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# Some New Insights and a Note Regarding Alexander Jannaeus Anchor/Star (TJC Group L) Coins

Yoav Farhi and Kevin W. Larsen

**Abstract:** The article examines one specific type of coin that was minted by Alexander Jannaeus and probably by his successors, during the first century BCE. New variants and unpublished specimens are discussed along with a proposal that this coin type may be divided into four subtypes. The article also considers the preparation of the dies used to mint the smallest of this type of coin. Finally, the article proposes the denomination that these coins had in the ancient Judean marketplace.

**Key words:** Alexander Jannaeus <http://d-nb.info/gnd/1048422461>, Judea <https://pleiades.stoa.org/places/687934>, 1st century BCE – 1st century CE, Khirbet el-Maqatir <http://d-nb.info/gnd/1151919179>

**Zusammenfassung:** Dieser Artikel untersucht einen spezifischen Münztyp, der von Alexander Jannaeus und wahrscheinlich von seinen Nachfolgern im 1. Jh. v. Chr. geprägt wurde. Neue Varianten und unpublizierte Exemplare werden diskutiert, einhergehend mit dem Vorschlag, diesen Münztyp in vier Untertypen aufzugliedern. Daneben wird die Herstellung der Stempel berücksichtigt, mit denen die kleinsten Exemplare dieses Typs geprägt wurden. Schließlich machen die Autoren einen Vorschlag, welches Nominal diese Münzen im jüdischen Zahlungsverkehr einnahmen.

**Schlagwörter:** Alexander Jannaeus, Judäa, 1. Jh. v. Chr. – 1. Jh. n. Chr., Khirbet el-Maqatir

The most common Jewish coin in the archaeological record in Israel is a small bronze coin minted by Alexander Jannaeus and likely by his successors as well. Ya'akov Meshorer in his »A Treasury of Jewish Coins« (below cited with the common abbreviation TJC) labels this type as group L with seventeen variants<sup>1</sup>, although there are apparently many dozens more. The obverse of this type has an anchor surrounded by a circle; around the circle is a Greek legend, on many of the coins imitative. The reverse has an eight or six-ray star surrounded by a border of dots; around the border is an Aramaic legend, on many of the coins imitative. TJC L is also the only group of Alexander Jannaeus coins that has a date (»year 25« = 79/8 BCE).

Since the publication of TJC, more than twenty years ago, an abundance of new data is available that facilitates an affirmation and a fine tuning of Meshorer's conclusions. In this essay we seek to offer a few insights on the TJC group L coins: 1) There are two new variants

of a star, now with five and seven rays. 2) We propose that scholars discuss the TJC group L coins in terms of four subgroups instead of identifying an ever growing list of variants. 3) We present an unpublished and interesting variant which proves that some dies were intentionally made with a partial star image. 4) We propose that two of our subgroups were intentionally struck on small and irregular flans by Jannaeus successors to serve as half-*prutah* coins.

## **Insight No. 1: Two new variants – five and seven ray stars**

Two new variants in the depiction of the star for the TJC group L coins were recently discovered. The first variant depicts a star with five rays; one specimen of this type was discovered

<sup>1</sup> TJC, p. 210.

at Khirbet el-Maqatir<sup>2</sup> (0.61g, 5x7mm; **fig. 1**)<sup>3</sup> and a second is from a private collection (0.57g, 10x<12.5mm; **fig. 2**)<sup>4</sup>.

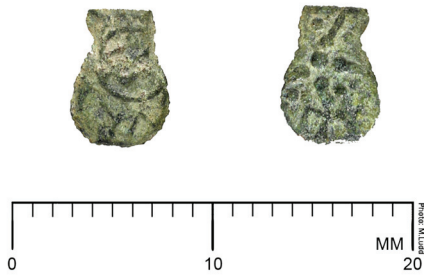


Fig. 1: From Kh. el-Maqatir, No. K041199



Fig. 2: David Hendin collection (photo by David Hendin)

The second new variant depicts a star with seven rays. The excavations at Khirbet el-Maqatir produced two such coins (**figs. 3 and 4**). These two coins were initially identified and discussed in the final excavation report for Khirbet el-Maqatir<sup>5</sup>. Even though two different dies produced the coins with seven rays, we are of the opinion that this is nothing more



Fig. 3: From Kh. el-Maqatir, No. K044910



Fig. 4: From Kh. el-Maqatir No. K045186

than an anomaly resulting from poor craftsmanship in the making of the dies. If a seven-ray star, or even a five-ray star, was intentional we would expect that many more coins with five or seven rays would have been found throughout Israel.

### Insight No. 2: The TJC group L coins may be divided into at least four subgroups

As stated above, Meshorer's standard reference for ancient Jewish coins, »A Treasury of Jewish Coins«, classifies coins into major types along with many variants of those types. For the group L coins Meshorer lists seventeen different variants<sup>6</sup>. They show such things as: variations in spelling, missing letters, variations in the number of rays of the star, parts of link pieces still attached to the flan, rays of the star represented by dots, legends missing on the flan because the smallness of the flan, and several other factors. While there is value in identifying variants, with each new coin that

<sup>2</sup> The Associates for Biblical Research excavated Khirbet el-Maqatir from 1995–2000 and 2009–2016. Khirbet el-Maqatir is located in the central hill country of Judea 16 km north of Jerusalem (NIG: 213403 E / 605355 N). For the publication of the coins see Farhi forthcoming.

<sup>3</sup> Unless otherwise noted, all of the coin photos are by Michael C. Luddeni. We wish to thank C. Corbin Kuhn for formatting all of our figures.

<sup>4</sup> We wish to thank David Hendin for permission to include this coin in our study.

<sup>5</sup> Larsen forthcoming.

<sup>6</sup> TJC, p. 210, L1–L17.



is discovered there is the likelihood of the list becoming longer. While this is not a concern in and of itself, when it comes to discussing the coins, numismatists have tended to group variants into groups. For example, over the past twenty years, for purposes of discussing the TJC group L coins, numismatists have tended to group together L1–6 and L7–17<sup>7</sup>. The rationale for this division may lie in TJC's description of the variants. Beginning at L7 Meshorer uses the adjective «crude» and this then defines the remaining variants. Having examined hundreds of TJC group L coins we think that there are at least four main subgroups, rather than two.

Subgroup L-I (**fig. 5**): Designates coins whose flan is of sufficient size to accommodate the legend on the outer edge of each side of the coin. The star is depicted as having eight rays. These coins are the largest and heaviest in this series (mean weight 1.27g and ranging 12–16mm in diameter)<sup>8</sup>. Most of the TJC group



Fig. 5: From Kh. el-Maqatir, No. K045226

L1–3 coins would fall into this subgroup. Likely a development of the Alexander Jannaeus's TJC group K coins, we consider this subgroup the principle issue of group L.

Subgroup L-II (**fig. 6**): Designates coins whose flan is slightly smaller and results in the legend on one or both sides of the coin to be significantly missing. The star is depicted as having eight rays and they are slightly smaller than L-I subgroup (mean weight 0.84g and ranging 8.5–15mm in diameter). Often the star



Fig. 6: From Kh. el-Maqatir, No. K044747

is struck with more than 50% of it missing. Most of the TJC group L4–7 coins would fall into this subgroup. We consider this subgroup a contemporaneous less careful issue of group L-I, serving as the same denomination.

Subgroup L-III (**fig. 7**): Designates coins with smaller flans and the star is depicted as having six rays with the Aramaic legend, which includes Alexander Jannaeus's name and the date



Fig. 7: From Kh. el-Maqatir, No. K041327

»year 25«, removed. The size of the flan continues to shrink with the mean weight ~0.52g and the diameter ranging 7–14.5mm. Most of the TJC group L8–13 coins fall into this subgroup.

Subgroup L-IV (**fig. 8**): Designates coins that have the anchor hardly seen on one side and

<sup>7</sup> See for example, Shachar 2004, p. 7; Ariel 2014, pp. 245–249, 251–254; Ariel 2016, p. 80; also Krupp (2011, pp. 41–42) finds it convenient to divide the small anchor/star coins into two subgroups (his Types P and PB).

<sup>8</sup> The metrology for all of the subgroups in the following discussion was determined by using coins from Khirbet el-Maqatir (cf. note 1). L-I: 18 coins; L-II: 149 coins; L-III: 491 coins; L-IV: 78 coins.







Fig. 8: From Kh. el-Maqatir, No. K045115

just one or two rays of a star and dots that are linear rather than forming a circle (one can also see an example in TJC L14). This subgroup is not just an even poorer striking from an eight or six-ray die, as if the image is accounted for by the die being off center to the flan. The eight or six-ray die has the dots that make up the border circle at the outer end of the rays. This particular die places dots parallel to the ray, even down at the base of the ray. If it was a regular die used on a very small flan we probably would not see any dots on the star side. Additionally, we project that if a die used to strike the star was a complete image (like the L-I coins), that die would be at least 20 mm in diameter. This is too large given the flan size. Therefore, the die was intentionally made with just one ray and did not include a complete star with a dotted circle and legend around it (see further discussion below, Insight 4). These flans are the smallest in the L group, with a mean weight of just ~0.29g and a diameter that ranges 5.5–12mm.

### Insight No. 3: Some dies were intentionally made with a partial star image

The following unpublished coin is from a private collection (0.5g, 9x10mm; **fig. 9**)<sup>9</sup>. The side of the star has two rays only, with two dots in between them and two square blundered imitations of Aramaic letters, which look like the Greek letter Π (pi). The other side has 3/4 of the anchor within a plain circle and some



Fig. 9: Ziv Zur collection (photo by Ziv Zur)

Greek letters around it, of which only the letter Λ (either lambda or alpha) is clearly visible.

To assist in analyzing this unique coin, we placed the coin next to another TJC group L coin (**fig. 10**). Both coins are similar in size with the bottom coin being just 1mm larger (9.5 x 11 mm). The proportion of the anchor that is visible and space for the corresponding legend



Fig. 10: Ziv Zur coin on top; TJC group L coin on bottom from Kh. el-Maqatir, No. K041327

beyond the circle of the anchor is consistent between both coins. The coin from the private collection is thick enough to have a beveled edge visible on the anchor side; unlike the bottom coin which is too thin for a bevel. The imitation Aramaic lettering underneath the rays of the star are in a straight line; unlike the legend

<sup>9</sup> We wish to thank Ziv Zur, Israel, for permission to include this coin in our study.



that curves around the dots that circle the star on other TJC group L coins. In addition, a close examination of the coin reveals what seems as a plain circle (in low relief) above the two rays, not part of the engraving of the die, but perhaps the physical edge of the die (see **fig. 11**).



Fig. 11: The possible edge of the die above the rays

Generally, it seems that the dies which were used for the crude types of TJC L (our groups III–IV) are usually one and a half to two times larger than the image actually struck on a coin. The size of this coin (9x10mm) and the size of the designs suggests that in this case the die used for the anchor was ~16mm and the die used for the star was ~10mm<sup>10</sup>. The die used for the anchor is clearly too large for the flan. But for the star, what we see on the coin is evidence that at least in this case the die was intentionally made to not include a complete design of a star with six or eight rays and a complete legend around it, but only part of the whole design was included in the die. Likewise, one should note that no such possible frame can be seen around the design on the anchor side, supporting the position that a larger die was used to strike that side. This partial star die, which includes part of the star (two rays), part of the surrounding dotted circle (two dots) and part of the surrounding legend (two letters), was good enough to represent the whole design in order that it could be identified by the person who would use it.

In reviewing the coins from Khirbet el-Maqatir we discovered an interesting parallel to this coin. The five-ray star coin from Khirbet el-Maqatir (**fig. 1**) is similar in weight to the coin from the private collection (0.61g compa-

red to 0.5g), but it is one-third the size (5x7mm compared to 9mm). As already mentioned the star is depicted with five rays, unusual for these Alexander Jannaeus coins since they are typically six or eight rays. But the most curious feature is the spacing of the rays, the two dots between the rays, and the surviving letters underneath the rays (**fig. 12**). A die-link is not possible for these two coins due to the difference in size. Likewise, there is nothing on the Khirbet

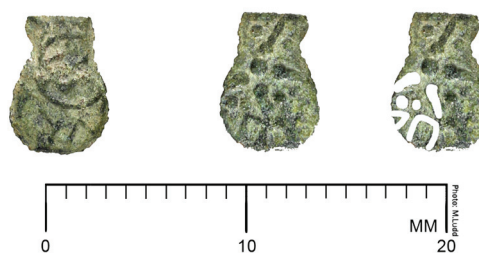


Fig. 12: From Kh. el-Maqatir, No. K041199 with rays, dots, and lettering similar to the coin in fig. 9

el-Maqatir coin that could account for the possible mark from the edge of the die above the rays as appears on the coin from the private collection (**fig. 11**). Nevertheless, we suggest that the inspiration for the die that was used for the two-ray coin comes from imitating part of a five-ray star with dots and letters.

Using our proposed sub-types, Insight 2 (above), we would place this coin from the private collection alongside the L-IV subgroup. This grouping is justified for two reasons. First, the commonality of a small flan. Second, the image of a star struck by a die that was intentionally made with a partial star image.

<sup>10</sup> Reference Fig. 10. For the coin in the private collection, if the plain circle around the rays is projected to a complete circle that surrounds the rays and letters, then the image would be ~10mm in diameter. For the TJC L coin, the rays are 4–5mm in length; thus the radius of the star itself should be 10mm, with another 4–5mm for the circle and legends, the star die would be ~15mm in diameter. Both coins have a similar sized anchor. The size of a complete anchor is ~8mm. If another 8mm is added for a complete circle and legend, then the anchor side would be ~16mm in diameter.



If we are correct in our basic understanding of this coin, then there is a significant implication that leads to our final insight – that groups L-III and L-IV were intentionally struck on small and irregular flans to serve as half-*prutah* coins, likely by Jannaeus's successors.

**Insight No. 4: Groups L-III and L-IV were intentionally struck on small and irregular flans to serve as half-*prutah* coins, possibly by Jannaeus's successors**

Numismatists have long acknowledged the difficulty in naming and assigning denominational value to Judean bronze coins. Citing Arie Kindler<sup>11</sup>, David Hendin affirms that the Judean bronze coins are most properly called *prutot* (sg. *prutah*) and half-*prutot* (also called a *lepton* in Greek)<sup>12</sup>. In his study of the metrology of these small bronze coins Hendin confirms the view of Meshorer that the denominations are not distinguished by weight. Rather, one distinguishes the denominations by the design of the coin<sup>13</sup>. Hendin makes the following conclusions about the denominations of some of the Judean small bronze coins:

- 1) The irregular TJC group L coins are degraded *prutot* and not half-*prutah* coins. Hendin says that Alexander Jannaeus did produce a half-*prutah* coin as evidenced in the coin's different design but they are very scarce<sup>14</sup>. Hendin probably meant TJC group O coins, although he did not state this.
- 2) Mattathias Antigonus did not mint half-*prutot*<sup>15</sup>
- 3) Herod I did mint half-*prutot* but they have proved to be quite rare in the archaeological record<sup>16</sup>
- 4) Herod Archelaus minted a half-*prutot*<sup>17</sup>
- 5) Hendin does not identify anyone else who minted Judean bronze coins of the half-*prutah* denomination.

Accepting the conclusion that the design and diameter is the key to distinguishing the denomination (in most cases regarding bronze coins), our proposal is that the L-II subgroup was minted contemporaneously to L-I subgroup or in subsequent years but prior to Alexander Jannaeus's death. The smaller flan that

was used for the L-II subgroup may have been necessitated by the population's need for *prutot* given the large geographical expansion of Jannaeus's kingdom. The smaller flans allowed for more coins to be minted from the same amount of metal.

We also propose that the L-III and L-IV subgroups were minted after Alexander Jannaeus's reign and that they, along with the L-II already in circulation, were used as half-*prutah* coins by the time of the first century CE<sup>18</sup>. This proposal takes into account three considerations: the change in the dimensions (weight and diameter) and shape of the flans (from round flans to more oval or elongated); the design of the TJC group L coins, from a star with eight rays to one with six to one with two or fewer rays; and the historical reality of a lack of half-*prutot* in the first century CE, along with the high frequency of L-II, L-III, and L-IV coins recovered in first century CE contexts (see **Table 1** for a summary)<sup>19</sup>.

First, the change in design. As we commented above, the L-I coins of Alexander Jannaeus are the better struck and executed coins in this group, likely because they were the first coins

<sup>11</sup> Kindler 1967, p. 186.

<sup>12</sup> Hendin 2009, p. 107.

<sup>13</sup> TJC, p. 71; Hendin 2009, p. 108.

<sup>14</sup> Hendin 2009, p. 113.

<sup>15</sup> Hendin 2009, p. 114.

<sup>16</sup> Hendin 2009, p. 117; GBC, p. 240–241, nos. 1185–1187.

<sup>17</sup> Hendin 2009, p. 117; GBC, p. 245, no. 1197. Contra Meshorer (TJC, p. 80 and 225, no. 72).

<sup>18</sup> In the expanded discussion below, our proposal is not suggesting that merchants and buyers in the ancient markets were trying to count rays on these tiny, crudely struck coins to distinguish their denominational value. However, it would have been simple, as it is today, to distinguish between L-I (and possibly L-II) in contrast to L-III–IV, just by looking at the size and shape of the flans.

<sup>19</sup> Meshorer's TJC group L1–3 coins are much more scarce in excavations compared to other Alexander Jannaeus coins. For example, at Khirbet el-Maqatir 18 coins of type L1–3 were found compared to 74 group K coins and 720 L4–16 coins. A reasonable explanation for this is that L1–3 coins were struck in a shorter period (80/79–76 BCE at the maximum), while the other types had much more time to appear.



Group L Subgroups	During Alexander Jannaeus's Lifetime (c. 80/79–76 BCE)	Mid 1st century BCE (c. 76–40 BCE)	By late 1st century BCE to c. 70 CE
L-I	<i>Prutah</i>	<i>Prutah</i>	Half- <i>prutah</i>
L-II	<i>Prutah</i>	<i>Prutah</i>	Half- <i>prutah</i>
L-III		<i>Prutah or half-prutah (?)</i>	Half- <i>prutah</i>
L-IV		Half- <i>prutah</i>	Half- <i>prutah</i>

Table 1: Suggested denominational usage of TJC group L coins

struck in this series and were struck as commemoratives for the 25th year of Jannaeus. While the coins may not be perfect they are essentially complete, not requiring multiple coins to try to figure out the inscription. The flans are of appropriate size to receive the complete image of the die, including the entire inscription (see **Fig. 5**). These coins also have a date which provides a fixed reference for their minting during the lifetime of Alexander Jannaeus. We consider the L-I coins to be *prutot*. The L-II coins, as noted above, are minted using flans that are too small for the image on the die. This causes the image to be either off-center or the legend to be off the flan. We propose that the L-II coins were an effort to get more coins into circulation and were minted in the final years of Jannaeus's life. We acknowledge that some of the coins in this subgroup kept the date »year 25«. This could be accounted for by the continual use of the dies that were initially used in the minting of the coins that we designate L-I. As dies broke and new dies were made then the year designation was not noted again.

There are two distinguishing characteristics between the L-II and L-III types, regarding the dies presenting the star. The first is the change from an eight-ray star to a six-ray star. The second is the removal of the Aramaic legend which includes Alexander Jannaeus's name and the date »year 25«. We think it is reasonable that these two changes are an acknowledgement on the part of the engravers that these coins are not »reak Alexander Jannaeus coins. Thus these coins were minted after the death of Alexander Jannaeus. We think it is most reasonable to assert that the striking of

the L-III coins occurred in the mid-first century BCE. Whether the L-III types were intended to be *prutot* or half-*prutot* remains undetermined. Hendin believes that the intent of these coins was to be *prutot*, especially when initially struck in the mid-first century BCE<sup>20</sup>. We have no firm objections to this conclusion. However, we do not wish to rule out the possibility that the L-III coins were minted after Alexander Jannaeus reign to serve as half-*prutot* while the L-I and L-II continued to be used by the population as *prutot* (along with all the other types of Alexander Jannaeus's coins; see more below).

As for the L-IV coins, these coins are the most difficult to understand. Part of the difficulty in understanding this proposed subgroup is that these coins are usually not collected in excavations that do not use metal detection; consequently, they do not appear in reports. As we commented above, the dies used to make these coins appear to be purposeful. Perhaps the creation of a one-ray or two-ray star die was nothing more than an aesthetic gesture since the flans had become so small. Such a die ensured that at least one or two rays would be visible instead of the potential for no rays to be visible with the use of a larger die on such a small flan. When the L-IV coins were struck and their denominational value are a great enigma. Whatever one concludes about the date of striking and the denominational value of the L-III coins likely applies to the L-IV coins<sup>21</sup>. In any case it is hard

<sup>20</sup> Hendin 2009, p. 113.

<sup>21</sup> Ideally, the question of when these coins were minted could be answered if we could find and excavate a site which was built and occupied during the reign of Alexander Jan-





to believe that the denominational value of the L-IV coins, which are the tiniest and the most crude of this type, was intended to be the same as L-I–III coins, thus they were most probably struck in order to serve as half-*prutot*.

Regardless of the original denominational value of the L-III and L-IV coins, we believe that by the late first century BCE and first century CE these coins were used as half-*prutot*<sup>22</sup>. There are two main reasons for our suggestion. First, while the ruling authorities (i.e., the Herodians and the Roman governors) are producing *prutot* in the late first century BCE and first century CE, there was a lack of production of half-*prutot* in this period and especially during the first century CE. As mentioned above, no one has suggested that half-*prutot* were minted after Archelaus. Second, the archaeological data shows the frequency of the TJC group L coins found in first century CE contexts<sup>23</sup>. In the first century CE people are clearly using the TJC group L coins, and thus it seems that there was a need for these coins, probably as half-*prutot*<sup>24</sup>. If the ruling authorities are not producing enough of this small change then the people are meeting their need by continuing to use the Alexander Jannaeus TJC group L coins more than a century after they were struck or by the (tolerated?, unauthorized?) minting of some of these coins during the first century CE.

### A Note regarding the production technique of TJC L coins.

In 1922 Hill discussed the ancient methods of coining. One of his insights was that

*a very common fault, especially in small coins, was caused by the dies being badly registered, so that only part of the type of one side was struck on the blank, the greater part of the blank being left empty. This faulty adjustment, in the case of blanks cast en chapelet and not separated before striking, but placed on an anvil in which several obverse dies were set, would produce coins with impression of parts of two*

*different dies on the same side. The blank was evidently placed so as to lie partly on two obverse dies, and the reverse die was brought down on it; thus a complete reverse impression was associated with two partial obverses*<sup>25</sup>.

One of his examples was a coin of Alexander Jannaeus published by him in his BMC Palestine<sup>26</sup>. In 2014 Nikolaus Schindel published a note on the production of Hasmonean coins, showing more examples of this technique. He also noted »significantly, basically all scholars who have discussed multiple dies have assumed that they were cut into the metal block at the same time and used simultaneously ( ) my idea is that the purpose of cutting several die impressions into the same piece of metal was simply to make the most economical use of the block of metal without remelting and totally reworking it«<sup>27</sup>.

We accept the suggestion that the technique of striking the flans on an anvil into which several dies were cut (rather than small circular dies set into the anvil) was used for Hasmonean coins, including coins during Alexander Jannaeus's reign. We suggest that this technique could have been altered in order to advance the striking process of TJC L coins, especially L-II–IV. While hundreds of flans could

naeus and ceased being occupied prior to Herod I. If such a site lacked L-III and L-IV coins, then one could begin to build an argument for the minting of these coins in the late first century BCE or during the first half of the first century CE.

<sup>22</sup> See also Krupp 2011, p. 42.

<sup>23</sup> Rappaport 1984, p. 39; Syon 2014, p. 115; Syon 2015, pp. 45–47; Farhi 2016, p. 73; Larsen forthcoming.

<sup>24</sup> If not after the Roman conquest of 64 BCE, certainly after 6 CE, when, following the deposition of Herod Archelaus Judea came under direct Roman rule, the continued use of Alexander Jannaeus coins may have also provided a not-so-subtle declaration against Roman rule (for a more developed argument see Larsen forthcoming).

<sup>25</sup> Hill 1922, pp. 36–37.

<sup>26</sup> BMC Palestine, pl. XXII:4.

<sup>27</sup> Schindel 2014, p. 47. Woytek (2006, pl. 11.22) published an image of a metal block (47x25mm) with two die impressions cut into the metal (each impression is 17 and 15mm respectively).





Fig. 13: Representative coins from Khirbet el-Maqatir struck on defective flans

have been prepared simultaneously in connected-flan molds<sup>28</sup>, striking them, one-by-one was likely not very efficient. Any method that would make it easier to produce large numbers of coins quickly would have been welcomed by the mint workers. Thus we suggest, yet without proof, that flans could have been struck simultaneously, while they are still attached to the strip, by using an anvil into which images of several lower dies were cut and a hammer into which images of several upper dies were cut. Another option is that a rectangular metal block, into which images of several upper dies were cut, was placed on the strip and then hit by a large hammer held by the mint worker; thus, in one hit he could actually strike several coins. This technique could be especially useful for coins of a small diameter, such as types L-II–IV.

Within this discussion we also note the existence of many L-III–IV coins that were struck on what appears to be pieces of metal initially refused from the casting process. Excavation reports seem, in most cases, to avoid publishing these extremely defective coins. The excavation team at Khirbet el-Maqatir, with the use of a metal detector, recovered dozens of these specimens, struck on flans with almost no resemblance of a legitimate coin. Upon inspection it seems that all of them have one side which was attached to a flan strip and all of them are beveled; thus, we can assume that

they are defective flans (and not just pieces of scrap bronze), perhaps the last ones in each strip of flans. A wide variety of such specimens were chosen for publication in the Khirbet el-Maqatir excavation final report, with a few shown here (**Fig. 13**)<sup>29</sup>.

Why these defective flans were struck instead of being gathered, remelted, and cast into 'normal' flans, is unknown. Maybe it was out of indifference since the coins were mass produced, resulting in little concern for quality control. The mint was given a certain amount/weight of bronze to make coins and the money bag was returned with the same weight of coins. The production of such crude coins, struck on defective flans, and their use in circulation might be another possible evidence that types L-III–IV were struck after Jannaeus, as he would probably not agree to the use of such coins, never seen before.

As with any research, questions are answered and new questions are formed. The plethora of Alexander Jannaeus coins recovered in sites all over Israel has raised many questions. We think that the finds have brought some clarity

<sup>28</sup> See, for example Ariel 2012, p. 55 (Table 2), who list several connected-flan molds, some with the ability to make hundreds of flans at one time.

<sup>29</sup> The coins in fig. 13 will appear, with these numbers, in Farhi forthcoming.



to this small anchor/star coin type, what have become commonly referred to as TJC group L.

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