Johannes Spitler, a Virginia Furniture Decorator at the Turn of the 19th Century
by Chris Shelton*

**Abstract:** This paper highlights the usefulness of objective technical information obtained by conservators in expanding the understanding of American folk art objects, particularly painted furniture. This topic is presented through the research on the materials and methods used by Johannes Spitler, a German-American furniture decorator active in the Shenandoah Valley of Virginia. A tall case clock and a recently acquired blanket chest both painted by Spitler were examined and treated in the furniture conservation laboratory of the Colonial Williamsburg Foundation. These objects are presently on display in the new exhibition areas at the Abby Aldrich Rockefeller Folk Art Center in Williamsburg.

**Introduction:**
With the inception of American folk art as a collected art form in the 1920’s, collectors sought to acquire objects which satisfied the aesthetics of both the art connoisseur and the antiquarian. Painted objects in particular have been approached with a curious mix of fine arts aesthetics and a love of patina. Along with this folk art aesthetic collectors have been driven by many preconceived notions of the nature and importance of folk art. Chief among these is the romantic association of folk art with the new American democracy, that is, “the art of a sovereign, if uncultivated, folk living on an expanding frontier, cut off from the ancient traditions of race, religion and class.”

These earlier values have shaped many major collections but are now being reevaluated by curators, folklorists, and historians. In a 1986 conference on folk art, John Michael Vlach presented the situation found in many museum collections today:

> Generally folk art has been pursued as a set of things,... but the current generation of scholars and collectors now find themselves pondering much folk art that has no folk attached to it. The data of folk art has evolved into a random assortment of collectibles...

Today’s market is still full of imprecise but salable misconceptions resulting from collection practices showing little concern for the context and use of the objects. In fact, the myth that rural artists developed their own materials has colored our thoughts about the materials used to fabricate folk art.

A pertinent example is found in Williamsburg’s Buttermilk Paint Colors, a line of paints marketed with “Color Fidelity to an Early American Craft.” The label explains that buttermilk or casein based paints, were most widely used in early America after 1800 when commercial pigments were normally not available beyond high population centers. The rural painter adjusted accordingly by crafting a paint from various milk derivatives and a combination of earthen ingredients.

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There is a profound assumption being made here that isolated rural painters did not have access to the materials used to make high quality paint.

There has been far too little objective scholarly investigation to counter myths such as this. Many curators, folklorists and other scholars are today actively working to give the individual objects a voice as they seek the material culture context of the “other” 90% of the American population. Conservators have an important role to play in this reorientation of folk art. As the scholarship has moved away from market influences and fine art aesthetics, the need for technical examinations, documentation and conservation has increased. The contextual clues about fabrication and use are still present on these objects. By taking a different, technical approach conservators can supplement the subjective information about these objects and help evolve a new understanding of folk art.

Background
Johannes Spitler’s work has been described as the product of “the seclusion of rural community life” in the German community of Massanutten, Shenandoah County, Virginia. He worked in Massanutten from the 1790’s through approximately 1810, when he moved to an Ohio German community.\(^3\)

In spite of his distance from a major urban center, as this research demonstrates, his dynamic working methods and materials defy the myth of the rural painter. The pigments and binders used in his intense palette of blue, orange, black, and white paints did not confirm a milk paint with local earthen ingredients.

Spitler’s designs were traditional, including typical German-American motifs such as hexagonal designs, birds, and tulips. At the same time his designs are uniquely abstracted. Possibly the best example of this phenomenon is the relationship between the top of the tall case clock and the design on the front of a blanket chest decorated and initialed in the same year (See figures 1 and 3). The broken scroll pediment and finials from the clock were included in the design on the chest in a graphic, two-dimensional way. Johannes Spitler also shared a number of design schemes with a Mennonite fraktur artist, Jacob Strikler, with whom he was related by marriage.\(^4\) The only other known clock decorated by Spitler, No. 3 three dated 1801, was decorated for Jacob Strickler and demonstrates a striking similarity in border treatment and the floral design motifs with Jacob Strickler’s fraktur designs.

From his early works through 1801, when he began to expand his designs to include animals, more foliate designs, and other geometric designs, Spitler initialed and numbered his creations by form. This rare occurrence among folk artists allows for an accounting of his production. It is estimated that Spitler was producing approximately 25 blanket chests a year at the height of his career.\(^5\)

Colonial Williamsburg Foundation owns two objects painted by Johannes Spitler in the Abby Aldrich Rockefeller Folk Art Collection (AARFAC) which were examined for this research. The first object is a yellow pine tall case clock, prominently labeled “j. SP./No.2.” The second object is a yellow pine blanket chest which was acquired in 1991 as a pristine example of Spitler’s later style (see figure 2). The tall c-c-e clock was brought to the Colonial Williamsburg furniture conservation lab for some minor structural repairs and a thorough examination and condition evaluation of the painted surfaces prior to the reopening of the Folk Art Center. At the same time the blanket chest was treated for some minor structural damage and had matching brasses fabricated for the lost drawer hardware. The pristine surfaces of the chest formed an important visual baseline for examining the tall case clock. Their side by side appearance was
Examination
The treatment of the paint on the clock began with a thorough examination of the surface. The condition of the paint was stable, although severely discontinuous across the wooden substrate. The paint had exhibited a poor adhesion over time to the denser, resinous late wood growth. In spite of the massive losses, there was very little tenting, active flaking or even cleavage evident.

The only reference to Spitler’s painting techniques assumed that he built up his designs in a free-handed, additive manner, first painting the case blue and then adding increasing layers of design over one another. Closer examination proved this to be false. The edges of the losses revealed that first the surface was primed with a thin red ground applied over the entire clock. The red ground was followed by the design, and lastly by the blue background. The brush marks in the blue paint clearly indicate that it was applied around the designs, not under them.

Examining the surface with low power magnification revealed that Spitler laid out his designs very systematically by incising them into the surface. The incised lines were visible in the losses of paint on the door and could be followed through the paint in many areas. It appears that once he had divided the surfaces into zones with a straight edge, he developed the design with a compass, various templates and stencils.

The traditional hex designs which Spitler made extensive and unique use of were laid out with a compass. The curvilinear stems which were popular in his later designs like that on the blanket chest were also inscribed with a compass.

The outlines of certain figures were incised into the red ground with a template pattern before the paint was applied. For example, the profile of the bird at the bottom of the door on the clock was incised before it was painted. The use of a template also allows the design to be easily repeated, sometimes in another context. This same bird profile appears in another design context on a privately owned chest from the same period (See figure 4).
Figure 1: Tall case clock No 2., 1800, AARFAC.

Figure 2: Blanket chest, c. 1805, AARFAC.
Figure 3: Haight blanket chest, c. 1805, private collection.

Figure 4: Blanket chest No. 70, 1800, private collection.
The final method used for developing the surface was stenciling. On the AARF AC blanket chest, the repeated profile of the birds was applied with rapid brush strokes through a stencil. This is clearly evident in how the brush marks end abruptly at the edges of the bird figures.

For all of their unique qualities, only a small portion of Spitler’s designs actually were executed completely free hand. On many objects, only the date and initials were done without a stencil or template.

The surface of the clock also had been coated several times with varnishes. It was unclear whether the surface was originally varnished. While painted decorative surfaces were often coated for reasons of durability, gloss, saturation, it is possible that the varnish was applied to brighten the surface after it had weathered.

There are a number of possible reasons for the methods Spitler used to develop a painted surface. The seemingly curious method of applying blue paint around the design rather then applying the design over a blue ground appears to be a labor intensive approach. However, this technique may have allowed the artist to complete a design without having to wait for a surface to dry sufficiently before another layer could be applied. Or perhaps Spitler only painted the design and the uniform blue backgrounds were painted in by an apprentice. The use of the compass, stencils and templates indicates an efficient process, one where time “eyeing-in” and needlessly duplicating a profile or element was minimized. Spitler’s style was not what one would expect from the rural, untrained artisan. Rather, it is a streamlined methodology for efficiently reproducing a unique decorative style.

Microscopy

Microscopy is the single most useful technique for understanding the application and composition of various paint and varnish layers. Examining cross-sectional samples in white light and their fluorescence in ultraviolet light can resolve complex layers of aged coatings or chemically characterize a varnish or paint binder. Transmitted polarized light microscopy of a dispersed paint sample can be used to efficiently identify pigments based on their size, morphology, and effect on plane polarized light. These two techniques are important and relatively simple in-lab methods for thoroughly examining and characterizing paint materials. Some familiarity with basic painting techniques and a few standard reference books are all that are needed to begin to understand the development of a painted surface.

Frequently painted objects have been later coated to compensate for a loss of saturation due to overcleaning, surface oxidation and dirt accumulation. Fine art/paintings conservation has traditionally viewed varnish as functional and subordinate to the color and visual interpretation of the paint. Its propensity to change color harmonies and to obscure the surface has often led to its complete removal and replacement. In the decorative arts, however, the importance of original finishes has been repeatedly emphasized for their documentary importance. A demonstrable original varnish is an important document of the working methods of the artist and an indication of the intended aesthetic appearance.

To better understand the paints Spitler used and to establish if the paint surfaces were originally coated with a varnish, small cross-sectional samples of the paint layers from the AARFAC clock and chest were taken. The exact areas were marked so that a good correlation could be made between the view in the microscope and the painted surfaces. Each paint sample was embedded in a small cube of polyester resin, ground perpendicular to the top surface of the sample and polished by hand with 0.3 micron microalumina abrasive and Stoddard solvent. For examination under the microscope, the ground cubes were mounted on slides and cover-slipped with Stoddard solvent.
The furniture conservation lab uses an Olympus BH-2 binocular polarizing microscope that was fitted with Universal Vertical Illumination (UMA), a mercury vapor light source and a violet cube (approximately 370-420nm excitation range) for ultraviolet light microscopy. An external fiber-optic light source with a variable intensity was used for examination and for normal white light photomicrography.

Four direct reactive fluorescent dyes were used to chemically characterize the binding materials found in the sections: 4% Triphenyl Tetrazolium Chloride (TTC) in acetone to indicate the presence of carbohydrates, 0.2% Fluorescein Isothiocyanate (FITC) in acetone to indicate the presence of proteins, 0.175% Rhodamine B (RHOB) in ethanoUxylene to identify saturated lipids such as drying oils and 0.175% Dichlorofluorescein (DCF) in xylene/ethanol for identifying unsaturated and saturated lipids.

Under the microscope, complex surfaces frequently can be resolved with a great sense of order and sequence. The samples taken from the clock showed a consistent presence of a red ground layer, paint layers and several clear coatings. The earliest, possibly original varnish in the cross-sectional samples from the clock compared favorably in thickness, color, inclusions, and fluorescence with a similar sample taken for comparison from the pristine surface of the blanket chest. Neither of these surfaces stained positively with the reactive fluorescent dyes for oils, carbohydrates, or proteins. It was, therefore, assumed to be a clear resinous coating of some kind. Subsequent coats of pure spirit varnish and oil and resin were added to the surface of the tall clock over this early varnish.

The binders in the paint layers were also chemically characterized using the reactive fluorescent dyes. Unlike clear coatings, the much smaller proportion of binder in a paint cross-section and its close proximity to colored pigment particles often makes binder characterization difficult. A positive fluorescence with DCF for unsaturated lipids, and little or no reaction with the FITC stain for protein seems to indicate an oil-bound paint system, rather than a proteinaceous casein or distemper binder. This finding, although not a conclusive analysis, was further supported by the lack of traditional casein paint additives, such as large amounts of chalk.

Dispersed paint samples were taken from the red ground and the four colors of paint on the clock for pigment identification with transmitted polarized light microscopy. The importance of identifying the pigments and colorants is two-fold. First, it can be useful for determining the working patterns and resources of an artist. Second, the sensitivity of certain types of colorants can be important to the choice of materials for cleaning during the treatment.

Each sample was taken with a scalpel by scraping a small amount of paint from the surface. The agglomerations were dispersed by dissolving the binder with a drop of ethanol before mounting under a coverslip with Permount, which has a refractive index of 1.58. The color, shape, size, relative refractive index, birefringence and angle of extension were compared with standard mounted reference samples. Part of each scraped sample was retained for a confirmation with a microchemical test usually for a specific metal ion in the pigment.

The results indicate that the five pigments Spitler used were commonly imported, commercially available pigments. Only the burnt umber, which was used in the thin ground applied of over the entire case, may be classified as an “earthen ingredient”, although it was most likely an imported pigment which Spitler purchased locally. The dark, warm color of the individual umber pigment particles was fairly homogenous but more translucent than a suspected iron oxide red pigment.
The white paint was formed with an almost pure white lead carbonate. Unlike chalk, the very small dense lead carbonate particles have a high relief due to their high refractive index ($n > 1.58$). They are also highly birefringent. The black paint contains lamp black, a fine carbonaceous black pigment. The orange decoration was formed with a pure red lead pigment, which under the microscope is slightly birefringent and intensely orange/red in transmitted light. The paint film itself is very opaque and has a muted brown cast on the surface, which is a common appearance for red lead exposed to light and the atmosphere.

Of particular interest were the blue background areas. These were painted with a mix of Prussian blue and lead white. Prussian blue, or ferric ferrocyanide, was the first modern “synthetic” pigment, discovered about 1710. It was imported in the colonies even though the materials for its fabrication also were available. The method of manufacture of Prussian blue has changed significantly since the eighteenth century and the modern pigment shares little of the morphology of the older material. Eighteenth century recipes involved calcined blood products as the source of iron cyanides, mixed with common iron salts. The synthesized mass was broken up, producing irregular glassy flakes with deep blue color. It was very desirable due to its high tint strength and durability. In this mounting media they have very low relief, indicating a refractive index around 1.58. In polarized light, the particles are isotropic. Prussian blue pigment is inert in acids, unlike some other blue pigments. Its presence can be tested by the effect of strong bases, which will turn it orange; the blue color returns by neutralization with acid.

The other pigments were also subjected to microchemical tests for the presence of lead (Pb), in the case of red and white lead, and for iron (Fe) for burnt umber. The lead ions liberated by dissolving both the orange and the white samples in nitric acid formed a positive yellow precipitate when exposed to an aqueous solution of potassium iodide, KI. The red ground was tested with similar procedure. The presence of iron was confirmed when potassium ferrocyanide solution precipitated dark blue ferric ferrocyanide.

The choice of a pigment can sometimes suggest something about the paint binder as well. Lead based pigments are much more traditionally applied in an oil rather than casein since they are particularly good catalysts for oil oxidation. Furthermore, Prussian blue pigment can not be used in the high pH environment of some casein paints, since the color of the pigment can be affected.

All of these pigments were commonly used throughout the 18th and 19th centuries in Europe and America for use in a range of paints. Pigments and binders were widely imported, sold by local peddlers and purchased in urban areas from merchants. Newspaper advertisements by these individual merchants often listed as many as fifteen pigments plus all types of oils and gums which were available.

Unlike the myth of the isolated rural painter, artisans were not only purchasing the newest pigments but also carrying on a dialogue in materials amongst themselves in the period. German language texts with period recommendations for useful dyes and pigments, such as Johann Krauss’ *Haus and Kunst Buch* (1819), were being published in Allentown, Pennsylvania. A similar book, *Das Groze ABC Buch*, was also published in New Market in the Shenandoah Valley of Virginia.

**Treatment**

It is particularly important on three dimensional painted objects to observe the relative consistency and condition of all of the painted surfaces. On the clock, the waist door had protected some of the paint decoration from light and some campaigns of “maintenance.” There was an obvious difference between the hood moldings which had been overpainted with an opaque chocolate brown, and areas on the sides of
the hood which were a dark reddish orange with a visual depth. It was also immediately evident that the quarter-columns had been overpainted and that some of that paint was on the sides of the case and over the red and black plinths of the capitals.

The goal of the treatment of the painted surface was to unify the appearance, return some of the original tonal harmonies and retain the earliest clear coating, if possible. The proper left side of the case was in the worst condition as far as paint loss. But it had not been as frequently overcoated and the moldings had not been overpainted brown, indicating that side probably was close to a wall in a corner.

The treatment proceeded in a two stage cleaning, first with an aqueous cleaning system. The removal of the oils and dirt from the surface allowed for an easier reduction of the resin coatings. Saliva was used on the more grimy surfaces while a 1% Triton x-100 aqueous solution with triethanolamine to adjust the pH to 8.5 was used to remove the oily surface and dirt accumulations. The resins were reduced in the second stage with a mixture of 70% ethanol and 29% xylene and approximately 1% benzyl alcohol. The overpaint was removed mechanically.

These cleaning methods were tested before the treatment was undertaken. Cross sections were taken from the test cleaning areas and these demonstrated that the earlier layer was intact even after prolonged cleaning. The visual appearance of the paint also indicated this fact.

All of the surfaces were coated after cleaning with a 5% solution of B-72 in xylene to saturate and consolidate without imparting a gloss to the surface. The only compensation that was undertaken was a thin glaze of acrylic dispersion paint over the mechanically cleaned moldings to mimic the more deteriorated surfaces.

**Conclusion**

The research presented in this paper answered a number of questions that needed to be resolved before the treatment of the paint on Johannes Spitler’s second painted clock could begin. It also brought to light the working techniques and materials of an important, identified Virginia furniture decorator. The oil paint binder and commercial, probably imported, pigments used by Johannes Spitler were quite different from the types of materials which have been widely assumed to be used by folk artists of the time.

Although making paints may be more self-determined than buying them, the latter may be a more accurate explanation of a rural artist’s methods, even in the late 18th century. And this research has established that Johannes Spitler was definitely a working artist, not just a rural dabbler.

The information observed on these objects indicates his methods for creating and duplicating large personal designs from a variety of sources, including popular design elements, and designs shared with fraktur artist Jacob Strickler. It also substantiated his heavy use of a compass, templates and stencils to speed up the reproducible layout and execution in his work.

Exactly how these techniques compare with other folk furniture decorators and other painters in the period is an area for much more study. That question will be answered when other folk artists and their objects are examined with an eye towards constructing a material oriented context for folk art and artists.
Acknowledgements
I want to thank the Colonial Williamsburg Foundation and my supervisor Carey Howlett for supporting my conservation internship and my research. In particular, I also wish to thank AARF AC curator Richard Miller, for his input and access to information of Johannes Spitler, and Joanna Ruth Harris, for her editorial efforts.

References


5. Three blanket chests were considered: No. 36 dated 1797, No. 48 dated 1798 and No. 70 dated 1800.


7. Paint decorated blanket chests from Wythe County, Virginia also have visible incised layout lines. This fact is covered in J. Roderick Moore, “Painted Chests from Wythe County, Virginia,” Antiques 122: 3 (Sept. 1982): pp. 516-521.


9. The painted surface of the chest may have been uncoated for a period before this early varnish since it is pooled in some of the abrasions and indentations in the drawers, but not in the losses. The chemical composition is not known, but its deteriorated condition is responsible for the matte, white haziness of the surface.


12. The test for Prussian blue and the tests for specific metal ions were derived from information presented in various courses at the Winterthur/University of Delaware Art Conservation Program.
