

PHOTOGRAPHY

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N . A . V . N o . 8 9 9

(From a talk given at the August 1990 meeting.)

I thought it might help fellow collectors if I summarized some points peculiar to numismatic photography, particularly those relating to exposure, which tends to be a problem when trying to reconcile all the factors involved.

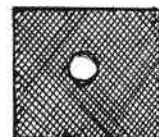
1. AUTOMATIC SETTING: This takes exposure out of the operator's hands, which is unsatisfactory for numismatic photography as:
 - a) THE SUBJECT IS RARELY "AVERAGE" (i.e. equal mixture of light and darks, which average out as a medium grey) but the camera assumes that it is, and adjusts itself accordingly, resulting in under- or over-exposure of the subject depending on the circumstances (see later).
 - b) COPY-STAND AND CABLE RELEASE: Because these are mandatory in close-up work, light enters through the uncovered viewfinder lens and confuses exposure measurement by the camera's auto system.
2. MANUAL SETTING: ABSOLUTELY ESSENTIAL FOR NUMISMATIC PHOTOGRAPHY because:
 - a) This allows the operator to do what he decides, regardless of what the camera "thinks" in its erroneous assumption that the subject is average.
 - b) It allows the use of a copy-stand and cable release without the light entering the uncovered viewfinder, modifying the correct exposure setting made when the eye covered the viewfinder.

THE "AVERAGE" SUBJECT

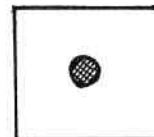
Whether set on "auto" or "manual", the exposure-meter of the camera assumes an average subject, but numismatic photography is NOT an average situation because if the background and specimen/s were averaged out the result would not be "medium grey".

FOR EXAMPLE:

A bright silver coin show to best advantage on a dark background.



A dark bronze coin shows to best advantage on a light background.



Identical Illumination

In this case, the camera, assuming the subject is medium grey, thinks there must be a very poor light and indicates an increased exposure to bring appearance to medium grey. Actually the coin is brighter than average but is insignificant in comparison to total area measured.

In this case, the camera, assuming the subject is medium grey, thinks there must be a very bright light and indicates reduced exposure to bring appearance to medium grey. The coin is darker than average but is insignificant in comparison to total area measured.

THEN IN BOTH CASES THE EXPOSURE SELECTED DISADVANTAGES THE SPECIMEN!

SO THAT ARE THE PRACTICAL IMPLICATIONS OF ALL THIS WHEN TAKING COIN AND MEDAL CLOSE-UPS?

1. ALWAYS USE "MANUAL" SETTING with copy-stand and cable release.
2. Because exposure meter indicates an accurate estimation of prevailing light only when presented with an average subject, give it the ideal one provided for this purpose - Kodak's NEUTRAL TEST CARD. Set the exposure from this card and DISREGARD WHAT HAPPENS WHEN IT IS REMOVED from the subject plane. This will result in a photo showing the specimen in the tone that it appears to your eyes.

If you wish you can make a fine adjustment to "improve" the appearance of the specimen such as:

Reducing the Grey Card indication by half to one stop to densify the image of a bright silver specimen, OR -

Increasing the Grey Card indication by half to one stop to lighten the image of a very dark bronze specimen.

When using daylight, a slightly overcast sky is preferable, and the ideal times are mid-morning or mid-afternoon for attractive modelling. When using colour film, BEWARE OF STRONGLY COLOURED SURFACES NEAR COPY-STAND.

Although I prefer daylight when convenient, adverse weather, night work or the need for consistent conditions during long photo sessions may dictate the use of artificial light. For good results all the above would still apply with the added provisos:

Photo-flood used at 45° angle of incidence (see below.)

For colour work, either Tungsten film should be used or the appropriate colour correction filter.

RING-FLASH IS ABSOLUTELY TABOO FOR NUMISMATICS.

If the following set-up is used, the specimen will be reproduced with good modelling, without distracting shadows on the background, which will appear cloudy and without grain or flaws because it is out of focus.

