Money and the Issues of the Age

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For when they had come to supply themselves more from abroad by importing things in which they were deficient and exporting those of which they had a surplus, the employment of money necessarily came to be devised. For the natural necessities are not in every case readily portable; hence for the purpose of barter men made a mutual compact to give and accept some substance of such a sort as being itself a useful commodity, easy to handle in use for general life, iron for instance, silver and other metals, at the first stage defined merely by size and weight, but finally also by impressing on it a stamp (charaktēra) in order that this might relieve them of having to measure it; for the stamp was put on as a token (sēmeion) of the amount.

Aristotle, *Politics* 1257a

The above passage is one of several texts that concern money attributed to Aristotle, located within his discussions of justice (*Nicomachaean Ethics*) and politics (*Politics*) (Finley 1970). Aristotle's thoughts on money reflect the views and anxieties of an educated wealthy Greek in the fourth century BCE, but significantly he attributes the invention of money to increasing overseas exchange, that is, transactions that went beyond small, localised groups. This tale of progression from 'barter' to 'money' has since been repeated in innumerable accounts of the 'invention' of money, so much so that Aristotle's text here might seem almost clichéd. But Aristotle was writing at a time of transformation in the Mediterranean. He had tutored Alexander the Great, whose conquests created a new series of connections with lands beyond the Mediterranean Sea. Money played an important part in this connectivity, as well as in the formation of different governmental systems in this period, and one might see this reflected in Aristotle's discussions. Indeed, if one were to characterise what role money played in the issues that loom large in the ancient world, an increase in cultural connectivity and its consequences (conquest, trade networks, colonialism, war and conflict, the transformation of identities and religion) is key. Consequently, this forms the focus of the following discussion.

Connectivity and Cultural Contact

Herodotus records that the Lydians were the first ancient people to use coins of gold and silver (Herodotus 1.94). Archaeological evidence demonstrates that coinage did emerge in this region (modern day Turkey), with weighed pieces of electrum (an alloy of gold and silver that naturally occurs in the area) found alongside stamped pieces of the same material. The earliest known context for these objects is a foundation deposit from the temple of Artemis at Ephesus, dated to the first half of the sixth century BCE (Thompson 2003: 68). But coinage was an evolution of earlier systems that had utilised other objects as money: increased urbanisation in the Bronze Age and the resultant changes to material culture resulted in a greater demand for raw materials and a more developed trade network. Early exchanges relied on a common cultural 'code' or agreement about what objects had value. Metals came to dominate these exchanges, since they were neither too rare nor too common, could circulate, and could be melted down and converted into objects that suited different local cultures. With this development participation within wider Mediterranean trade networks no longer relied on a common cultural code, metals functioned as a form of 'proto-currency' (Sherratt 1993). Scientific analysis of copper objects from the Bronze Age show a common isotopic signature, suggesting a strong and dynamic series of inter-regional exchanges, with metal moving, being melted down and recycled again and again in different regions (Bernard Knapp 2000). The exchange of metals was both a product and a facilitator of increased connectivity. Metals took on set forms and weights. In the ancient near east, linen wrapped parcels of silver pieces have been found fastened with a seal as early as the twelfth century BCE. This has been seen as a development towards the invention of 'coinage' proper, since a coin is essentially a pre-weighed piece of metal guaranteed with a stamp (Thompson 2003).

Further east other materials fulfilled an exchange role, but again we find remarkable connectivity. In China and India, cowrie shells may have functioned as a form of exchange along trade routes; indeed, one form of cowrie is called *Cypraea moneta* in recognition of its monetary function (many Chinese characters to this day contain the pictograph for cowrie in words connected to value or money, Xinwei 1994: xxii). Like metals, cowrie shells had qualities that made them suitable as a form of exchange: they were durable, portable, and neither too rare nor too common. When cowrie shells acquired some of the functions of money within China remains debated (namely due to on going debate about what the definition of 'money' might be); but from the twelfth century BCE they are found in quantity, likely brought to the region from the Indian ocean through Central Asia (Yang 2011). Both bronze cowries and moulds found for casting bronze cowries have in the region of the Chu state of the eastern Zhou period (c. 770-222 BCE); these bronze cowries carried inscriptions and clearly functioned as currency.

'Coinage' as we might recognise it appeared in Lydia in the sixth century BCE; by 480 BCE more than 100 Greek cities in Greece, Italy, Sicily and Turkey were minting their own silver coinages (Osborne 2009: 239-41). Initially these coins circulated alongside bullion, suggesting that pre-weighed pieces of metal and coinage were interchangeable at this early stage. The speed with which silver coinage was adopted across the Mediterranean by Greek cities must reflect existing networks and connectivity, a suggestion furthered by the types of coinage adopted. Greek cities in the western Mediterranean frequently adopted coinage that initially weighed and/or looked similar to the issues of cities to whom they had connections in the eastern Mediterranean. The Greek colony of Massalia (Marseilles), for example, adopted denominations and designs that recalled the coinage of their 'mother-city' Phocaea (located in western Anatolia). Existing cultural networks thus contributed to whether coinage was adopted, and what type (Rowan 2013: 112-13). That other factors were also at work in the adoption of coinage, however, is evident from the cities that encountered coinage but did not adopt the medium. Rome, for example, did not strike her own coinage until the third century BCE, and instead continued to use pieces of bronze (*aes rude*). Settlements, tribes and peoples who were outside the connected Mediterranean (in Britain, Germany, interior Spain) were also slower to adopt coinage as a monetary form.

Fig. 7.1: Copper coin of the Indo-Greek Bactrian king Menander, c. 160-145 BCE, 18.3mm, 2.44g. On the obverse is a helmeted bust and a Greek legend reading *King Menander, Saviour*. The reverse shows the goddess Athena and a legend in Karosthi script naming Menander as King and Saviour. Yale University Art Gallery, 2001.87.14562.

Cultural contact only increased from the fourth century BCE. The military campaigns of Alexander the Great and his successors brought Greek settlers, culture and Greek silver coinage to India; the subsequent interactions between cultures resulted in coins of Indo-Greek kings in what is now Afghanistan and Pakistan, which carried Greek language on one side and Karosthi on the other. A second century BCE hoard from the Graeco-Bactrian settlement of Ai-Khanum contained Indian punch-marked silver coinage as well as coins in the name of the local Indo-Greek ruler Agathocles, demonstrating an intermingling of cultures and monetary-systems. King Agathocles (c. 185-170 BCE) struck coinage on the Greek weight standard, with Greek legends and images, including a 'pedigree' series honouring previous Greek rulers of the area, but also issued currency on an Indian weight standard (square in shape) that carried imagery referring to Hindu deities and Buddhist beliefs with legends in Greek and Brahmi (Narain 1973, Hoover 2013: 25-31). Agathocles and other Bactrian kings were also the first to issue coinage in a copper-nickel alloy, an alloy otherwise only known in China at this time, and which wouldn't be used again for coinage until the nineteenth century.

The date of the first Indian coins (square pieces of silver with punch marks) is extremely controversial (dates range from seventh to fifth century BCE); archaeological evidence suggests, however, that Indian proto-coinage (bent silver bars) may have been influenced by Greek coinage via Achaemenid Persia (Cribb 2005: 8-19). Indian Kushan gold coinage was inspired by the arrival of Roman gold issues, with designs at times imitating their Roman predecessors (Cribb 2005: 10). Again the connectivity between cultures arises as an overall theme in the adoption of monetary forms. Alexander the Great's silver coinage, characterised by designs showing the head of Hercules and a seated Zeus, was influenced by the coinage of Persian satraps he encountered as he moved east through Cilicia (modern Çukurova in Turkey, de Callataÿ 2012: 178). Roman expansion and the resultant Roman Empire only intensified the connectivity in those regions that fell under Roman control (Versluys 2014), resulting in an increased adoption of money and monetisation. That money may have carried more than value with it is indicative in the adoption of coinage in Britain: the issues struck by Iron Age kings in the first century BCE, for example, are the earliest evidence for the adoption of writing in the region (Williams 2001).

Democracy and Imperialism

Money was also key in the formation of different governmental systems in antiquity, be it the democracy of classical Athens, or the Empires of China and Rome. Athens had used pieces of cut silver (described as *Hacksilber* by modern archaeologists) as money before the adoption of coinage under the tyranny of Peisistratus in the sixth century BCE (van Alfen 2012: 88-9). After a period of varying numismatic designs (*Wappenmünzen*), Athens adopted a standard imagery for its money: the head of the city's patron goddess Athena on the obverse, and an owl (an animal associated with Athena) and an olive sprig on the reverse, accompanied by a legend naming the coin as a product of Athens: ΑΘΕ. Money enabled a citizen democracy like Athens to function by allowing the city to compensate its citizens for participation in assemblies, jury courts, and for acting as magistrates, amongst other activities. Aristotle records that before the introduction of payment attendance at the assembly had been poor (Aristotle, *Constitution of Athens* 41.3). Money also enabled cultural development in the city by allowing government officials to pay poets and offer prizes for music and literary festivals, a development which has been linked to the development of Greek tragedy (Seaford 2008).

Fig. 7.2: Athenian silver tetrdrachm, fifth century BCE, 25mm, 16.71g. Yale University Art Gallery, 2007.182.271

Athenian silver coinage continued to be produced until the first century BCE, becoming a symbol of Athens and Athenian democracy (the latter the prerogative of elite citizen males). In this sense money acted as a medium of exchange and payment, but also as a medium of identity that one might 'think with'. The imagery on Athenian coinage provided a material focal point for Athenian identity, but so too did the metal (silver) and its high purity: the purity of Athenian silver coinage became equated to the purity of Athenian citizens. Indeed, Athens resisted striking the convenient, bronze small change that gradually appeared in other Greek cities, suggesting that the ideological role of Athenian coinage at times overrode its functionality. The connection between Athens' silver coinage and its democracy is clearest when both came under threat during the Peloponnesian War (431-404 BCE). In 406/5 BCE, having been cut off from their silver mines by the Spartans, the Athenians issued two emergency coinages: bronze coinage plated with silver, and small coins made with gold that came from the Nike statues on the Athenian acropolis (van Alfen 2012: 95). The contemporary playwright Aristophanes equated this corruption of the coinage with the corruption of Athens itself, now witness to an influx of foreigners:

> *We often thought that the same thing has happened*
> *to the city, in respect of the good and fine men among its citizens,*
> *as happened with the old coinage and the new gold.*
> *We do not make use of these coins, not counterfeit*
> *but the fairest, as it seems, of all, and only the ones*
> *struck well and ringing true among the Greeks*
> *and the barbarians everywhere, but (we use)*
> *these wicked little bronzes, struck yesterday*
> *and the day before with the worst possible striking.*
> *And those of the citizens whom we know to be noble and*
> *respectable, just and good and fine, reared in (the traditions of)*
> *the wrestling ground, the dance and music,*
> *we treat outrageously, and we make use of the bronze ones*
> *for every purpose, foreigners, red-heads, villains from evil stock, recent arrivals whom the city in the past would not have used*
> *even in the most random way as scapegoats.*

Aristophanes, *Frogs* 718-33 (= Melville Jones 1993 no. 86)

Aristophanes here equates what he considers to be 'true' Athenians with the well-struck, high quality silver coins of the city; the influx of foreigners is equivalent to the city's use of poorly struck bronze issues. We see the connection again in language: officials named *dokimastēs* tested Athenian coinage for forgeries, just as the process of *dokimasia* tested the authenticity of a citizen; both come ultimately from the Greek verb "to test" or "to evaluate" (δοκιμάζω). The Greek word for 'stamp' or 'die' was *charaktēr*, from which we derive our word 'character', and which in antiquity could also mean a characteristic or character of a particular person. The play between the two meanings of the word is found in Greek texts throughout antiquity. The philosopher Epictectus, for example, stated that one should reject a coin of the emperor Nero in favour of one issued by Trajan, since Nero's coinage is 'rotten'. A person who was gentle, generous, patient, and affectionate would be accepted by Epictectus and made a citizen, 'only see that he does not have the *charaktēra* of Nero' (*Discourses of Epictetus* 4.5.16-18). Epictetus demonstrates how coinage provided a metaphor for thought within ancient philosophy; Seaford has gone so far as to argue that the adoption of coinage within Athens (a homogenous, impersonal, universal medium that is both abstract as a unit of value and concrete as a physical object), was a precondition of pre-Socratic metaphysics, 'in which universal power belongs to an abstract substance which is, like money, transformed into and from everything else', as well as other philosophical thought (Seaford 2004).

At the height of her power Athens produced such a quantity of coinage that the phrase ‘sending owls to Athens’ became a proverb to describe a pointless action (the equivalent of sending ‘coals to Newcastle’ in English, although the phrase survives in its original in German: *Eule nach Athen tragen*; Melville Jones 1993 no. 56). The sheer volume of coinage produced by Athens and its purity meant that Athenian coinage transformed into what might be described as an ‘international’ currency, accepted in numerous regions in the eastern and (at times) western Mediterranean, and even minted by others. This last development meant that the Athenians had to introduce a law in 375/4 BCE detailing which ‘Athenian’ coins would be acceptable in the city: coins of Athenian type and pure silver were acceptable (regardless of the mint), plated or otherwise forged coins were removed from circulation (Melville Jones 1993 no. 91, van Alfen 2005).

As Athenian influence and coinage increased, other Greek cities reduced or ceased production. It remains debated whether this was due to the ready supply of Athenian issues, or was the result of an Athenian insistence that her allies use only her currency (van Alfen 2005: 94). A decree of the second half of the fifth century BCE (the ‘Standards’ or ‘Coinage’ decree, preserved on various stone fragments found in different regions), records that allied cities, who paid tribute to Athens each year, were to use Athenian coinage, weights and measures; silver could be brought to Athens to be converted into the appropriate currency for a fee (Melville Jones 1993 no. 78). Although much remains controversial, it is evident that at the height of her power Athens demanded payment from her allies in her own currency. Money played a role in visualizing democracy, but it also came to shape the Athenian empire. A parallel might be found in the Zhou coinage of China: the inscriptions on these coins refer to a variety of locations, although they are only ever found within the region controlled by the Zhou dynasty. The likely explanation is that the inscriptions refer to the source of the tribute that funded the coinage (Cribb 2005: 434).

Money, and in particular coinage, also played a role in the formation of the Roman Empire. The northern boundaries of the Roman Empire roughly correspond to the areas that had been monetized in the Iron Age, suggesting that societies with money were easier to conquer (Howgego 2013). Money acts as a medium of commensuration that renders different value and cultural systems equivalent; it thus plays a key role in contact, conquest and colonial situations (Comaroff and Comaroff 2006). Whether the existence of money meant that differing regimes of value could more easily merge, and/or the use of coinage reflected an elite social hierarchy that made conquest easier, or because the adoption of coinage was also frequently followed by the adoption of other parts of Roman culture like imagery and writing (as in Britain), the geographical alignment between the use of coinage and Roman expansion indicates the connection between money and imperialism (Howgego 2013).

The Greek historian Polybius, who lived during an intensive period of Roman expansion in the second century BCE, also appears to have realized the connection. In his *Histories*, Polybius compares the constitutions of Rome and Sparta. The Spartans were slow to adopt coinage, a point that Polybius notes caused a problem in terms of growing Spartan power. He argued that while the Spartans conquered their neighbors, iron currency rods and goods-exchange were sufficient, but once they sought to expand beyond the Peloponnese, their exchange systems proved insufficient, ‘since these enterprises demanded a currency in universal circulation and supplies drawn from abroad' (Polybius, *Histories* 6.49.8-10). Polybius wrote as the Roman silver coin, the *denarius*, was becoming just such a 'universal' currency. The *denarius* was introduced in c. 211 BCE during the Second Punic War, at a time when Rome emerged as a serious Mediterranean power. The coinage was produced by melting down and re-striking other precious metal currencies, an imperialist act that ensured that the regions under her control (Sicily, Italy, and Spain at this stage) utilized only the precious metal coinage of Rome, and the messages it carried (Burnett 1995).

Fig. 7.3: Ban Liang Qian, 400-100 BCE. Yale University Art Gallery, 2001.87.45339

The unification of China under the Qin dynasty in 221 BCE also brought with it a standardized currency. Bronze *qin ban liang* (round coins with a square hole in the centre) circulated as accepted currency until the end of imperial China (Yang 2011: 9), initially with gold bullion also acting as a form of money (Scheidel 2008). Other types of currency that existed in China (e.g. cowrie shells, bronze cowrie shells, and utensil-shaped money) were repressed (Scheidel 2008). The control of monetary forms that frequently accompanied the formation of Empires in antiquity is also found in Ptolemaic Egypt. Evidence suggests that a 'closed currency' system was introduced, in which incoming currency had to be exchanged for lighter Ptolemaic coins; the government gained 3g of silver and 1.5g of gold for each gold or silver coin exchanged, as well as the fee charged for the conversion (von Reden 2010: 43-7). Under Ptolemy II a monetary poll tax was introduced, frequently paid in bronze coinage, which ensured monetization throughout the Egyptian countryside.

Money was thus used to form and consolidate governmental systems, but it also played a role in rebellions against established hierarchies. Indeed, the particular ideological emphasis given to coinage by the Romans (who treated coinage as a 'monument in miniature') meant money played a symbolic role amongst the differing groups who opposed Roman power. As an object connected to the government, and, in the Roman Empire, the person of the emperor, money attracted expressions of discontent. During the rebellion of Rome's Italian allies in the Social War of 91-88 BCE, Italians struck their own coinage with imagery communicating their own ideologies, and carrying the local Oscan language (Campana 1987; the coins were still on the Roman weight standard, however, and show Roman inspiration). One of the most poignant designs from this series was a silver *denarius* that had as its reverse a bull (representative of Italy) goring a wolf (representative of Rome) (Rutter 2001: no. 427).

The successive Jewish revolts against Roman control in 66-70 CE and 132-5 CE also witnessed the issuing of coinage that declared independence from Roman control. During the First Jewish War silver shekels and half shekels were struck depicting the *omer* cup on one side and pomegranates on the other, accompanied by legends in Paleo-Hebrew script reading “Sheqel of Israel” and “Holy Jeruslaem”. A new dating system was placed on the currency (Meshorer 2001:115-34, bronze coinage was also struck). The weight standard, writing (an intentionally archaic script no longer in use) and imagery were all statements of independent identity. During the Second Jewish War a form of local currency was again released, this time created by overstriking the Roman currency that was in circulation. This had the effect of proclaiming and fostering a sense of Jewish identity and independence while at the same time destroying the imagery of the government they were opposing (Gitler 2012: 491). When the Romans recaptured Jersualem after the Second Jewish War, they melted down and restruck the coinage of the revels, and cut the bronze coins to prevent their continued use. Roman reaction is seen in the The Jerusalem Talmud, which records that coins issued by rebels were not accepted (Meshorer 2001: 161-2).

Fig. 7.4: Silver denarius of the second Jewish revolt, 134/5 CE, 19.1mm, 3.3g, overstruck on a denarius of the emperor Vespasian. Legend in Paleo-Hebrew on both sides and a palm branch on the reverse; the remnants of the Latin legend from Vespasianic coin visible on both sides. Yale University Art Gallery, 2002.121.42.

Local civic coinages in the Roman Empire also occasionally show the removal or defacement of the imperial portraits of emperors who attracted posthumous condemnation (labeled *damnatio memoriae* in scholarship). At times this looks like the concerted actions of a local government, but other cases might have been isolated acts by individuals (Harl 1987: 35). Roman coins found at the battlefield site of Kalkriese in Germany displayed signs of defacement (cuts and piercings); these were originally interpreted as expressions of disillusionment made by Roman soldiers serving in the area, but they might equally be the actions of the victorious Germans who might have ‘dismembered’ these objects of Roman government after their victory (Kemmers and Myrberg 2011: 98). These instances demonstrate the ideological role of coinage, and its connection to the person (and portrait) of the emperor.

War and Crisis

Money revolutionized warfare in the ancient Mediterranean. The conquests of Alexander the Great were facilitated by the professionalization of the Macedonian army by his father Philip II, a revolution funded by the acquisition of the rich mines of Mount Pangaion. With the gold coinage produced from these mines, Philip II was able to hire mercenaries and other Greeks, creating a highly trained professional army that could wage warfare all year round, a significant departure from the largely citizen based military forces of classical Greece (Diodorus Siculus 16.7.6). These were the first 'Greek' gold coins (Greek cities previously used Persian gold coinage, the 'daric') and were called *philippeioi* after their issuer (the word later came to mean gold coinage more broadly, de Callataÿ 2012: 176-7). Philip II also struck silver coins in greater quantity than any previous Macedonian king. The quantities and wide circulation of both these issues must have been a factor in the imitation of these coins by Celtic tribes in northern Europe.

Money also facilitated purchases and developments in military hardware, most noticeably with the acquisition of navies by Athens and other states (Herodotus 7.144, Trundle 2010: 237). The use of money to hire mercenaries meant that warfare increased in scale, but so too did the mobility of individuals, as soldiers became detached from their homelands. The movement of mercenaries became a key issue in the Mediterranean from the fourth century BCE (Trundle 2010: 229). A telling example is that of Entella in Sicily: Campanian mercenaries, who had been serving in Sicily and were discharged, travelled to the city. They were initially admitted as fellow citizens, but then the mercenaries slew all the men young enough to serve in the military, married the women of the city and claimed it as their own, overstriking what was likely their pay with a new coin design 'of the Campanians' (Diodorus Siculus 14.8-9, Lee 2000).

If money assisted in creating larger professional armies, then the existence of these forces in turn necessitated the continued issuing of coinage to pay them; a cycle that we see continuing throughout Mediterranean antiquity. The payment of military expenses would have formed, for example, a significant part of the expenditure of Rome, although coinage would also have been struck for other expenses. Funds would have arrived through rents, fines, taxes, as well as mines, but also through war indemnities and booty – indeed, the need to pay an army likely resulted in greater ferocity and looting in warfare (Rowan 2013). The incoming wealth from war is responsible for a cultural revolution in the Roman world, funding, amongst other things, building projects in Rome that transformed the city (Wallace-Hadrill 2008: 356). But war was not always successful or profitable. The ongoing and seemingly ever present costs of maintaining an army is likely one contributing reason to the slow debasement of Roman silver coinage throughout the third century CE; intensive periods of warfare, and Roman military defeats in this period, as well as a decrease in productivity in Roman mines, meant that lead was increasingly added to silver coinage with the fineness eventually falling to about five per cent (Estiot 2012: 543).

The economic effects of this debasement need further research, but the economic stress of the Roman Empire at this time is evident in the repeated reforms of the Roman monetary system. Eventually a system was created that relied not on silver, but upon a pure gold coinage, the *solidus*, which remained in use until the tenth century CE.

War also affected credit in the Roman world. When the Pontic king Mithridates VI invaded Asia in 88 BCE and instigated a massacre of Romans and Italians in the region, the resulting economic loss caused a collapse of credit in Rome. Cicero wrote that the monetary system that operated within the forum at Rome was linked with Asia, 'the loss of one inevitably undermines the other and causes its collapse' (Cicero, *De Imperio Cn. Pompei* 19, Kay 2014: 245). Similarly, Julius Caesar's crossing of the Rubicon in 49 BCE and seizure of the Roman treasury, and the ensuing civil wars, created such unease that lenders called in their debts. The resulting economic crisis required several official measures (Cassius Dio 41.37.2, Verboven 2003).

The disruptive effects of war are also evident in China, particularly in the Chu-Han war (206-2 BCE). The conflict resulted in millions of casualties and disrupted agricultural production. The solution to the lack of goods seemed simple: make more coins so that more people would be able to buy things (Xinwei 1994: 148). The Han dynasty reduced the weight of their gold and bronze currency in implementing this plan, not realizing that this would cause inflation (indeed, the rise in prices was blamed on merchants hoarding goods). Evidence of credit in China is harder to find, although the *Rituals of Zhou* record that governmental coin offices would make loans, whose size and duration was determined by the loan's purpose (Xinwei 1994: 98). Money thus both affected, and was affected by, the intense periods of military conflict in antiquity.

Identity and Colonialism

A recurring feature of ethnographic descriptions in classical antiquity is mention of whether a particular people made use of money, and what type of money they used. The *Geography* of Strabo (64/63 BCE – CE 24), for example, contains numerous passages on the topic: the Persians use coined money but gold and silver is channelled more towards objects than coinage (15.21), some on the Iberian peninsula use barter rather than money, or *Hacksilber* (3.7), those in Albania not use coined money, nor accurate weights or measures, and don't plan 'war or government or farming' (11.4). That a coinage or form of money might come to characterise a particular people is also evident in the repeated mention of Spartan money: the legendary Lycurgus allegedly banned the use of gold and silver coinage in the city, instead preferring to use the 'ancestral' currency of iron spits (*obols*). Lycurgus also reputedly made the currency so worthless that 'ten mina's worth required a large store in a house and a yoke of animals to transport it' (Plutarch, *Life of Lycurgus* 9.1-4). Thus, say our ancient sources, illegality and wickedness was prevented in the city, since the allure of money had been averted, since who would attempt to steal or take something that 'could not be hidden, envied if possessed, or even cut into pieces with any benefit?'

This connection between money, identity, and character is more marked in the classical world than elsewhere in antiquity. Ancient Chinese coins, although they had have varying shapes, carried only texts, not images. The peculiar direction taken by money in the classical world might be explained by the very beginnings of coinage. One of the earliest known coins is an electrum coin decorated with a stag and a Greek legend that reads ‘I am the badge/sign (*sēma*) of Phanes’ (British Museum, museum no. BNK,G.950). Electrum was an alloy with variable gold:silver ratios, which made the intrinsic value of each piece of metal variable. Scholars believe this problem led to the expedient of ‘stamping’ electrum; the value of the piece would thus being guaranteed by the state (or in the case above, by Phanes), rather than by the metal content of the object (Wallace 1987, Kroll 2012). Although electrum was quickly replaced by coinage of gold and silver, the practical uses of the ‘badge’ or ‘stamp’ had already been demonstrated, and the practice persisted throughout the classical world. It is this twist of materiality, perhaps, that led to the association between money and the identity of the issuer in the classical world, placing it on a different monetary trajectory.

Coinage and its designs not only reflected particular identities in classical antiquity, they also actively assisted in forming them. Just as politicians of the nineteenth century saw currency design as a media that might foster collective traditions and identities (Helleiner 2003), so too did emergent cities and settlements in the ancient Mediterranean often strike coinage with deliberately chosen types. An engaging case study can be found in the Greek settlements of southern Italy and Sicily. Although ancient literature, and subsequently scholarship of the modern colonial period, characterized these settlements as ‘colonies’ of a particular Greek ‘mother-city’, the archaeology of these towns reveals them to be more diverse than initially believed. Nonetheless the ideology of these settlers was that they were connected to mainland Greece and Asia Minor (Osborne 1998, Malkin 2003).

A unique, but nonetheless Hellenic ‘Achaean’ statement can be found on the coinage of Greek settlements of southern Italy (known as ‘Magna Grecia’). In the seventh century BCE a series of Greek cities were founded in the region, and in the sixth century several of these cities adopted coinage. The fabric of these issues was unique, although shared by several of the cities in the region: the reverse of the coin was an incuse imitation of the obverse. The overall effect gave the illusion of the design having been impressed onto the coin in repoussé style, although the coin was struck from both an obverse and reverse die. The skill and labor involved in this type of coinage was significant. Scholars disagree over why this particular design was adopted, but its use in several Greek cities in the region must have contributed to a sense of regional identity. Find evidence suggests that although the coinage did not circulate outside Magna Grecia, coins of differing cities could be hoarded together (and thus presumably circulated together), at least before 480 BCE (Holloway 2000: 480). The designs adopted for these first coinages in the region reflected the traditional stores of value that had existed in archaic Greece before the advent of coinage (e.g. a bull on coins of Sybaris, a tripod on coinage of Kroton, grain on the money of Metapontum). These images thus contributed to the idea that these cities were connected to a ‘motherland’ and a Greek heroic age, fostering a sense of ‘being Achaean’ (Papadopoulos 2002). The persistent representation of objects that had acted as stores of value before money can also be seen in ancient China, with the use of small spade-coins, knife-coins and ring-coins (Xinwei 1994: xxiii).

Fig. 7.5: Silver stater of Kroton, Southern Italy, 500-480 BCE, 20.5mm, 7.98g. The repoussé effect can be seen with the tripod, in relief on the obverse, and incuse on the reverse. Yale University Art Gallery, 2001.87.2344

Coinages of other Greek cities in southern Italy and Sicily focus on local landscapes, with rivers and springs appearing with frequency. Modern studies of colonization have demonstrated the importance of local landscapes in shaping new communities, and, in the case of rivers, how they mark the connectivity of one settlement with another (Frisone 2012). Rivers, represented as a man-faced bull, appeared on coins struck by Neapolis (Naples) and ancient Gela in Sicily, amongst others. The issuing of money at the beginning of a colony allowed the expression of what vision the (presumably elite) settlers had for their city. When the Romans began creating colonies outside of Italy in the first century BCE, part of the foundation often included the striking of a ‘local’ coinage (sometimes the *only* time local coinage was issued), whose imagery reflected the ‘idea’ of a colony and its identity. The use of this money must have contributed to a sense of common heritage amongst an otherwise mixed group of settlers (Rowan 2014). Both local landscapes and coinage provided a means for self-definition for settlers in a foreign land.

That, as in the modern world, these ‘colonial currencies’ may have reflected the conqueror’s gaze, or vision of an area, rather than any reality, might be seen in the coinage struck by for the veteran settlement of Emerita (Mérida) in Spain. The colony was founded in c. 25 BCE with veterans from the tenth and fifth legions (Cassius Dio, *Roman History* 53.26.1). Silver coinage was struck carrying the portrait of the emperor on the obverse, with the city walls of Emerita on the reverse (Sutherland and Carson 1984: no. 9). The city itself was under construction for decades after its foundation, but the image of a ‘final’ or ‘complete’ city on currency must have aided settlers in visualizing and identifying with their new home. The earliest bronze coinage struck in the name of Emerita showed the Roman city foundation ritual (contributing to the idea that this, like other colonies, were ‘mini-Romes’), as well as representations of the local river (shown as a female goddess spitting water out of her mouth), and legionary standards (Burnett, Amandry et al. 1992: 5-11). The use these coins, and their images, would have contributed to a cohesive identity for the new town. The connection between coinage and civic identity can be traced throughout the first three hundred years of the Roman Empire, particularly in the eastern Mediterranean (Howgego, Heuchert et al. 2005).

There is also a strong connection between money and personal identity. Graeber has pointed out the strange parallel between objects of personal adornment and objects that serve as currency in cultures across the ages: beads, shells, precious metals and other objects could be worn as jewellery as well as used as money (Graeber 1996). Jewellery, after all, serves as a store of value. Personal decorative objects, however, cannot be defined as all-purpose money, although at times they might have had a particular monetary function. For example, some metal torques (neck rings) within Celtic Germany weigh exactly the same amount as 100 coins of local weight, suggesting some connection between the two. Torques were also deposited, at times in identifiable religious contexts, suggesting that this object, which communicated personal prestige, might also have a secondary function (Hunter 2015: 103–5). Graeber connects personal adornment with monetary materials with the potential power this material holds for action - a public display of (purchasing) capacity. The same might be said of the personal display of money itself. As precious metal coinage travelled beyond the northern borders of the Roman Empire to Barbaricum in Late Antiquity, gold coins and medallions were converted into jewellery by barbarian leaders. This jewellery was frequently designed so that the portrait of the Roman emperor was on display (Bursche 2001, Eremić 2014). In a society which had no tradition of portraiture, the image of the emperor may have held as much power and prestige as the gold itself.

The imperial portrait certainly held power within the Roman Empire, imbuing the currency with the power of the monarch: the fifth century CE legal text the *Theodosian code* records that all *solidi* (gold coins) on which the imperial portrait appears are of equal worth; the law was evidently formulated in response to people valuing coins carrying ‘larger’ portraits as being worth more than coins with ‘smaller’ portraits (*Theodosian Code* 9.22.1). We should not take the surviving textual evidence at face value, but since Roman imperial coinage bore the face of the emperor, reports survive that it was illegal to carry coins into brothels, toilets or other places that might disgrace the imperial visage. Evidently the power of money was coupled with the power of the emperor (Wolters 1999: 308-18). The power or ‘charisma’ of the portrait is also the likely explanation behind the appearance of Roman coins, as well as imitation Roman coins, as pendants in southeast Asia. The coins likely arrived via India with other goods, and again the portrait appears to have been the important aspect of the object (Borrell 2014). The appearance of (imitative) Roman imperial portraiture in this region of the world again demonstrates the connectivity of antiquity.

Religion

America’s banknotes carry the phrase ‘In god we trust’, a motto of the nation that also, in this context, inadvertently references the role of trust in fiduciary money. Similarly many Greek coinages from the classical world carried imagery of deities, and one must wonder whether this imagery contributed to the trust placed in its value. It was only after Alexander the Great, when powerful kings came to be worshipped like gods, that living rulers began to appear on coinage in the Mediterranean (kings more so than queens, but women did appear. It was the rediscovery of Roman coinage in the Renaissance that led to the revival of portraiture on money, a tradition that has persisted until the present day, Stahl 2013). Dies, flans, and other minting materials have been found in temples in several classical cities (e.g. Himera in Sicily, Argos and Sounion in Greece), although we cannot always tell whether this meant minting operations took place in these spaces, or if the objects were simply deposited there after use (Cutroni Tusa 1982, Kalligas 1997).

The deposition of mint materials in temples has a parallel in the removal of temple holdings to be used as money. The most celebrated example is perhaps that of Athens, mentioned above. The gold coinage struck during the Peloponnesian War was made from the gold of the statues of Nike in the Parthenon. The dies used to make these coins were then deposited in the temple of Athena as an offering (Melville Jones 1993: no. 170). Some temples also invested or loaned money, capitalizing on the fact that, after the invention of coinage, offerings could now take the form of (or could be converted into) coin, which might then be used as a commodity to increase the temple's wealth. This investment could not occur when religious offerings consisted of grain, meat, or other goods; metallic, all-purpose money was transformative here. This change was not universal, but the invention of coinage collapsed any boundaries that might have existed between cult, government administration, and warfare in classical Greece. Davies has demonstrated that many of the cities which utilised temple assets were cities that relied on expensive naval power, which perhaps made them more pragmatic towards their cultic wealth (Davies 2001).

Given the strong connection between money, identity and government, it is not surprising that religion shaped the decoration (and at times the use) of money throughout antiquity. The currencies of the Jewish rebellions against Roman rule have already been mentioned; the Hasmonean dynasty (semi-autonomous rulers of Judea from c. 140-16 BCE) also largely refrained from reproducing human figures on their coinage in accordance with the commandment against graven images (Gitler 2012). The silver currency of the Sasanian Persian kings, who ruled Iran from 224 CE until the Islamic invasion of 651 CE, was also dominated by religion in its iconography, with many issues carrying representations of the Zoroastrian fire altar (Schindel 2005). This religious imagery might have contributed to the 'trust' of the currency as much as it underlined the religious right of the Persian 'king of kings' (*shahanshah)* to rule.

The rise of Christianity, however, was slow to have a marked effect on money, probably because it remained a 'private', rather than a governmental, religion for quite some time. The city of Apamaea in Phrygia placed an image from the story of Noah on its local coinage in the third century CE, since the local Ararat Mountain was identified as the biblical "mountains of Ararat" where Noah's arc came to rest. This tradition likely arose out of, and was connected to, a local Phrygian legend about a flood (Spoerri Butcher 2006: 250-60). Constantine's conversion did not result in a monetary revolution: overt Christian symbols were restricted to the chi-ro symbol and *labarum* (a military standard with the chi-rho symbol upon it, Abdy 2012). Although overt Christian imagery was slow and subtle in its appearance, Christian inhabitants of the Roman Empire saw Christian imagery even where it may not have existed. The Christian author Eusebius interpreted Constantine's numismatic portrait, shown gazing upwards in the style of Alexander the Great, as the emperor with his eyes uplifted in prayer (Eusebius, *Life of Constantine* 4.15). Whether this was the intended interpretation or not (and it is more likely Constantine was aligning himself to Alexander), it was evidently important to Eusebius that money, as an object guaranteed by the emperor and associated with him, should reflect his own religious world view.

Fig. 7.6: Argentiferous bronze Nummus of Julian II, 361-363 CE, 27.4mm, 8.45g. Julian II is shown diademed and bearded on the obverse, while the reverse shows a bull and carries a legend referring to the security of the empire (*res publica*). Yale University Art Gallery, 2001.87.17834

Money, and its design, did not escape the tension that existed between ‘pagans’ and Christians in late antiquity. When coins of the ‘pagan’ emperor Julian (361-3 CE) were released showing a bull on the reverse, the design became a point of contention (inadvertently revealing just how much the inhabitants of the Roman Empire held the emperor responsible for the coinage struck in his name). The church historian Socrates (3.17.4-5) wrote that the Christian citizens of Antioch said that the bull ‘which was impressed upon his coin, was a symbol of his having desolated the world’, and was connected to Julian’s ‘pagan’ practice of animal sacrifice. Another church historian, Sozomen (5.19.2), records that the context behind these insults was that war preparations in Antioch had resulted in a rise in prices. When Julian attempted to reduce prices, merchants allegedly fled the city, and a scarcity ensured; the emperor’s beard and coin design became the focus of frustrations. Julian retaliated with a satirical work *Misopogon* (‘Beard-Hater) directed against the citizens of Antioch, which referred to the fact that he has been insulted not merely on account of his beard, but for the designs of his coins (355D). In the *Hymns against Julian* Ephrem the Syrian identities the bull as the golden calf of the Jews: ‘The bull of paganism engraved on his heart [Julian] imprinted on that image for the People who love it’ (1.16-20). Numismatic imagery thus might evoke a variety of interpretations according to culture and context.

Pseudo-, Private and Alternative Currencies

Keith Hart has observed that the two sides of a coin, ‘heads’ and ‘tails’, reflect the dual nature of money itself. Money (and its value) is simultaneously the product of a social organisation that is ‘top down’ (‘heads’) and ‘bottom up’ (‘tails’) (Hart 1986). Although money may be underwritten by the state, at its heart money is also a commodity whose value is agreed upon by two or more individuals. Although this chapter has focused on governmental currencies, money also existed beyond the state in antiquity, creating exchanges and relationships at a local level. In both imperial Rome and imperial China, much currency production remained local – either through the production of provincial coinage, small change struck by individual cities in the Roman Empire, or through the local production of coinage by individuals in China – the western Han dynasty, for example, allowed the private minting of coins (Xinwei 1994: 151).

The decision of the emperor Wen to allow private minting, a policy of non-interference that conformed to the emperor's Confucian outlook, did cause concern amongst officials. Jia Yi's 'Memorial admonishing against letting people have private coinage' was one of China's earliest monographs on monetary problems, and observed that people were abandoning the land in order to take up coin production instead (Xinwei 1994: 175-6). In 175 BC Jia Shan wrote:

'Money is a useless commodity, but it may be exchanged for items of great value. These items of great value are that over which the ruler exercises authority. To allow people to make coins is to have the ruler share his authority with them. This cannot be done for long.'

Han History, "Biography of Jia Shin", in Xinwei 1994: 177

The anxieties about currency produced 'beyond' the government here echoes the modern anxieties surrounding alternative currencies in the current age. At times the private production of currencies in China was restricted or banned, and the *Han Shu* records that if an individual produced poor quality coinage their face was to be tattooed in black ink (24B, 3b in Swan 1950: 234). Production of coinage by individuals outside the government is also known in the classical Mediterranean, although here the evidence is archaeological.

In the Roman world we find privately produced coins that imitate governmental currency (whose 'legality' or 'acceptance' remains a topic of discussion), as well as locally produced currencies that imitate the coinage of other cities, intended for local use within a local context. The best studied of these are the coins produced within central Italy in the first century BCE in workshops that have been labelled 'pseudo-mints' (Stannard and Frey-Kupper 2008). One 'pseudo-mint' was probably located in Pompeii and produced coinage, without any legend, that carried imagery adopted from the coinage of the cities of Ebusus (Ibiza) in Spain and Massalia (Marseilles) in France. Excavations at Pompeii have revealed that a significant portion of the small change in the city consisted of these 'pseudo' currencies – for example 45% of the coin assemblage from the recent American excavations consisted of these types (Hobbs 2013: 32). Another 'pseudo-mint' was likely located at ancient Minturnae (Minturno, Italy) and produced coins with designs adopted from Paestum and elsewhere; these issues are found in Italy and Sicily (Stannard and Frey-Kupper 2008). The production of these 'unofficial imitations' and 'pseudo' issues have been connected to the increased monetization of Italy in the first century BCE, and hence an increased need for small change. This demand was not met by the Roman authorities, who, for reasons unknown, ceased to produce small coinage between 82 and 46 BCE (Hollander 2007: 24, Stannard and Frey-Kupper 2008: 376-8). It is evident though that for this region at this time, unofficial or pseudo-currencies played a key role in facilitating daily transactions, and, through their imagery, undoubtedly contributed to shaping local identities and communities.

These roles can also be identified in the lead ‘token currencies’ that appeared in quantity in parts of ancient Egypt the third century CE. The production of these alternative currencies again occurred in a vacuum of ‘officially’ produced small change: the government mint at Alexandria ceased to produce bronze coinage in any quantity (Milne 1971: xvii). Instead lead tokens were produced for use by different cities (Milne 1930). That these token currencies may have reflected and shaped local identities can be seen in the differences between cities: Memphite tokens carried images of the Nile and Egyptian deities (Isis-Hekate, Apis), while those of Oxyrhynchus were more ‘Greek’ in design, with images of Athena, Zeus and Nike (Milne 1971: nos. 5276-319). Excavations at Oxyrhynchus uncovered 37 different types of tokens, with 184 carrying one of 12 local Oxyrhynchite designs (Milne 1930: 301). These objects thus likely facilitated local, everyday transactions within the region, and might be seen as historical precursors to community currencies like the Bristol pound.

‘Token’ currencies, or monetary objects whose value and acceptance were constituted within a very localised setting, can also be found in the continued use of old or obsolete currencies throughout the Roman Empire. The bronze coinage of Rome’s rival Carthage, for example, remained in circulation in Africa for more than a hundred years after Carthage’s destruction (Burnett 1987: 179), and Ptolemaic coinage also continued to circulate for hundreds of years after the Roman conquest in 30 BCE (some issues have been found in archaeological strata as late as the third century CE, Buttrey 1987: 165). In India the fourth century BCE coinage of the Mauryan kings continued to circulate until the third century CE (Hoover 2013: lxiii). These locally agreed upon monetary forms (notably, for the Roman imperial period, confined to small change) could be also resuscitated: Roman coinage was used in Africa for small change in the nineteenth century CE (Greenhalgh 2014: 89). This demonstrates the diversity of monetary objects that might have existed within antiquity, as well as their contribution to more recent monetary practice. Although this contribution has traced what this author (admittedly a Graeco-Roman specialist) identifies as key issues of the age, the diversity of antiquity and monetary practice cannot hope to be fully captured within one book chapter. Money reveals connectivity in this period, but it also reveals diversity.

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