

## ***Art, The Art of Forgery, and Coinage***

Seminar at University of Washington, 26-28 March 1999

Counterfeit Detection Summary by J. Eric Holcomb

This well-attended and well-prepared seminar covered ancient coinage, Chinese and pre-Meiji Japanese coinage, popular U.S. collector coins, large cents, and U.S. gold coins.

Below is a summary of how to recognize certain kinds of counterfeit pieces. *This summary should not be used to reach a final opinion on any specific coin.*

**Ancient Coinage** – coins in this category are collected by numismatists worldwide, and counterfeits range in quality from obvious replicas for the tourist trade to die-struck pieces that are of higher quality than the originals! (Literally “too good to be true” in some cases!) Since originals are usually found with corrosion from having been buried (especially the bronzes), distinguishing them from cast copies with poor quality surfaces and artificially applied patinas isn’t always easy. One useful test is the “prick” test – original patinas tend to be hard and mineralized and cannot easily be dislodged by gently pricking with a thorn or other sharp instrument, whereas modern artificial patinas often are powdery and can be dislodged. (You should also look for other evidence of cast or electrotpe copies, such as a seam around the edge, or evidence of its removal.) Artistic style is very important - modern counterfeits struck from hand-carved dies may not look quite right (especially the eyes!), and the dies may have been carved using different tools than were used in ancient times. Of course, a great deal of experience is usually required to make these calls. Some 19<sup>th</sup> and 20<sup>th</sup> century counterfeits have fooled advanced collectors and museums. Don’t spend a lot of money on ancients without getting some expert opinions (which nowadays may include having the coins certified or “slabbed”).

**Chinese Coinage** – since most original Chinese coins were cast until the 19<sup>th</sup> century, the situation here is reversed - a traditional Chinese “cash” coin (with the hole in the middle) that has a modern manufactured appearance is a replica! (This also applies to Chinese “knife money” and other unusual forms of money.) Of course, counterfeit detection can be far more complicated than this, especially for copies that are made to appear old. The “prick” test is again useful, although not foolproof, especially if the copy was a contemporary counterfeit that’s as old as an original! Some counterfeits and outright fantasy pieces have the wrong designs, for example too many Chinese characters, or poorly shaped characters. Once again, don’t spend a lot of money without authentication!

**Pre-Meiji Japanese Coinage** – this coinage takes several different forms, including the rectangular *ichibu-gin* pieces, the ingot-like *chogin* and the *mameitagin* struck on leftover lumps of silver. Genuine pieces have certain characteristics, such as metal flow lines and sharp details from the hammering process. In the case of the *chogin*, the ingots were cast, but the designs were stamped on, whereas most of the counterfeits are completely cast. The *ichibu-gin* have cherry blossoms stamped on the edge, as well as the *sadame* character stamped in the field after the initial die striking. One unusual characteristic of the debased gold *koban* pieces is that they are chemically treated to remove silver near the surface, giving a more golden color. This treatment gives a distinct appearance in the recessed areas of the coin, even after the high points have worn down.

Counterfeits may also be chemically “color refreshed.” Consult Joseph Boling for authentication of these and other Japanese coins and paper money.

**U.S. Coinage** – counterfeits are usually made either to circulate (relatively easy to detect), or to fool collectors (harder to detect). There are also many deceptive alterations of genuine coins, including added mint marks, date alterations, and re-engraving of details to give the appearance of a higher grade. Some examples of different types of counterfeits and alterations:

- **Cast copies** – often made from base metal (e.g., lead or pot metal) to circulate, back in the days when coins were still worth a lot of money! (Now, almost all counterfeits for circulation are of paper money.) Castings lack the detail of genuine coins and will also lack genuine mint luster in the case of higher-grade pieces. Other evidence includes weight, size (slightly smaller), specific gravity (density), casting seam (or evidence of its removal) on the edge, and dull “ringing” sound. However, some castings can be of high enough quality to fool collectors! If the surface doesn’t look quite right, you might want to pass on buying the coin - even in the likely event that it’s a genuine coin with some kind of surface damage, it’s probably worth less!
- **Spark erosion dies** – this is a process of using an electrical spark across a small gap to transfer a design from a genuine coin to a steel die. After the die is polished, the fake coins struck from the die will show a granular appearance with some loss of detail on the coin’s relief, which was incused on the die. These counterfeits, most often seen of “keys” such as the 1909-S-VDB and 1955 double die Lincoln Cents, can be very deceptive. Detection can sometimes be made based on fine details, such as die polish lines, that are known to be present on the original die(s) but did not transfer to the spark erosion die. Also see the discussion of transfer dies below.
- **Transfer dies** – there are other methods of making counterfeit dies (besides spark erosion) that may be even more difficult to detect. Some things to look for:
  - *Loss of detail* – the transfer process will result in some loss or softening of fine details in all areas (not the same as high point wear or weakly struck highlights). Examples of details to examine include lettering, stars, denticles, and Liberty’s hair. Some original varieties have additional specific diagnostics, such as mentioned above for the 1955 double die cent.
  - *Bumps, depressions, and tooling marks* – transfer dies will usually produce one or more of these features on struck copies. For example, a bag mark on the original coin being copied may show up as a depression on the copy. (These are often obvious to authenticators who have examined several coins from the same counterfeit dies!) Lint marks are also common on copies, although larger “strike through” errors, clash marks, and defects such as improper alloy mix are more common on genuine coins. Unfortunately, genuine coins are also more likely to have genuine bag marks! (If it’s too good to be true, ...)
  - *Luster and strike* – although struck copies do have “mint” luster, it’s usually different from an original coin. Genuine coins usually show more evidence of metal flow and die erosion than copies because the genuine dies were used to strike more pieces. Copies are more likely to be struck with increased pressure, sometimes producing a raised rim or a proof-like appearance.

- *Field* – the normally flat field of the coin has a slight “dish-shaped” appearance on many struck copies. This was emphasized most in the context of U.S. gold coins.
- *Edge* – the edge reeding or lettering (where applicable) is often not correct on counterfeit copies of any kind.
- **Hand-made dies** – some U.S. 19<sup>th</sup> Century circulating counterfeits were struck from hand-carved dies, and display irregular (sometimes even comical) lettering and other design elements. Some of these have been cataloged and may be collectible, but don’t get fooled into buying them as a genuine coin!
- **Altered mintmarks and dates** – Added mintmarks may be irregular, may be of the wrong style, may be in the wrong position, may have a visible seam at the base, and may not match the surrounding area in appearance. A microscopic examination is advisable. A depression around the mintmark does not necessarily indicate an alteration, as the depression could be caused by raised metal on the die from punching the mintmark into the die. However, too large a depression could mean that the mintmark was carved out of the surrounding metal after the coin was struck. Be sure to look for tool marks in cases where a mintmark (or part of a date) might be removed to simulate a more valuable coin. Well-known examples include the 1928 Peace Dollar and the 1914-D Lincoln Cent (made from a 1944-D). For most of the altered dates, the appearance and style of the date (and sometimes of other design elements) will be wrong. (In the case of the altered 1944-D, the spacing between the “9” and the “1” will be too large, and the small “VBD” initials may not be removed from Lincoln’s neck.) Digits and mintmarks added after striking will not show metal flow lines around the perimeter, in cases where such flow lines are visible on the other digits and lettering.
- **Re-engraving** – Examples of re-engraved details include the horns of Buffalo Nickels, the lines in the fasces of Mercury Dimes, false reeded edges, and even completely re-engraved dates! These may not always be as obvious as it might seem, so always look carefully with a magnifying glass when examining and grading coins! While you’re at it, also look for evidence of cleaning, polishing, surface damage, or other problems.

When in doubt, have it authenticated, or don’t buy the coin!

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