## More Evidence on the Collective Mint of Philistia

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#### Abstract

This article discusses several matters relating to the likelihood that the coinage of Philistia was struck in a *collective mint*. Links of Ashdodan and Gazan epigraphic dies with anepigraphic dies of Philistian coins are considered, as are the sociopolitical implications of these links against the coinage's circulation, weight standard, axes, metallurgical analysis and the predominance use of the archaic eye motif in the coins. The number of coins struck from the same pair or several pairs of dies, and coins known in single specimens, are tabulated in an appendix.

#### INTRODUCTION

The past three years saw the publication of a number of reviews of our joint monograph, The Coinage of Philistia of the Fifth and Fourth Centuries BC: A Study of the Earliest Coins of Palestine (2006).<sup>1</sup> Some of these reviews suggested that a more thorough analysis of the die links in the coinage of Philistia was needed. At the time of the writing of the monograph, die links were studied in a limited manner only. In fact, die links were only noted in the monograph for different coins of the same type (as coins "struck from the same pair of dies") and between the obverses and reverses of different coins and different coin-types (2006:76–294 passim; here coin-types do not separately count similar obverse/ reverse iconographical types which appear in different denominations). However, these observations cannot be taken as a proper die-link study due to the fact that they were done selectively and based on a limited number of specimens for each coin-type. In this article we are not carrying out a full die study. Rather, we reexamine the plausibility of the existence of a central Philistian minting authority that we had tentatively suggested previously (Gitler and Tal 2006:316-318). This reexamination is based on new evidence related to 'inter-city' regional die links - namely aspects of coin circulation, the coins' common weight standard, similar axis orientations and metallurgical analysis. Additional details on the quantities

E.g., de Callataÿ 2006; Hendin 2006; Boardman 2007; Elayi and Lemaire 2007:55– 56, 81–82; Fischer-Bossert 2007; Hoover 2007; and Betlyon 2008.

of coins struck from single or multiple pairs of dies in the Philistian coinage, and especially on die links between different epigraphic coin-types, will also be provided. All these intend to buttress our claim that all the Philistian coinages were struck at a central, or *collective*, mint. Finally, we will offer some initial thoughts on the economic and sociopolitical implications of such a phenomenon.

#### Circulation

Philistian coin circulation was discussed in The Coinage of Philistia (Gitler and Tal 2006:49–51). Based on the evidence of findspots, the geographical distribution of the coinage of Philistia was restricted mainly to southern Samaria, Judah, and the southern Palestinian coast (southern Sharon Plain and Philistia). Comparison of the circulation of the coinage of Philistia with that of the three other operating Palestinian minting authorities of Persian times — namely, Judah, Samaria and Edom — showed that Philistian coins had a wider diffusion, overlapping the geographical regions of the other three minting authorities. We concluded that the coinage of Philistia can be seen as currency belonging to an intercity monetary system that may have operated through a central minting authority structure. The mint produced coins that shared similar motifs applicable to all of the cities. However, it also produced individualized coins with specific allegorical motifs characteristic of each city. The primary use of the Philistian coins was as a local currency, as evidenced by very small number of such coins found outside Palestine, in hoards, excavations and as strays. In such cases, one does not know how the coins were valued, but it was probably at their bullion price.

#### Weight Standard

The coin denominational system and weight standards of fourth-century BCE Palestine have been dealt with extensively (Tal 2007). According to contemporaneous epigraphic material and other written sources, it was deduced that there were probably local denominational systems and weight standards in the region, apparently based on the *sheqel* and its fractions, whether in Judah, Samaria, Philistia or Edom. All three minting authorities of Philistia (Ashdod, Ascalon and Gaza) followed a *sheqel* weight standard of 14.32 g (Tal 2007:21–22). Although the evidence of a common weight standard for all Philistian coins has no direct or substantial bearing on the existence of a local *collective mint*, it might strengthen our conclusion in some respects.

#### Metallurgical Analysis

The results of metallurgical analysis may also be brought to bear on the question of the existence of a collective mint in Philistia. In the 2008 study of Gitler, Ponting and Tal, inductively coupled plasma atomic emission spectrometry (ICP-AES) was carried out on Philistian coins (those with legends of Gaza and Ascalon) as

well as Edomite coins. Our results suggest that not only did much of the silver bullion used for striking the Edomite and Philistian coins originate in the Greek world, most probably from Athenian 'owls', but also that Edomite coinage was probably produced by a Philistian minting authority based on identical silver content for both coinages. In other words, if coins of Gaza and Ascalon have identical silver content and this silver content is also identical to that of the coins of the neighboring region of Edom, the idea that a Philistian minting authority produced all these coins is probable.

## NEW EVIDENCE ON INTERREGIONAL DIE LINKS

A recently found quarter *sheqel* ( $rb^{\circ} šql$ ) ("*drachm*") of the city of Gaza provides a die link between (epigraphic) coins of Gaza and Ashdod. Images of all of the coins catalogued below appear on Pls. 1–2 in 2:1 scale.

## 1a.

*Obv.* Bearded male head r., oriental hairstyle with hair bunched in the back. *Rev.* Owl r., head facing; in upper l. field, olive spray and crescent; below them: ' (='ayin). In r. field: AOE. Incuse.

R, <sup>\scale</sup>, 2.91 g, 13 mm. Test cut. Jonathan Rosen collection. Unpublished.

## 1b.

*Obv.* Same die as 1a.

*Rev.* Cow suckling calf. In upper field traces of inscription: '*šdd*. Dotted border set in incuse square.

 $\mathbb{R}$ ,  $\downarrow$ , 3.50 g, 13 mm. Abraham Sofaer collection. Gitler and Tal 2006: Type II.4Da.

Coin 1a is attributed to Gaza because of the appearance of the letter '*ayin* on its reverse (cf. Gitler and Tal 2006: Types V–VI *passim*), yet its obverse was also employed to strike another quarter *sheqel* ("*drachm*"), No. 1b, of the city of Ashdod (Gitler and Tal 2006: Type II.4D).

Additional cases of obverse die linkage involve yet another quarter *sheqel* ("*drachm*") of the city of Ashdod (below No. 2a) and five coin-types of Philistia lacking a city legend (below Nos. 2b–f). Interestingly, in the obverse's left field there are traces of an illegible legend. The following coin descriptions of Nos. 2a–f refer to the reverse.

## **2a**.

*Obv.* Bearded male head r., knotted oriental head cover; hair bunched in the back. *Rev.* Bes standing facing with bowed legs; in between a lion's tail. The Bes holds

two lions by their tails. In upper r. field: '*aleph*; in upper l. field: *shin* ('*š*). Dotted border set in incuse square.

 $R, \rightarrow$  , 3.18 g, 15 mm. Test cut. ANS 1944.100.62663. Gitler and Tal 2006: Type II.10Da.

## **2b**.

*Obv.* Same die as 2a.

*Rev.* Owl r., head facing, tail tilted downward; in upper l. field, crescent and below it, a retrograde *yod*. On r.:  $A\Theta E$ .

*ℝ*, *∠*, 3.38 g, 15 mm. Private collection. Gitler and Tal 2006: Type XIV.16Db.

## **2c**.<sup>2</sup>

*Obv.* Same die as 2a.

*Rev.* Owl r., head facing; in upper l. field, olive spray and crescent; on r.:  $A\Theta E$ .  $\mathcal{R}, \rightarrow$ , 3.15 g, 11.5 mm. Ex. Martin Huth collection. For the coin-type see Kindler 1995:411, No. 4.

## 2d.

*Obv.* Same die as 2a.

*Rev.* Paradise flower / Phoenician palmette. On the corners illegible letters. Dotted border set in incuse square.

 $\mathbb{R}$ ,  $\rightarrow$ , 3.07 g, 13 mm. Kadman Numismatic Pavilion, Eretz-Israel Museum, Tel Aviv KNP6843. Gitler and Tal 2006: Type XVII.2Dc.

## 2e.

*Obv.* Same die as 2a.

*Rev.* Phoenician palmette (or Paradise flower?). Within the volutes, two birds (ibises?) one in front of the other, and a dolphin underneath. Dotted border set in incuse square.

 $\mathcal{R}$ ,  $\rightarrow$ , 3.07 g, 12 mm. Private collection. Gitler and Tal 2006: Type XVII.3Dd.

## 2f.

Obv. Same die as 2a.

*Rev*. Hybrid head; male r. and roaring lion l.; in lower l. and upper r. fields, olive sprays. Dotted border set in incuse square.

 $\mathbb{R}$ ,  $\checkmark$ , 3.30 g, 13 mm. Private collection. Gitler and Tal 2006: Type XVI.22Da (Pl. 2:2f).

The following coin is linked to No. 2f through a common reverse die.

<sup>2</sup> We are grateful to Martin Huth for providing the image and technical data of this coin.

## 3.

*Obv.* Bearded male head r., oriental hairstyle with hair bunched in the back. *Rev.* Same die as 2f.

 $\mathbb{R}$ ,  $\rightarrow$ , 3.28 g, 14 mm. ANS 1974.26.926. For the coin-type see Gitler and Tal 2006: Type XVI.21D (Published in *SNG* ANS 6: Pl. 1:37). (Pls. 1:3; 2:3).

It is worth noting that the obverse motif of this coin also appears on coins Nos. 1a–b.

The following *ma*'*eh* ("*obol*") (No. 4), although not die-linked to another specimen, has two reverse designs appearing on both sides. From this striking error it is evident that the moneyer who struck this *ma*'*eh* was in the possession of two different 'owl' reverse dies, one of Gaza (depicting the *mem* of Marnas, indicating the mint of Gaza; cf. Gitler and Tal 2006: Coin-types V.17–25), and the other of Philistia (lacking a specific legend attributed to a city).

**4**.

*Obv.* Owl r., head facing; on r.  $A[\Theta E]$ . In r. field between the Greek legend and the owl, *mem.* Overstrike of a head of Athena (?).

*Rev.* Owl r., head facing; on r. AOE. On l. field: E which belongs to the underlying coin legend of a similar Owl/AOE legend *obol*. Incuse.

 $\mathbb{R}$ , >, 0.58 g, 11 mm. Jonathan Rosen collection. Gitler and Tal 2006: Type V23Oa; Fig. 2.



Fig. 1. Coin No. 4 (3:1 scale)

A discussion of the importance of these die links appears below.

## ADDITIONAL RELATED ASPECTS

Axes

In Gitler and Tal 2006:315–328 the question of a single vs. multiple minting authorities was examined. There is basic consistency of axis orientation among the four groups: the epigraphic city coins of Ashdod, Ascalon and Gaza, and

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the Philistian coins lacking a city legend (on the general implications of axis orientation cf. de Callataÿ 1996). Only Ascalon varies from the other sites, but this difference is very small. The figures suggest that axes of 3, 6, 9 and 12 o'clock are most common. Moreover, the percentage of coins found within each category within each axis group, confirms that the proportion of coins within each axis category is similar across the four groups. It is also interesting to note the similar proportion of coins found in the 3, 6, 9 and 12 o'clock axis categories. This distribution does not reflect a common axis profile generally found in mints in the ancient world or even all mints in Persian-period Palestine. Comparison to the Samarian issues published by Meshorer and Oedar (1999) shows that the axis distribution among Samarian coins is very different from that of the Philistian coins we have examined; i.e., Samarian coins are much more likely to be found in the 6 and 12 o'clock axis than are Philistian coins. Of course, the nature of the data that was available to us must be taken into account. About 68% of the Philistian coins we examined were of the no-city-legend group, and for Ashdod and Ascalon the numbers were relatively small. Nonetheless, the consistency of the data regarding the axis is considerable, and thus does not support the view that the coins were minted in multiple mints.

## The Use of the Archaic Eye Motif

From an iconographic point of view, Philistian coins can be divided into two groups, Athenian-styled and Philistian-styled. The Athenian-styled issues copied one of two types of Athena heads, with a frontally depicted eye or with a fully developed profiled eye. The dating of these styles in the original Athenian issues is commonly accepted. Beginning *c*. the 450s BCE Athena is depicted with a frontal eye.<sup>3</sup> Athenian *tetradrachms* with the new profiled eye appear in three Sicilian hoards of the 380s (Kroll 1993:8). However, since the minting output was modest and remained so to the middle of the fourth century BCE, the fully developed profiled eye is best attested in the so-called pi-style *tetradrachms* dated *c*. 350 BCE. Accordingly, a quantitative study of the appearance of these two styles in the Philistian coinage may have chronological (and possibly historical) implications. A so-far overlooked fact may shed even further light on the chronological aspects of the Philistian (and the Judean and Samarian) coinage. From the iconographical point of view, it is clear that the Athenian head not only

<sup>&</sup>lt;sup>3</sup> Kroll suggested a more precise dating of these Athenian issues to the years 454 to *c*. 415–413 BCE (1993:6–7). He associated the beginning of the frontally depicted eye and the subsequent mass striking of that series with the removal of the Athenian League treasury from Delos to Athens in 454 BCE. Kroll fixed the series' most probable termination date to *c*. 415–413 BCE based on the decline in silver bullion income from Athens' allies and the fall in productivity of the Laurion mines (Kroll 1993:6, esp. n. 11; 2001:3 n. 2).

influenced local Athenian-styled types but also the Philistian-styled ones. A clear example is seen on Fig. 3.



Fig. 2. Athenian *tetradrachm* depicting a frontal eye (left); Philistian *drachm* with a frontal eye (center; Bibliothèque Nationale, Paris PA341; Gitler and Tal 2006: XIX. 17Da); superimposition of the facial area around the frontal eye of the Philistian *drachm* over the same area on the Athenian *tetradrachm* (right)

This example shows that Philistian die engravers used the Athena head as a prototype for the designing of heads in the Philistian series. An examination of the appearance of the frontally depicted eye versus that of the profiled eye in both the Athenian- and Philistian-styled coinages (Tables 1–2) produces intriguing results.

Frontal eye		Profiled eye
6	Ashdod	0
9	Ascalon	0
9	Gaza	8
53	Philistian	5
77	Total	13

Table 1. Eye depiction on Philistian coins with Athena head\*

\*Based on coin-types (excluding VII-X, except VII.6O)

Frontal eye		Profiled eye
12	Ashdod	0
15	Ascalon	0
20	Gaza	0
134	Philistian	0
181	Total	0

The vast majority (85.5%) of Athenian-styled coins depicts a frontal eye (Table 1). No Athenian-styled specimens of Ashdod and Ascalon have profiled eyes. This distinctive preference for the earlier (archaic) style is even more significant when we examine the Philistian-styled coins (Table 2). Without exception all female and male heads (181 coins) depict frontal eyes.

One may explain these findings as the result of fashion. It may be that the Philistian die engravers had a preference for the earlier (archaic) frontally depicted eye despite the Athenians' obvious stylistic change.<sup>4</sup> However, can this be compelling when 95.2% of the Philistian coins with heads depict a frontal eye? Alternatively, we may suggest that this clear preference in style has to do with chronology. All the Philistian-styled coins could have had a *c*. 380 BCE (or even more likely *c*. 350) *terminus ante quem* and it is likely that most of the Athenian-styled coins had the same date. The Philistian and Gazan issues depicting the profiled eye of Athena definitely have a *terminus post quem* of *c*. 380 (or 350) BCE, as the use of the profiled eye would not have occurred in Palestine before it did in Athens.

It should be noted, however, that Gitler and Tal 2006's Coin-types VII–X are excluded from Table 1. These are the Athenian-styled Athena/Owl Palestinian imitations – having neither additional motifs in the field nor any northwest Semitic letters. Most of these issues are ma'en (m'n) ("obols") which are the most common type used in late Persian-period Palestine. The existence of more profiled eye specimens of this group also suggests that these coins became more common toward the second half of the fourth century BCE.

The historical implications of a later date for the Philistian coinage relates to the assumption that the coastal cities of Philistia were involved in Artaxerxes III Ochos' unsuccessful attempt to re-conquer Egypt (*c*. 351–350 BCE), and/ or in the subsequent Phoenician revolt led by Tennes, king of Sidon. Although Sidon was finally taken by Artaxerxes III Ochos *c*. 345 BCE, the destruction of a number of coastal Phoenician centers is well-documented in the archaeological record (Elayi 1990:182–184; Tal 2005:83–86; see, however, Briant 1996:703–704; 1030–1031). One cannot exclude the possibility that the coastal cities of Philistia, or more specifically Ashdod and Ascalon, were deprived of minting rights because of their involvement in the rebellion, whereas Gaza — the main launching base of military activities aimed at restoring control over Egypt (Gitler and Tal 2006:41–42) — remained loyal and continued to mint municipal issues. This would explain the sole use of the frontally depicted eye in the coins of Gaza

<sup>4</sup> A similar preference appears in the Egyptian Athenian-styled issues of the middle or second half of the fourth century BCE. In both the Egyptian *tetradrachm* imitations (Buttrey 1982; 1984) and the Athenian-styled Artaxerxes III Pharaoh *tetradrachms* with demotic characters (Mørkholm 1974), the eye of Athena is depicted frontally and not in profile (see also Figueira 1998:531–532).

(Table 1). We may further posit that the minting authority of Gaza ceased issuing Philistian-styled coins and was the sole producer of the low-denomination Philistian Athena/Owl issues — mostly *ma*'*en* and half *ma*'*en* — without city legend.

Support for this idea that eye-style preference does have chronological (-historical) significance — and that this is not only a matter of artistic preference, in which die-engravers continued to use the earlier, archaic style — can be obtained when the same tests are applied to the coinages of Judah and Samaria (Tables 3–5).

# Table 3. Eye depiction on Judean coins with(Athena and other female or male) heads

Athena Head						
Frontal eye		Profiled eye				
1		3				
Female / Male Heads						
6		2				
7	Total	5				

## Table 4. Eye depiction on 224 Samarian coins with(Athena and other female or male) heads

Athena Head						
Frontal eye		Profiled eye				
13						
all the <i>drachm</i> s with		13				
Athena head have a frontal		12				
eye (5)						
	Female / Male Heads					
19		30				
32	Total	42				

Table 5. Eye depiction on 81 Athenian-styled Samarian coinsin the Samaria hoard

Frontal eye	Profiled eye	Unrecognizable
4	43	34

The coinage of Judah (Table 3) shows some preference toward the earlier (archaic) frontally depicted eye (58.3%) when compared to the profiled eye (41.7%). The coinage of Samaria has the opposite stylistic tendency, in which the frontally depicted eye (43.2%) is less preferred over the profiled eye (56.8%)

(Table 4). Moreover, the frontally depicted eye (8.5%) is far less represented than the profiled eye (91.5%) in the Athenian-styled coins of the Samaria hoard (Table 5). Comparative results for all three coinages of the Late Persian period appear on Table 6.

	Frontal eye	Profiled eye
Philistia	95.2	4.8
Judah	58.3	41.7
Samaria	43.2	56.8

Table 6. Comparison of style preference in Late-Persian periodPalestinian coinages (%)

These tests confirm the generally accepted chronological sequence of the three coinages of late Persian-period Palestine; i.e., that the Philistian coinage began earliest, followed by Judah and most probably then Samaria, and that the Philistian coinage ceased first, with both Judah and Samaria minting coins until the end of the Persian period (Tal *forthcoming*).

#### CONCLUSIONS

Philistia was desolated by the Neo-Babylonians; a gap in its settlement history was found in the archaeological remains (Stern 2000). Once the Achemenids took control over the region, Philistia was most probably placed under Phoenician-Tyrian hegemony as can be inferred from several epigraphic finds. As a result, the coastal cities of Philistia - Ashdod, Ascalon and Gaza - 'revived' and prosperity returned to the region. Given the archaeological evidence it seems that the Achemenids permitted a considerable degree of independence in terms of local administration, economy and trade, in order to achieve political and economic stability in Philistia. In return, the Achemenids demanded Philistian loyalty to the crown (Elavi 1990:81-134; Briant 1996:55-59, 505-506). Most probably, the cities of Philistia struck their coins during that same time span. Given the shared cultural traditions of Ashdod, Ascalon, and Gaza in Persian times, and the common coin distribution, it seems likely that the cities formed social and political alliances, making the region a 'tripolis' in a sense that recalls the Philistine pentapolis of the Iron Age. The fact that the coins of the cities of Philistia and of the region of Philistia were all minted according to a local Philistian standard lends support to such a conclusion.

#### Collective Mint

Based on the numismatic evidence and historical setting presented above, a *collective mint* explanation for the phenomenon of interregional die links in the coinage of Philistia is plausible.

A *collective mint* would benefit regions with several city-states of a somewhat equal autonomous status, shared cultural and economic interests and a coined money exchange. This was done by pooling resources to overcome the technological, economical and political difficulties involved in coin production. Such pooling of resources may have fostered the high technological and artistic abilities evident in the Philistian coins. A *collective mint* especially makes sense when a region is in the earliest stages in developing a coinage, and when technological knowledge on coin production and use was limited.

In the case of Philistia the fact that the regions' cities minted coins under Achemenid rule may also suggest that the idea of a *collective mint* derived from imperial economic policy, which preferred centralized coin production over multiple mints. Although we currently lack evidence on centralized coin production in other Achemenid satrapies, except perhaps for Lycia (Vismara 2007; and Novella Vismara, pers. comm.), the subject is still in its prime. The opportunities that determine the creation of a *collective mint* do not limit the autonomy or prestige of a given autonomous city, since users of the coins were not aware where the coins were produced. The three cities whose names appeared on some of the coins did not have their own mints. Nevertheless, they should be considered *minting authorities*. It follows that only the issues bearing municipal legends can be defined as 'municipal' coins. From a numismatic point of view, it would appear that the specification of the minting authority's name on the coins was rather arbitrary and was probably influenced by various factors. Moreover, it seems that some (if not most) of the Philistian coins were intended to circulate as regional coinage ('inter-city coinage') and it is probably for this reason the authorities in charge often avoided adding specific municipal legends.

#### Other Explanations

*Traveling mint*: Obviously, explaining the die links presented above as the outcome of a *traveling mint*, namely traveling die engravers and/or moneyers (i.e., persons who physically created flans and coins) would alter the above understanding of *collective mint*. One could ask, however, why a coastal plain of some 75 sq. km whose three cities are located some 20 km apart, with easy communication between them, would need to create a *traveling mint*? An extensive, mountainous or difficult-to-traverse region would benefit much more from such a solution.

Transfer of dies or use of recycled dies: A more straightforward explanation for the die links could be the transfer of dies from mint to mint on an as-needed basis, or the use of recycled dies, in order to save time and money required for the production of new ones. Transferring or recycling dies could also explain — assuming a small pool of expert engravers — how even a small mint could issue new coins *ad hoc* when needed.

Considering these alternative possibilities, it nevertheless appears to us that a *collective mint* is the most logical explanation, as previously suggested (2006:316-318). Some of the coins in question bear the names of one of the three cities, while others lack legends altogether. Previous research tended to concentrate on the attribution of anepigraphic issues to one of the three mints. Thus, several numismatists have tried to link certain Philistian coin-types lacking clear indication of their mint to specific minting authorities on the basis of shared, similar or identical motifs. For example, Meshorer attributed anepigraphic coins to Ashdod based on similar designs of animals' forelimb muscles (Meshorer 1989:289, Nos. 8-9a are related to Nos. 4-5), and other anepigraphic coins to Ascalon based on the motif of the "sprouting (palm) branch" (Meshorer 1989:290 No. 15 is related to No. 10),<sup>5</sup> and even the appearance of a dolphin, which he believed symbolized Ascalon's Tyrian hegemony (Meshorer 1989:290, No. 16 is related to No. 11). Lemaire suggested the attribution of 11 anepigraphic Philistian coins in the so-called Abu Shusheh hoard to Ashdod based on artistic comparanda and the 'signature' of the die engravers (1990:257–262). Kindler attributed five anepigraphic coins to Ashdod based on die links and artistic similarities (1995). Gitler assigned a hoard of 31 anepigraphic Athenian-styled ma'en ("obols") found at the excavations of Ashkelon to the mint of this city. This suggestion was based on the provenance and the fact that only five different reverse dies were used for the minting of 31 coins and that 21 coins made with the same reverse die were found in such a small cache (Gitler 1996:2–6). Gitler also attributed five anepigraphic coins to the mint of Ascalon based on the appearance of the motif of the 'sprouting branch' on these issues (Gitler 1996:8–9, letters F, G, I, J, K) and four others to Ashdod based on iconographic resemblances and a die link to an Ashdodan coin-type (Gitler 2000:83-84, Nos. 3-6). Mildenberg attributed two coins to Ashdod based on die links to Ashdodan coin-types (Mildenberg 2000: Pls. 55:25-26) and to Ascalon and Gaza based on iconographic resemblances (Mildenberg 2000: Pls. 56:33 and 57:41).

Scholarly attributions of anepigraphic coins to specific urban mints seem misleading when considered against the evidence at hand. In certain cases the identification of the mint does not benefit from coin analysis: The study of die links between different coins from the same region can contribute more significantly to understanding ancient coinages' social implications. Furthermore, when one

<sup>5</sup> On this motif and its varied depictions in the southern Levant, see Staubli 2005. The 'sprouting palm branch' may well have symbolized a 'Tree of Life' in the contemporaneous Philistian contexts.

attributes early Palestinian issues lacking municipal legends to a specific minting authority, their original use as intercity coinage is forgotten. For this reason, we maintain that the moneyers in charge deliberately avoided adding specific municipal legends. In other words, it may not have been relevant to specify the minting authority, and numismatists may be missing the point by forcing mint attributions.

Gitler and Tal's 2006 study assembled 311 coin-types catalogued according to *minting authorities*, namely Ashdod (18), Ascalon (25) and Gaza (42), and iconography, that is Athenian-styled (110) and Philistian-styled (116) coin-types. The die links in the coinage of Philistia suggest that 'die exchange' may provide an explanation to the unprecedented number of coin-types in Persian-period Philistia. Our No. 4 also attests to 'die exchange.'

This last specimen proves that at least some Athenian-styled *ma*<sup>c</sup>en ("obols") without northwest Semitic letters were struck at the same place which issued coins for the city of Gaza, as is evident from the coin obverse, which bears the letter *mem*. In sum, despite its divergence with the traditional numismatic approaches entrenched in modern scholarship, the idea of a central regional mint in Persian-period Philistia best explains the anomalies in that coinage, and suggests new sociopolitical and socioeconomic conclusions.

#### APPENDIX: QUANTITIES OF COINS AND THEIR DIES

The quantities of the Philistian coins and their dies are too low to estimate the output of coin production in this area. However, other noteworthy aspects of these coinages can be proposed based on the breakdown of the 311 coin-types of this series. The following four tables (Tables 7–10) are based on the coins recorded in Gitler and Tal 2006 and provide a new quantitative perspective on the occurrences of types of coins struck from the same pair of dies as opposed to those struck from several dies. Table 9 provides a quantitative summary of Philistian coins documented only by a single specimen. Figure 3 presents a comparative summary of Tables 7–9 combined.

Based on the coins recorded in Gitler and Tal 2006 the data in the first two tables (Tables 7–8) allows one to compare the frequency of types of coins struck from the same pair of dies to those struck from several dies.

Table 7. Quantitative summary of Philistian coins struck from the same pair ofdies (modified after data in Gitler and Tal 2006)

390 types* of Philistian coins – 103 are struck from the same pair of dies								
	Sheqels / "Tetradrachms"Half Sheqels / "Didrachms"Quarter Sheqels / "Drachms"Maʿehs / "Obols"Half Maʿehs / "Hemiobols"Fraction							
Ashdod			8	5				
Ascalon		1	5	6				
Gaza	1		6	4	1			
Philistian	1		22	38	6			
Total	2	1	41	52	7	_		

\* By "types" here we count separately coins bearing the same motifs but minted in different denominations.

Table 8. Quantitative summary of Philistian coins struck from several pair ofdies (modified after data in Gitler and Tal 2006)

(r)									
<b>390 types of Philistian coins – 60 are struck from several pairs of dies</b>									
	Sheqels / "Tetradrachms"	Half Sheqels / "Didrachms"	Quarter Sheqels / "Drachms"	Ma'ehs / "Obols"	Half Ma'ehs / "Hemiobols"	"Fractions"			
Ashdod			1	1					
Ascalon			1	3					
Gaza			9	8	1				
Philistian			19	14	3				
Total			30	26	4				

<sup>&</sup>lt;sup>6</sup> The assigning of Greek denominational designations, such as "*drachms*" and "*obols*", in Persian-period Palestinian coins is, in our view, faulty (Tal 2007). Based on epigraphic sources of the late Persian period the "*drachm*" and "*obol*" coins were most likely local quarter *sheqel* (*rb*' [*šql*]) and 1/24 *sheqel* (*m*'*h* [*ma*'*eh*] or biblical *gera* [*grh*] in Judah) denominations respectively. This article will employ the local denominational terminology but add the earlier-used Greek terms (in quotation marks).

	390 types of Philistian coins – 227 single specimens								
	Sheqels / "Tetradrachms"	Half Sheqels / "Didrachms"	Quarter Sheqels / "Drachms"	Eighth Sheqels / "Hemidrachms"	Ma'ehs / "Obols"	Half Ma`ehs / "Hemiobols"	"Fractions"		
Ashdod			5		7	2			
Ascalon	1		6		6	2	1		
Gaza	5		10		11	5	1		
Philistian	2	1	62	3	50	39	7		
Total	8	1	83	3	74	48	9		

Table 9. Quantitative summary of Philistian coins known from a singlespecimen (modified after data in Gitler and Tal 2006)



Fig. 3. Comparative summary of Tables 7-9 (total of 390 Philistian coins)

Out of the 311 recorded Philistian coin-types, 70 belong to a coin series; i.e., of more than one denomination (Table 10).

Table 10. Quantitative summary of Philistian coins belonging to a series(modified after data in Gitler and Tal 2006)

Coin series	Coin series of Philistian coins (equivalent to 311 coin-types)										
	"Tetradrachms"/ "drachms"	"Didrachms"/ "drachms"	"Drachms"/ "obols"/ "hemiobols"/ "fractions"	"Drachms"/ "obols"/ "hemiobols"	"Drachms"/ "obols"/	"Drachms"/ "hemiobols"	"Obols"/ "hemiobols"	Total			
Ashdod				1	7		1	9			
Ascalon		1		1	4	1		7			
Gaza				4	8		2	14			
Philistian	1		1	5	26		7	40			
Total	1	1	1	11	45	1	10	70			

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