth investigation. This investigation is in progress (for the finds from Trench L812), and I hope Bruno Callegher will soon publish the results.

I have considered the so-called 'blank flans' from the city as illegible coins. These coins originally had a type — or trace of a type — on them.¹¹

It is important to note that, for the period between the middle of the fourth century to Zeno's reign, the curves of the graphs for the synagogue and city coins appear identical, despite their obvious quantitative differences.¹²

Callegher (2007:55) had already noted the similarity between the coin distribution of the synagogue and the city. However, he apparently failed to draw the correct conclusions from this, thus affecting any interpretation of the significance of the coins in the excavations.

The overlap of the two curves in Fig. 1 requires an explanation. The process of the formation of the Trench L812 deposit, wherever it occurred, seems to have been similar to the individual losses of coins ('fallen from pockets') in the city. While coins were accidentally lost (or discarded) one by one in the city with a more or less even distribution over time, the synagogue coins (in Trench L812 as well as the other trenches) were being collected separately in a deposit that was later — in whole or in part — buried under the synagogue floor.

11 Despite the visual examination of a large number of 'blank flans' no certain specimen has been identified. We only know they were the by-products of illegal mints. Traces of the type could be identified in all specimens, the minimum requirement for their acceptability as currency. Incidentally, the citation of Arslan 1997:304, in Callegher 2007:5, and in n. 266 about the presence of 'blank flans' within the deposit of the Capernaum synagogue is not corroborated by my findings. I have so far found no blank flans among the materials from the synagogue. I believe that the claim that unstruck flans (or coins without a recognizable type) were in circulation has yet to be established.

12 In elementary statistical calculations, unless there is the accepted minimal number required for a reliable calculation, the quantity of specimens taken into consideration appears irrelevant with results only appearing as approximation.

A reading of the graph allows us to date the onset of the accumulation to the middle of the fourth century, when coins donated by the community started to be set aside. These coins, which probably included some older ones, were still in circulation.

These were fractional bronze denominations. It is possible, however, that there were higher-denomination coins donated to the synagogue that were immediately selected for other uses. I cannot rule out the possibility that ‘token currencies,’ such as tiny cast coins with extremely low weights (Arslan 1996b), were also offered to the synagogue. I find it hard to accept that these ‘token-currencies’ circulated at a time when weight stability was considered paramount, even including fractional denominations characterized by outstandingly stable average weights for most of the fifth century, up to Zeno’s second reign.¹³

In overlapping the curves of the coins in the synagogue with the coins in the city (Fig. 1), a seemingly obscure discrepancy appears, namely, the presence of *nummi* in the synagogue between the reigns of Marcian and Zeno, a time when these same coins were virtually missing in the city.

In my opinion, the circulation of the bronze coins in that phase is a sign of a decreasing incidence in Capernaum of the bronze fractional denomination, the *nummus*, possibly used less and less in daily transactions. This trend stabilized in the subsequent proto-Byzantine phase, where the heavy bronze denominations (the 40-*nummi folles*; Callegher 2007:133–134) became prevalent in the city. The issue of *nummi*, on the other hand, was not discontinued, and the occasional appearance in the city of *nummi* of Anastasius I and Justinian I is evidence of that (Callegher 2007:134, Nos. 1201 and 1208). Support for the idea of a decrease of *nummi* at Capernaum comes from other assemblages with significant quantities of proto-Byzantine fractional currency, such as the 1982 Sardis hoard covered in more detail later in this article. Although geographically far apart, this hoard is situated within the same currency area as Capernaum, and contained, according to the author, 138 Anastasius I *nummi*, accounting for 37.4 % of the identifiable coins issued before 498 CE (Burrell 2007).

A reason for the continuous presence of *nummi* in the synagogue could be the traditional use of the smallest coins, the symbolic demonetization of which was more easily accepted during ritual services. This means that the faithful

13 See Arslan 2003c for the stability in the absolute weight of the *nummus* in the fifth century until Zeno’s reign, both in the East and West, with calculations made using the Capernaum coins. For more traditional approaches, see Callegher 2007:49: “the steady weight decrease of copper coins throughout the fifth century caused by the devaluation of the metal relative to gold resulted in the growing devaluation of the bronze nominals and the appearance of a high number of imitations which circulated along with, but not in replacement of, the official currency.” My theory is exactly the opposite: It argues for the appreciation of bronze over gold.

would bring a *nummus* to the synagogue rather than other denominations, even when lower numbers of *nummi* were in circulation. This would be similar to the so-called ‘Charon’s *obol*’ placed inside graves. For a long period of time in the Western Roman Empire the *as*, rather than a smaller denomination, or a coin of a different metal (Cantilena 1995; Dubuis et al. 1999; Heinzelmann et al. 2001), was used for this purpose.

The processes of accumulation discussed above, and which I explored extensively in 1997, led to the formation of a coin assemblage that cannot be considered a ‘hoard’ in the normal sense of a group of coins quickly withdrawn from circulation.

THE DEVELOPMENT OF NORMAL HOARDS

Callegher’s interpretation of the Trench L812 deposit as a ‘hoard’ rather than as suggested herein requires further investigation, also for a correct interpretation of the other assemblages in Palestine that may have been formed in a similar way. It would be helpful to focus again on ways of deciphering the structure of ‘normal’ hoards developed over a short period of time. An example is the Biassono hoard (Monza, Italy; Arslan 1995; Arslan 1996c), consisting of 2,234 *sestertii*, a very limited number of *dupondii* and five *antoniniani*, the most recent struck in the name of *Mariniana* (wife of Valerian I, 256 CE). The histogram, which I published back in 1983 (Fig. 2), clearly shows the typical pattern of ‘normal’ hoards developed over a brief period of time (Arslan 1983: 203). There are very few ancient coins, and some of those are in a very bad state of preservation because of their long-lasting circulation. The numbers of coins increase through to the end of the second century (Severan period). At that point, their numbers drop sharply either because of reduced mint production or a supply crisis. Under Severus Alexander, the curve rises again and peaks under Balbinus, Pupienus, and Gordian III. After that, the quantities fall and are sporadic after the reign of Philip I.

The Biassono hoard, concealed due to some emergency — possibly the Alemanni threat — unquestionably reflects the composition of bronze coins (mainly *sestertii*) then in circulation.

The curve shows the history of coin supply in the region, and yearly reduction in quantities, which seems to have been quite steady. Decrease in the number of the more recent specimens indicates lengthy distribution times from the Roman mint to outlying areas of the empire.

The coins of the hoard appear to have been amassed in the same area where the hoard was found, i.e., in the tenth and eleventh regions (*Regio X* and *XI*). The curve of the hoard coincides perfectly with the histograms of a number of

other hoards (below) and indicates the nearly exclusive occurrence of the same denomination (*sestertius*) and the same supposed dates of concealment.

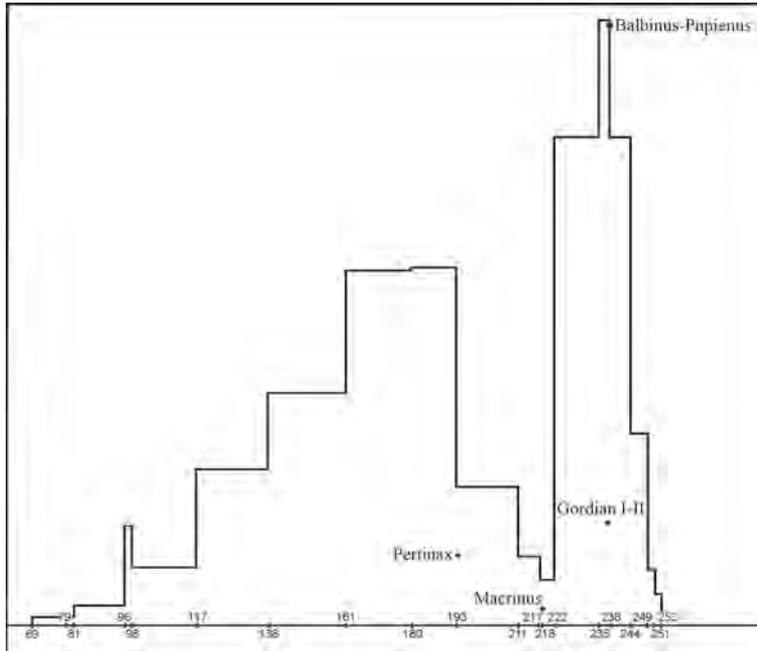


Fig. 2. Biassono hoard: chronological distribution

Fig. 3 is a histogram with overlapping curves of the Biassono hoard and the Angera and Besano hoards. The Angera (Varese) hoard¹⁴ — near Lake Maggiore and about nine km from Biassono — has a similar curve showing a decline in the Severan period, thus confirming that that decline was the result of problems affecting assemblages in the entire region and was not restricted to any specific hoard. The third hoard, from Besano (Varese; Chiaravalle 1982), originally consisted of 182 coins, but it was recovered illegally and pillaged. Only 154 bronze coins and three *antoniniani*, from Augustus to Philip I — i.e., between 9/11 CE and 247 CE — remained. By overlapping the three curves, one may observe that the profile of the Besano hoard is analogous, except for a difference in its final phase: The most recent issues — the best-preserved coins — were collected and put on the market. Thus, an analysis of the numismatic profiles can

¹⁴ The hoard, scattered in a ploughed field but probably intact, consisted of 231 *sestertii*, a few *dupondii* and three silver coins dating to between Augustus and Philip I (22 BCE–249 CE; Arslan 1983).

indicate whether an assemblage is intact, and the approximate dates of the stolen coins.

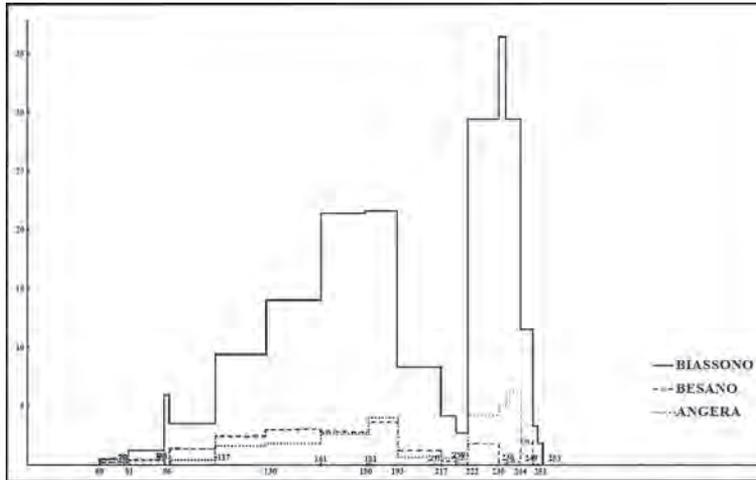


Fig. 3. Biassono, Besano and Angera hoards: chronological distribution

REINTERPRETATION OF THE TRENCH L812 DEPOSIT

It remains to be seen whether the characteristics identified in the above hoards, their periods of decline, their final peak and the dynamics between the coins and the money in circulation at the moment of concealment (for the denominations found in associated assemblages) can be applied to assemblages concealed elsewhere at different times. Comparison between Trench L812 at Capernaum and another credible hoard concealed in the same area of circulation at a similar time made by superimposing their histograms would thus be extremely useful. If the characteristics are similar it would constitute proof that the Capernaum Trench L812 deposit (along with the Trench 14 hoard) is not a hoard developed over a short period of time, and that considering it as such would only lead to mistaken conclusions about coin circulation at the time.

For comparison with the Trench L812 deposit I have used the recently published 1982 Sardis hoard, consisting of 695 *minimi* dating to Anastasius I and Thrasamund (496–523 CE).¹⁵ Thus the hoard reflects the coin circulation of a Byzantine town dating to just a few years after the most recent coins from

¹⁵ Burrell's review of analogous assemblages in Sardis and elsewhere (2007:239–245) is very helpful. She seemed not to be aware of the Capernaum finds, which were known by then, appearing in Arslan 1997, and having been noted in Noeske 2000: vol. II:645–660.

Trench L812 of the Capernaum synagogue. Burrell's 369 legible coins support her conclusion that they date to Anastasius' reform (498 CE, Burrell 2007:253). I prepared the following graph representing the hoard according to the dates of issue of each specimen (Fig. 4).¹⁶

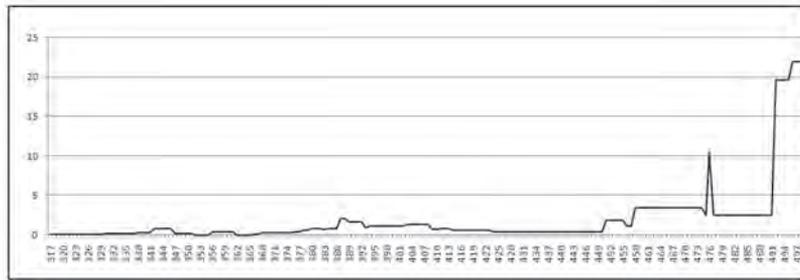


Fig. 4. Sardis hoard

The graph shows the very low number of coins issued before the Theodosian period, and subsequent limited increase up to the middle of the fifth century. The numbers rise under Marcian, with a peak in the very last phase with Anastasius' coins. There are 138 of the latter coins, or 37.4% of those identified.¹⁷ According to Burrell's classification, they were all issued prior to 498.

The curve for the Sardis hoard is characteristic of hoards accumulated over a short period of time, with an exponential peak in the final stage. Burrell did not mention this interpretation, which in my opinion is obvious. Rather, she attributed the existence of so many Anastasius coins to the high-volume of its issue (Burrell 2007:236).

If the curve of the Trench L812 deposit in Capernaum is overlaid with the profile of the Sardis assemblage — indisputably a hoard — I observe that the two curves are incompatible (Fig. 5). The Trench L812 deposit of the Capernaum synagogue is not a hoard. Rather, it is comparable to the coin profile of the city in the same chronological period as studied by Callegher (Fig. 1).

¹⁶ The percentage of identified coins is very low (53.1%). In the Trench L812 deposit the rate is approximately 63%.

¹⁷ Burrell identified blank flans in the Sardis hoard (2007:238 and Nos. 574–583). She suggested that they were counted by number, owing to their extremely low weight (0.25–0.40 g) and therefore seems to accept that they were used for fiduciary circulation, which I deem very unlikely. The same theory was also applied to the issues under Leo and Zeno (see Arslan 2003c, with very different positions). Burrell also suggested an odd idea that Anastasius 'issued' blank flans before his reform (Burrell 2007:252).

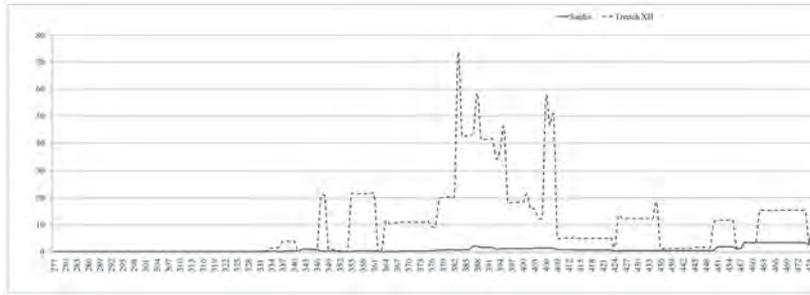


Fig. 5. Superimposition of the Trench L812 deposit and the Sardis hoard

With this understanding, one may now investigate the details of the histogram of the Trench L812 deposit itself and reflect upon the production volumes of the classes represented, volumes of supply and the different degrees of monetization — if any — in varying chronological ranges. It may be possible to revise current understandings on the date and distribution of some coin types based upon their very high peaks on the Trench L812 histogram (between *c.* 380 and *c.* 410 CE). This, however, will be undertaken elsewhere.

THEORETICAL HOARDS

Analysis of monetary assemblages, such as those in Capernaum and Sardis, helps one understand the course of monetization in ancient societies, in different locations and over different time periods. Specifically, study of the composition of the Capernaum synagogue deposit alongside the assemblage of that city's isolated coin finds, together with the Sardis hoard can provide the right answers — as long as the right approach is followed. A correct interpretation of the economic history becomes impossible with an inappropriate approach, and may sometimes lead to unlikely scenarios.

A good example of such a scenario is a 'theoretical hoard' in Pompeii (Naples), R. VIII, Ins. V, No. 36, of 1950,¹⁸ found inside the drainpipes of thermal baths, incautiously described as a hoard and accepted as such by Crawford in his inventory of Roman Republican hoards (Crawford 1969: No. 245). The assemblage was therefore understood to reflect the circulation pattern in Pompeii in the middle of the first century CE. In fact, it is an accumulation of coins lost over time by the patrons of the baths.

¹⁸ Maiuri 1950:127 (with an excellent coin catalogue by Laura Breglia). The coins are bronze and date to the late third to the middle of the first century BCE. Stazio (1954:160–161) described it as a hoard.

A similar instance is an assemblage excavated in the 1950s in section 12 of the thermal baths at Sofiana (Caltanissetta, Sicily).¹⁹ It consists of 304 bronze specimens, ranging from Hadrian's reign until after the middle of the fourth century (Julian II). The assemblage had a similar structure and was formed over time, as shown by its profile, which does not include the typical final peak. A complex explanation was formulated of a postulated fourth century circulation pattern (Santangelo 2002), with coins dating to the second century still current and general comments on the continued circulation of the *Tetrici* coins.

The reconstruction based upon the Sofiana 'treasure' of a 'theoretical' fourth-century circulation in Sicily became so appealing as to suggest the existence of other fake 'hoards' in Sicily. An example of such an assemblage without a consistent structure consists of the 17 bronzes ranging from Hadrian to Magnentius possibly situated in Gela (Caltanissetta, Sicily; Sole 2002). These coins were confiscated by the police and the term *tesoro* was applied to them, apparently with the Sofiana "treasure" in mind.

The group of 'theoretical hoards' also includes deposits formed through natural causes, such as accumulations in waterways or cases where coins were found as part of votive offerings or in the drainage systems of baptismal pools. However, the cases referred to me have always been analyzed correctly.²⁰

THE TRENCH L812 DEPOSIT AND COIN CURRENCY AT CAPERNAUM

Having looked at other currency deposits all containing specimens that could not have possibly been in circulation at the same time but were nevertheless identified as hoards, we may now resume the analysis of the Trench L812 deposit at Capernaum. Callegher described it as a 'hoard' in the following way: "In practice, over a limited period of time, the available monetary stock was collected without paying particular attention to the face value of the individual coins, and then buried under the pavement's sub-foundations for propitiatory purposes" (Callegher 2007:55). Callegher's conclusion raises a question about his understanding of the significance of the assemblage: "Both numismatic hoards, therefore, show that the issues under Theodosius I, Valentinian I, Valens,

19 Orlandini-Adamesteanu 1955:214; Santangelo 2002:111: Analysis of the contemporary "treasures" selected for comparison showed a regular pattern.

20 Regarding deposits linked to baptismal rites, which should never be interpreted as hoards, see the recent and exhaustive Perassi-Facchinetti 2005 and Facchinetti 2008 (with an excellent bibliography) about the ritual throwing of coins into sacred wells. In St John's Baptistery in Milan, a coin deposit, accumulated in the plumbing, has been found; it consisted of 222 coins, 127 of which were legible, dating from Constantine II to the early seventh century.

Arcadius, Honorius, Theodosius II, Valentinian III, Marcian, and Leo were part, albeit to different degrees as far as denominations and origin were concerned, of the monetary stock in use in Capernaum *in the course of the fifth century, in particular in its second half ... The most common types remained in circulation for a long period of time*" (Callegher 2007:57 [italics mine]).

Callegher's reconstruction of the bronze currency in the second half of the fifth century can, in fact, be misleading and is in a certain sense invented. As a hoard, it would have a series of uncharacteristic anomalies, such as the lack of a final peak as well as the significant existence of very ancient issues dating to 347–348, 361–362 CE and between 380–381 and 408 CE. The very old coins, including from the house of Constantine, were in very good condition with faint traces of extended circulation, unheard of in hoards.

Callegher's refusal to consider the assemblage as a deposit accumulated over time — with a very similar profile to the isolated finds from the city — led him to posit a currency where coins were never withdrawn from the market. It forced him to conclusions that cannot be demonstrated, such as a massive hoarding of copper coins during the reign of Zeno. However, this has been contradicted by the evidence of the Sardis hoard. The almost total lack of bronze divisional currency of Anastasius I and Justinian I in the city, noted above, would be attributed to local circumstances instead of a generalized situation.

The above difficulty in interpretation is not intended to diminish the importance of a quantitative and statistical analysis of assemblages such as Capernaum's isolated city finds and Trench L812 in the synagogue. Rather, it points to the need to formulate one's queries accurately. Usually the study of coins from isolated finds entails an analysis of the overall accumulation of a currency over a long period of time, even centuries. My conclusions cover the total number of coins of each class that are present at the end of an accumulation (or when it becomes covered by successive strata). Reliable conclusions on the coin circulation for different sites and during different periods are possible only after an appraisal of associated assemblages accumulated over a short period of time.²¹ In the case of Capernaum (Arslan 1997:294), examples of such relevant assemblages are the hoards in the 'En Nashut and Dabiyye²² synagogues and the 1982 Sardis hoard deposited during the reign of Anastasius I.

21 For this purpose, the so-called 'savings hoards' should be definitely ruled out.

22 For the 'En Nashut hoard, see Ariel 1987; Ariel and Ahipaz 2010. For the Dabiyye hoard, see Ariel 1991. These two hoards, along with finds from other synagogues, are compared to the non-hoarded finds from the Capernaum synagogue in Callegher 2007:57, and this may lead to misinterpretations. A comparison seems possible instead with the "foundation deposits" in synagogues, such as from Gush Halav, a synagogue destroyed in 551, with 418 legible coins (see Raynor 1990 and now Bijovsky 1998), Horbat Marut (Gabriela Bijovsky, pers. comm.), Horbat Kanef (Ariel 1980) and others.

REFERENCES

- Ariel D.T. 1980. Coins from the Synagogue at Horvat Kanef, Preliminary Report. *INJ* 4:59–62.
- Ariel D.T. 1987. Coins from the Synagogue at `En Nashut. *IEJ* 37:147–157.
- Ariel D.T. 1991. Coins from the Synagogue at Dabiyye. *`Atiqot [ES]* 20:74–80.
- Ariel D.T. and Ahipaz N. 2010. Coins from Excavations at `En Nashut. In Z.U. Ma`oz. *En Nashut: the Art and Architecture of a Synagogue in the Golan* (Archaostyle Scientific Research Series 9). Qazrin. Pp. 138–187.
- Arslan E.A. 1983. Uno o due ripostigli monetali di III secolo? In *Angera e il Verbano Orientale nell'antichità, Atti della giornata di studio, 11 settembre 1982*. Milan. Pp. 195–211.
- Arslan E.A. 1996a. Il deposito di 20.323 Nummi tardo romani della Sinagoga di Cafarnao: come procedere a un campionamento scientifico. *International Numismatic Newsletter* 29:6–7.
- Arslan E.A. 1996b. Monete axumite di imitazione nel deposito del cortile della Sinagoga di Cafarnao. *LA* 46:307–316.
- Arslan E.A. 1996c. Il ripostiglio di Biassono (MI) 1975. *Ripostigli Monetali in Italia Schede Anagrafiche*. Milan.
- Arslan E.A. 1997. Il deposito monetale della Trincea XII nel cortile della Sinagoga di Cafarnao. *LA* 47:245–328.
- Arslan E.A. 2003a. *Coins*. In A. Strus, *Khirbet Fattir – Bet Gemal, Two Ancient Jewish and Christian Sites in Israel*. Rome. Pp. 383–404.
- Arslan E.A. 2003b. *Dall'Italia a Magdala in Terrasanta. Un pellegrino del V secolo e le sue monete*. In G.C. Bottini, L. Di Segnia and L.D. Chrupcala eds. *One Land — Many Cultures. Archaeological Studies in Honour of Stanislao Loffreda* (Studii Biblici Francisci Collectio Maior 41). Jerusalem. Pp. 33–40.
- Arslan E.A. 2003c. *Problemi ponderali di V secolo: verso la riforma del Nummus*. *RN* 159:27–39.
- Arslan E.A. 2003d. Le emissioni monetarie “isiache” di IV secolo a Roma e Alessandria. In N. Banacasa, A.M. Donadoni Roveri, S. Aiosa and P. Minà eds. *Faraoni come Dei, Tolomei come Faraoni. Atti V Congresso Internazionale Italo-Egiziano. Torino, Archivio di Stato — 8–12 dicembre 2001*. Turin-Palermo. Pp. 171–177.
- Asolati M. 2009. Review of B. Callegher 2007: *Monete dall'area urbana di Cafarnao (1968–2003)*, Jerusalem. *Rivista Italiana di Numismatica* 110:588–592.

Bijovsky 2000–2002 appears to be of paramount importance for these comparisons and for the coin currency of the fifth century CE in general. Bijovsky has also let me read her continuing research in draft form; this research contains more in-depth explorations on the subject of currency than has been possible in this article.

- Asolati M. and Gorini G. eds. 2006. I ritrovamenti monetari e la legge di Gresham. *Atti del III Congresso Internazionale di Numismatica e di Storia Monetaria, Padova 28–29 ottobre 2005*. Padova.
- Bijovsky G. 1998. The Gush Halav Hoard Reconsidered. *ʿAtiqot* 35:77–108.
- Bijovsky G. 2000–2002. The Currency of the Fifth Century C.E. in Palestine: Some Reflections in Light of Numismatic Evidence. *INJ* 14:196–210.
- Burrell B. 2007. A Hoard of Minimi from Sardis and the Currency of the Fifth Century C.E. *RN* 263:235–282.
- Callegher B. 2007. *Monete dall'area urbana di Cafarnao (1968–2003)* (Studii Biblici Francisci Collectio Maior 47). Jerusalem.
- Cantilena R. 1995. Un obolo per l'aldilà. *La Parola del Passato* 50/3–6:161–162.
- Chiaravalle M. 1982. Il ripostiglio di Besano (Varese), 1918. *Ripostigli monetali in Italia. Documentazione dei complessi*. Milan.
- Corbo V.C. 1972. La Sinagoga di Cafarnao dopo gli scavi del 1972. *LA* 22:204–235.
- Corbo V.C. 1975. *Cafarnao I: Gli edifici della città* (Pubblicazioni dello Studium Biblicum Franciscanum 19:1). Jerusalem.
- Crawford M.H. 1969. *Roman Republican Coin Hoards* (Royal Numismatic Society, Special Publication 4). London.
- Dubuis O.F., Frey-Kupper S. and Perret G. (eds.) 1999. *Trouvailles monétaires de tombes Actes du deuxième colloque international du Groupe suisse pour l'étude des trouvailles monétaires, Neuchâtel, 3–4 mars 1995*. Lausanne 1999.
- Facchinetti G. 2008. L'offerta di monete nei fonti battesimali in età paleocristiana. *Temporis Signa* 3:39–60.
- Heinzelmann M., Ortalli J., Fasol P. and Witteyer M. (eds.) 2001. *Römischer Bestattungsbrauch und Beigabensitten in Rom, Norditalien und den Nordwestprovinzen von der späten Republik bis in die Kaiserzeit. Culto dei morti e costumi funerari romani. Roma, Italia settentrionale e province nord-occidentali dalla tarda Repubblica all'età imperiale*. Rome 1999 (Palilia 8). Wiesbaden.
- Loffreda S. 1972. The Synagogue of Capharnaum: Archaeological Evidence for its Late Chronology. *LA* 22: 5–29.
- Maiuri A. 1950. XXII. Pompei. *Notizie degli Scavi di Antichità*: 116–136.
- Noeske H.-C. 2000. *Die Münzen der Ptolemäer*. Frankfurt.
- Orlandini P. and Adamesteanu D. 1955. Vita dei medaglieri. *Annali Istituto Italiano di Numismatica* 2:206–215.
- Perassi C. and Facchinetti G. 2005. *Mittere in concha*: l'offerta di monete e il rito del Battesimo in età paleocristiana. *TINC* 13:1237–1243.
- Raynor J. 1990. Numismatics. In E.M. Meyers, C.L. Meyers and J.F. Strange eds. *Excavations at the Ancient Synagogue of Gush Halav*. Winona Lake, Ind. Pp. 230–245.

- Santangelo S. 2002. Il tesoretto di bronzi di Sofiana. *Annali Istituto Italiano di Numismatica* 49:105–154.
- Sole L. 2002. Museo Archeologico Regionale di Gela. Sequestri di monete da Gela e il suo territorio. *Annali Istituto Italiano di Numismatica* 49:285–320
- Spijkerman A. 1972. *Cafarnao, IV: I catalogo delle monete della di S. Pietro* (Pubblicazioni dello Studium Biblicum Franciscanum 19:4). Jerusalem.
- Spijkerman A. 1975. *Cafarnao III: le monete della città* (Studii Biblici Francisci Collectio Maior 19c). Jerusalem.
- Stazio A. 1954. Vita dei Medaglieri, Soprintendenza alle Antichità della Campania. *Annali Istituto Italiano di Numismatica* 1:160–163.
- Testa E. 1972. *Cafarnao IV: I graffiti della Casa di S. Pietro* (Studii Biblici Francisci Collectio Maior 19d). Jerusalem.

ABBREVIATIONS

- AJC* Y. Meshorer *Ancient Jewish Coinage*. Dix Hills, NY 1982
- AJN* *American Journal of Numismatics*
- BMC* e.g., *BMC Arab.*: G.F. Hill. *Catalogue of the Greek Coins of Arabia, Mesopotamia, and Persia*. London 1922
- BMCO* e.g., *BMCO* 1: S. Lane-Poole. *The Coins of the Eastern Khaleefehs in the British Museum. Catalogue of the Oriental Coins in the British Museum* 1. London 1875
- CH* *Coin Hoards*
- CIL* *Corpus Inscriptionum Latinarum*
- CNP* e.g., L. Kadman. *The Coins of Akko Ptolemais* (Corpus Nummorum Palaestinensium IV). Jerusalem 1961
- CRE* e.g., H. Mattingly. *The Coins of the Roman Empire in the British Museum I. Augustus to Vitellius*. London 1923
- DOC* e.g., P. Grierson. *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection* 3. *Leo III to Nicephorus III 717–1081*. Washington, D.C. 1973
- IEJ* *Israel Exploration Journal*
- IG* *Inscriptiones Graecae*
- IGCH* M. Thompson, O. Mørkholm and C.M. Kraay. *An Inventory of Greek Coin Hoards*. New York 1973
- INJ* *Israel Numismatic Journal*
- INR* *Israel Numismatic Research*
- LA* *Studium Biblicum Franciscanum Liber Annuus*
- LRBC* e.g., P.V. Hill and J.P.C. Kent. Part 1: *The Bronze Coinage of the House of Constantine, A.D. 324–46*. In *Late Roman Bronze Coinage (A.D. 324–498)*. London 1965. Pp. 4–40
- MIB* e.g., W. Hahn. *Von Anastasius I. bis Justinianus I (491–565)*. *Moneta Imperii Byzantini* 1. Österreichische Akademie der Wissenschaften Philosophisch-Historische Klasse Denkschriften 109. Veröffentlichungen der Numismatischen Kommission 1. Vienna 1973
- MIBE* W. Hahn. *Money of the Incipient Byzantine Empire (Anastasius I–Justinian I, 491–565)* (Veröffentlichungen des Instituts für Numismatik und Geldgeschichte der Universität Wien 6). Vienna 2000
- MIBEC* W. Hahn and M. Metlich. *Money of the Incipient Byzantine Empire Continued (Justin II—Revolt of the Heraclii, 565–610)*. (Veröffentlichungen des Instituts für Numismatik und Geldgeschichte der Universität Wien 13). Vienna 2009
- MN* *American Numismatic Society Museum Notes*
- NC* *Numismatic Chronicle*
- NCirc.* *Numismatic Circular*
- NNM* *Numismatic Notes and Monographs*
- NZ* *Numismatische Zeitschrift*
- RRC* M.H. Crawford. *Roman Republican Coinage*. Cambridge 1974
- RIC* e.g., C.H.V. Sutherland. *The Roman Imperial Coinage I. From 31 BC to AD 69*. London 1984
- RN* *Revue Numismatique*
- RPC* e.g., A. Burnett, M. Amandry and I. Carradice. *From Vespasian to Domitian (AD 69–96). Roman Provincial Coinage* 2. London 1999
- SC* e.g., A. Houghton and C. Lorber. *Seleucid Coins. A Comprehensive Catalogue. Part I. Seleucus I through Antiochus III*. New York, Lancaster, PA and London 2002
- SICA* e.g., S. Album and T. Goodwin. *Sylloge of Islamic Coins in the Ashmolean, Volume 1: The Pre-Reform Coinage of the Early Islamic Period*. Oxford 2002
- SNAT* e.g., L. Ilisch. *Sylloge Numorum Arabicorum Tübingen–Palästina IVa Bilād aš-Šām I*. Tübingen 1993
- SNG* *Sylloge Nummorum Graecorum* (with suffix as necessary, e.g. *SNG Cop.*)
- SNR* *Schweizerische Numismatische Rundschau*
- TINC* *Transactions of the International Numismatic Congress*
- TJC* Y. Meshorer. *A Treasury of Jewish Coins from the Persian Period to Bar Kochba*. Jerusalem and Nyack 2001
- ZfN* *Zeitschrift für Numismatik*

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Contents

- 3 JAROSLAW BODZEK: Tiarate Heads on Samaritan Coins
- 21 HAIM GITLER: The Earliest Coin of Judah
- 35 ALLA KUSHNIR-STEIN: Inscribed Hellenistic Weights of Palestine
- 61 DONALD T. ARIEL and OLIVER D. HOOVER: A New Coin of the Mint of Marisa
- 79 ROSA M. MOTTA: Zeus on Dora's Coins
- 93 DAVID HENDIN, CRAIG LUNDSTROM, ZACHARY WHITE and NATHAN W. BOWER: Preliminary Sequencing of Herod I's Undated Coins Based on Alloy Changes over Time
- 105 JEAN-PHILIPPE FONTANILLE: Herod Philip: The First Jewish Portrait
- 121 ANDREW M. BURNETT: Wife, Sister, or Daughter?
- 127 KENNETH MILLER: A First Jewish Revolt *Prutah* Overstrike
- 133 SHAI HENDLER AND LIONEL HOLLAND: Three Small Coins (*minimi*) from Caesarea Maritima
- 135 RAMI ARAV AND CARL SAVAGE: A Rare *Aureus* of Antoninus Pius at Bethsaida
- 139 NATHAN T. ELKINS: A Mid-Fourth Century Purse Hoard from the Roman Auxiliary Fort at Yotvata
- 147 ERMANNIO A. ARSLAN: The L812 Trench Deposit inside the Synagogue and the Isolated Finds of Coins in Capernaum, Israel: A Comparison of the Two Groups
- 163 GABRIELA BIIOVSKY: From Carthage to the Holy Land: The 'Palm Tree' *Nummus*
- 175 NITZAN AMITAI-PREISS and L. ALEXANDER WOLFE: Amuletic Bronze Rings from the Arab-Byzantine Transitional Period
- 187 YOAV FARHI: A Fāṭimid Coin Die from Israel
- 191 REVIEW: Oliver D. Hoover, Andrew Meadows and Ute Wartenberg-Kagan (eds.), *Coin Hoards. Vol. X. Greek Hoards*. New York, 2010. (François de Callatay)
- 197 Abbreviations