On Sophocles’ *Antigone* 1037-39:

*Electrum, Gold, and Profits*

Yuyen Chang
General Education Center
Chang Gung University, Taiwan

**Abstract**

This paper is an attempt to explore Creon’s acrimonious retort to Tiresias in *Antigone*: “Make your profits, import electrum from Sardis if you wish, and gold from India” [κερδαίνετ’, ἐμπολάτε τάπο Σάρδεων ἥλεκτρον, εἰ βουλέσθε, καὶ τὸν Ἰνδικὸν χρυσὸν] (*Ant 1037-39*). In these remarks, Sophocles cautiously broaches the subject of moral decadence in the fifth century BCE or thereabouts. In this mention of the circulation of electrum in Greek cities, the play points to the prosperous foreign trade routes and the induction of the precious metals and coins from Sardis and India to Ancient Greece. In blaming the affluence of Athens for corrupting even a prophet, Sophocles also touches on the emerging concept of money, the traffic between the East and the West, the possible trade routes in ancient times, and the connection of various economic spheres from at least the heroic time to the classical period. This paper seeks to illuminate how the innovation of electrum coinage had a profound impact on the interaction between ancient Greeks and Asians, to investigate how the commencement of electrum coinage might have shaped both the practice of the local and foreign exchange, and to articulate how the imagined auriferous far-away India could stimulate transcontinental trade. The ultimate purpose of this paper is to address the questions how the Greek temples amassed their wealth during the classical period, how the innovation of coinage facilitated the formation of a powerful political-religious conglomerate in Athens, and how the sliding scale, both literally for valuing coins and metaphorically for evaluating ethical standards, motivated a profound rethinking of changing norms and values.

**Keywords**
electrum, gold, coinage, Sardis, profits, *Antigone*
Introduction

Tiresias envisions that a ruler’s impaired decision may incur the danger to both the ruler’s family and the whole city and thus advises Creon to humble himself and to correct his mistakes before the unforeseeable calamities befall Thebes (Anti 998-1032). However, reluctant to take Tiresias’ advice, Creon rejoins mockingly:

κερδαίνετ’, ἐμπολάτε τὰπὸ Σάρδεων
ηλεκτρὸν, εἰ βούλεσθε, καὶ τὸν Ἰνδικὸν
χρυσόν’ (Anti 1037-39)\(^1\)

Make your profits,
import electrum from Sardis if you wish,
and gold from India.

We may jump into the conclusion that Sophocles is broaching the subject of moral decadence in fifth-century BCE Athens. It seems that the commercial metaphors employed by Sophocles are the best verbal recourse to censure those prophets who are corrupted by their extravagant temple possessions. Yet the crux of the problem is how the layered realities of cultural, commercial, and political interchange are unfolded through this ironic reproach against the corruption of religious and ethical principles.

Antigone, like most Greek tragedies, synthesizes two contrasting perspectives, epitomized by Seaford as follows: “the themes of tragedy are taken from the moneyless world of traditional mythology (including Homer), but the world in which tragedy was created was newly pervaded by money” (“Aristotelian Economics and Athenian Tragedy” 271). Anti 1037-39, which depicts how Tiresias might dip into the coffers of massive religious and political funds treasured in the sanctuary, prompts a larger picture pertaining to a circulation of electrum in ancient Greece, a prosperous foreign trade route, and a prophet good at importing precious metals or coins from Sardis and India. That is, through an indictment against the affluent fifth-century Athens and against the crippled religious values and norms, Sophocles provides a brief rundown of the emerging concept of money, the traffic between the East and the West, and the interconnection of various economic spheres.

\(^1\) The citations and the enumeration of lines from Oedipus Tyrannus and Antigone—hereinafter abbreviated as OT and Anti respectively—are based on The Loeb Classical Library 20 and 21 (Sophocles 1994a, 1994b).
from at least the heroic time (about the twelfth century BCE) to the classical period.

This paper is an attempt to cast light on the thematic words such as “electrum” [ἠλεκτρόν], “import from Sardis” [ἐμπολάτε ταῖς Σάρδεις], and “gold from India” [τὸν Ἰνδικὸν χρυσὸν] so as to better grasp how the introduction of coinage accelerated mercantilism and political economy. First, I will draw on historical archives to illuminate a broader context concerning the innovation of electrum coinage in ancient Greek and Lydian cities. It is stressed that, despite the preponderance of the electrum from Sardis—or the Lydian electrum coins—in the earliest datable archaeological context for coinage, coinage developed popularly not inside Lydia, but in the zones where Greek and Lydian cultures interacted. Then the focus of this paper is placed on the issue of the interaction between Greece and Asia Minor by investigating how the commencement of electrum coinage might shape both local and foreign exchange. However, it is more difficult to understand the phrase “to import gold from India.” Creon seems to pose an impossible challenge to Tiresias to do transcontinental trades with remote India. In Creon’s reproach against those prophets stooping to taking bribes, Sophocles implies that powerful political-religious conglomerate is forming. Certainly, putting precious metal coins into general circulation threatened the old system of ranked sphere of exchange. We had better reassess whether the Greeks in the fifth century considered money purely a token of wealth, a sign of greed, or a necessity for life in response to historical circumstances. In addition to the ascendency of commercial metaphors in Antigone, these key phrases are therefore central to understanding the underlying purport of the ironic phrase “make your profits if you wish” [κερδαίνετ . . . εἰ βούλεσθε] and instructive to more comprehensively address the questions how the Greek temples in the fifth century amassed their wealth, how the development of coinage facilitated such a wealth accumulation, and how the sliding scale, both literally for valuing coins and metaphorically for evaluating moral standards, motivated a profound reflection on ethical issues.

**Electrum [ἠλεκτρόν]**

Modern readers may associate the word ἠλεκτρόν with “electron,” a subatomic particle carrying a negative electric charge. The term “electron” is derived from the Greek word for amber or ἠλεκτρόν—which is etymologically originated from the word sun or helios [ἥλιος] probably because of the bright
yellow form of amber found in the Baltic Sea.² In fact, electrum is related to the discovery of electrical phenomena. Ancient Greeks, dimly aware of the occurrence of electricity, noticed that rubbing a piece of amber with fur would leave an electric charge on its surface and then a spark could be created. The term “electrum” is either an obsolete ancient Greek word for amber or a kind of natural silver-gold alloy (Manutchehr-Danai 7323-24).³ Such an electrum alloy with more than 20% silver was ubiquitous in Egypt and Asia Minor by 3000 BCE for jewels and ornaments. That the application of electrum in the ancient Egyptian royal house was actually not uncommon can be backed by certain available examples: the obelisks of Egyptian queen Hatshepsut “were originally tipped with electrum to glitter in the sun” (Hart 10); the famous craftsman Ptah “moulds the body of Ramses II (Dynasty XIX) out of electrum, and his limbs out of copper and iron” (Hart 177). Besides, electrum might be used to decorate vases.⁴ According to The Hutchinson Dictionary of World History, in ancient times the Scythians “produced ornaments and vases in gold and electrum with animal decoration” (1004). At any rate, ἥλεκτρον was at the earliest stage a precious object with a high decorative value.

It can be inferred from Homer’s epics that ἥλεκτρον was already abundantly used in Sparta at least earlier than the eighth century BCE. In the Odyssey, Telemachus is stunned by the splendid spectacle of the hall: “you see the flashing of bronze throughout these echoing halls, and the flashing of gold, of electrum, of silver, and of ivory” [χαλκοῦ τε στεροπὴν καὶ δώματα ἡχήντα χουσοῦ τε ἥλεκτρον τε καὶ ἀργυροῦ ἦδ᾽ ἐλέφαντος] (Odyssey IV.72-73). Electrum here should be amber, which was supposed to be one of the precious substances and to be profusely utilized in decorating grandiose palaces. But how amber was imported to ancient Greece is a matter of debate. Herodotus believes that “our tin and amber come from the most distant parts” [ἐξ ἔσχάτης δ᾽ ὁνὸς ἡ ἀσσύτερος ἡμῖν φοιτᾷ

---

² The Etymologies of Isidore of Seville explains that “electrum is so named because it reflects in the sun’s ray more clearly than silver or gold; for the sun is called Elector (‘the Shining one’) by poets” and three kinds of electrum are amber or liquid electrum, metallic electrum, and gold-silver alloy (332).
³ Likewise, The Description of Greece expounds that electrum [ἡλεκτρον] refers either to silver-gold or amber: “this amber of which the statue of Augustus is made, when found native in the sand of the Eridanus, is very rare and precious to men for many reasons; the other ‘amber’ is an alloy of gold and silver” (Pausanias V.12.7).
⁴ Electrum exemplifies the similarity between ancient coins and carved gems. However, according to G. K. Jenkins, as far as the technique is concerned, “gem carving is . . . an older art than that of coinage” (5).
καὶ τὸ ἡλεκτρόν] (III.115.2). Lionel Casson, speculates that amber, “following prehistoric routes across Europe from the Baltic, made its way to their workshops” (19). Thus, if ἡλεκτρόν or amber was not indigenous to Greece, the possible routes of importing amber might well substantiate a long-distance cultural and commercial interaction between Greece and other areas in centuries preceding the classical period.

Unexpectedly, the natural gold-silver electrum turned into a kind of coinage—despite its arbitrary gold-silver ratio. Richard Claverhouse Jebb notes that electrum [ἡλεκτρόν] was a kind of “white gold”: “Croesus dedicated at Delphi a lion of refined gold [χρυσὸς ἀπεφθοξ], standing on a pedestal formed by 117 half-plinths, or ingots, of gold—four being of refined gold, and the rest of this electron, or ‘white gold’ [λευκὸς χρυσὸς]” (185). The electrum coins were in vogue in “the states of Lydia and Phocaea” and “the kings of Sardis were also the first to coin pure gold and silver” (Glotz 67-68). Sardis, the capital city of ancient Lydia, was formerly a major commercial center linking the Asian kingdoms of the East with the coastal Greek cities of Ionia. The electrum lion coins of ancient Lydia are calculated to be the world’s first state-issued coins, which were produced in a huge quantity and with a consistent type. Nevertheless, the gold-silver ratio of the electrum coins was uncontrollably erratic. Robert Wallace estimates that “modern tests on the natural alloy establish a silver content of, approximately, 10% to 30%” (386); and Herodotus records that the electrum Croesus dedicated to the Delphi contained 27% silver (I.50). Gustave Glozt speculates that in ancient times only the precious metals were coined and “the oldest pieces are of electron, a pale gold which was yielded in abundance by the Lydian washings and contained an average of 30% of silver” (67). Moreover, certain electrum coins were struck from alluvial

---

5 Here the most distant parts [ἐξ ἐσχάτης] are the furthest points of Asia and Libya in the light of ancient geography: “These then are the most distant parts of the world in Asia and Libya. But concerning the farthest western parts of Europe I cannot speak with exactness; for I do not believe that there is a river called by the foreigners Eridanus issuing into the northern sea, whence our amber is said to come, nor have I any knowledge of Tin-islands, whence our tin is brought. The very name of the Eridanus bewrays itself as not a foreign but a Greek name, invented by some poet . . .” (Herodotus III.115).

6 The interaction between ancient Greek areas and Syria around 1800 BCE to 1500 BCE was inaugurated thanks to the exchange of recourses; for example, “the Minoans imported a good many things: gold, beads, faience, figurines, and probably papyrus paper from Egypt; copper from Cyprus; ivory from Syria” (Casson 19). In addition, Pytheas, crossing “the channel from Britain back to the Breton shore” and then proceeding “to skirt the coast eastward,” arrived at “an enormous estuary and to an island where was so plentiful the natives used it for fuel;” it is surmised that this estuary was “that of the Elbe” and the very island was “island Helgoland, also a depot for amber” (Casson 126).
gold and, in the process of striking coins, the natural electrum alloy was much diluted by adding silver. In spite of its highly variable gold-silver ratio, electrum had the advantage of being of ten times higher value than silver but only two-thirds as high as gold.

The history of electrum coinage reflects a trajectory of the contact between Greeks and Asians. Admittedly, it is almost impossible to date when the first coins were struck, especially due to a shortage of good archaeological evidence. Although it is generally agreed that coinage was invented by Lydians, ancient Greeks were probably the first people to embrace coinage in more diverse aspects. That coins circulated in Lydia and in those Greek city-states of southern Asia Minor were of the same weight suggests that a dominant Greek culture mattered in the innovation of coinage. Michael B. Connolly, estimating that electrum was the earliest known European coins and appeared around 600 to 575 BCE, argues that the electrum coins “were used to finance transactions between city states based on their weight” and “Greek coinage swiftly followed” (15). Meanwhile, the only Greeks to mint electrum coins were “those who lived relatively close to the Lydian source of electrum, in Asia Minor or the neighboring islands” (Seaford, *Money and the Early Greek Mind* 130). From these two pieces of evidence, we can gather that coins might have served as an interface between the ancient Near East and mainstream Greek practice—not merely in terms of geographic vicinity but also in the sense of the common weight of these coins. Around the mid-sixth century BCE, electrum coinage was replaced by silver coinage in Asia Minor and became scanty in most Greek cities. Nevertheless, bullion performed a similar money function before the invention of coinage for a long time—even after a blanket adoption of coinage. The deposit of electrum coins found at the Artemision in Ephesos indeed reveals three pieces of valuable information: first, these electrum coins were of standard weight; second, some of these electrum lumps had an incuse square punchmark on the reverse and some of them had striations on the obverse; third, the deposit must date back to 560s BCE (Osborne 250). In brief, these electrum coins altogether figure prominently in the development of the primitive coinage around Lydia—among both Lydians and the neighboring Greeks—during the sixth century BCE. The history of early electrum coins provides a window to the cultural reciprocation between ancient Near East and Greek.

More importantly, such a West-East interrelationship was achieved not merely

---

7 It is so far uncertain if the concept of coined money should be credited to ancient Lydians or ancient Greeks. However, it is evident that the “evolution of coinage was an achievement of the Greeks and that it spread rapidly into all the corners of the world they inhabited” (Jenkins 2).
by the dissemination of coins but also by the common ground for monetization and the institution of coinage. According to Seaford, “in the area of money the Greeks were influenced by their eastern neighbors, some of whom had been employing silver for various money uses since the third millennium BCE” (Money 125). A striking affinity consists in that the Mesopotamian manā is one sixtieth of a larger unit and in the Greek numismatic system the Semitic word mna is used to refer to a weight equal to one hundred drachmas or one sixtieth of a talent (Seaford, Money 125). Electrum coins were once for larger payments. Some electrum coins collected in the British Museum “formed the staple medium for larger payments in the north-eastern Aegean and Black Sea districts” until superseded in the later fourth century BCE “by the vast gold coinages of the Macedonian kings” (Robison 160). The Persians were presumably the third people to issue coins around 545 BCE, but it is uncertain “whether Lydia replaced its electrum coinage by silver (and gold) before or after its incorporation in the Persian empire c. 545 BCE” (Osborne 256). In mainland Greece, silver coins appeared almost at the same time as Lydia abandoned the usage of electrum coins. Towards the end of the sixth century BCE, Persians replaced Lydian-type coinage by making gold (darics) and silver (sigloi) coins, while the peculiar dynamic of Greek coinage was in full swing across the Greek world.

Antique coins, workable in business transactions and for political, diplomatic and religious occasions, were not necessarily the same as money; in many situations, the emblematic significance of coins outshines their real and exchange values. Most ancient coins, which bear the figures or heads of the chief gods or heroes, the pictures of animals and typical products, and the images related to themes from local mythology, vividly illustrate the rich multiplicities of the city-state civilization, in particular with its many centers of political and cultural life and with diversified local character and traditions. Along with the function of official civic emblem, ancient coinage carries a lofty aesthetic capacity. Basically, “the Greeks themselves clearly had a definite feeling for their coins as works of art” (Jenkins 8). Coins “became as much ambassadors of the issuing city as its dedications might seem to be at Olympia or Delphi, and dies were commissioned from artists of quality, some of whom even signed the work” (Boardman, “Aristotelian Economics and Athenian Tragedy” 350). In addition, the earliest coinage and seal-making have a lot in common. Seaford, with an emphasis on the difference between the coin-mark and the seal-mark, recapitulates the four closely interrelated features: first, coins were issued by the state to guarantee their value by the coin-mark; second, coins’ conventional value was generally higher than their value as metal; third, coins were
of use only for their monetary value; fourth, Greek coins have been found in vast numbers (Money 126). Moreover, ancient Greek coins were unprecedentedly correlated with immortality and invested with a grand ornamental value. For instance, outside Ionia “coinage was seen from the beginning as a way of marking identity and staking claims to independence or to friendship” (Osborne 257). These ancient coins, somehow differing from money and commodity, were dearly cherished because of their symbolic magnitude.

Actually, the value of coins was soon appreciated by not only distinct cities but also individual celebrities. By the turn of the sixth century BCE, most of the principal Greek cities were minting their own coins. In a classical city-state, a repertoire of devices on the coins had a personal rather than a strictly civic significance; to rephrase it, instead of symbolizing the city, coins might well serve as the emblems of mint-officials, salient rulers or kings. As long as the precious metal coins were stamped, their real use-value was reduced; but their symbolic value was paradoxically elevated.

Like the precious metals, the earliest coins had multiple functions; unlike metals, coins could not be exchanged without a warrant. Herodotus depicts how in the sixth century BCE precious metals were accepted to pay for many goods and skills required to build a magnificent public construction, to pay a doctor, and the like (Herodotus 1.61; 3.143). Drachmas, which were not coins but weights of uncoined silver, were used in paying for victims in public sacrifices and for compensation for injuries under Solon’s legislation. In fifth-century Athens, one of the coinage functions was to pay for rent. Unlike gold and silver which might be exchanged by weight, electrum could not circulate without a guarantee. Otherwise, seeing that the public couldn’t gauge the gold-silver ratio of the electrum coins, certain imposters started to forge false coins. To pay their mercenaries, ancient Greeks had to pound a guarantee mark on an amount of coinage for the reason that the intrinsic value of electrum coins varied. Practices such as the stamp of ownership and the guarantee of the issuer came into existence—a guarantee basically established on a highly unreliable basis.

It should be noted that the Greek term money or coin involves a variety of

---

8 In and after the eighth century BCE, most Greek cities became literate and implemented a script which differed from one area to another; in a similar vein, “their separateness appears also from the fact that when coinage appeared in the Greek world in the middle of the sixth century, each polis coined for itself” (Crawford, Archaic and Classical Greece 22).

9 It is so far “not fully understood how the ancient mints managed to obtain an accurately weighed blank—and the accuracy of their weighings could be considerable, especially for gold coins, though silver is often less exact and bronze quite often most irregular” (Jenkins 4).
Complicated notions. According to Seaford, “Greek words for coins, which were of relatively low value and had no Near Eastern equivalent, are mainly Greek words for things” (Money 126-27). In Antigone, Creon, suspecting that his subordinates might do anything illegal merely for money’s sake, rants: “there is no institution so ruinous for men as money” (οὐδὲν γὰρ ἀνθρώποισιν οἶνον ἄργυρος κακὸν νόμισμ’ ἐβλαστε) (Anti 295-96). In other words, money or silver is supposed to be a distinct institution, which has triple senses: first, “anything sanctioned by current or established usage or custom;” second, “current coin, money;” and third, “full legal measure” (Liddell 1179). Similarly, electrum could be a kind of precious metal or important thing, or as a form of institution by which the activities of exchange, trade, and import-export were gauged. As a precursor to coins, electrum is indicative of a threshold to a new mercantile epoch. Yet Sophocles in Antigone not only adroitly sketches the coinage circulation in a fifth-century city but also adumbrates inter-state and international exchange, which will be the main concern in the following discussion.

Import from Sardis [ἐμπολάτε τὰπὸ Σάρδεων]

The verb “import” [ἐμπολαω] means to get by barter, by traffic, or by sale, (Liddel 547). Creon, who characteristically draws commercial metaphors to pin the blame on prophets, responds to Tiresias contemptuously: “Know that you will never be able to trade on my judgment” [ὡς μὴ ἑμπολήσων ἵσθι τὴν ἐμὴν φρένα] (Anti 1063). In this instance, ἑμπολήσων can be construed as “make profit of my mind by dealing with me” (Liddel 547). The verb “import” occurs at OT 1025. Oedipus, still in ignorance of the fact that he was deserted by his parents, is now extremely anxious to sort out what happened during his babyhood and to question whether the Corinthian messenger “bought” [ἐμπολήσας] or “found” [τυχὼν] the baby Oedipus (OT 1025). At this point, Oedipus already knows that Polybus is not his father; however, he is quite unwilling to accept that he was abandoned around Cithaeron. The term ἑμπολήσας in this case implies a profit from smuggling a baby. The action of “importing” entails a complicated series of exchange or trading activities.10 The imperative mood of the verb “import” [ἐμπολάτε] in Anti

10 Moses I. Finley, analyzing the economic theories advanced by Aristotle, discovers that “in Ethics Aristotle does not use any of the normal Greek words for trade and trader (as he does ruthlessly in Politics), but clings to the neutral word ‘exchange.’ . . . Plato concedes that the polis requires petty traders (kalexoi) who will give money for goods and goods for money” (“Aristotle and Economic Analysis” 39). Vlassopoulos indicates that the purposes of Aristotle’s work are to
1037-39 is selected to urge the addressee to get something from other places by barter, by sale, or by traffic. To be more exact, Creon seems to hint at a way of international trade by importing precious metals from Sardis and India, a very specific trade which, in modern concepts, may involve both multiple-national commercial activities and international currency exchange. Yet the issues such as how in ancient times an international deal might give rise to new forms of exchange and how the new monetary concepts could remodel the social dimensions deserve being dwelled upon.

As Greek coinage was developed to meet the trend of thriving trade and implemented under the redistributive activity of the polis, monetization tangibly altered the consumption and production modes and reshaped the framework of Greek society. Following Finley’s model, Kostas Vlassopoulos takes the Greek polis as a consumer city and as a contrast to medieval and modern producer cities (124); in this light, in ancient cities manufacturing was hypothetically merely for local marketing, while in medieval cities it was destined for export. However, the transcontinental trade, which began with the invention of coinage, constitutes a counterexample to the assumption that in ancient cities all production was only for local consumption. Although most respectable Greeks grew things rather than sold them,\(^1\) to import something from other areas was inevitable for Greeks, since neither the basic grains—such as barley and wheat—nor the most crucial domestic animals—such as goat and sheep—were native to Greece (Burkert 11). In addition, whereas the traditional sphere of exchange had been an embedded economy, the trade by importing or via other means in effect extended such a sphere into the disembedded commerce,\(^2\) in which large-scale and long-distance marketing overtook the local exchange. Eventually, these two different transactional orders, embedded and disembedded, were wont to intermingle under the constantly shifting

\(^1\)Boardman details his argument that a Greek trader was probably not a powerful man: “on the land, not in the market-place, were found Greeks who formed governments. But the Greek who grew things had to sell them or persuade traders to sell them for him. The element cannot be ignored, but we do not need to start talking of ‘a powerful merchant class.’ For instance, the founding fathers of Syracuse were farmers from an inland village near Corinth, scarcely entrepreneurial material. . .” (The Oxford History of Greece and the Hellenistic World 16).

\(^2\)The embedded commerce is defined or limited by the social and political contexts, while the disembedded is not.
social and political circumstances. In particular, the social structure underwent a transformation in which the primacy of *oikos* was interrupted and replaced by that of the *polis*. This explains why “the introduction of coinage questioned the meaning of wealth embodied in aristocratic possessions” (von Reden 6). Although it remains insufficient to claim that this transformation directly led to a development from myth to science or from myth to history, such a shift undoubtedly opened up a possibility of challenging the traditional notions of justice and the meanings of power and wealth in society.

The phrases—“import electrum from Sardis” [ἐμπολάτε τάπο Σάρδεων ἥλεκτρον] and “(import) gold from India” [τόν Ινδικόν χρυσόν] (Anti 1037-39)—tellingly signal a momentous landmark in the history of international coinage along with the expanding transcontinental trade. Actually, the Lydians, who first chose electrum as their currency, were good retailers.¹³ Primitively, a large number of coins were punched not for general trade or daily shopping, but for specific and limited purposes, such as for payments to mercenary soldiers.¹⁴ Accordingly, inter-city, international and transcontinental economic activities were concertedly promoted. Douglas M. MacDowell defines an ancient merchant or *emporos* as “a man who buys goods in one city to sell in another” and the man “would usually travel as a passage on the ship transporting his goods” (231). At a remarkably early date, the Mesopotamian import-export transactions became active but “were in the hands of individuals, not the state” but “this amazingly far-flung and highly developed trade died out shortly after 1750 BCE” (Casson 9), and in a while Phoenicians “had their trade routes ca. 1000-800 BCE” (Casson 64). Archaeologically, the finds of shipwrecks establish that busy trade routes existed by the sixth century BCE. From then on, trading contacts multiplied and cities became more settled and prosperous, and wealth in the Greek world was henceforth accumulated. At an Attic *deme*, Thorikos, some of the houses seem to “have served an industrial and/or a commercial function” and “the domestic quarters are often combined with facilities for processing silver ore, which was mined in the area”

---

¹³ Nevertheless, coinage first circulated widely among Greeks rather than among Lydians. Most of the maritime Greek city-states, neighboring Lydia, were enterprising and virtually politically independent, and without their own supplies of precious metal, but “the Lydian kings were probably happy to give some of their massive surplus to these Greeks in exchange for goods and services, for the Greek art found in Lydia, for the use of Greek ports, Greek trading ships, and Greek mercenaries” (Wallace 128).

¹⁴ Herodotus accounts how the Lydian Pactyes, whom Cyrus had left in charge of the finances at Sardis, took advantage of his position to hire mercenaries and then headed up a rebellion (I.154-61).
In Aegina, because of the poverty of the soil, residents tended to undertake sea trades; and, to meet the rise of related businesses, silver coins were thereupon hammered. The first coins appeared on “the trading island of Aegina about 595 BCE, in Athens about 575 BCE, and in Corinth shortly afterwards” (Freeman 184). In view of that, to mint coins was to forward the commercial expansion. Whereas metallurgy arrived in Greece from the East in the third millennium, the spread of coinage and trade and the increase of overseas interests notably for the northeastern Aegean cities bolstered the long-distance transportation of goods and foodstuffs. Both the release of coins and the deliverance of merchandise contributed indispensably to a critical phase of East-West culture drift. Taken together, the invention of coinage did enliven foreign markets as well as local exchange for a fairly brisk economy at that time.

Analogously, the initial coinage as a *nomisma* suggests the distributive justice or the egalitarian ideology and practice within the *polis*; however, such *nomisma* still has neither a given form nor a proper name. On the one hand, in ancient times money was supposed to signal the formation of a standard shared by the community. Seaford reasons that “both Plato and Aristotle thought that coinage was introduced to facilitate trade, albeit thereby serving the *koinōnia* (communality) of the *polis*” (Money 131). The word *nomisma* is an abstract form derived from the root *nem*-, meaning “to allot, to distribute, and *nomisma* is etymologically the process or the result of lawful distribution” (Kurke 13-14). In a generic sense, the term *nomisma* is a norm or currency shared by the community. On the other hand, coins as a kind of *nomisma* involved a high unpredictability in that the circulation of coins was liable to change with divergent political interests. As early as the 470s BCE, various League members had “voluntarily given up minting their own coins when the Athenian coinage proved more stable and acceptable in their market” (Castriota 196). Athens with its imperial power directly or indirectly manipulated how the coinage was operating throughout the Greek world. It is imaginable that the Athenians resorted to their superior legislation mechanism to institute a norm: a Coinage Decree, “passed in 445 BCE, required the allies to use only Athenian weights, measures, and silver coinage” (Freeman 264). This decree fostered not only the Athenian judicial operation but also the prosperity of the silver mines under the sway of Athenians; moreover, the stark reality of incompatible measure systems between city-states might account for the necessity for the issuing of this decree. Under these new policies, the unpredictable and unreliable exchange practice would be perforce stabilized. Where the decree of flowing currency was enacted, there would be an impending political economy to take the place of the incalculable,
nameless and formless nomisma.

The innovation of coinage triggered both an economic growth and a conceptual breakthrough. Greek coinage was “located between commodity and sign, between ‘primitive’ and modern money” and designated a “crucial and unprecedented conceptual transformation” (Seaford, Money 6). Obviously, although coins were becoming more and more convenient for carrying on transactions, it took a rather long time for ancient Greeks to count coins as a general form of money since the complex concepts of money were hard to grasp. For instance, coinage was yet unknown in the mainland Greece during Solon’s time, and the pecuniary penalty decreed in Solon’s laws was in the form of non-monetary terms. It is understandable that Solon didn’t stipulate the rules in terms of silver coins, which had not been minted in Athens until a generation after Solon. What is stressed in these fines is a relationship of obligations rather than an official numismatic measurement. Anyhow, in Solonian Laws, silver was used as a general means of payment and a given sum of drachmas was administered for compensation for injuries, and precise penalties were treated in the form of quantifiable units of silver. Similarly, Solon in his sacrificial calendar set prices to be paid for victims. In any case, Solon’s reform materialized sundry abstract exchange ideas into a system of quantitative precision, uniformity and depersonalization. Solon mentioned “the stock-piling of silver and gold” as “the international means of exchange before coinage, by which the rich could finance their extravagant living” (Buckley 93). The relevance of political economy cannot be underestimated. The archaic and classical Greek society, which had been based on status rather than on class, that is, on a political rather than an economic ranking, was practically being remodeled under Solon’s reform. Afterwards, Pericles dexterously wielded his political leverage in prioritizing the economic ends for the construction of monuments and in introducing public pay for public service.

The abundant commercial metaphors in Antigone altogether disclose the changing customs to estimate how much wealth one person or one family possessed. Wealth was initially conceived of as the goods [κτῆμα] of a barn. The term chrēmata, meaning good things, which “had formerly referred and could still refer to all the goods that a person might posses” (Schaps 16), is in modern sense, the totality of individual wealth. The restrictively defined concept of money can be found neither in Hesiod nor in Homer. Instead, many examples of using precious metal or chrēmata are available in the Odyssey. Herodotus mentions chrēmata in sketching how Arion returned after a concert tour of Magna Graecia and brought back enough chrēmata to fuel the murderous interest of the sailors (1.24).
Thucydides stresses the importance of *chrēmata* in the time of the tyrants (I.13). In these cases, *chrēmata* almost has the same function as money or, at least, stands indisputably for wealth. Creon keeps questioning Tiresias: “What thing? What is this general statement you are making” [τί χρήμα; ποίον τούτο πάγκοινον λέγεις] (Anti 1049)? When tortured by the fear that he might have “been sold and exported” [ἐξημπόλημαι κάμπισφρότισμαί πᾶλαι] (Anti 1036), Creon is inclined to the pecuniary metaphors, wording and thinking. In contrast, Haemon is of the opinion that “nothing” [οὐδὲν κτῆμα] is more worthwhile than the good fortune for his father Creon (Anti 701-02); in this case, the worth of real goods or properties [κτῆμα] is less appreciated than that of the abstract wellbeing.

Both the positive and negative effects of money are reckoned in *Anti* 295-301: on the positive side, money is an instrument used by men to make friends, achieve honors, strengthen leadership, improve physical beauty, enhance skills in speaking, and get enjoyment even in illness; on the negative side, money is a catalyst to destroy cities, drive men from their homes, change good men into evildoers, and teach men to know every kind of impiety. Under such a conceptual transformation the coinage of money is both a guarantee and a threat to traditional paradigms. Katherine Clarke contends that there is a shift “from aristocratic to democratic temporality in Athens of the fifth century BCE” or “from legitimating through the constant recreation of the ancestral paradigms and myths of origin to a more rational time” (12-13). The time span between the background of *Antigone* around the twelfth century BCE, the issuing date of electrum during the seventh century BCE and the theatrical stage at Athens in 442 BCE turns out to be a flexible stretch for an elaborate array of numismatic imagery. As a playwright, Sophocles neither accounts for the historical significance of the electrum, silver or gold coins nor locates the place of the mintage nor gives a precise date of the coinage. To put it differently, the juxtaposition of various coinage images amounts to a “before-and-after” picture: “The creative phase of Homeric epic in roughly the eighth and early seventh centuries BCE occurred before—whereas tragedy came

15 The word κάμπισφρότισμα is “the perfect conjugate form of the compound verb ἐν-φορτίζω, meaning to ship away; and the other term ἐξημπόλημα originates from ἐξεμπολάω, in which the verb form ἐμπολάω means to make money via trading” (Chang 135). For Jebb, Creon means: “The Thebans have bribed Tiresias to frighten me. He has taken their money. In return, he is to deliver me into their hands. I am like a piece of merchandise which has been sold for export, and put on board the buyer’s ship” (185).

16 The explicit dates seldom appear on Greek coins before the Hellenistic period; but the indirect evidence such as a magistrate’s name carved on a coin is of great help in deducing its date (Jenkins 9).
into being shortly after—the rapid development of coinage . . . by the Greek city-states in the sixth century BCE” (Seaford, “Tragic Money” 119). Above all, in the diction “to import electrum from Sardis,” the geopolitical map and the diachronic extent are extended from the fifth-century Athens retrospectively to an encompassing historical and economic background; in a like manner, the phrase “gold from India” indeed spins an extensive geographic and chronological context, which deserves further scrutiny.

**Gold from India [τὸν Ἔνδεικόν χρυσόν]**

Was it possible for an ancient Greek or Athenian to import gold from India? The earliest regular use of gold “dates from the fifth millennium BCE in Bulgaria where containers of sheet and cast gold were found, with gold-dust decorated pottery vessels” (Wilson 325-26). The mines of Chalcidice and the Rhodope massif in the north Aegean, which “held the only Greek-controlled source of gold,” could produce “1000 talents worth of precious metal each year at the height of production in the fourth century BCE,” while the total “Athenian production in a year had been calculated at 65 talents” (Freeman 223). In short, gold had been mined in Macedonia and Thrace since the Bronze Age; but it was Philip II who commenced serious gold exploitation after gaining control of the mines in 358 BCE. However, before the fifth century BCE, much of the gold needed in the Aegean region was imported—probably from Egypt, where gold was extracted from the river placer deposits of the Nile valley. How gold was imported from India during the archaic or classical period is somewhat beyond our grasp. There are two theories: first, gold was transported to Greece directly from India; second, gold was brought to Greece via Persia or Lydia.

The first theory seems nearly invalid. India, shrouded in an impenetrable mysticism, was fantasized by ancient Greeks as a powerful and wealthy land awash with gold. A. D. H. Bivar, who bases his arguments on certain Sanskrit literary sources,17 comes to the conclusion that ingot-like currency or even coins were prevalent in India in the fifth century BCE or even earlier (194-97). Even though it is true that India was brimful of gold, most of the ancient Greeks had not actually been there until in 326 BCE Alexander reached India and achieved his last great

---
17 In a broader sense, “during the sixth century BCE northern India was divided between a number of local republics and kingdoms,” and most of the outlying “regional states are designated in Indian literature, on some coins, and in current historical writing” (Bivar 194).
victory at the Battle of Hydaspes. Undeniably, commodious imported objects—“scarabs and glass from Egypt, seals and an iron knife from Syria, seals from Cyprus and even an amber bead from the Baltic” (Osborne 20)—show that ancient Greeks were still in touch with a large part of the Near East. Yet it remains a puzzle how to ship gold from India to Greece during the twelfth century BCE, during seventh century BCE, or in 442 BCE. The ancient sea traffic between the Persian Gulf and India can be circumstantiated from the following description that “the first true sea voyages were made by Egyptians who worked northward along the coasts of Palestine and Syria or southward down the Red Sea, and by Mesopotamians and Indians who sailed between the Persian Gulf and the northwestern coast of India” (Casson 4). It has been proved that certain early Indian ships loaded with trade goods shuttled over the open waters of the ocean between the Persian Gulf and the northwest coast of India; but this is insufficient to corroborate a direct trade route between India and Greece, not to mention the importation of gold. To sum up, the possibility of a direct access to Indian gold in ancient times could be ruled out.

The second theory is more plausible than the first one. Jan Coenraad Kamerbeek commented that “both ἡλέκτρον and Ἰνδικὸς χρυσός are reminiscent of Herodotus (III.94.2)” (177). It is intriguing that ancient India was included by Herodotus as the twentieth province of the Persian Empire under the reign of King Darius. According to Herodotus, the ancient Indians, whose country abounded in gold, paid a tribute of three hundred and sixty talents of gold dust to Darius (III.94; III.98). Darius I of Persia (ruled 521-486 BCE), known as Darius the Great, the third king of kings of the Achaemenid Empire, held the empire at its peak—even including Egypt and parts of Greece. The gold Daric coins, on whose obverse appeared an archer representing Persian king and whose reverse consisted of a rectangular punch, were supposedly issued by Darius I. It is conjectured that these gold coins were minted in the western part of the Achaemenid Empire, not in the eastern part near India. Therefore, the second theory is seriously undermined by the fact that Anti 1037-39 includes the phrasing “to import gold from India” rather than “to import the Daric gold coins” or “to import gold from Persia.”

The most conceivable scenario is that Sophocles scratches for a trope to bespeak how egregious it is to catch a corrupt prophet having profited from his duty. The metaphor of gold recurs in Antigone. Gold conveys a positive sense when the chorus calls forth “eye of golden day” [ὦ χρυσέας ἁμέρας] (Anti 103-04). Yet

---

18 Alexander was said to aspire to emulate Heracles and Dionysus, both of whom, based on certain Greek myths, originated in India (Freeman 326).
Zeus detests those overconfident men or those “with arrogance of flashing gold” [χρυσοῦ καναχής ύπεροπτλίας] (Anti 127-30). Gold, like other precious metals and most jewels, is of great aesthetic value; yet the symbolic worth of gold often exceeds its real value, nominal value, exchange value and even decorative value. Unlike the unreliable electrum coins, gold embodies the imperishable. Since 447 BCE Pericles directed a great building project atop the Acropolis, on which the new temple Parthenon was built for Athena. Remarkably, inside the Parthenon was placed a gold-and-ivory statue over thirty feet high portraying the goddess in battle armor and holding in her outstretched hand a six-foot statue of the figure of Victory. Some early Egyptian goldsmiths utilized the process of *diplosis* (“doubling”)—by deliberately adding silver to gold—to “extend the more valuable gold” (Wilson 326). The alloyed metal is electrum. To test the gold content of such alloys, ancients came up with the idea of touchstones such as the Lydian stone. Reversely, separating silver from gold involved more sophisticated processes, which might be first developed at Sardis during the late seventh century BCE (Wilson 326). Gold is best characterized by its unique immunity to rust. While a conscientious prophet is supposed to be as incorruptible as gold, a harsh irony surfaces when Creon scoffs that Tiresias can make a great profit by importing gold from India.

Gold was frequently given as a gift in the heroic context or as a form of tribute during the classical period. It is estimated that by the middle of the fifth century BCE, “the league member’s annual tribute alone totaled the equivalent of perhaps US$200 million in contemporary terms” (Martin 108). But not all tributes were in the form of gold; one of the most striking instances is that the Delian League allies would make their contribution “either by paying phoros (tribute) or by supplying ships” (Buckley 195). The tribute, which unambiguously showcased the power of a *polis*, was displayed in the procession at the Athenian City Dionysia (Beer 35; von Reden 147-48; Seaford, *Money* 5). In other words, theaters could function as a parade of a city’s splendors. Yet when this practice of exhibiting the annual tribute paid by the members of the Delian League “began with the transfer

---

19 The method requires proper control of the heating temperature and a relatively advanced chemical laboratory. First, electrum was mixed with salt and brick dust in a pot, which then would be heated for such a sufficiently long time that the metal couldn’t be melted but the silver would be converted into chlorides and absorbed into the brick duct.

20 “For glass, crystal, murrhine vessels, other articles men make of stone, and pottery, are all broken by the water of the Styx, while things of horn or of bone, with iron, bronze, lead, tin, silver and electrum, are all corroded by this water. Gold too suffers just like all the other metals, and yet gold is immune to rust, as the Lesbian poetess bears witness, and is shown by the metal itself” (Pausanias VIII.18.5).
of the league treasury from Delos to Athens in 454 BCE” (Rehm 53), a political
power was simultaneously boosted by incorporating both economic and religious
supremacy.

The imagery of importing gold from India is engineered not merely to
fulminate against the decline of prophetic credibility but also to trace the emergence
of the mercantilism which would permeate the fifth-century Greek world. Hundreds
of years must have elapsed before the widespread use of coins was fully established.
In the early phases, coins made only of precious metals such as gold, electrum and
silver were normally of such a size that only rather vast amounts could be paid with
them. By the middle of the sixth century BCE there is “even the first instance from
Ionia of small silver pieces which probably gave a flexible a range of possibilities
as the coinage of the fifth century Athens” (Jenkins 3). Replacing electrum and gold
coins, silver coins became the mainstream currency in Athens. Thanks to the
sophisticated assay technique, the purity and consistency of Athenian silver
coins could reach “from 98.5 per cent to 99.7 percent silver” (Rihll 278). The silver mines
in Attica essentially underpinned the success of Athens as a naval and political
power. The problem, as Nancy Demand points out, lies in that “the commercial
ethos had undermined tradition and even brought about the monetarization of
culture” (9). The international exchange of electrum, gold and silver was actually
commingling ethnic, linguistic, cultural, and geographic issues. Consequently, an
unsettling ethical concern arises: Did the power of money displace traditional value?
A question will be detailed as follows.

**Make Your Profits, If You Wish** [ἐμπολάτε . . , εἰ βούλεσθε]

Prophets, though generally entitled to a higher status in ancient Greece, were
among the craftsmen or professionals with unique crafts such as metal-workers,
wood-workers, and physicians. Tiresias in mythic and heroic contexts was an
illustrious seer. Yet the term seer etymologically involves a deep-rooted paradox: on

---

21 T. E. Rihll and J. V. Tucker attribute such an almost perfect assaying to the very special
property of silver: “spiriting is the violent escape of oxygen as silver solidifies” and “silver
absorbs large quantities of oxygen as atmospheric pressure, if heated to around its melting point”
(278-79). The technology of metallurgy was so much valued in Ancient Greece that the god
Hephaestus is listed among the four major characters of technology (Rihll 283). However,
according to Freeman, “the Greeks had no tradition of applying their scientific understanding to
creating more efficient ways of production” and even coins “were made in an unsophisticated
way with each one stamped individually” (223).
the one side “the Greek word for god, *theos*, is intimately related to the art of the seer,” while on the other side “the word for seer itself, *mantis*, is connected with the Indo-European root for mental power, and is also related to *mania*, madness” (Burkert 112). Tiresias is a prophet or seer, not a priest; in mythology, Tiresias was revered as the gods’ spokesman. In fifth century daily life, these prophets came to be the professionals in their temples. *Anti* 1037-39, while not demonstrating that Tiresias is really able to accrue bulky coins for the temple he serves, indeed creates a climate of suspicion and implies that pecuniary amassment is tantamount to galloping corruption of religious centers. In the wake of the intellectual revolution, both a growingly frenzied skepticism over the veracity of oracles and a biased invective against religious scandals were inevitable. As a matter of fact, certain temples, when becoming extremely large social-political-economic conglomerates which dominated virtually every corner of ancient Greek life, turned out to be influential financial providers. Before determining whether a prophet would fall for the lure of filthy lucre, we had better discern the process by which these temples gathered financial and political momentum.

Coins could be gifts to temples. But, as von Reden indicates, a gift “became a bribe when it was transacted between individuals in a political context” (94). In the political practice of democracy, gifts to politicians were regarded as bribes; likewise, gifts to prophets were similarly tainted. But bribery was less a clearly defined crime than a threat to conventional norms. Certain temples collected tremendous incomes and commodious treasures through short-term leases of their land, gifts and dedications. For instance, Herodotus narrates that Croesus gave each Delphian two gold staters and in return the Delphians granted Croesus and all Lydians “the rights of first consulting the oracle, exemption from all charges, the chief seats at festivals, and perpetual right of Delphian citizenship to whoever should wish it” (Herodotus I.54). The gold bounty was never gratuitous; instead, what was given was expectedly to be in exchange for a political and religious privilege. Osborne alerts

---

22 The concept of priest in monotheistic religions such as Christianity—which was built exclusively upon male and hierarchical clergy—suggests a uniformity of identity and function that is in a stark contrast to the inherent diversity of Greek religion. It should be noted that “the official priests of Delphi were lay administrators” (Finley, *The Ancient Greeks* 50-51). For a long time, the so-called Greeks were communities scattered all over the Mediterranean and never achieved political or social unity; that is to say, the Greek cultural unity was not centered on a dominant institution, such as a church or a temple. Although diviners were more skilled than ordinary men in interpreting omens, Greek religion was singularly free from priest craft of any kind. “Greek religion might almost be called a religion without priests: there is no priestly caste as a closed group with fixed tradition, education, initiation, and hierarchy, and even in the permanently established cults there is no *disciplina*, but only usage, *nomos*” (Burkert 95).
us to another episode in Herodotus’ Histories that in 511 BCE Spartans defeated their enemies because “the Delphic oracle instructed them to free Athens” and “that Delphi so instructed them because of Alkmionid influence or bribery” (293). These two cases display how a temple arrogated its political clout by means of receiving gifts and accumulating wealth. Later, during the second century BCE, the temple of Apollo, religious mainstay in Athens, became both a sacred niche and a public strongbox, which stored not only the savings of the temple but also those of the city-state.

Where religious centers were step by step becoming significant financial providers or banks, there would be a downfall of divine transaction order. During the fifth century, the four major functions of money came to the fore: storage of wealth, means of payment, means of exchange, and measure of value. The finds of the electrum coins underneath the Temple of Artemis of c. 560 BCE at Ephesos (Howgego 2) do explain that since the classical period some Greek sanctuaries functioned as banks and money was hoarded in enormous quantities inside. The stored precious metals or coins, which should have been the communal wealth kept in the temples, was controlled by the rich—seeing that priesthoods were customarily held by members of wealthy aristocratic lineages and became a form of inherited property. Theoretically, the lavish offerings and sacrifices to gods are supposed to represent the long-term and metaphysical transactional order, while the individual gains from trade are short-term transactional order. Nevertheless, both the collection of profuse coins and the hangover mechanism inside temples eventually gave rise to the obscurity of these two transactional orders. In this light, that a prophet is alleged to share proceeds from importing electrum and gold from other states exemplifies the abandonment of the very long-term divine transaction.

The innovation of coinage did expedite the synthesis of political and religious powers, both of which were found prone to control the public wealth. From the sixth century BCE on “the East Greek had been exposed to the wealth and manners of Lydia” and the barbarian gold flowed into Greek sanctuaries as well as financed certain political factions (Boardman, “Chapter 7c: Material Culture” 427). In the Near Eastern temples and palaces, the personal central authority such as a king enforced the delivery of goods by means of contribution, storage, redistribution and so on; but in the Greek polis—or at least in their cosmopolitan centers—the circulation was achieved by the impersonal intermediary of small pieces of stamped metal. The Athenian treasury was based at Delos, “which was a centre of religious importance to the Greeks” and the treasurers “were called the ‘Hellenotamiae’ (Treasurers of the Greeks)” (Buckley 194); moreover, “in 454/3 BCE the Delian
League treasure was moved from Delos to Athens either through a genuine fear for its safety after the defeat in Egypt or as a pretext to gain control of the League’s finances” (Buckley 204-05). In the Athenian maritime empire, temples were thus transformed into financial and bankable organizations, where anything dedicated to the sanctuaries composed an extraordinary income or profit for the temples and those serving inside. Interestingly, “the Greek word ‘decate’ was probably the traditional word for any ‘tax’” (Buckley 114). And in turn the taxed treasures were indeed instrumental in augmenting the political and military potency—that is why Thucydides reiterates the military potential of the treasures in the sanctuaries of Olympia, Delphi, and Selinous (I.121; I.143; IV.118.3; VI.20.4). Given that the motivation for Greek religious activities was both a civic duty and a desire to boast of ostentatious generosity, money—or the collection of coins—became a media for the coalition of religious and political circles.

Furthermore, the introduction of coinage was to meet the need of central authority to reimburse an assortment of uniform payments—to pay not only mercenaries but also temple-builders. Unquestionably, the temple construction projects—especially those colossal temples from the sixth century BCE on—would sap bounteous recourses, which came from outside, from cities themselves, or from the rich and the powerful. And by corollary, in order to complete these grandiose temples, the surpluses of various city taxes, already being levied in money, had to be earmarked for a building-fund. Coinage was thus to represent a state’s savings or surplus wealth, which could be stored in this form and retrieved for use whenever needed. Above all, the introduction of coinage unpredictably induced a shift of authority from gods to polis. Crawford even attributes the rapid coinage spread in the Greek world to a vision that “a Greek polis saw the possession of its own coinage as an important element of its autonomous administration” (“Numismatics” 186). As long as these temples functioned as banks, the political tentacles of the religious centers were spreading even wider, although “neither Greek nor Roman religion either had the substantive doctrines or the ecclesiastical machinery” (Finley, Authority and Legitimacy 21). The gathering of coins in temples was a sure indication that the traditional benchmarks were changing with the march of political economy; yet the invention of coins did facilitate a gigantic amalgamation of economical, political, and religious institutions.

The profits out of minting and importing electrum coins were stupendous. First, the dilution of the electrum coins was difficult to detect and did benefit those issuers; to be more precise, the state issuer could arbitrarily multiply profits simply by altering the amount of silver in each coin. Secondly, the international coins
circulation at that time was conducive to a prodigious interest. Besides, the sale of coinage contributed a source of profits to the state and even the annulment of the coinage brought some income to the official issuers. A coin did have its intrinsic value on the scales and possessed an extra value out of the dealing of the legal tender or out of the issuing authority—an extra value is tantamount to a considerable profit. After all, the percentages of gold and silver in electrum coins fluctuated appreciably since “the gold content was purposely varied according to the ruling price of the metal, so as to provide a fixed unit of value” (Robinson 160). Such an intentional interference procedure in the fifth century did involve a comparatively sophisticated financial technique, which in turn made it possible to advance a profitable circulation.

Sophocles accentuates the mutability of things rather than the uniformity of numismatic system. Basically, the procedures for establishing the scale of the coinage units required a series of fractionalization. Among the Greeks in the eastern Aegean, the basic unit was a relatively high-value coin, the stater, with smaller coins being subdivisions of it—thirds, sixths and so on down to the ninety-sixth (Seaford, *Money* 127). As long as the same weight standard was scarcely kept, how to assay a coin would be a pressing concern. Assaying literally and metaphorically played a crucial role in ancient Greece. Ancient Greeks instituted the official silver assayer [δοκιμαστής], who was actually a public slave responsible for testing the purity of the coins. At the second level, as the overflow of false coins debilitated the basis of commercial activities in Athens, a law to prescribe death as the penalty for producing counterfeit coins was put into practice. It was thus expedient to assign official coins-testers or *metronomoi* (controllers of measures), who were state-owned slaves and “sat in the Agora” to test for the genuineness of any coin by means of inspecting “the measure and weights used by traders” (MacDowell 158). An official tester was set up so as to curb the uncontrollable excess of falsehood in exchange activities. Last but not least, the

---

23 The classical Greek coins, specifically those adopted in Athens, were small compared with the coins of Alexander and his successors, these in turn being small compared with the coinage of Rome. It reminds us of the decreasing size of the coins; yet the classical Athenian coins were more substantial than the latter two kinds of coins.

24 Seaford clarifies the term stater: “from the fifth century onwards the ‘stater’ is generally a coin, but could also be a unit of weight,” which means “the standardized but unstamped pieces” (*Money* 89).

25 In order to impose Athenian silver coinage, weights and measures on all of the allies, Clearchus proposed the Coinage Decree in 447 BCE. According to one of the decree’s provisions, any surplus from a minting operation was to go into a special fund, and anyone proposing to use it otherwise was subject to the death penalty.
trope of assaying coins was hereafter expansively applied in philosophical discussion. It explains why Creon champions the viewpoint that “there is no way of getting a man’s spirit and thought and judgment, until he had been seen to be versed in government and in the laws” [πρὶν ἀν ἄρχωι τε καὶ νόμοις ἐντοχθῆς φανῇ] (Anti 175-77). “To be versed” or ἐντοχθῆς, which means being proved by rubbing or putting into practice, comes from the metaphor that the real worth of a coin will become apparent with wear. All in all, Anti 1037-39 subtly spells out how classical Greece witnessed the very metamorphosis of coinage itself—which necessitated not only the re-evaluation of coins, the institution of the coin-testers and the negotiation of differing yardsticks but also a new appreciation of the ethical, political, and religious fulcrums.

Works Cited


Clarke, Katherine. *Making Time for the Past: Local History and the Polis*. New
___, *Authority and Legitimacy in the Classical City-State*. Kobenhavn: Munksgaard, 1982.

**About the Author**

Yuyen Chang is Assistant Professor at General Education Center, Chang Gung University.
Email: yuyenc@mail.cgu.edu.tw

[Received 6 Jan. 2010; accepted 8 June 2010; revised 10 Aug. 2010]