

The Alchemist in Art: A Few Misidentifications and Misinterpretations

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Collecting Alchemical Art

For reasons that are something of a mystery to me, modern chemists have always displayed an interest in collecting paintings and prints of alchemists. Thus the Oesper Collections contain some 13 black and white photos of alchemical paintings (1) from various German museums that were apparently sold as a set by the firm of V. A. Bruckmann of Munich starting as early as 1902, as well as a smaller set of pre-World War II black and white photos of alchemical paintings purchased from the firm of J. Nachemsohn of London. Between 1931 and 1943 the ACS journal, *Industrial and Engineering Chemistry*, began reproducing, in monthly installments, a large collection of more than 150 prints and paintings depicting both European and Asian alchemists known as the “Berolzheimer Series of Alchemical and Historical Reproductions” (2).

Starting in the late 1930s, the Fisher Scientific Company of Pittsburg began making copies available to its customers of the alchemical prints and paintings collected by its founder, Chester G. Fisher. These often came already framed and it was not uncommon in the last half of the 20th century to find these reproductions decorating the hallways and conference rooms of various American chemistry departments. This collection has since been donated to the Chemical Heritage Foundation (CHF) in Philadelphia, where it has been joined by the collection of Roy Eddleman of Spectrum Medical Industries (3). Similarly, Alfred Bader of the Aldrich Chemical Company began collecting art as a young man, and many selections from his collection were reproduced on the covers of the company’s technical publication, *Aldrichimica Acta*, including several with an alchemical theme, copies of which were likewise made available to interested customers (4).

Real or Imaginary?

At first glance, the 17th century would appear to correspond to a flowering of European alchemy. A plot of the number of new and reissued alchemy books published per annum between 1500 and 1800 peaks in

this century (5), and the vast number of oil paintings depicting alchemists, made by such 17th-century Dutch and Flemish artists as David Teniers the Younger, Jan Steen, David Rychaert, and Thomas Wijk would seem to suggest that 17th-century alchemists were literally coming out of the woodwork. And there is little doubt that widespread distribution of copies of the alchemical paintings and etchings by these artists and others found in the Bader and Fisher Collections has played a major role in shaping the image which most modern chemists have of the alchemist.

Until recently, these alchemical paintings and etchings have generally been taken at face value by historians of chemistry as faithful renditions of actual alchemists and alchemical laboratories. As such, they were frequently used as illustrations in various histories of chemistry and in accounts of the evolution of chemical laboratories. However, in an important article published in 1975, C. R. Hill conclusively demonstrated what any good art historian should have suspected from the beginning, namely that these paintings are not literal images of actual alchemists and their laboratories but rather imaginative artistic reconstructions of what the 17th-century public thought an alchemist should look like (6). As such, they are no more accurate than similar imaginative images of alchemists by 19th- or 20th-century artists. They are, in fact, genre paintings, of which literally hundreds of copies were produced in order to feed a growing market among the rising mercantile class for paintings of this sort, not unlike the 20th-century fad for paintings of big-eyed children or dogs playing poker. Indeed, paintings of alchemists were but one of many genres that Teniers and his students exploited. Other favorites included numerous renditions of “The Temptations of St. Anthony,” of “Witches’ Sabbaths,” and of various tavern and kitchen scenes (7).

Laboratory Apparatus

Though these paintings tell us more about popular trends in 17th-century mass art than about alchemy, they do contain relatively accurate renditions of period

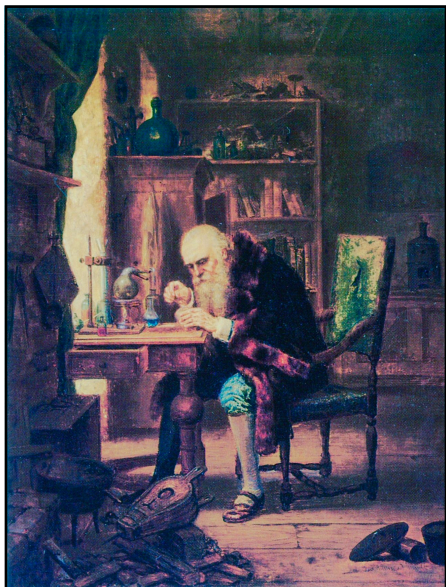


Figure 1. A circa 1870 painting of an alchemist by E. A. Schmidt. Despite the bellows and the usual clutter of objects in the foreground, both the knee britches and buckle shoes suggest the 18th century rather than the 17th century and the chemical apparatus on the table (and especially the wooden stand, clamp, and alcohol lamp) are unmistakably late 19th century. Years ago, when I first saw this painting at the Fisher museum in Pittsburg, it was labelled as an alchemist, as was no doubt Schmidt's original ill-conceived intention. However, in light of these anachronisms, the staff at CHF have since relabeled it as simply "The Chemist" (3).

chemical apparatus (though not necessarily of how this apparatus was arranged and used under actual laboratory conditions), based, no doubt, on what the artist saw at the local apothecary, distiller, or assayer. We



Figure 2. A typical painting of an alchemist by David Teniers the Younger. Note the clutter in the foreground, the assistants in the background, and the observer in upper right.

know this because the apparatus shown in these paintings can be easily identified using the illustrations found in 16th-century books on assaying and distillation or in the plates of laboratory apparatus that were increasingly appended to 17th-century textbooks. In contrast, 19th- and 20th-century alchemical paintings frequently contain period inaccurate apparatus and furniture (figure 1) and sometimes, in the case of late 20th-century paintings, apparatus that is purely imaginary and is designed solely to intensify the aura of mystery and magic surrounding the subject.

As for the arrangement of the apparatus and the usual clutter of objects scattered on the floor in the foreground of most typical alchemical paintings, Hill was able to show that this was an artifact of a 17th-century artistic fad intended to demonstrate the artist's proficiency at painting a wide variety of inanimate objects. He was able to illustrate this by comparing a



Figure 3. David Teniers the Younger's painting of *The Fat Kitchen*. Note again the clutter of objects in the foreground and the assistants in the background. No observer window appears in this particular painting.

typical painting of an alchemist (figure 2) by Teniers with one of his typical kitchen scenes (figure 3). Also in common to these two genres is the depiction, in addition to the primary figure in the foreground, of numerous secondary figures performing various tasks in the background, as well as a lone observer who is viewing the entire scene from a small window set high on one of the walls, though this latter feature is not always present.

Misidentifications

Despite their lack of realism, there is little doubt that most 16th-, 17th- and early 18th-century alchemical paintings are intended to represent alchemists, however

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Figure 4. A moralistic painting by Peter Brueghel the Elder (1525-1569) implying that the extravagance of the alchemist will eventually drive his wife and children to the poor house. This is most commonly printed in the form of an etching, in which case the scene is reversed.

imaginary. This is particularly true of a subset of these paintings that was explicitly intended to be moralistic and usually depicted the alchemist driving his family into the poor house as a result of his obsessive pursuit of the philosopher's stone (figures 4 and 5). However, over the years I have also encountered numerous paintings and etchings that were incorrectly labelled as images of alchemists, especially in older collections or on popular websites. Generally these correspond to paint-

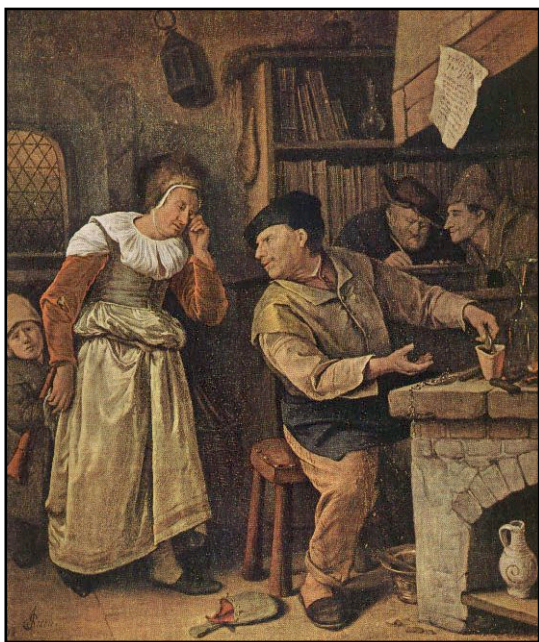


Figure 5. A moralistic painting by Jan Steen (1626-1679) entitled "The Last Piece of Silver" showing an alchemist sacrificing his family's last coin for his experiments.

ings actually intended to depict any of the following four subjects:

1. money changers and/or lenders
2. medical doctors and/or iatrochemists
3. pharmaceutical distillation
4. private brandy distillers

Of these, the first case is the rarest. These paint-



Figure 6. A late 19th-century painting of a money changer by Jan Weiland, often incorrectly labelled as a painting of an alchemist.

ings usually show one or two elderly men with long white beards seated at a small table, one of whom is holding a small balance and one or two gold coins. A typical example is shown in figure 6. This was done by a 19th-century Dutch artist by the name of Jan Weiland and appeared as item 95 in the Berolzheimer Series. At the time, the original was apparently owned by the well-known British chemist, Sir William Pope, who no doubt had purchased it in the mistaken belief that it depicted an alchemist (2). The small, hand-held balance shown in these paintings is actually a coin balance and was used to check whether any gold or silver had been shaved from the coins being exchanged. The Oesper museum owns an actual 17th-century example of such a balance and the weights that accompany it are in coinage units of ducats and florins rather than



Figure 7. A painting of a “Uroscopy” by Franz Janneck (1703-1761) often misidentified as an alchemist or, at best, as a “medical chemist.”

mass units.

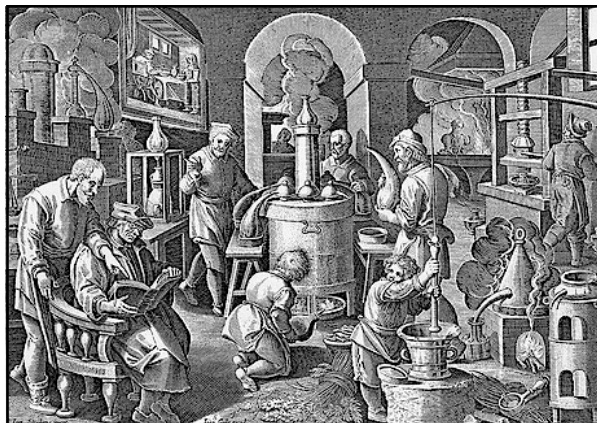
In contrast, the second case is by far the most common. These paintings invariably show a woman, either sitting or standing next to a so-called alchemist, who is holding a flask containing a yellow liquid up to the light for closer inspection (figures 7 and 8). In actual fact the flask contains a sample of the woman’s urine and the so-called alchemist is really a physician or, at best, an iatrochemist, who is checking the sample for clarity and any possible indications of disease. The period author, Robert Burton (1577-1640), once con-



Figure 8. A painting of a so-called iatrochemist by Balthasar van der Bossche (1681-1715) examining a woman’s urine sample. Note the man in the background pulling a tooth.

temptuously dismissed such doctors as “piss prophets.”

Starting with the pioneering books on medicinal distillation by Hieronymus Brunswig (1450-1512), many renaissance books and etchings depict the process of distillation, which became increasingly important to medical and pharmaceutical practice with the passage of time. Yet, once again, these images are fre-



Figures 9 and 10. An etching (top) and an oil painting (bottom) by Jan van der Staet (1523-1605). Though both were entitled *Distillation* by the artist, both are often incorrectly labelled as an alchemical laboratory. Judging from the large plant press in both images, the tied bundles of plants on the floor in the etching, and the boys working large mortars and pestles, in all probability both images really depict, a la Brunswig, the large-scale preparation of plant-based medicinal products, such as essential oils.

quently misidentified as alchemical, as is the case with both the famous etching and painting by Jan van der Staet (figures 9 and 10), the latter of which has ap-

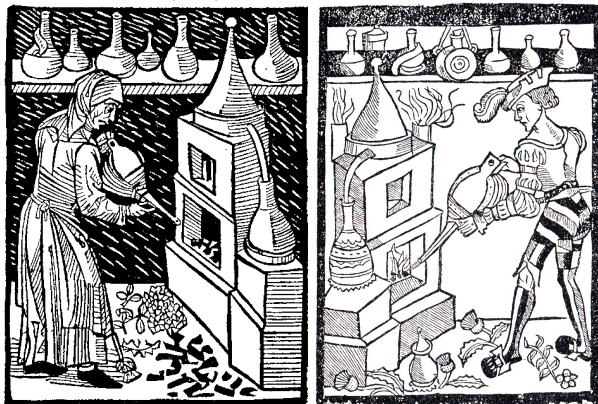


Figure 11. *Left*: A woodcut of an aquavitwoman operating a still with a Rosenhut for the preparation of flavored brandies and used to illustrate the 1474 printing of the booklet by Puff von Schrick. The subject of the image may be inferred not only from the subject of the booklet which it illustrates but also from the scattered herbs and berries on the floor (along with pieces of charcoal for the furnace). *Right*: The replacement woodcut used for the 1500 printing of booklet in which a young gentleman dressed in the latest 15th-century fashion, including skin-tight stripped hose, a doublet with puffy sleeves, a feathered hat, and shoes with decorative ribbons has been substituted for the woman. Nevertheless, despite these obvious clues, both images have appeared in modern books mislabeled as examples of alchemists.

peared in at least two well-known histories of chemistry under the incorrect title of “The Alchemist” rather than the correct title of “Distillation.” That van der Staet intended these images to celebrate chemical technology rather than alchemy is apparent from a companion etching to figure 9 entitled “Gun Powder,” which shows the metallurgical activities inside a cannon foundry.

Our fourth and final case involves images of individuals operating small stills, usually in a home or workshop. The earliest example, shown on the left in figure 11, appeared on the title page of a 15-page booklet on the distillation of flavored brandies by Michael Puff von Schrick, first published in 1474. As correctly described by Forbes many years ago, this shows an “aquavitwoman,” rather than an alchemist, operating a still with a Rosenhut condensing head for the production of said flavored brandies (8). Even more egregious is the common misidentification of the figure in the replacement woodcut for the 1500 printing of Schrick’s booklet shown on the right as being that of an alchemist, rather than that of a foppish young gentleman about town.

Our second example (figure 12) is from the Bader Collection, copies of which were distributed by the Aldrich Chemical Co. to interested customers some years ago and which was labelled “The Alchemist,” by

Hendrick Heershop. It shows a man contentedly smoking his clay pipe while watching a small copper still. Nothing else in the painting is even remotely alchemical and in all probability this really shows a private individual distilling liquor in his basement storeroom. Indeed, I would have labelled this class of etchings and paintings “moonshiners” rather than brandy distillers, if not for the obvious anachronism.

We may never know how many of these misidentifications were due to unscrupulous art dealers attempting to satisfy the desires of overly enthusiastic collectors or to the wishful thinking of the collectors themselves.

Misinterpretations

Sometimes it is difficult to classify a given painting because of conflicting clues or because someone has misinterpreted one or more of the objects depicted in the scene. A case in point is a second, much better known, painting by Heerschop entitled “An Alchemist’s Experiment Takes Fire” (figure 13). As two recent commentators have observed, there are no crucibles or other metallurgical apparatus present in this painting but only alembics, a large mortar and pestle, and an assortment of apothecary jars (3). In particular, the jar with the diagonal label just above the subject’s left hand is typical of the kinds of fancy display jars found in period apothecaries (figure 14) (9). In addition, the subject’s furnace is lacking the hood arrangement normally used when working with the toxic fumes associated with assaying and metallurgy.

Why these commentators still consider this to be a



Figure 12. “The Alchemist” by Hendrick Heershop (1626-1690).



Figure 13. "An Alchemist's Experiment Takes Fire" by Hendrick Heerschop.

painting of an alchemist rather than an apothecary (whose shop might logically be connected to his living quarters, as seen through the door in the background) is because of the metal plate on the floor in the foreground with the half moon cut out of its outer rim (3):

But why should we think this is a chymist at work on transmutation? ... the key clue lies at his feet. Front and center in the composition is a large pewter plate – hardly a likely piece of laboratory apparatus – with a chunk cut from its rim [for use in his experiments]. The



Figure 14. A 17th-century etching of a German apothecary. Note the diagonal labels on the jars on the left and the small alembic still in the lower right corner similar to the one visible over the "alchemist's" right shoulder in figure 13.

cutout part is emphasized by being directly turned toward the viewer. This picture is probably a reference to one or more well-known stories of transmutation in which part or all of a metal kitchen plate was turned into gold or silver.

Unfortunately for this theory, the object in question is actually a barber's shaving plate (figure 15) in which the purpose of the missing half moon section on the rim is to accommodate the customer's neck. What it is doing in the painting is, of course, still a matter of conjecture.

Copies and Forgeries

The circa 1902 black and white photos of alchemical paintings found in the Oesper Collections show many of the same paintings as those found in the Fisher Collection and the internet reveals that several of these are also currently being offered for sale by various auction



Figure 15. A decorated porcelain shaving plate with the characteristic half moon cutaway in the rim.

houses. How did these museum holdings end up in the hands of private collectors? The answer has already been hinted at in an earlier section. These paintings were so popular that literally hundreds of copies were made, either by the original artists and their students (it is estimated that the younger Teniers and his assistants alone painted nearly 400) or by forgers (7). Thus either the museums or the collectors or both may own copies rather than originals. This is illustrated by the two paintings in figures 16 and 17, both of which are by Teniers the Younger. However, figure 16 presumably represents the original, which is in the Prado Museum in Madrid, whereas figure 17 is a copy that Chester Fisher bought in London in 1924. Close examination reveals, aside from the acquisition number in the lower left corner of figure 16, several differences between the two paintings. Thus the window shutter in the upper

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Figure 16. The original of one of Tenniers' paintings of an alchemist located in the Prado Museum in Madrid..

left corner of figure 17 is located much higher than in figure 16 as is the drapery over the second window. Likewise, the objects on the shelf and in the niche below the shutter differ in the two paintings as do the tools on the side of the furnace and the expression on the alchemist's face. Most noticeable, however, is that



Figure 17. The copy of the painting in figure 16 purchased by Chester Fisher in London in 1924 and which appeared as item 116 in the Berolzheimer Series.

the background lighting in figure 17 is much darker than in figure 16.

Not only were entire paintings copied, the apparatus in the paintings was recycled from one painting to another and even from one artist to another, indicating

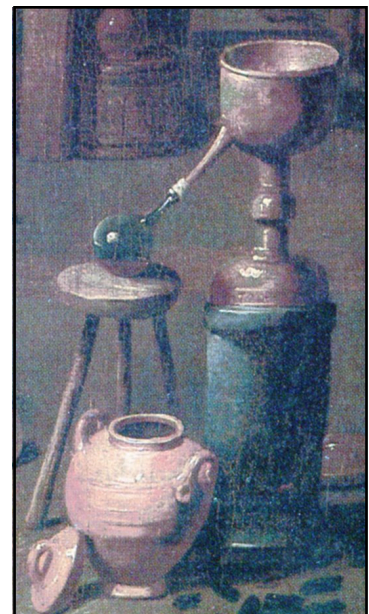
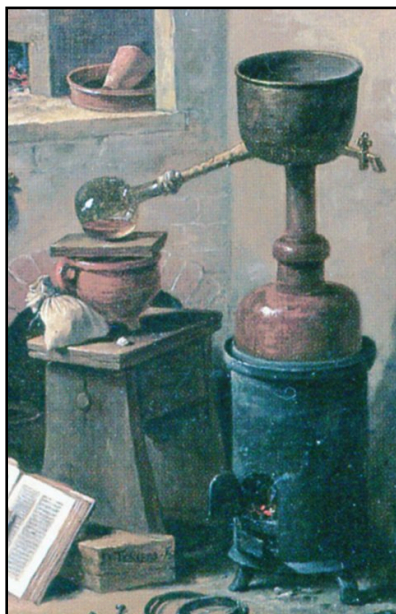
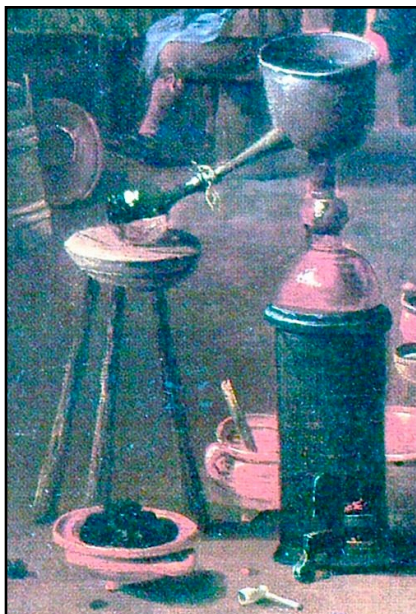


Figure 17. Three images showing, with only slight variations, the same metal Moor's Head still and stove as excerpted from three different alchemical paintings: two by Tenniers the Younger (left and center) and one by van den Bossche (right).

that they were creating new paintings based on copying and rearranging objects found in older paintings. Thus figure 18 shows three views of a metal Moor's Head and its accompanying cylindrical charcoal furnace taken from three different alchemical paintings. The same apparatus appears in figure 16 and in at least two other alchemical painting by Tenniers that I am aware of (10).

Conclusion

In closing I can do no better than to quote C. R. Hill's own conclusion to his 1975 paper, though in the intervening 42 years most historians of chemistry and alchemy have continued to ignore its sage advice (5):

As a category the alchemist pictures seem to be unique in their attraction for historians of a particular science seeking an iconography for their subject. It is hoped the present article has demonstrated the need for caution in accepting them as valid pictorial accounts of alchemical ambience and apparatus.

References and Notes

1. The phrase "alchemical paintings and prints" is ambiguous as it could also be used to describe the illustrations found in actual works on alchemy rather than secondary depictions of the alchemists themselves. Obviously I am using it in the latter rather than the former sense. The earliest treatment of this subject I am aware of is the slim volume J. Reid, *The Alchemist in Life, Literature and Art*, Nelson & Sons: London, 1947. Reid surveys the major artists and reprints representative paintings and etchings for each. However he discusses none of the issues covered in either this article or the article by Hill (6), and often misinterprets objects in the various images.
2. Progressively updated lists of the first 143 images of "The Berolzheimer Series of Alchemical and Historical Reproductions" may be found in *Ind. Eng. Chem.*, **1936**, 28, 129, *Ibid.*, **1939**, 31, 125; *Ibid.*, **1941**, 33, 114; and *Ibid.*, **1943**, 35, 106.
3. L. M. Principe, L. Dewitt, *Transmutations: Alchemy in Art*, CHF: Philadelphia, PA, 2002.
4. A. Bader, *Adventures of a Chemist Collector*, Wiedefeld & Nicholson: London, 1995; and A. Bader, *Chemistry and Art: Further Adventures of A Chemist Collector*, Wiedefeld & Nicholson: London, 2008.
5. See the graph in E. E. Ploss, H. Rosen-Runge, H. Schipperges, H. Buntz, *Alchimia: Ideologie und Technologie*, Moos Verlag: Munich, 1970, p. 122.
6. C. R. Hill, "The Iconography of the Laboratory," *Ambix*, **1975**, 22, 102-110.
7. J. P. Davidson, *David Teniers the Younger*, Westview Press: Bolder, CO, 1979.
8. R. J. Forbes, *A Short History of Distillation*, Brill: Leiden, 1948, p. 84.
9. Hill (reference 6) has also noted the appearance of heavily decorated apothecary display containers in many alchemical paintings.
10. See plate 20 of reference 1 and plate 6 of reference 6.