

# **The Challenges and Details of Large Quantity Coin Finds**

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I would like to address three things in turn: 1) the production of coins; 2) the context of coin finds; 3) and the modern recovery, study and care of coins, all with an eye towards the challenges posed by large quantities of coins found in shipwrecks.

Coins first appeared in the western world some 2,700 years ago. During most of this long history, coins were entirely handmade. The metals were excavated and smelted by hand; the coin blanks were manufactured by hand; the dies were engraved by hand and the coins were struck by hand. Their use as monetary instruments required that coins be standardized, but because coins were handmade each individual coin differed in some way from all the others produced at roughly the same time: the alloys would differ from batch to batch depending on the metal sources, individual weights within a single batch would vary, dies would wear and be recut, or different obverse and reverse die combinations would be used. Of the billions of handmade coins produced over the centuries, only a very small proportion of them remain today. The detailed study of every existing coin thus helps us to piece together the bigger picture of a state's fiscal and monetary policies, particularly the decisions made about how many coins to strike in a given year, in which denominations, and in which alloys. Detailed study also helps us to understand how mints operated as both government institutions and factories, how they developed organizational structures and production processes to meet demand. Various parts of this production process were mechanized in some mints in some places starting in the 17<sup>th</sup> century, but not completely so, meaning that individual coins within a series dating from as late as the 19<sup>th</sup> century, for example, might still differ from one another in significant ways. It is only for coins struck in the 20<sup>th</sup> century, when the production process became fully automated and machine tolerances became amazingly precise, that we can truly begin to speak of coins within a series being virtually indistinguishable from another. For earlier periods, the singularity of each and every coin matters for helping to

piece together the economic, social and political histories of those who made and used the coins. This is true even when textual evidence, like mint records exist, since these are often incomplete, have errors, or purposefully do not tell the whole story.

Most of what we know about how coins were used comes from where coins are found. While single coins are often found where they were dropped, most historic coins come from hoards, which represent deliberate decisions to select particular types of coins and gather them together in one place for safe keeping, for transport, for religious purposes, and so on. The careful study of a single hoard can reveal how and why it was assembled; by comparing multiple contemporaneous hoards we can draw larger conclusions about how and where different types of coins circulated, and thus how people actually used their money. Sadly, however, the vast majority of hoards found on land and on the seafloor have not been properly excavated or recorded; most have been recovered illegally or under circumstances that did not prioritize careful removal. Critical information has therefore been lost, including where in fact the hoards were found and their exact contents.

Shipwrecks are extraordinary phenomena since, among other things, a single wreck might contain dozens of separate hoards. The purses of individual passengers, for example, were likely to contain rather different coins depending on the owner's socio-economic status, travels, and personal monetary preferences. At the same time, states, corporations, or very wealthy individuals shipped large amounts of various types coins for various purposes. A state, for example, might have shipped coins of a single denomination from a single mint and a single year in one container; while an individual or corporation might have shipped coins of different denominations, mints, years, and even nationalities in another. In order to differentiate all the various hoards contained within a single wreck, each and every coin must be carefully excavated with its precise location mapped and recorded. If coins are raised in large concretions, perhaps the remains of coins held in a chest, the concretion itself must then be carefully disassembled, with the location of individual coins within the concretion mapped and recorded. Such care gives us insight into how the hoard was assembled: older coins on the bottom and newer coins on top might indicate a longer period of time for gathering the coins, for example, which could have historical ramifications.

Once properly excavated, the real work on coins begins. Most coins whether excavated on land or in water require some cleaning and conservation. For coins made of reactive metals like copper and silver, the conservation process can be intensive requiring special conservators and equipment. As the coins are being cleaned and conserved, a detailed, individualized database record needs to be created for each coin, including high quality photographs, basic measurements like weight and diameter, typological information like nationality, mint, denomination, and date, as well as notes on post-production modifications like graffiti, countermarks, and cuts or clippings. Once these basic tasks are completed, actual study of the coins can begin. Archaeologists, numismatists, and historians must here work in concert to situate the coins within various contexts, including production, circulation, and finally the event that buried them. The numismatic portion of the study might necessitate intensive, comparative die studies and non-destructive metallurgical analyses to determine the actual alloys used. This larger project of scholarly synthesis must then be fully published, with each and every coin catalogued and illustrated whether in print or online. Finally, the disposition of the coins themselves needs to be sorted. This is something I'll return to in a moment.

What I have outlined here is an ideal scenario, in which shipwrecked coins are excavated, studied, and published to the highest possible scientific standards. These standards, however, are resource, time, and money intensive. The excavation and study of one of the largest land hoards found to date, for example, the Frome hoard from England containing some 50,000 coins, has required countless hours of specialist conservation and numismatic work and considerable funds to complete. And indeed full conservation of the coins has yet to be completed for lack of funds. Ships are enormous vehicles; the numbers of coins they are able to convey is staggering; tons of coins numbering in the hundreds of thousands have been pulled from single wrecks. The sheer magnitude of such coin finds puts them in a completely different register compared to finds on land, requiring exponentially greater resources, time and money to deal with. This means that prior to any excavation adequate financial resources and specialists need to be gathered for the proper recovery, conservation, study, and publication of the coins, tasks that could take many years, if not decades to complete. To commit to anything less for each and

every shipwrecked artifact, including each and every coin, is frankly irresponsible and verges on treasure hunting.

Once the coins are fully and carefully published, and the numismatists and archaeologists are for the moment done with them, their final disposition then needs to be realistically considered. In an ideal world, national museums would have ample space and staff resources to display, store and care for tons of newly excavated shipwrecked coins, in addition to the on-going storage and care of their existing collections. The continued storage and availability of all the coins from a single wreck in one place could aid future research if problems with earlier research are noted or if new questions come to mind. In the real world, however, most national museums are poorly funded, understaffed, and have little space to spare. There will no doubt be temptations to sell coins, probably fueled by the erroneous belief that coins are repetitious and have little individually to offer to historical research. If nations cave to this temptation—and one would hope doing so only with the stated intention of providing funding for their museums—policies can then be devised for keeping the best preserved and most historically significant coins for the national collection, while releasing for sale only those coins that have been certified by numismatic experts as exact die duplicates in poorer condition. I would like to end by emphasizing that coins are not treasure. They are cultural heritage and need to be protected, preserved and studied as such.