

The Eighth-Unit

The smallest common denomination of Cleopatra VII's rule in Cyprus was the bronze eighth-unit. Under previous reigns, this denomination paired the head of Zeus-Ammon with one eagle on the reverse. The Greek reverse legend reads, "Ptolemy, King." A symbol before the eagle indicates the time period, but perhaps not the reign. Several symbols mirror those on half-unit coins. Weight of this denomination averages about 2 grams. Some of this type may have been struck during the first years of the reign of Cleopatra.

In about 38 BC, new types of this denomination were issued. Types are similar to that of the full-unit. The obverse features the diademed and draped bust of Cleopatra VII as Aphrodite right. Die axis is generally 12:00. The reverse shows a double, or rarely (if ever) a single, cornucopia, bound at the base with a fillet. The Greek legend reads, "Ptolemy, King." (S7850; Svor. 1160 (double cornucopia); Svor. 1161 (one cornucopia); SNG Cop. 648 (flan with squared edges); SNG Cop. 649 (flan with beveled edges) BMC 3. All these references list the coin as issued by Ptolemy IV, with the portrait of Arsinoë III, his sister and wife, whose portrait appears on some rare gold octadrachms. This small denomination is the most common of the eight denominations struck under Cleopatra VII in Cyprus. Paphos II notes that 13% of all the Ptolemaic Cyprus coins found are this type, making it the most plentiful ancient coin in the region of the capital. The Idalion dig reported 28% of the 25 Ptolemaic coins recorded. At Curium, Cox recorded 10%, also the most common type found. It seems far more likely that this was an issue of Cleopatra VII, not Arsinoë III.



Bronze eighth-unit of Cleopatra VII struck at Paphos. (1.35g)

The diameter of this type is about 10 mm. The average weight of unworn examples is 1.7 grams, with weights varying from 0.6 grams to 2.6 grams. Over 90% of the flans are of typical Ptolemaic fabric, with beveled edges, struck on flans cast in a matrix drilled in stone. A small percentage of the issue was struck on flans apparently cut from a rod, not cast. SNG Cop. 648 notes "flan with squared edges" while SNG Cop. 649 is "flan with beveled edges." Nicolaou suggests that instead, "these may have been cast from moulds with deeper depressions." The rod-cut minting technique does suggest Syrian influence, and the possibility of an auxiliary mint. Where is this "Syrian flan style" mint? Salamis, on the coast near Syria is a possibility. Under Tiberius, both Paphos and Salamis produced coins, with Paphos producing the larger share. Cox notes that about one third of this type found at Curium was cut from a rod. If correct, this much higher figure indicates that mint for the rod-cut examples was nearby to Curium.



A bronze eighth-unit struck on a flan cut from a rod. SNG Cop. 648. (2.09g)

The link between the quarter-unit and the eighth-unit is strong, and has been noted by both Cox and Nicolaou. Both types were struck on similarly cast flans. Neither has a centering dimple. Both often appear on ragged flans, with sprues. The weight standard of the quarter is double that of the eighth. The variation in weight is similar. The sprues and weight variation eliminates the former attributed date of c. 205 BC, because coins of this period have little weight variation. The regular flans of the Ptolemy V Cypriot issue with a cult statue of Aphrodite on the reverse make an interesting comparison.

The number known for the quarter-unit and eighth-unit issues suggests a large issue at the time. 110 and 41 of the two respective types were found at the excavations at Neo Paphos (Paphos II), making them the two most plentiful issues found. The third most common (36) is the half-unit with two eagles and the headdress of Isis. The very large numbers found also connect these issues. The excavations at Curium (Cox) give similar data, with the same three Ptolemaic coins as the most common. (32, 21 and 18 examples) "The American Expedition to Idalion, Cyprus" reported 7, 3 and 1 specimens. All earlier Ptolemaic Cyprus bronzes are, by comparison, scarce.

Recall that according to Plutarch, Cato took more treasures to Rome from Cyprus than Pompey brought back from all his wars. A few years earlier, Ptolemy X had left his fortune to Rome. Similar smaller transfers from Egypt to more powerful Rome took place on a regular basis. The need for mark-up on bronze coinage in the time of Cleopatra would be great. As with post-World War I Germany, the outflow of goods from Egypt and her possessions was rapid, producing inflation. Striking coins with high seigniorage (mark-up over the cost of the metal) was one way for the government to collect goods and services from their people to pay foreign debts.

Of a similar scale (13 mm long) oval blue glass intaglio from the British Museum "Cleopatra of Egypt" writes:

The portrait features are relatively clear and show a full face, with straight nose and a strong chin with a downturned mouth. It is, however, the hairstyle and broad diadem in particular that indicate that this representation is of Cleopatra VII. Portrait features are often distorted when produced on such a small scale.

There are a variety of portrait styles for the issue, which was produced from a large variety of both obverse and reverse dies. On many examples, Cleopatra's portrait is similar to that on the full-unit. On others, it resembles that on Egyptian full-units and half-units. The portraits that look like the Egyptian issues are either compact or broad. Other portraits are pretty, almost Barbie-like, more in the style of Arsinoë III gold. Perhaps it is from this style portrait, that previous attributions to the time of Ptolemy IV were made.



Another eighth-unit with a “pretty style” portrait. (2.32g)



Small shallow-relief portrait on a flan “cut from a bar.” (1.99g)

Another portrait style is crude, on small, thick flans, with similarities to the bronze portraits of Cleopatra from Chalkis and Damascus. Yet another style is even cruder, and also struck on small, thick flans.



Another bronze eighth-unit, of cruder style on a dumpy flan. (2.23g)

The variety of the tiny Cypriot bronze Cleopatra VII portraits is startling. "Cleopatra of Egypt" notes:

Cleopatra's portrait was clearly manipulated by the queen herself, most likely also by Antony, and evidently by her worshippers, her admirers and especially her detractors. Sadly for those who seek the secret of her personal allure, the more we study Cleopatra's surviving images, the less certain we may be of her looks.

The flans of Cypriot bronze issues of Ptolemy IX and later are ragged, of variable weight and lack the indented centering marks of earlier issues. A lathing process made the centering dimples of early Ptolemaic bronzes. These factors argue for a date after Ptolemy IX, although flan characteristics do not date the issue precisely. A raised central bump should not be confused with an indentation. The indentation on early Ptolemaic flans is an artifact of the lathing process. The raised central bump on late Ptolemaic flans is a result of the production of the casting mould. Both the central indent and the central bump occur at the center but are made by different methods. Rather than assigning this coinage to Cleopatra VII or Ptolemy IV, it could be argued that they belong to Ptolemy IX or X. This was also a time of significant bronze coinage in Cyprus. Half-units and quarter-units with eagle reverses date to this period. The Cypriot denominations of Ptolemy IX and X are similar to those of Ptolemy XII and Cleopatra VII. The quarter-units with Zeus / Zeus have no reverse legend, a unique feature in the Ptolemaic series. Lack of the typical reverse legend, "Ptolemy King" suggests that the issue may have been struck under an authority not named Ptolemy. Perhaps some of these were coined under the Romans (58-48 BC), with the types continued under Cleopatra VII. It would be a surprising indeed if there was almost no bronze coinage on the island of Cyprus between 58 and 27 BC, and an attribution of these two connected types to Ptolemy XII means the gap would be this large.

Further, the distinctive portrait of Cleopatra VII, with the strong links to portraits from Egypt and Syria dates the eighth-units to her reign (51 to 30 BC). The exact hairstyle of the eighth-units is not used for Cleopatra on any coinage except the full-unit noted above, which is also from Paphos at this time. Likewise the diadem and occasional scepter connect the two denominations. The lack of prettiness in the portrait challenges an alternative attribution to simply "bust of Aphrodite." This issue would have to be *Aphrodite me to megalo sagoni*, "Aphrodite of the big chin" or *Aphrodite me te megale mete*, "Aphrodite of the big nose." No earring is visible. The diadem and scepter are unusual for Aphrodite. There are no portraits of Aphrodite on previous Ptolemaic coins, with the exception of a Cypriot issue under Ptolemy I Soter as Satrap, while there are portraits of several women rulers, sometimes in the guise of the goddess Isis. Powerful third century BC Queens Arsinöe II and Berenike II each appear on many coins as queen in their own right, not assimilated to any goddess. Arsinöe III as Queen is known for some rare gold octadrachms. A unique Paphos Mint Cleopatra I portrait gold octadrachm is (Leu, April 1978, #180) now in the British Museum. Cleopatra II and III are shown as Isis on bronze coins. No other Ptolemaic female ruler was of enough significance to appear on coinage during the reigns of Ptolemy VIII, IX, X and XII, a period of one hundred years. After the death of Cleopatra VII, the broad political changes in Ptolemaic possessions preclude the ongoing issue of Ptolemaic coins.

Of course, dating a coin on the basis of portraiture alone, without confirming inscription, can never be absolute. The old Svoronos attribution accepted by the later references of #1160-1162 to Arsinöe III 160 years prior to Cleopatra VII was made on far less supporting evidence. A number of other late Hellenistic and early Roman Provincial portrait coins are similarly attributed, solely on the basis of mint, time period and portrait.

The Tiny Sixteenth-Unit

A fifth Cyprriot bronze denomination during this time was the tiny sixteenth-unit. Two varieties were issued during the late reign of Cleopatra, c. 38-30 BC. The diameter of these tiny coins is about 8 mm. They weigh about 0.8 grams, with weights known from 0.4 to 1.5 grams. The flans have a fabric similar to the quarter-unit and eighth-unit flans. Most are cast though some appear to be "cut from a bar."

The first variety has a portrait similar to the eighth-unit, though on a smaller scale. The reverse has an eagle standing right. The type is recorded as Svor. 1162. While Nicolaou writes of these, "it differs in type and fabric from the Cyprriot Arsinoë III type and may not be Cyprriot" she is probably mistaken. Cox calls them Cyprriot. The type is found only on Cyprus. The flan and style is similar to Svor. 1160.



Bronze sixteenth-unit of Cleopatra VII struck at Paphos. (0.92g)

The second type is unconventional for any Ptolemaic coinage, except the late coinage of the time of Cleopatra VII. The stylistic link with the eighth-unit is strong. The obverse of this tiny coin features a winged thunderbolt, with five rays on each side. The reverse has an eagle standing left, with the usual partial Greek legend, "Ptolemy, King" (Svoronos 1246 as Ptolemy V). An earlier attribution would require that this scarce issue be very common, for several of these tiny bronzes would have been required to make the smallest denomination in common use during other times.²⁷



Tiny bronze sixteenth-unit of Cleopatra VII, the smallest coin of the Ptolemies. (0.73g)

²⁷ A numismatic equivalent of this smallest of Ptolemaic denominations may be seen in American coinage before 1857. Half cents were minted and circulated in small numbers, as change when required. More recently, another similar situation occurred with the farthing, half penny, and the 1/2 p. in Great Britain of 1965. It has been suggested that the extremely common American cent may soon be eliminated from production and circulation.

Find evidence for the second variety shows a link with the eighth-unit. Three examples of this tiny coinage were found at the House of Dionysos, the Ptolemaic bronze coin mint discussed in Paphos II. One was found in room LXXXIII, along with sixty-two eighth-units.²⁸ A second was found in Well 11, along with fifteen more eighth-units,²¹ presumably a "donative hoard." A third was a single find, near a late Roman coin. An unusual specimen found

²⁸ Contents of room LXXXIII, 0.5 to 5 m

21 Ptolemaic coins were unidentifiable. From the sizes, several are probably quarter and eighth-unit bronzes.

The coins found in Room LXXXIII can be broken into two or three find strata.

A. Deep, below a layer of ash, some early coins were found.

2 Cleopatra VII Æ 1/4 obols
3 other Ptolemaic Æ, 2.0g and under
8 other Ptolemaic Æ, over 2.0g
2 Foreign, 3.3g, 6.3g
9 larger Ptolemaic, 7 obols, plus 2 larger: 19.6g, 24g

B. Layer of ash, between 2.2 and 2.3 m contained a narrower sampling of coinage, almost all small.

37 Cleopatra 1/4 obols
24 Other Ptolemaic 2.0g and under
1 Foreign coins under 2.0g
12 Other Ptolemaic 2.0-4.0g
2 Other Ptolemaic 4.0g + 2 obols (8.1, 7.3)

C. Not in ash, 1.5 to 2.30 m, mostly 2.0-2.2 m

A layer of similar depth has many more small coins
25 Cleopatra 1/4 obols, plus one 1/8 obol
32 Other Ptolemaic 2.0g and under
3 Foreign coins 2.0-2.3g
25 Other Ptolemaic 2.0-4.0g, only 2 Zeus standing
10 Other Ptolemaic 4.0g + 9 obols, 1 19.5g

D. Two coins were found at 0.5 to 1.0 m

1 Completely worn Ptolemaic Æ21, obol, 5.8g
1 Augustus, Victory standing, obol

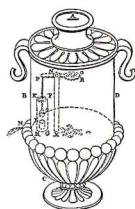
elsewhere on Cyprus adheres to an eighth-unit, reverse to obverse. This was the tiniest coin issued by the Ptolemaic Kingdom, and among the last.²⁹

²⁹ Perhaps, this smallest of denominations was used in ancient vending machines. Heron, a Greek mathematician, teacher and inventor, who lived from c. 10 - 70 AD in Alexandria, designed vending machines for use in temples. His design survived but not the machine itself, nor records of any actual use. A drawing by Heron appears in Ancient Inventions, by Peter James and Nick Thorpe. The machine accepted coins and dispensed holy water. At the end of the day, the machine would be emptied and the priests would have put away the day's sales.

A slot at the top regulated what would and would not fit into the machine. James and Thorpe write:

The ancient slot machine worked as follows: The coin fell into a small pan hung from one end of a delicately balanced beam. Its weight depressed one end of the beam, thus raising the other end, which opened a valve and allowed the holy water to flow out. As the pan fell, the coins would slide off; the beam end with the pan then swung up and the other end down, closing the valve and shutting off the flow of water." Water was used to wash the face and hands before entering the temple.

The coins accepted the "five-drachma bronze coin." What coin is this? The eighth-unit, which would have been equal to the half-chalkus / eighth obol marked "E" for 5 (RPC 5251), which was the smallest denomination in circulation in Egypt. They would have been five copper drachmas. The sixteenth-unit was a rare denomination. Could the sixteenth-unit have been intended for use in Heron's machine? Perhaps. Or does "five-drachma bronze coin" refer to the weight of the coin itself? A billon tetradrachm of Nero weighed about 13 grams, so a "five-drachma bronze coin" may have referred to the 16 gram bronze diobol of Cleopatra or Augustus; or perhaps a 16g hemidrachm of Nero (RPC 5276; 5319). Considerable speculation is required to say which coin Heron noted.



Modern drawing of an Egyptian vending machine from the time of Nero.

The Other Small Late Ptolemaic Bronzes

Several rare to unique types support the chronological connection between quarter, eighth and sixteenth-units.

- 1) A 13 mm bronze of 3-4 grams has the horned, not laureate Zeus obverse paired with reverse headdress of Isis (SNG Cop. 685var. (as late 2nd to 1st century BC); BMC (Ptolemy X) 48-56 (Kyrene?). The headdress of Isis may connect to the second reign of Ptolemy XII, a quarter unit. The attribution to Cyprus is not certain.
- 2) Another rare type combines an obverse of the usual Zeus type, with the reverse of the eighth-unit. The head of Zeus-Ammon is horned, not laureate. This feature differentiates the issue from the Laureate Zeus / Zeus standing issue of Cleopatra. The range of weights suggest dates from the time of Ptolemy VIII to early in the reign of Cleopatra VII, though Ptolemy IX is the likely reign of origin.



Rare bronze quarter-unit(?) with reverse of the eighth-unit. Note the small thick flan. (2.05g)



A smaller flan example. (1.54g)

- 3) Another rare types feature obverse quarter-unit (SNG Cop. 666) and eighth or sixteenth-unit paired with an eagle standing left (as Svor. 1162). The reverse die of the latter is smaller than the obverse, conceivably from the half denomination (Svor. 1246).
- 4, 5, 6) Three rare types are struck at the 3.7 or less gram weight standard of the quarter-unit, on a typical beveled flan of about 17 mm. Known from only a few specimens, the obverse features the Temple Aphrodite of Paphos, with its distinctive conical black stone at the center. The reverse has an eagle, a type used at Paphos on Classical era bronzes, as well as on most Ptolemaic coinage. There is no legend. Another has the head of Zeus paired with a

similar Temple. A unique Æ15 of 2.3 grams found at Paphos II has Victory paired with Temple reverse. These three "politically neuter" issues may have been struck in 30 BC, immediately after the defeat of Cleopatra.



Extremely rare quarter-unit with obverse temple of Paphos and reverse eagle.

7) A fourth Actium-era type has the usual Zeus Salaminios standing, but with the Ptolemaic grain ears exchanged for a Roman patera. On Roman issues with this reverse, similar types are noted. "Cleopatra of Egypt" notes, "... at least three, possibly four, portraits of Augustus from Egypt that have been re-cut from images of Ptolemies." The statues were "Romanized." While the reverse type is similar to the early issues of Augustus, at least one example shows a trace of the Greek letters for Ptolemy (surely Ptolemy XV).



The usual reverse of the quarter-unit shows the statue of Zeus Salaminios holding grain-ears. At right is the reverse of a very rare issue with Zeus holding a Roman patera. (2.73 g, 1.88 g) Remnant of the statue today.

This rare issue appears to be post-Actium, just before or early during the Administration of Octavian.

All of these puzzling issues are rare.

Archeological Context - A Late Ptolemaic Bronze Mint

The published archeological data from "Paphos II" supports many of the assertions made here. This important dig uncovered the remains of a late Ptolemaic mint in 1964. The second century AD House of Dionysos was built upon the site of previous buildings. Paphos II notes, ". . . A workshop for casting metal was found. This was in Room LII (-LI) at the north-west corner of the House . . . Among other objects recovered from within the ashes scattered about in this and the adjoining Room LI were iron and copper slag, bronze coin-flans as well as struck bronze coins and fragments of coin moulds in limestone." The single example of the Cleopatra VII full-unit found at the site was in this workshop. It is a coin important enough that it was placed on the cover of the "Paphos II" book. Coins found in rooms with coin-moulds are listed in the endnotes.³⁰³¹³²

³⁰ A variety of tiny coins, mostly from the time of Cleopatra were found in this well.
Well 11

| | |
|---------------|--|
| Ptol I | - |
| Ptol II | 1 ($\text{\textsterling}26$, 12.4g) |
| Ptol III | - |
| Ptol IV | - (- "Arsinöe III" $\text{\textsterling}9$ reattributed from here to Cleopatra VII) |
| Ptol V | - (- Thunderbolt / Eagle $\text{\textsterling}7$ reattributed to Cleopatra VII) |
| Ptol VI | - |
| Ptol VIII | 1 ($\text{\textsterling}17$, 1.7g) |
| Ptol IX | - |
| Ptol X | - |
| Ptol XII | - |
| Cleopatra VII | 14 |

The 14 Cleopatra VII \textsterling included the following denominations:

| | |
|--------|----|
| unit | - |
| 1/2 u. | - |
| 1/4 u. | - |
| 1/8 u. | 13 |
| 1/16 u | 1 |

1 corroded $\text{\textsterling}16$ 2.8g Ptolemaic coin was unidentifiable.

³¹ A variety of coins from the time of Cleopatra VII were found together with some early foreign and cut coins, in this well.

Well 17, 1.5-2.0 m

| | |
|-------------------------------------|---|
| 596 Marathus, | $\text{\textsterling}13$, 1.3g, Zeus / Galley, 2nd c. BC |
| 16 Demetrios Poliorketes, | $\text{\textsterling}13$ 2g |
| 136 Cleopatra | $\text{\textsterling}14$ 2.2g 1/4 obol |
| 457 Cleopatra, | $\text{\textsterling}25$ 5.2g, obol |
| 458 Cleopatra | $\text{\textsterling}25$ 5.7g, obol |
| 582 Seleukid, Antiochus VIII, | $\text{\textsterling}20$ 6g |
| 122 Cleopatra | $\text{\textsterling}12$ 0.5g, 1/4 obol |
| 187 Ptolemy VI | $\text{\textsterling}15$ 2.3g, 1/4 obol |
| 461 Cleopatra | $\text{\textsterling}25$ 5.3g, broken flan, obol |
| 831? $\text{\textsterling}23$, | 3.3g cut fragment, (hemiobol?) |
| 832? $\text{\textsterling}20$ 4.9g, | hemiobol |
| 31 Ptolemy I, | $\text{\textsterling}20$, 3.4g cut fragment (hemiobol?) |
| 459 Cleopatra | $\text{\textsterling}25$ 5.1g, headdress of Isis obol |
| 507 Cleopatra | $\text{\textsterling}17$ 2.4g Zeus stg. hemiobol |
| 178 Ptolemy IX and X | $\text{\textsterling}38$ 36.6g triobol |

³² Sealed deposits found below mosaics in adjoining rooms XXXVIII and XVI, as well as between the rooms. Two half-obols and two obols were found under each mosaic. More coins were found in the mosaic and wall in between the two rooms. These deposits show the side-by-side circulation of the types involved, as well as the dates of the second century mosaics.