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Anne Lykke

Ritualizing the Use of Coins in Ancient Greek Sanctuaries

Abstract: The article explores aspects of the monetization of the Greek sanctuaries, more

specifically how space was created to accommodate coins as objects and their use within the sacred

sphere. Except in a limited number of cases, our understanding is still quite fragmented. Where

most research has focused on analyzing the coin material or the epigraphic evidence, the intention

here is to look more widely at the archaeological evidence connected with coins and coin-related

material. This is done in an attempt to appreciate the significance of the progressing monetization

and ritualization of the use of coins and in extension to develop an understanding of the possible

changes in human behavior in the sanctuaries based on this evidence.*

Keywords: coins, Greek sanctuaries, ritualization, human behavior

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Despite the abundant evidence of the appearance of coins in Greek sanctuaries from the inception

of money in the Archaic period, our knowledge of their use within the sanctuaries is still

incomplete. It has long been recognized that literary and epigraphic evidence provide valuable

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testimony for the complex nature of the Greek sanctuaries, both with regard to sacred and secular matters, and has been used extensively to reconstruct their economic organization and activities.¹ The archaeological evidence can be used to further clarify aspects of the use and significance of coins.

In the present article, neither specific coin types nor all of the available archaeological material will be discussed at length; rather the focus is directed towards understanding the progression of monetization and its possible effects on the sanctuaries as evidenced by human behavior when adopting coins in the ritual sphere. Following a general introduction and brief remarks on research issues, the article will discuss how the creation of space for coins in the sanctuaries was established through the use of storage space and specific installations as well as the emerging use of coins as part of sacred traditions.

I Context

Major sanctuaries are found in all parts of the Greek world, testifying not only to the spread of Greek culture over time, but also to the regional differences caused by inheritance, religion, historic development and progression of time. This not only determined the physical development of sanctuaries and temples but also the nature of the cult centers based on their individual socioreligious contexts.² Consequently, the use of coins and coinages within the different regional sanctuaries was also subject to variations depending on the progression of this medium in different areas.

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¹ i.a. Sokolowski (1955, 1962 and 1969); Linders and Alroth (1992); Melville-Jones (1993 and 2007); Hägg (1994); Meadows and Shipton (2001); Archibald, Davies and Gabrielsen (2005); Lupu (2009).

² i.a. Marinatos and Hägg (1993); Alcock (1994); Pedley (2005).

Within the core geographic region of Greece, which will be the main focus here, sanctuaries were not duplicates of one another. They served different gods, sometimes more than one, and could have different functions, such as being places of healing, or places to seek out the advice of oracles. Additionally, some sanctuaries were Panhellenic, whereas others served the inhabitants of certain areas. They could even periodically change appearance in connection with specific feasts or games.³ Despite this, as sacred places within the Greek cultural sphere, the sanctuaries shared structural and administrative traits, which were adapted and rationalized with increasing monetization.

The progression of monetization in sanctuaries does not seem to have been different from its general progression in Greek society. The Greek economy was increasingly monetized with the spread of silver coinage from the last half of the sixth century BCE, which until then had little requirement for weighed silver or coined money, until the use of coins as a medium of exchange was widely accepted in the Greek world by the fourth century. A full understanding of the actual monetization process has yet to be achieved, especially the transition from a non-monetized economy using pre-monetary forms of money or bullion to a *polis* controlled monetized economy,

³ Balabanēs (2004), *passim*; von Reden (2010), 184–185.

⁴ Weikart (2002), 146–147.

⁵ Before Common Era (BCE) is hereafter omitted after all dates.

⁶ Kim (2001), 10; Kletter (2004), 209; Seaford (2004), 139; Davis (2012), 128, 131, 134–140.

which has raised many questions, ⁷ including the importance of the sanctuaries in this development.⁸

Within the chronological frame of monetization, the process did not progress simultaneously nor similarly in all parts of the Greek world. Different traits can be detected, depending on local traditions. For example, it is worth taking note of one group of offerings of monetary value used in the western part of the Greek world. This group consists of silver ingots and pieces of ingots bearing inscriptions, which denoted their use as dedications in sanctuaries in Magna Graecia and Sicily, primarily between the late seventh and late sixth century, but still in practice in the fifth century as well. These silver bullion objects thus preceded and overlapped with use of coins as offerings, especially during the early period of monetization. The latter point is illustrated by one example, where four coins were melted onto one side of an ingot from Poseidonia, which was dedicated to an unnamed goddess. While this appears to have been part of the process of using coins as offerings in at least this part of the Greek world, it was not a tradition in all of the Greek world. In the fifth-century writings of Herodotus, the author lists items dedicated in sanctuaries by legendary old kings and rulers, testifying to the tradition of dedicating objects of high metal value before or in the early period of monetization in the central part of Greek

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⁷ For example the discussion of the etymological shift from *obelos* (iron spit) to *obolos* (low value coin) and term *drachma*, originally referring to a handful of six spits, i.a. Tomlinson (1980), 221–223; Strøm (1992), 41–51; Melville-Jones (1993), nos. 31, 39; Seaford (2004), 102; Schaps (2004), 83–85, 85 n. 15; von Reden (2010), 156–157. A similar mechanism is reflected by Plutarch in his late first-early second century CE *Parallel Lives* (*Theseus* 25,3). Heretrospectively—states that the minting of specific coins was eponymous for the specific sacrifices of the *hekatomboion* (100 oxen) and *dekaboion* (10 oxen) as terms of valuation (cf. Davis 2012, 143–144), although the latter does not reflect a general practise similar to the use of e.g. the *pelanos*. For wider discussions on the transition from the (bullion-based) non-monetized to a monetized economy, cf. i.a.: Kagan (1960), 121–136; Schaps (2004), 1–33; Seaford (2004), 125–146; Kroll (2008), 12–37; Davis (2012), 127–158.

⁸ At one point it was argued that, in the evolutionary history of money in the Homeric world preceding the actual minting of coinage, the origin of money should be found within the sacred sphere of the ancient Greek world. However, this is an exaggeration of the facts attributable to early twentieth-century research: Peacock (2011), 47–65, especially 55–64 in reference to Laum (1924); Reden (2010), 157.

⁹ Kroll (2008), 24–29.

¹⁰ Kroll (2008), 26–28, n. 46, fig. 1.3a–b (Paestum Museum).

world.¹¹ Further to the east, coinage was only slowly introduced as a replacement for a weight-based economy, where for example the use of *hacksilber* was still widespread during the fourth century.¹²

II Research issues

Even with the best recording of mostly complex find situations—often disturbed by later activities—the coins excavated only provide a partial view of the total quantity of coins in circulation during the period when the sanctuaries were in use.¹³ It is troubling, however, that especially in earlier excavations, the documentation of coins found within the sanctuaries is not sufficient to allow a reconstruction of their ancient contexts. Sometimes the content of a hoard is not recorded. Often only the coin hoards are published with references to their specific find spots, whereas stray finds are registered without precise contexts, thus losing important connections in the archaeological material. This makes reconstruction problematic.¹⁴ In some cases, material will have simply been lost or misplaced in the time since excavation, wherefore the coins cannot be identified more closely.

A commendable exception is the publication of the coin finds from the sanctuary of Nemea.¹⁵ In this case, the detailed documentation of coin finds has enabled the reconstruction of interesting details concerning behavioral patterns within the sacred precinct. The find spots of stray coin finds have been used to reconstruct the outline of the areas in use during different occupation periods of the sanctuary. The seating arrangements of the audience in the stadium by cities were suggested based on the concentration of coin types documented there.¹⁶ Evidently, most of such

¹¹ Arafat (2009), 583.

¹² Gitler (2006), 5–14; Lykke (2016), 109–112.

¹³ As summarized by Knapp and Mac Isaac (2005), 19.

¹⁴ Knapp and Mac Isaac (2005), 11.

¹⁵ Knapp and Mac Isaac (2005).

¹⁶ Knapp and Mac Isaac (2005), 27–30.

stray finds consisted of small change coins, and should be attributed to loss during what appears to be straightforward daily economic transactions between vendors and visitors in the sanctuary. Thus, they serve primarily as testimony to the lively exchange, which took place within the boundaries of the sanctuary, including during the games. The patterns of these transactions did not differ much from similar venues in the secular world, such as the agora. Nonetheless, the example of Nemea stresses the importance of a clear correlation between coin material and archaeological context in order to reconstruct the activities that took place within ancient sanctuaries.

III Creating space for coins

The introduction of coinage not only meant the introduction of a new way to perform economic transactions. In the context of the sanctuaries, this also caused the development of or changes to existing traditions. Both are physically visible in the archaeological remains and probably also conceptually, although the latter is much more difficult to establish.

Storage space: It is well known from both written sources and the archaeological remains, ¹⁷ that one major role of the sanctuaries was to provide secure areas for the storage of different kinds of valuables. Among the earliest evidence for this is a lead tablet excavated in the foundation of the Archaic Temple of Artemis at Ephesus (where the earliest coin objects in electrum have also been located), dating to the late seventh or early sixth century and thus before monetization began spreading in the Greek world. ¹⁸ The text specifies that the sanctuary accumulated and stored wealth converted into silver and gold bullion, for example springing from the sanctuary's control of the revenues from the nearby "Sacred Harbor" and salt fields. ¹⁹ The conditions under which valuables

¹⁷ Broneer (1976), 44.

¹⁸ IGSK Ephesos I; Hogarth (1908), 46, 120–144, Pl. 13; Kroll (2008), 18–21.

¹⁹ Athenaeus 8.361; Kroll (2008), 20–221.

were stored can only be assumed from the known archaeological remains and later practices, and the evidence suggests that changes took place, as the Greek world was increasingly monetized.

The term *thesauros* has been found in inscriptions and written sources to refer to the different kinds of structures used to collect or store valuables.²⁰ In some cases, the broad use of the term *thesauros* can make it difficult to discern what the term is referring to precisely; ²¹ alternatives include the freestanding treasury house, the *opisthodomos*, temple depositories, or even offertory boxes. An example of this is found in a Hellenistic inscription from Delos, which reveals that sacred funds were to be stored in a sacred chest, either in the Temple of Artemis, or the Temple of Apollo, or in both.²² However, this has not been verified archaeologically. In the most certain cases, a combination of the archaeological find situation, inscriptions, or even literary references, allow an identification.²³

Among the most distinct archaeological features associated with the storing of wealth is the freestanding treasury house, which accommodated the needs of major Greek *poleis*. In addition to these large-scale buildings, where different kind of valuables could be stored, ²⁴ we have knowledge of the use of smaller freestanding structures and the use of rooms or features incorporated in the temple buildings for the same purpose. ²⁵ Especially the use of the smaller forms of the *thesauroi* become interesting in view of the increasing monetization and it is also these that are of primary interest in the following.

²⁰ Kaminski (1991), 68–72; Pafford (2006), 96; Arafat (2009), 581–582.

²¹ Kaminski (1991), 64 n. 3; Pafford (2006), 157; Hering (2015), 159–162, 166–169.

²² Linders (1987), 117; Linders (1992), 71; Hollinshead (1999), 209.

²³ Kaminski (1991), 66, 68, 70; Crawford (2003), 70.

²⁴ Hering (2015), 192–196.

²⁵ Hollinshead (1999), 209, 214.

Among the earliest known containers for the storage of valuables are temple depositories. It should be noted that the use of the term *thesauros* in connection with these is not definite.²⁶ The depositories were generally not large-scale structures. The few archaeological traces date back to the sixth century and thus not long after the first written evidence. These structures—also identified as lined cists or temple pits—were inaccessible, always confined to the inner rooms of temples, and not designed to receive offerings or other objects on a regular basis. They had the capacity to contain large-sized dedications, such as metal vessels, or larger amounts of coins deposited at once.²⁷

In the Doric Temple of Apollo at Corinth, dated to the middle of the sixth century, a lined cist (1.29 m by 0.84 m) was found beneath the southwest corner of the *pronaos*, its floor-level approximately 1.5 m below the floor level of the temple, which may well have functioned also as a depository for coins.²⁸ The use of these "temple pits" as depositories has been substantiated in research by the findings of coins and other valuables.²⁹ An example mentioned regularly is Temple A at Kos, where a subterranean box for valuables was found during excavation situated next to the base of the cult statue. However, in the preliminary excavation report, the excavator seems to describe an offertory box situated to the left of the statue, not a depository.³⁰ This makes it difficult to draw any conclusion based on the excavation reports.³¹ In case of the Temple of Poseidon at Isthmia, which will be outlined below, the depository from the Archaic period is assumed because

²⁶ See discussion by Pafford (2006), 143–157 concerning the use of the term in connection with the temple depositories in research.

²⁷ Kaminski (1991), 139–144.

²⁸ Kaminski (1991), 143; Bookidis and Stroud (2004), 411–416.

²⁹ Broneer (1955), 135–136; Kaminski (1991), 139–144.

³⁰ "..., links eine Basis mit Loch in der Mitte erhalten, unter dem eine Höhlung war." (Herzog 1903, 8).

³¹ Kaminski (1991), 144–145 in ref. to Herzog (1905), 2. However, Herzog (1905), 2 only notes that: "In der ganzen Grube waren 1902 viele späthellenistische Bronzemünzen gefunden worden", making any conclusions difficult.

of the remains of valuables and coins retrieved from the fill of the classic temple, which may have been stored within the archaic predecessor.

One of the best-known large-scale storage facilities architecturally incorporated into a temple building was the *opisthodomos*, the foremost example being the back room of the Temple of Athena Parthenos on the Athenian Acropolis. ³² Both fifth- and fourth-century inventories specifically refer to the storage of coins among the valuables placed first in the Old Temple of Athena and later in the *opisthodomos* of the Temple of Athena Parthenos, including tools for coining and test pieces. ³³ It is possible that the *opisthodomos* functioned exclusively as the monetary treasury of Athena after 406/5. ³⁴

The archaeological and the written evidence combined characterize sanctuaries as places of storage. Both large and small treasuries were places used for the storage of valuables of any kind and thus used regularly before the implementation of coinage. In connection with the use of the *opisthodomos*, the literary evidence clearly reflects an increased focus on the coins in storage between the Archaic and the Classic period. The archaeological evidence does not support this in any specific detail, when one looks only at the preserved remains of the storage facilities and the limited amounts of coin material found in connection with these. Still, development traits do begin to make themselves visible.

Offertories: Contrary to the architecturally incorporated storage facilities of the *opisthodomoi* and the depositories, which testify to the steps taken to accommodate and secure the general storage of valuables increasingly consisting of coins, *thesauroi* in the form of offertories demonstrate the

³² Ferguson (1932), 133, 154–155; the *opisthodomos* is most often connected with a room at the back of a temple, although this was not always the case, cf. Hollinshead (1999), 209–213. Bookidis and Stroud (2004), 412 suggest a similar identification for the use of the western chamber of the archaic temple on the Western Hill in Corinth.

³³ Ferguson (1932), 86–87, 129 n. 1; Melville-Jones (1993), nos. 169–170; Harris (1995), 41, 106–107 in ref. to *IG* II², 1408, add. P. 799 lines 11–13 (dating to 398/7) and *IG* II², 1421 lines 6–7 (dating 374/3); Hollinshead (1999), 210–211; Kurke (2009), 425.

³⁴ Ferguson (1932), 129; Linders (2007), 777–782.

developing role of coins in the activities of the sanctuaries.³⁵ The term offertory is here understood very broadly as they could be used for different purposes, as described in the following.

As not all of these *thesauroi* are found complete, with an accompanying inscription, or *in situ*,³⁶ their original placement can in some case be difficult to determine. Additionally, some offertories have only been preserved in inscriptions referring to their use,³⁷ making it hard to identify the shape of the structure, such as in the case referred to above of the Hellenistic inscription from Delos, which mentioned the storage of coins in a Sacred Chest.³⁸

Offertory boxes comprised both smaller movable boxes made from different materials and larger, immovable stone installations placed strategically in the sanctuaries. Due to their size, the smaller moveable boxes would not have been theft-proof and can generally not be attributed to specific places in sanctuaries, and in many cases they probably required a stand or indoor shelving.³⁹ An Athenian example of this can be found in an inscription from 408/7, which refers to the storing of the Eleusinian money "in a box on the fourth shelf."⁴⁰

The immovable offertories were specifically designed as receptacles for single coins and equipped with an opening through which these were thrown into a closed container below, which could be intermittently emptied;⁴¹ although some offertories were constructed as closed containers that absorbed the coin dedications, meaning they were no longer accessible after dedication.⁴² The

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³⁵ Kaminski (1991), 63–181 has treated the topic of the smaller *thesauroi* (especially offertories, but also temple depositories) in detail; see also Crawford (2003), 69–84 for Italy; Pafford (2006), 95–103; Hering (2015), 162–164.

³⁶ E.g. Stillwell, et al. (1941), 13–14.

³⁷ Hering (2015), 163, n. 1676.

³⁸ Kaminski (1991), 99, 118.

³⁹ Kaminski (1991), 65–66, 69, 99, 133–140.

⁴⁰ IG I³, 386; Harris (1995), 41.

⁴¹ The administrative procedure of this has amongst others been preserved in Oropos (I. Oropos 324), see Pafford (2006), 126–127.

⁴² Kaminski (1991), 126–127 amongst others mentions examples from Crain and the Temple of Asclepios in Lissos in Crete.

two types of immoveable offertories (closed and open) suggests a possible differentiation between a permanent coin offering and coins available for reuse in some cases.

Contrary to the moveable offertories, immovable offertory boxes have been securely identified in the immediate vicinity of altars, temples and shrines, in public areas of the sanctuaries, within general areas of specific cults, ⁴³ or in the inner rooms of temples. ⁴⁴ Only relative few examples of these immovable stone *thesauroi* date before the Hellenistic period; it is unknown if large offertories in perishable materials existed before this time. ⁴⁵

Among the sites where offertories appear in inscriptions is the oracle sanctuary for the cult of the hero Amphiaraos, six km south of the port of Oropos. Here the use of offertory boxes is indicated by a number of inscriptions, which specify the use of the contributions made in them. For example, one text from the fourth century states that the worshipper is to pay a fee for the sacrifice of animals. The fee is specified, as well as how the worshipper is to place this in the *thesauros*. Another inscription specifies that healing fees are to be paid, and that improper conduct in the sanctuary could result in a fine. The inscriptions thus provide the visitors with the directions how to proceed within the sanctuaries using the *thesauroi*, possibly to some extent allowing them to proceed without the aid of sanctuary personnel.

It is noticeable that fees are referred to as *pelanoi*, a name with an archaic origin as "payment in kind" (originally some kind of grain offering in the form of a cake, which was brought to the altar of a sanctuary and burned). This developed into coin contributions during the late sixth

⁴³ Inscriptions name the god for which the offerings are made: Pafford (2006), 98.

⁴⁴ Kaminski (1991), 77, 91–98, 115–121.

⁴⁵ Kaminski (1991), 64, 78–80, 98–106.

⁴⁶ The evidence of Oropos is preceded by fifth-century accounts from Athens connected with the Eleusinian Mysteries; see e.g. discussion by Pafford (2006), 7–43 with further references.

⁴⁷ Kaminski (1991), 122–123 naming a number of these; Lupu (2003), 329–330, I Oropos 277 and 278 (lines 6–9); Pafford (2006), 124–131; Stewart (2009), 126–127.

⁴⁸ Kaminski (1991), 123–125; Pafford (2006), 95.

and fifth century in accordance with the progressing monetization of the sanctuaries.⁴⁹ The implementation of sacrificial tariffs in connection with the use of *thesauroi* is known from inscriptions from a number of places.⁵⁰ From the late fifth century at the latest, immovable *thesauroi* thus accommodated the replacement of at least a portion of the traditional gifts-in-kind to coins.⁵¹

Prominent archaeologically preserved examples of immoveable offertory boxes were found in Corinth. The lower part of a late fifth or fourth century offertory was found *in situ* at bedrock level in the area of the Temple of Apollo, and is among the earliest dated examples of a stone *thesauros*.⁵² Another example is a complete fourth century offertory (length 1.22 m) found *in situ* 0.5 m south of the northern corner of the altar of the Asklepieion.⁵³ The second offertory in particular exemplifies the connection between the cultic activities taking place at the altar and the payment of fees in an offertory box,⁵⁴ and this also suggests the increasing ritualization of the use of offertory boxes.⁵⁵ In this case, it is easy to picture how the worshipper would have approached the main altar to offer his sacrifice to the waiting priest, who, after having watched the worshipper place his sacrificial fee in the connected offertory, would have proceeded to sacrifice the animal brought to the altar. Another *thesauros* dated to the early fourth century is the offertory box of

⁴⁹ Kaminski (1991), 71–72; Davies (2001), 119–120; Weikart (2002), 147; Seaford (2004), 78–79; Pafford (2006), 137–138; von Reden (2010), 161–162. Both Kaminski and Davies highlight the inscriptions from Delphi naming an oracle-tax known as the *pelanos* tariffs.

⁵⁰ Lupu (2009), 59–60.

⁵¹ Weikart (2002), 147.

⁵² Kaminski (1991), 99, 143; although the date of this *thesauros* is not without dispute, see Pafford (2006), 103–108. Pafford (at 114-115) suggests the offertory box from Kokkinovrysi (also at Corinth) as possibly the earliest example.

⁵³ Kaminski (1991), 74, 99–100, 149 (no. I a 2).

⁵⁴ Kaminski (1991), 116; Pafford (2006), 110.

⁵⁵ Pafford (2006), 140–141.

Aphrodite Ourania, found reused in a house in Athens and thus no longer *in situ*, that has been attributed to the Sanctuary of Aphrodite situated on the north slope of the Acropolis.⁵⁶

Worshippers most likely encountered offertories of different sizes, moveable and immoveable, on a regular basis when arriving at and moving about the sanctuaries. ⁵⁷ The offertories would be in place to accommodate the visitors all year round and to aid the enforcement of the rules for coin offerings from individuals visiting the sanctuaries. ⁵⁸ The availability of the offertories could suggest that even when no priests were present in the sanctuaries, visitors would have been able to engage in sacrificial rituals. In a Hellenistic inscription from Serapion A in Delos, well known for its rich epigraphic evidence, the keeper of the *thesauros* even urges the worshippers to voluntarily make an offering upon entering the sanctuary. ⁵⁹

The archaeological evidence of offertory boxes underlines that their use was a general practice during the Hellenistic period. Since the evidence on an earlier use of the offertories is much more limited, it is difficult to make generalizations. Nevertheless, the early examples from Corinth and Athens suggest that the use of offertories designed for the reception of coins was well understood and implemented in the sanctuaries before the Hellenistic period, simultaneously with the full implementation of the use of coins in the secular world. The increasing use of coins both in the day-to-day business of the administration of the sanctuaries, and as part of the rituals, is reflected by the archaeological record, which complements the written record.

⁵⁶ "SEG 41-182. Athens. Treasury-Box of Aphrodite Ourania, Early 4th cent. B.C.", in: *SEG* (Consulted online on March 14., 2017 http://dx.doi-org.uaccess.univie.ac.at/10.1163/1874-6772_seg_a41_182); Kaminski (1991), 154 remarked on this as unpublished.

⁵⁷ Cf. Kaminski (1991), 118–120.

⁵⁸ See Pafford (2006), 118–123 for reconstructing the rules connected with the Sanctuary of Artemis at Aulis, which probably also involved the offerings of coins.

⁵⁹ Kaminski (1991), 124 with additional examples.

The offertories served as an administrative tool invented to support the collection of payment in coins for different kinds of ritual services provided. ⁶⁰ Contributions or fees were required on different occasions: offerings or voluntary contributions could be made, the sanctuary personnel could have expected these in exchange for providing services, the offertories could be used to collect fees, or could possibly receive a contribution placed in recognition of access gained to perform rituals on your own. The latter was most likely under the subtext that a lack of payment would result in some kind of retribution. It evidently also became legitimate to collect coin dedications previously not available into offertory boxes; this is especially well illustrated by the example of Oropos, where coins previously thrown into a spring were collected in *thesauroi* instead. A major consequence of the use of *thesauroi* that could be re-opened was that the coins now became available for reuse by the sanctuary administration.

Due to their flexible nature, acting as both objects and means of exchange, the treatment of coins should probably not necessarily be assumed to have been identical with that of other objects entering the sacred sphere. The line between placing a coin as an offering or voluntary contribution and paying a sacred fee into the offertories seems to have been malleable, as the *thesauroi* essentially were used for all purposes; except when coins were placed in immoveable offertories that could not be reopened. As coins were conceived of as reusable objects, this attribute would only disappear if they were withdrawn from circulation or their nature changed permanently. The problem of "reprocessing" sacred property may have been circumvented through the use of offertories and thus not perceived as problematic as in other cases, such as the melting down of the Golden Nikai during the Peloponnesian War (further below), or at all.

⁶⁰ Kaminski (1991), 98–106; Weikart (2002), 145.

IV Coins from archaeological contexts

The abundant coin evidence from sanctuaries may be grouped into two main categories of hoard finds and stray finds. Coins have been excavated in different areas of the precincts of sacred structures, both within and outside, and in different contexts, as illustrated earlier by the example of Nemea. Although the serendipity of the finds determines the extent of our knowledge, it is nonetheless worth the effort to examine the categories and contexts of the coin evidence in order to evaluate their use as objects for ritual purposes.

Hoards: A number of the coins found in the context of Greek sanctuaries, from the beginning of their monetization in the Archaic period, were found accumulated into hoards. The term "hoard" is a flexible designation used to classify two or more coins—and other kinds of pieces of metal such as *hacksilber*—found together. Hoards can thus merely be evidence of the accidental accumulation of coins in specific spots or evidence of intentional actions. Coin hoards collected and stored or buried intentionally are highly subjective in terms of selection of content in regard to both coin types and chronology according to the ideas of the owner of the valuables, which may not always reflect the coin types circulating at the time of burial. For example, a hoard buried in Egypt before this region was monetized would suggest that the content of the hoard was important with respect to bullion and not necessarily for the coins or coin types themselves. Evidently, the reasons for burying valuables (especially as they were not necessarily confined to coins) are not always explicit.

Outside the context of the sanctuaries, the identity of the individuals, who buried hoards and most likely expected to be able to retrieve the buried valuables, remains completely unknown.⁶² The burial of a hoard in the specific context of the sanctuary is another matter. Such a

⁶¹ Holle (1978), 173–175.

⁶² Holle (1978), 187; Myrberg (2009), 159–160, 171.

burial must be seen as evidence of a conscious act within a sacred setting, and we should presume that the administrators of the sanctuary would have overseen all such deposits made in sacred ground. Even so, the reasons for, or intentions behind, the different kinds of accumulations of coins are not always clear, for example whether all hoards were placed or buried intentionally (thereby simultaneously withdrawing the coins from circulation and thus demonetizing them), or whether they were accidental accumulations of coins near specific features. Thus, we find several terms applied to these: foundation deposits, permanent offerings, votive deposits, etc. The divisions between these categories are not always as distinct as the labels seem to imply, and any identification mainly relies on the archaeological context, which can present us with problems.

The Temple of Poseidon at Isthmia dating to the mid-fifth century provides a very early and rather complicated example. ⁶³ There 135 silver coins (some of which were labelled counterfeit) were found scattered mainly in the *pronaos* of the Archaic temple together with other objects (pottery fragments, jewelry, bronze objects etc.). The traces of fire found on some of the objects suggest them to have been in storage in the Archaic temple when this building was destroyed. This possibly happened at the time of the Persian Wars. ⁶⁴ The question is how the presence of the coins and other objects in the foundation of the Classical temple should be understood. The answer may be found in a correlation between the find situation, where a valid attempt to reconstruct the situation at the time of excavation has been made, ⁶⁵ and the composition of the coins, more specifically the presence of the possible counterfeit coins.

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⁶³ IGCH 11 5

⁶⁴ Broneer (1955), 135–136, (1971), 1, 3, 10, and (1976), 44–45; Müller-Zeis (1994), 99–100 cat. no. 60; Gebhard (1998), 93; Weikart (2002), 133–134.

⁶⁵ Gebhard (1998), 93–96.

Disregarding the validity of the coins for a moment, it seems likely that the treasure deposited in the Archaic temple, perhaps in a depository inside the temple. 66 was left scattered by its destruction, and remained in the fill of the Classical temple built over it in the middle of the fifth century. This is substantiated by the fact that, according to the excavation report, the coins and objects were found scattered in all of the three trenches excavated in the area of the pronaos of the Archaic temple, ⁶⁷ and not located in a more concentrated area. This does not necessarily imply that these objects were simply overlooked or forgotten in the fill. They may still have had a sacred quality because of association with the older temple, ⁶⁸ although the exact nature of this is very difficult to reconstruct, especially considering the presence of the plated coins. If the silverplated coins from the Isthmian sanctuary are counterfeits, and were deemed as such at the time, it seems unlikely that these coins would have been included in a deposit placed to consecrate the foundation of a new temple. In this case, we are clearly not dealing with a regular foundation deposit.⁶⁹ However, it is possible that the coins were either not recognized as plated or recognized but still accepted as official coinage (discussed further below), thus leaving the issue open. A similar and earlier example of the appearance of electrum coins in the fill of a temple is that of the Temple of Artemis at Ephesos. Also here the sacred nature as a possible foundation deposit of the coins has been contested, 70 but again the objects may still have had a sacred quality to them. 71

During the Hellenistic period, the evidence becomes more substantial. In the Hemithea temple, four silver and 171 bronze coins were found scattered within a one m² area in the fill below the floor of the *cella*, together with the fragments of a *kantharos*, although there seems to be no

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⁶⁶ The excavator suggests the coins may have been stored in a *thesauros* to the left of the entrance into the *cella*, analogous to the situation in the Archaic temple in Corinth; cf. Broneer (1971), 5 n. 14.

⁶⁷ Broneer (1955), 135–136 and (1971), 10; Müller-Zeis (1994), 30; Gebhard (1998), 99–100.

⁶⁸ See Crawford (2003), 69–70 also referring to the long tradition of using foundation deposits.

⁶⁹ As stated amongst others by R. Müller-Zeis (1994), 30.

⁷⁰ Hogarth (1908); Bammer (1990), 138–141, 148–150; Müller-Zeis (1994), 27–30; Schaps (2004), 93–96.

⁷¹ Crawford (2003), 69.

clear connection between the vessel and the depositing of the coins. Based on the dating of the latest coin to Demetrius Poliorketes, the temple was built around 300, replacing an earlier shrine of possibly a Classical date.⁷² The concentrated find situation of the coins suggests that they were placed here intentionally before the erection of the Hellenistic temple and should therefore be understood as a foundation deposit,⁷³ but it is difficult to determine this with absolute certainty.

In the Dionysus sanctuary of Kali Vryssi 34 coins were found in the destruction layer. In this case, the coins have mainly—and probably correctly—been identified as evidence for the dating of the operational period of the sanctuary from the third quarter of the fourth century, as well as representative of coins circulating at the time of the destruction of the sacred structure in the early third century. The coins are thus not evidence of hoarding, but simply a concentration of stray finds,⁷⁴ offering insight into the day-to-day operations of the sanctuary before its destruction.

The evidence of a coin hoard from Alabanda was published in 1905, though the publication only mentioned that a hoard of 56 bronze coins of one type (Apollo/lyre) was found in the *naos*. ⁷⁵ In this case, the imprecise recording of the finds makes any attempt to reconstruct the find situation and reason for the burial nearly impossible.

Generally, the use of coins/hoards as foundation deposits and votive offerings evidenced in later periods and other regions have been thought to suggest that these were regular features also in the core of the Greek world. However, the evidence is scanty, and the find situations are often far from ideal, which leaves much room to hypothesize, as briefly illustrated here.

⁷² Cook and Plommer (1966), 39–43, 68–71, 168–170.

⁷³ Müller-Zeis (1994), 30–31, 101 cat. no. 69; Weikart (2002), 134, no. VII 2.

⁷⁴ E.g. Kali Vryssi, Liampi and Peristeri (2010), 3, 10–12.

⁷⁵ Bey (1905), 454–455; Rigsby (1996), 326–328; IGCH 299, p. 44.

⁷⁶ Crawford (2003). 70.

⁷⁷ See i.a. Müller-Zeis (1994) and Weikart (2002) for extensive accounts of this.

Counterfeit coins in sanctuaries: The presence of the aforementioned silver-plated coins in the fill of the Temple of Poseidon in Isthmia is not unique, even if such finds are rarely archaeologically documented, and it is known from written sources that sanctuaries played a role in the withdrawal of counterfeit coins from circulation.⁷⁸ The written evidence, however, is of a later date than the archaeological evidence.

The Isthmian excavation publication does not state how many coins were counterfeits, only that they were Aeginetan (turtle/incuse) and Corinthian (Pegasus/incuse) silver-plated ones, ⁷⁹ both common currencies during the later Archaic period, equating to the early period of monetization. The presence of these coins is not a surprise, as the role played by sanctuaries as storage places for such coins is described in later written sources. ⁸⁰ But the question is: should the Isthmian coins be regarded as counterfeit coins (in the sense of being "bad coins," according to Nikophon's Law, below), or were they officially minted, put into circulation and thus regarded as legal tender? ⁸¹ If the coins are to be regarded as counterfeits, it must be considered whether such coins were deposited in temples during the late Archaic period, or if this was a later practice.

The Athenian Coin Law of 375/4, 82 perhaps better known as Nikophon's Law, reflects the need to regulate coins circulating in Athens, at least in early fourth century, when the Athenians saw themselves confronted with different kinds of official, imitative and fraudulent coins. 83 In connection with the counterfeit coins, the law is concerned with the control and handling of these, their storage in the temple, but also with the punishment for people using them. Counterfeit coins may have been a growing problem in the financial and political crisis years during and after the

⁷⁸ Broneer (1955), 135–136, n. 33.

⁷⁹ Broneer (1955), 135 and (1971), 3, 5; Stroud (1974), 174–175.

⁸⁰ See Stroud (1974) on Nikophon's Law.

⁸¹ Van Alfen (2005), 328, 337.

⁸² Stroud (1974), 157–188.

⁸³ Buttrey (1979), 44–45; Van Alfen (2005), 322–323, 326; Aleshire (1989), 103.

Peloponnesian War.⁸⁴ Earlier on, Aristophanes had already reflected on the problems brought on by this crisis in *The Frogs*, which dates to the final years of the war, in his reference to the use of Athenian silver-plated coins issued by the city during a time of severe distress.⁸⁵

However, where Aristophanes' mention of the state-controlled production of low quality (plated) coins during the late fifth century underlines that these could have been put into circulation legally, the introduction of Nikophon's Law and condemnation of the use of "bad money" by Demosthenes in *Against Timocrates* (212-214), are reactions to the problems with the various coins in circulation. Nikophon's Law and Demosthenes' address of the issue underline that with the progress in monetization, problems with plated, debased or counterfeit coinage increased, ⁸⁶ even if it is difficult to reconstruct the extent of this phenomenon. ⁸⁷ This increase demanded legal steps to either ban or remove such coinage from circulation.

Written evidence of the specific handling of the counterfeit coins in sanctuaries is found in the early fourth-century inventory of treasures of the Artemis Brauronia Sanctuary on the Athenian Acropolis. It is also mentioned in the Hekatompedon inventories from the Eleusinion, wherein it is described how the counterfeits were sent from the sanctuary in Eleusis to the Hekatompedon in Athens. The storage of these coins may have been moved to the Metroön in the early fourth century where other forgeries were also stored. The fact that during the same period the *opisthodomos* of the Parthenon appears to have been converted into the main coin treasury of Athens concurs with the apparent concentration of coins in storage. Even if tempting to pursue, it

⁸⁴ Stroud (1974), 157–188; Harris (1995), 106.

⁸⁵ Arist., Frogs, 1. 718–726; Ferguson (1932), 88; Stroud (1974), 171–172; Van Alfen (2005), 328.

⁸⁶ Van Alfen (2005), 339–340.

⁸⁷ Van Alfen (2005), 338, 344.

⁸⁸ Ferguson (1932), 93–94, n. 2; Stroud (1974), 175–178, n. 72; Melville-Jones (1993), nos. 165–166; Kurke (2009), 423, n. 14

⁸⁹ Harris (1995), 106; Kurke (2009), 423, n. 14 listing epigraphic references, suggests this transfer because of Nikophon's Law.

would be a purely hypothetical consideration whether the origin of the counterfeit coins played a role in the decision to place the corrupted coins in the sanctuaries. The exceptionality of objects could prompt this, as it was seen in connection with the storage of the tools used when the golden Nikai were melted down during the final years of the Peloponnesian War, the metal available to be coined *in extremis*. The storage of the dies for this purpose was preserved in later inventories.⁹⁰

Why and when the sanctuaries came to play a major role in the withdrawal of the counterfeit coins is difficult to pinpoint. The written evidence post-dates the possibly counterfeited coins from Isthmia. It is therefore difficult to determine to what extent the presence of the potentially "bad coins" in the Isthmian sanctuary represented the need to regulate the circulation of the counterfeit coins during the Archaic period. It is quite possible that sanctuaries played a role in this particular process already in the fifth century, and that the phenomenon most likely grew in step with increasing monetization, 92 although the evidence is slim.

Individual coin offerings: Basic traits of human behavior become especially apparent when looking at the use of individual coins in sacred contexts. Even if stray coins appear in greater concentrations in areas were commerce took place, ⁹³ they were evidently not restricted to these areas and could be used in different ways, such as offerings in sanctuaries, as already mentioned in connection with the use of offertories.

From written sources it is known that individual coins were used to fulfill specific sacred rituals, such as being thrown into springs to pay healing fees, as related by Pausanias in connection with the sanctuary of Oropos.⁹⁴ Other references mention the placing of coins on altars, tables or

⁹⁰ Ferguson (1932), 86–95, 129, n. 1; Thompson and Thompson (1970), 1–6; Kurke (2009), 425.

⁹¹ Kurke (2009), 428, n. 26.

⁹² According to Stroud (1974), 171–172, n. 50 the use of counterfeit coins may date back to the sixth century, in reference to Herodotus III 56, telling how Polykrates of Samos used gilded lead coins to pay the besieging Spartans. The basis for such a deduction is, however, very slim.

⁹³ Knapp and Mac Isaac (2005), 27–30.

⁹⁴ Paus. I 34, 2–5.

cult statues, 95 although these are referred to as general practices, which cannot be dated more specifically. Sanctuary staff would most likely have removed such offerings on a regular basis, after which they may have been either deposited in the sanctuary or reused. The coins that escaped this procedure would account for stray coin finds in the near vicinity of cult bases or altars. 96 The recognition of coins as dedications among the archaeological remains is very difficult, despite their value as testimony to human behavior within the sacred space. Indeed, if not for the literary references, our knowledge of such practices would be very limited. Crawford has pointed out that in Hellenistic Italy, the *thesauroi* became the place where such undifferentiated coin deposits could be placed. 97 That this also appears to have been the case in Greece is illustrated by an example from the second century from the cult room of the Temple of Artemis at Messene, where the offertory box was placed in front of the cult statue, ready for use. 98 This allows for at least the suggestion that such traditions were firmly in place during the Hellenistic period.

Graffiti found on a very limited number of coins suggests that they have become demonetized objects. ⁹⁹ Both the sanctuary administration and the dedicators could have used graffiti either to mark out the coins as sacred property when they were received or to denote them as gifts. ¹⁰⁰ Another option is the use of coins specifically designed and minted for use within the sanctuaries, but this is phenomenon is confined to very particular chronological periods and places. ¹⁰¹

⁹⁵ Lenormant (1874-1877), 327-328; Kaminski (1991), 124 n. 403, 128-129.

⁹⁶ This could theoretically apply to a Corinthian fifth-century silver coin found close to the west face of the long altar in the sanctuary of Poseidon in Isthmia: Broneer (1971), 100.

⁹⁷ Crawford (2003), 73.

⁹⁸ According to Kaminski (1991), 160–161, no. II 2 this is also found in connection with other cult images (Thasos, Amathus, and Andania).

⁹⁹ i.a. Lenormant (1874-1877); Manganaro (1983).

¹⁰⁰ The publication of an article on this topic is forthcoming by author.

¹⁰¹ e.g. Psoma (2008), 227–255; critically commented on by Nollé (2014).

Evidently, the dedication of individual, undifferentiated coins grew for making small offerings and paying fees. Such offerings could also, however, be so special or rare that this would be noted and registered in inventories. The excavator at Isthmia suggested that the three golden Darics found in the sanctuary of Poseidon were dedications in the Classical temple. Seven if the dedication of such rare and valuable coin objects hardly compares with the generic coins placed in offertories or possibly laid out on the base of a statue, the custom of using individual coins as offerings is thus accounted for through both written and archaeological evidence.

As with other kinds of offerings, coins were offered with the expectation of receiving something in return or as an expression of gratitude for something already understood as received. What separates coin offerings from others were their reusability, as emphasized earlier. ¹⁰⁴ This could vary according to their treatment as either a commodity or means of exchange, ¹⁰⁵ which increasingly seems to have gained flexibility in the context of the sanctuaries. The fact that the coins could be reused in the sanctuary's favor was most likely a major factor in this development.

V Concluding remarks

In step with the monetization of the Greek world, space was specifically created to accommodate both the general use of coins and the emerging use of coins as part of existing and new religious practices; a mentionable example, the concentration of coins in the Athenian *opisthodomos*, testifies to the growing presence and importance of coins within the sanctuaries. However, in regard to sacred matters and the roles played by coins, the available evidence is not consistent enough to allow more than glimpses into the reality of ancient sacred life in sanctuaries. A correlation between the archaeological material and the written evidence is necessary in order to

¹⁰² Kraay (1976), 34; Seaford (2004), 129; Kosmetatou (2004), 148.

¹⁰³ Broneer (1962), 5, Pl. 2b, and (1971), 170.

¹⁰⁴ Cf. Crawford (2003), 69. His focus is on coins in votive deposits in Hellenistic Italy.

¹⁰⁵ Panagopoulou (2007), 330–331.

reconstruct as well as possible the ancient reality of the use of coins in specific sacred contexts. When these are combined, a more detailed—if still incomplete—picture emerges. Within this it is clear that, in addition to their economic value, coinage gained increased importance and their use was ritualized, for instance as dedicative objects and offerings, which more often than before replaced traditional in-kind gifts of the late sixth century. They were used both to rationalize the existing use of dedications and also to complement them.

This is especially visible in the growing use of *thesauroi* in the form of offertory boxes. These are a physical testimony to the pragmatic relationship of employing coins in Greek cult practises: they were used as a means to collect payment both for ritual services and for individual offerings – and by extension to make the coins available for reuse by the temple staff.

The appearance and greater use of the offertory boxes from the late fifth century correlates with the increasing implementation and use of coins during the same period. By the fourth century, coins had become thoroughly integrated into the Greek world. With this a dark side of the monetarized economy emerged, as the presence of counterfeit coins or otherwise "bad" coins increased in appearance, although an understanding of coins as either "bad" or "acceptable" counterfeits varied according to time and place. The role of the sanctuaries as storage space for such coins is far from clear, as the written evidence postdates the archaeological evidence, making any claims about the involvement of the sanctuaries in such practices difficult to determine.

Through simple measures, it appears that coins could change their own nature according to context of use: from a monetary object to a dedication/fee and back again. In some cases, this could entail a permanent demonetization of the coins, such as was the case of the four coins melted onto one side of an ingot from Poseidonia, the use of closed offertories, or the depositing of coins in the foundation of temples. A reentry into circulation is possible in connection with the reuse of the

coins placed in the offertories emptied on a regular basis. In most cases, it would have been impossible to distinguish coins used within the sanctuaries from coins used in secular contexts. The possibility that at least a part of the coins entering the sanctuaries and even used in connection with rituals could also have left the sanctuaries again, especially with the increasing use of the offertory boxes, cannot be ruled out. This could for example take place when it was necessary to hire manual labor in connection with construction work, etc. As the both the written and the archaeological evidence shows, only in some cases do the coins seem to have lost their reusability and were consequently demonetized.

The monetization of Greek society evidently intensified the economic and rational thinking of the administration of the sanctuaries, including the development of administrative measures and the development of space to secure valuables. The monetization of the sacred sphere evidently caused physical changes. The possible reuse of coins from the sacred sphere may also have caused other changes, such as how sacred property could be handled. It is unclear, however whether this may also have reflected a shift in the understanding of communication between the worshipper and the god.

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