before credit cards elizabeth munger

When the inhabitants of one country became more dependent on those of another, and they imported what they needed, and exported what they had too much of, money necessarily came into use. For the various necessaries of life are not easily carried about, and hence men agreed to employ in their dealings with each other something which was intrinsically useful and easily applicable to the purposes of life, for example, iron, silver, and the like. Of this the value was at first measured simply by size and weight, but in process of time they put a stamp upon it, to save the trouble of weighing and to mark the value.—Aristotle, *Politics,* Bk. I:Ch. 9, 33-41, trans. by Benjamin Jowett.

Several especially important ancient Greek silver coins and two Roman medallions, part of a collection recently donated to Field Museum by Jon Holtzman, of Madison, Wisconsin and Paul Holtzman, of Las Vegas, Nevada, are on display in the South Lounge through November 7. Three different styles of coin from the 6th century B.C. represent the earliest period in the history of coinage, the *Archaic* period of Greek art. One beautiful specimen from the 4th century B.C. exemplifies the *Finest Art* period.

Western world coinage is believed to have been invented about 640 B.C. in the Asia Minor Kingdom of Lydia. That's what Herodotus said, and most modern scholars are disposed to agree with him. The beginning of coinage in China about the same time was probably an independent invention. In the West the first metal used was a naturally occurring mixture of gold and silver called electrum, which came from the river beds in Lydia. But silver then became most commonly used, and only occasionally gold.

Among ancient Greek coins now on display in South Lounge are these illustrated. *Page 22, top to bottom:* stater of Aegina, struck 550-480 B.C., obverse and reverse, and tetradrachm of Athens, struck 540-500 B.C., obverse and reverse. *Page 23, top to bottom:* tetradrachm of Acanthus, struck 525-500 B.C., obverse and reverse, and tetradrachm of Clazomenae, struck 387-301 B.C., obverse and reverse.

Technologically it was really just a step forward to make small equivalent units, coins, of the precious metal bars or ingots that were previously used in trade exchange—no doubt sometimes stamped with their claimed weights, and perhaps even a mark identifying their origin.

The stater was an early basic weight denomination. It's an oversimplification of many variations of standards, but we could think of 3,000 shekels (staters) = 60 Minae = 1 Talent, and 1 stater as equal to 2 drachms. Hence the tetradrachm pieces shown here were equal to two staters. Electrum consisted of about 73 percent gold and 27 percent silver and was valued at 10:1 in relation to silver. The same weight standard was thus easily usable for both metals, so that one electrum stater or tetradrachm would equal ten silver staters or tetradrachms. Gold was more complicated because it had a 13.1:1 relationship to silver.

The first coins were merely equivalent weights of metal lumps hammered more or less flat between two unengraved die punches. This technique, which accounts for their irregularities, remained the standard method for at least 1,500 years. But artistic treatment emerged very early in the form of an engraved image (called *type*) on the lower die, which produced the obverse or face of the coins. The reverse side had only an incuse, a rough indentation from the punch.

In the beginning the types were animals, which probably had sacred significance as well as special local import for the town issuing the coins. Only later was the image of a divinity especially important to the town used.

Its purpose was not only to identify the origin of the coin but also to impress the users that an unimpeachable witness vouched for its full weight and purity. In fact, a vestige of the tradition is still with us, for our own coins assert "In God We Trust." These silent invocations did not identify the value of the coins, whatever Aristotle meant (the translation is a little ambiguous). They "marked" the value of coins only in the sense of an intended guarantee of full value.

But neither forgeries nor debasement were prevented by such devices. Some of the specimens on display show how wary ancient bankers made their test cuts to be sure the coins were pure through and through. In fact, there is evidence that in Roman times debasement was sometimes so institutionalized that mintmasters had to earn their pay by producing a certain proportion of coins that were merely silver-plated over a copper core.

The first European Greek city-state to establish coinage was Aegina, in the late 7th century B.C. The early example shown here has the smooth-backed sea turtle emblem, an animal sacred to Aphrodite, whose temple overlooked the harbor of Aegina. One of her most important responsibilities was to function as goddess of trade. Aegina's coins became the internationally accepted currency of trade throughout the Peloponnese until Athens took possession of the island during the Peloponnesian War.

Athens' coinage, established about 575 B.C., was the first to use a type on both sides and also the first to use a human head to identify a god. The "almond" eye of Athenia in profile on the obverse side of the specimen shown here is a mark of the *Archaic* period. The owl on the reverse side was as much the emblem of the city as was their patron goddess; it represented the Athenian god of the night, the originals of which lived in the hills around the city. Next to the owl the first three letters of the city's name can be faintly distinguished. These emblems persisted in Athenian coinage down to the time of Augustus, though the style of representation changed. The Athenian "owls" challenged and replaced the Aeginetan "turtles" as the pre-eminent international currency.

A lion downing a bull was the constant—and appropriate—emblem of the city of Acanthus in Macedonia, for according to Herodotus this area had many lions and wild bulls. Even camels in Xerxes' expeditionary forces against the Greeks were attacked by lions in this district. The reverse side of the example shown here has the quartered-square incuse that this city's coins retained until late in the 5th century B.C.

The tetradrachm of Clazomenae with its high-relief three-quarter-view head of Apollo on the obverse and spread-winged swan on the reverse side is a choice example of the high artistic level Greek coins reached during the 4th century B.C. The die engraver, Theodotos, signed his work, though it is not legible on this specimen. Of the only twenty specimens of this coin known to exist, two are in the British Museum, and now one in Field Museum.

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