The intention with the present volume to focus on Neue Prägungen to understand the innovative potential of coinage presents us with quite a challenge, as it is difficult in general terms to define such a highly complex topic.

The information available on the coins and coinages in the context of ancient sanctuaries, which is of specific interest here, is limited and controversial. Not only has the identification of coins and coinages stemming from the context of sanctuaries proven difficult, but these have also been understood to have served a range of purposes, which were determined by different factors. Among these were the varying identities of the minting authorities, their intentions with the minting of specific coin types and the actual use of the coins. Specific occasions could have determined the production of individual coin types, coins were for several reasons and on different occasions deposited in the sanctuaries. These factors include different chronological and geographical aspects, which in all are too manifold to be dealt with here. Adding to this is the possible existence of actual ›temple coinages‹ circulating in larger contexts, not to speak of the aspect of ›bankings‹ in the context of the sanctuaries. These factors and others all played different roles at different times and can also be found to be overlapping.

Despite being situated on the fringe of the ancient Greek world, and thus on the fringe of the monetised ancient world, during its time of monetisation, Jerusalem offers the setting for an outstanding example of a new coinage in the context of an ancient sanctuary. Contrary to many other places, the rich sources connected with the Jewish temple offer unparalleled detailed insight into its history, development and socio-cultural context. However, it neither can nor should be ignored that the temple in Jerusalem as such in many ways is an isolated case exactly because of its very specific religious setting and history, which makes it difficult to draw parallels to other contemporary sanctuaries. Exempt from this is, nonetheless, the introduction and minting of coinage here, which depended highly on the development and spread of other contemporary coinages.

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1 This article was written in the course of the Hertha Firnberg Project: Sanctuaries as Monetary Centres in the Ancient Greek World, funded by the Austrian Science Fund (FWF).
1. The Foundation for the Early Jewish Coinage

As commonly recognised, the development of the medium coinage took place in the Greek world and the introduction of a monetised economy coincided with a time, where this world was subject to marked changes with the development of the Greek polis and associated institutions. Undoubtedly, these societal changes had an effect on the development of coinage, although to which extent is difficult to pinpoint, but the medium itself was also to bring changes.

A general problem is that only in a limited number of cases does the material at hand allow a more detailed insight into the possible developments and therewith the intentions with the use of specific coinages. Additionally, the material is neither chronologically nor geographically spread evenly in the Greek world, especially during the earlier centuries. Contrary to this, the material evidence stemming from the Hellenistic period onwards has been subject to an increasing, extensive and in part opposing discussion during the last years.

It is commonly recognised that the first coin objects known are the electrum pieces at home in Lydian Asia Minor during the very late seventh and early sixth century BCE. The genesis of these is still to a great extent shrouded in darkness, as these pieces only come with relative little information. The appearance of these first coin objects did also not imply that a monetised economy had developed; rather a monetised economy developed after the invention of the first coined metal pieces and did not become a reality until after the institutionalisation of silver coins.

The first place where the general use of silver coinage was established was mainland Greece during the last half/last quarter of the sixth century BCE, after which time the progression of the monetised economy was an indisputable fact. In mainland Greece, around 480 BCE, more than 100 mints were producing silver coins. Regular bronze coinages were instituted in Southern Italy and Sicily from the middle of the fifth century BCE and in various parts of mainland Greece and the Aegean from the end of the fifth; in the rest of the Greek world they became a widely accepted during the fourth century, including the Levant and the Jewish

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2 Kim 2001, 8.
3 Schaps 2004, referring to both basic developments, such as the marketplace and the development of the agora from a place of political venue to become both a political center and market (pp. 108-109), and alterations of traditional structures in society (p. 121).
4 Such as the critical comments made by Johannes Nollé 2014 on an article written by Selene Psoma 2008 concerning the so-called *panegyris* coinages.
7 Kim 2001, 10
8 Kim 2001, 10; Kletter 2004, 209; and others.
9 Seaford 2004, 139.
world. This means we are dealing with a period of approximately two centuries, from the beginning of the use of stamped electrum pieces until the establishment of a monetised economy, within which a complex coin system containing both silver and bronze coins had fully developed.

Coin objects are known from Greek sanctuaries already from a very early point in time. The earliest minting of regular silver coins identified in the context of Greek sanctuaries date to the fifth century BCE. These stem from the Pan-Hellenic sanctuaries of Olympia and Delphi. However, among the earliest examples of coin objects are the electrum pieces found in and around the so-called ›Central Basis‹ of the Artemision in Ephesus. These were possibly buried here before the temple was built around the middle of the sixth century BCE, wherefore they from an early point in time have been understood as a demonetised founding deposit. However, this has been contested based on the results of later excavations. Disregarding if the coins were part of a founding deposit or votive offerings, the compositions of the coin objects from the Artemision are representative of the various stages in the origin of coinage, from unmarked pieces of different standard weights to full coins.

The use of electrum pieces were neither commonly established outside Lydia, nor circulating far from their place of issue and their usage was continuously limited during their time of existence until their disappearance in the second half of the sixth century BCE, seemingly being replaced by silver coins. Seemingly, as this would entail a similar or identical function of the electrum and silver objects and that the silver coins replaced the electrum pieces. The electrum coins may have held a monetary function, however, this is still not completely clear and the facilitation of trade may not always have been the main objective of their usage. A find context such as the Artemision in Ephesus supports a multi-purpose use of these objects that may have entailed a removal from its original usage, in this case possibly changing their original monetary purpose to that of votive offerings.

The use of hacksilver and, as a final step towards the development of coinage, un-coined pieces – as found in the Artemision in the form of electrum pieces, has long been seen to

10 Psoma has identified these as the earliest examples of coinage minted by religious assemblies (Psoma 2008, 227–255).
11 Schaps 2004, 93-96, with further references, originating in the stratigraphy proposed by D. G. Hogarth (1908).
13 Seaford 2004, 129.
14 With a few exceptions, such as the coinage of Cyzicus, Schaps 2004, 104.
16 Kletter 2004, 209; although, examples such as the later electrum coinage of Cyzicus show that this was not always the case, Schaps 2004, 104.
17 Bammer 1990, 150.
illustrate the progression of the medium coinage.\textsuperscript{18} The basis for the functionality and flexibility of hacksilver and un-coined silver pieces was that they relied on established and refined weighing systems.\textsuperscript{19} The minting of coins could only take place if the medium was not only completely understood, but also generally accepted. Otherwise, the value of the coins was reduced to the value of the metal, i.e. the value in bullion, which had to be weighed to be used.

As stressed by Kim and others, silver coinage should not be seen as a radical new development, but as the result or as the formalisation of the use of silver bullion, hence also the use of hacksilver.\textsuperscript{20} This was additionally accompanied and strengthened by the increasing realisation of the possibilities of this medium as an image carrier; although this in the Greek world and related areas never came to reach the same standing as in the Roman imperial period.\textsuperscript{21} The speed of the development of this medium and the rapid spread of coinage speak for a general familiarity with weighed precious metal in the form of hacksilver or un-coined metal within established weight-systems.\textsuperscript{22} The early existence of larger amounts of early dating fractional silver coins suggests a broad basis of users accustomed to this,\textsuperscript{23} though not ignoring the fact that there is only little evidence of a bullion-based economy in Greece and that the existence of fractional coins did not become the general rule until the Hellenistic period.\textsuperscript{24} This development and the character of the use of fractional coinage is also supported by evidence from the periphery of the Greek world, as it is the case in the Jewish temple in Jerusalem from the early fourth century onwards.

2. The Introduction of Coinage in Southern Palestine

According to the archaeological evidence, the introduction of the minting of coinages in Palestine began during the late fifth century BCE, where local coinages are first found in connection with the major Palestinian coastal cities under Philistine control. The numismatic evidence of the fourth century shows that the use of coins and the use of hacksilver continued parallel for some time, until the use of coins had become generally accepted as the superior medium.\textsuperscript{25} An example of this is a hoard consisting of hacksilver and cut coins dating to the

\textsuperscript{18} Schaps 2004, 102–103.
\textsuperscript{19} Kim 2001, 15.
\textsuperscript{20} Kim 2001, 19.
\textsuperscript{22} Schaps 2004, 82; Seaford 2004, 93, in reference to: Kroll 2001; Schaps 2001.
\textsuperscript{23} Kim 2001, 13–14.
\textsuperscript{24} Kim 2001, 15–17, noting the preference for weighing silver deductible from literary and epigraphic sources, such as the Laws of Solon during the early sixth century BCE; Schaps 2004, 195; Meadows 2014, 169
\textsuperscript{25} A development similar to that found in Greece during the sixth century BCE, Von Reden 1997, 156–161; Schaps 2004, 105.
second half of the fourth century BCE reportedly stemming from the vicinity of Samaria (fig. 1). This parallels the earlier development of coinage in Asia Minor, as exemplified by the electrum coins found in the context of the Artemision in Ephesus and shows that the transition to the use of coinage also in Palestine was not rapid and that the weighing of silver remained an important factor even after the introduction of coinage.

In addition, the use of iconography underlines the gradual implementation of the medium coinage. Despite various minor local differences, the common basis for the iconography of all early Palestinian coins was the Attic Greek coinage circulating the region widely as the primary accepted currency of the Mediterranean world during this time (fig. 2). This is made evident by the widespread imitation of the Athenian tetradrachm found in a large number of early city coinages in Palestine, e.g. from the cities of Gaza (fig. 3), Ascalon, Ashdod, Samaria, all displaying the goddess Athena on the obverse and her owl with the olive branch on the reverse.

The frequent imitations are evidence of the high standing of and confidence in the Athenian coins, which were not restricted to the city coinages of Palestine, but is amongst others also found in the early coinages of Egyptian Memphis and Elephantine. In addition to the use of a similar iconography at the beginning, the basic common denominator for these different coinages was that these were produced by local administrations, for local purposes and primarily minted to cover the financial demands of the local cities and provinces, hence the coins were predominantly fractional and their distribution limited. This also applies to the early coinage of the part of Palestine, which constituted the Jewish world, which nonetheless to some extend distinguish itself from other local contemporary coinages through the identity of their minting authority.

3. Weights and Temple Tax in the Jewish World

One important aspect deserves attention, as this can be found in varying forms spread across the ancient Greek world. Different weighing systems were at home both in the Greek world and in the Near East, which evidently came to play a significant role for the coin standards applied.

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26 The completeness and original composition of this hoard can no longer be ascertained, Gitler 2006, 5–10.
28 Kim 2001, 18–19; Schaps 2004, 49.
In Palestine, the use of weights is evidenced by numerous stone weights, both inscribed and without inscriptions. Additionally, in connection with the Jewish temple in Jerusalem, numerous written references to the use of a temple shekel (the so-called ‘Shekel of the Sanctuary’) can be found. The latter suggests that the Jewish temple was in possession of weights (or rather sets of weights), which functioned as the standard of measurement for all weights. Also in the Greek world, we find similar evidence in sanctuaries, where weights have been excavated inscribed with the legends such as Δι ό ς at Olympia, Απόλλωνος Θερμίου at Thermos, or ιερά Ήρης at Samos. These sanctuaries all seem to have played an important role in the organization respectively controlling of measurements and weight on a larger scale. At least in the case of the Jewish temple, this preceded the use of coinage by centuries and came to determine the weight standard of the earliest locally minted coins found here. The denominational system of the coins during the late Persian period was based on the weight standard of the shekel (c. 11.4 g), which subsequently during the early Hellenistic period was replaced by the heavier Attic weight standard of the tetradrachm (c. 16.5 g). The varying weights of the early fractional Jewish coins testify to the sophisticated use of the specific weight standards during their time of minting.

Another important fact is the annual payment of taxes familiar in connection with the Jewish temple. According to Exodus 30,13, the poll tax of half a shekel annually paid by adult male Jews to the temple, was equivalent with the measure of half a shekel silver, consistent with the Shekel of the Sanctuary. These payments are traceable in Biblical sources and epigraphic evidence during at least five centuries, between the late fifth/early fourth century BCE and the first century CE. The later use of the Tyrian shekels as means of payment to the temple underlines the high degree of thought behind the up keeping of the tax system of the Jewish Temple, also at the times where no Jewish silver coins were minted.

Since the earliest coins were not minted as a one-to-one equivalent of the required tax of half a shekel, the newly introduced coins cannot be tied solely to the payment of the taxes. The discrepancies in the weight of the individual coins would in case of a payment to the temple still have demanded them to be weighed. As already commented on, according to the archaeological evidence hacksilver, cut coins and coins existed side by side, and the payment

30 Schaps 2004, 227–228. Several references to the weighing of silver (shekels) can be found in different bible passages: e.g. Exodus 30,24, 38,24; Leviticus 27,4; Numbers 7,13, et al. An interesting detail is that shekel originally meant ‘weight’ or ‘to weigh.’
32 Psoma 2008, 238.
33 Ronen 1998; Ronen 2006; Lykke 2015, 14–15.
36 Lykke 2015, Chapter 1, for the following.
of the poll tax at the beginning of the fourth century was in all likelihood still made with weighed silver in every available form also for some time afterwards. The newly introduced Jewish provincial coins may only have played a minor role in this connection, but these coins – in agreement with the nature of this medium also as an image carrier – reflected the specific intentions of the issuing authorities.

4. The Coinage of the Province of Judah

In Palestine, the earliest coins identified to belong in a Jewish context are the so-called Yehud coins. These were minted under Persian administration during the fourth century BCE and under Ptolemaic rule during the first half of the third century BCE and have primarily been found within the borders of the Jewish province. The coins carry the Persian name of the province of Judah: YHD (yehud). In the beginning, it was written only in Aramaic as YHD, but later under Ptolemaic rule also in Hebrew as YHDH (yehudah), usually in the palaeo-Hebrew script. The inscription YHD was at first the only detail, which distinctly labelled them as belonging to the Jewish province.

The few larger coins found (quarter-shekels), which has been dated the earliest Yehud coins represent marked exceptions to what is found later. These rare coin types are either direct imitations of Athenian coins or display featured comparable to coin types from Asia Minor and may belong to a Philistine mint minting on behalf of the Jewish province. The latter suggestion would explain why the iconography of the earliest coins and their weight differ so radically from the later coins minted here, which consequently were minted by another authority. If this is correct, the introduction of coinage in the Jewish province should be viewed as a multi-phased and to some extent deliberately approached process. Nonetheless, the speed with which this locally minted coinage gained ground and the circulation of it and its use in everyday transactions in Judah has proven very difficult to identify, amongst others because the earlier recorded coin material largely has come with no secure provenance. Finds such as the Samaria hoard mentioned above, however, does suggest that the establishment of the regular use of coins was process, which was still ongoing at the end of the fourth century BCE.

The Yehud coinage seems to have functioned as a coinage independent of the contemporary world, a fact that is especially underlined by the use of the shekel as the weight standard. Contrary to this, the iconography displays both parallels to the coinages of other areas and

37 Lipschits/Tal 2007, 36–38; Gitler/Lorber 2006, 16.
39 Gitler 2006, 6–7 lists multiple other hoards from this region.
regions, as well as highly individual traits. Among the common types is the display of the
goddess Athena already mentioned, but also the head of the Persian king. Additionally found
are different images of animals (birds, lions), protomes of winged animals, a lily – which
came to be one of the most marked signs of the centre of the Jewish world, an ear, human
faces, and more. Overall, a wide range of images of which only some can be attributed to
specific iconographic traditions. The chronology of the individual coin types is still not
completely certain, except for the issues emitted during the Ptolemaic period, which closely
imitated the coin types of the Ptolemaic administration in Alexandria.  

5. The Identity of the Authorities Minting in Judah

Due to the literary and material evidence available, the case of the Jewish Temple in
Jerusalem is one of the few examples, where it is possible to gain significant ground in
understanding the reception and initiation of the use of the new medium coinage. Here, it is
possible to approach and understand the authority behind the coin minting and the innovative
processes taking place in this connection, where we in other cases possess less evidence.

First of all, coin types carrying personal names which can be associated with known fourth
century BCE Jewish high priests or governors. Especially the coin legend Yohanan with the
title ha-kohen (the priest) underlines the identity of the authority issuing this specific coin
type (fig. 4); it is very unlikely that any priest would have been in the position to issue silver
coins according to liking. In addition, the name Yehezqiyyah, which is found with or without
the title ha-pecchah (the governor) (fig. 5), is in this connection conspicuous. It is very likely
that the office of the Persian governor and the position of the Jewish high priest in some cases
were combined in one person. This would conform to the appointment of Persian governors
during the previous centuries, where verifiably persons from existing local dynasties – which
in the Jewish world were led by the high priestly aristocracy – were selected to hold these
positions.  

Secondly, the continuity of the minting of the Yehud coins between the Persian and the
Ptolemaic period is noticeable. With the establishment of the Ptolemaic kingdom, the coin
minting of areas coming under Ptolemaic rule became subject to radical changes, as they were
generally replaced by the royal Ptolemaic coinage. Contrary to this, apparently the Province
of Judah was allowed to keep up its local silver coin production, despite the highly centralised

41 See Lykke 2015, Chapter 1 with detailed references for the following.
42 Lykke 2010, 74–86 and 2015, Chapter 1, with further references.
Ptolemaic monetary administration and coinage monopoly.\(^43\) This speaks for a continued standing of the Jewish Temple as an important economic factor also for the Ptolemaic king.

Thirdly, the knowledge of the long use of the Shekel of the Sanctuary and the use of the shekel as the basis for the early Yehud coins weight system is significant in connection with the identification of the minting authorities. Together with the use of the shekel as the weight standard for the Yehud coins, other indications support a direct connection between the Yehud coins and the temple administration.

The continued parallel use of coins, hacksilver and cut coins in Palestine in general, but also in the Jewish dominated areas, speak for the particular position of the Yehud coinage in Judah. This is furthermore supported by the possibility that the introduction of coinage here was part of a deliberate process, where the first coins were minted specifically to be used here. In fact, in this case, the minting of an own coinage may have contributed to the consolidation of the position of the Jewish temple as an institution of increasing financial importance,\(^44\) the importance of which did not completely diminish until the destruction of the Jewish temple in the First Jewish war against Rome in 70 CE.\(^45\)

6. Summary

The history of the ancient Jewish temple in Jerusalem is without question largely unique in the context of the ancient Greek world. Nonetheless, the example of the Jewish temple offers excellent evidence of the specific relationships between different ruling powers, a local economy and coin-minting specific for this time and, therewith, the innovative aspect of a local fractional silver coinage introduced and produced in a very specific setting.\(^46\) Although, as at the centre of the Greek world, the exact degree or impact of this is difficult to measure and to nail down to specific particulars, and thus rather remains traceable in development trends of a more general nature. One important aspect concerning the coinage of the Province of Judah is the use of the specific weight system, which can be directly related to the Jewish temple in Jerusalem even before the minting of an own coinage. The early Jewish coinage was in fact a new medium, which was implemented in a much older system, which was slowly adapting to the new circumstances of becoming monetised.

\(^{43}\) Mørkholm 1991, 70.  
\(^{44}\) Lemaire 2007, 60.  
\(^{45}\) Lykke 2012.  
\(^{46}\) Jerusalem is not a stand-alone example of such connections between the minting of coinage and temples, but it is the only example supported by such rich sources, Lykke 2015, 18–19.
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**Lemaire 2007**

**Lipschits/Tal 2007**

**Lykke 2010**

**Lykke 2012**

**Lykke 2015**

**Meadows 2014**

**Mørkholm 1991**

**Nicolet-Pierre 1979**

**Nollé 2014**

**Psoma 2008**


Images:

Fig. 1: Hoard from Samarian. Fourth century BCE (©Israel Museum Jerusalem. Inv.no. IM 15298)
Fig. 2: Athenian tetradrachm (25.9 x 22.7 mm; 16.76 g) (454-415/413 BCE). (©Kunsthistorisches Museum Wien. Inv.no. KHM GR 12737)

Fig. 3: Coin from Gaza imitating Athenian tetradrachm (13.9 mm; 3.92 g) (mid fourth century BCE). (©Israel Museum Jerusalem. Inv.no. IM 2013.39.33751)

Fig. 4: Yehud coin with the name Yoḥanan and title ha-kohen (the priest) (7.4 mm; 0.16 g) (late fourth century BCE). (©Israel Museum Jerusalem. Inv.no. IM 8.408.790)

Fig. 5: Yehud coin with the name Yehezqiyah and title ha-pechah (the governor) (7.6 mm; 0.22 g) (late fourth century BCE). (©Israel Museum Jerusalem. Inv.no. IM 92.5.14228)