



GEORGE WASHINGTON'S **Life in Color**



a u t u m n

Life Guard Teacher Fellowship Created Materials
George Washington Teacher Institute

mountvernon.org/teachers

**Connecting Across the Curriculum:
More Ideas for George Washington's Life in Color**

Autumn

Life Guard Teacher Fellowship Created Materials
George Washington Teacher Institute

mountvernon.org/teachers

1

Biography connection: Research the life of Sir William Hamilton. His life as a diplomat took him to many places around the world. His personal life was quite scandalous for the eighteenth century.

2

Business connection: Research the lives of Josiah Wedgwood and Robert Adam. Were they successful in the decorative/design business?

2



Orange and Black Wallpaper?

When you want to redecorate a room and the redecoration includes wallpaper, you have two choices: you can strip off all the old paper or simply paint or paper over the wallcovering that is already there. Each choice has its own advantages. If you strip off the old paper, you will have a cleaner surface on which to apply a new finish. Colors from the old paper will not bleed through onto the new. New wallpaper won't be affected by any peeling, bubbling, or tearing of the old paper beneath it. On the other hand, if you decide to leave the paper in place and cover it with a new layer of paper or paint, you will have saved the time it would have taken to remove the old.

Restoration professionals might prefer that second option. They might prefer it because those layers upon layers of paper have papered over previous layers of paper, leaving intact the decorative history of the space. Having that history helps for restoration purposes and documenting changing styles and tastes. Almost always the time will come when all the layers

need to be removed. In a historic house like Mount Vernon, that time will often be when the staff of professionals decide to restore a room's appearance to a particular time period. In the Washingtons' bedroom there were several layers of papers, one on top of another, glued together.

Pictured at left, one of the larger fragments, about 8" x 9", features a neoclassical swag (sometimes called a festoon) in a color scheme of orange, peach, beige, and black. While orange is associated with warmth, heat, and sunshine, it is also generally perceived as an extroverted color. Orange may be too vibrant in a bedroom designed to be a place of retreat and relaxation. Such a thought must not have been part of the redecorating conversation at Mount Vernon, as at some point in time this paper covered the walls of what was the Washingtons' bedchamber. The color scheme, combined with the neoclassical swag design, may offer some clues to the source of the design and the reason why such a pattern would have been a popular wallpaper choice.

Excavations of Pompeii and Herculaneum in Italy inspired worldwide interest in classical antiquities. The discoveries inspired artists and designers in many fields, including fashion and the decorative arts. Not every designer traveled to Italy to see the discoveries first hand, of course, but resources were available—and widely distributed—that gave a glimpse of the ancient world to people unable to see it.

Some people were content to admire the antiquities being unearthed in Pompeii and other archaeological sites. Others weren't content to just look; they wanted to acquire the objects being unearthed. One of the earliest antiquities collectors was Sir William Hamilton, British ambassador to the Court of Naples from 1764 to 1800. Living in Italy and moving in highest society, Hamilton had both the opportunity and the means

to collect the art of his choice.

Greek vases became a focus of Hamilton's collection. In 1766 he published *Collection of Etruscan, Greek, and Roman antiquities from the cabinet of the Honble. Wm. Hamilton, His Britannick Majesty's envoy extraordinary at the Court of Naples*, a book of engravings of the vases in his collection. Three additional volumes were published between 1769 and 1776. All four volumes circulated widely and were used by designers like Josiah Wedgwood and Robert Adam as sources of inspiration for their work. As more and more designers saw these printed works, decorative arts firms created fabrics, textiles, furniture, paints, and all manner of furnishings to satisfy the public's desire for contemporary objects and designs that followed the latest trend, which was, of course, ancient history.

Some designers took inspiration from shapes and forms. Others adapted classical architectural elements. Still others used common color schemes. This may be the source of the wallpaper fragment found in the Washingtons' bedchamber.



Red-figure Kylix. Signed by Hieron, attributed to Makron, c. 480 BCE. NY: Metropolitan Museum of Art.

One of the most common features of the ancient vases that so captured Sir William Hamilton is their color scheme. Potters in ancient Greece made vessels through processes that were thousands of years old. Pots were shaped on the

3

wheel and dried to leather hardness. Handles and other elements were added to the pot with slip (very loose clay that acts as glue). The earliest vases (between the sixth and fourth centuries BCE) were decorated in a style that came to be called black-figure because the decorative elements were painted onto the body of the pot with a slip that turned black in firing. The background was left the color of the clay—usually a variation of terracotta, which would be on a scale from orange to brown. Later vase painters innovated by leaving the figures the color of the clay and painting the background with the slip that turned black in firing. This later style was called red-figure.

Whether red-figure or black-figure this color scheme is the same as the wallpaper fragment in the Washingtons' bedchamber: black and (in the family of) orange. Perhaps this wallpaper is simply following a design trend of the day. It's worth noting, though, that this wallpaper fragment may connect Mount Vernon not only with the Europe of George Washington's day but with ancient history as well.



Black-figure Column-krater. Attributed to Lydos, c. 550 CE. NY: Metropolitan Museum of Art.

3

Art History connection: How many different vase shapes did the ancient Greek potters make? Look for lekythos, pyxis, oinochoe, hydria, amphora, volute krater and more.

4

Art connection: Create your own black- or red-figure vase. Choose a terracotta pot and draw your design in pencil. Use paint or permanent black marker to create the design.

1

Career connection: Robert Dossie was an apothecary. What did it mean to be an apothecary in the eighteenth century? What career today is similar?

4

A Recipe Book for Artists

When Eleanor (Nelly) Parke Custis received her Thomas Reeves & Sons **watercolor** box, it included forty semi-moist watercolor cakes. Reeves pioneered the technology to produce the cakes, removing one hurdle for a would-be watercolorist. No longer were painters required to grind pigments, make pastes, and find containers. Nelly and others could simply sit down with a brush and water, wet the watercolor blocks, and apply paint to paper.

Not all painters chose to use the new, ready-made paints, opting instead to continue the practice of making their own paints. One of the books in George Washington's library was a how-to art book. Robert Dossie's *The Handmaid to the Arts*, originally published in London in 1758, gave every reader the information needed to create a wide assortment of art materials. Dossie's background was in science. As an apothecary, he was familiar with mixing chemicals. In his book he offered recipes and step-by-step guides to de-mystify the processes of painting, printmaking (engraving), japanning, and papermaking for the lay person. The second edition, the version in Washington's library, was published in 1764 and promised "considerable Additions and Improvements."

The first part of Dossie's book has to do with the "nature, preparation, and use of all the various substances employed in painting." After a general introduction, the second chapter is about color: color in general, the tools needed to make and prepare colors, the recipes for specific colors, dryers for oil paints, the differences in preparing oil paint ad watercolor/water-based paint.

Making paint—for canvas or paper or walls—



begins with pure color pigments processed by washing, grinding and heating. The pigment is added to the proper binder for the medium, which for watercolor paints is gum arabic.* A pigment paste—pigment and a small amount of water—and gum Arabic are mixed in equal portions. A glass plate provides a strong, non-porous surface for mixing and using a paint spatula allows for crushing any clumps in the pigment. When a smooth paste is achieved the paint is put into pans or half-pans, a palette, or other container. This has been the basic recipe for watercolor for centuries.

Early pigments were all natural: soil, minerals, and gemstones. Dossie discusses pigments and paints by color family, beginning with reds. One of them is Indian Red, so named, according to Dossie, because it originally came from the East Indies. Dossie comments that "real" Indian Red has been largely forgotten as there is a cheaper substitute color that suits most purposes. He describes the color as "warm, though not bright."

Yellow Ochre, one of ten or so yellows discussed by Dossie, is a naturally occurring, non-toxic pigment, which makes it unlike many other yellows. Like Indian Red, Yellow Ochre was used by prehistoric cave painters who demonstrated that the clay that is the source of the pigment can come in shades from pale yellow (cream) to bright yellow to brown. Dossie warns against yellow ochre pigments that have been diluted and gives a method for determining whether a pigment is

2

5



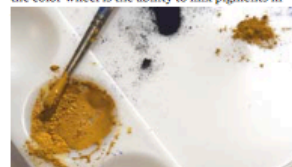
really natural.

First in Dossie's discussion of blues is Ultramarine, made from calcined* lapis lazuli.* Ultramarine was the most expensive paint, but not too long before Dossie's book was published, a much less expensive blue called Prussian Blue had been developed. Dossie considered that the resulting decrease in the use of Ultramarine was "an injury to painting in general, as the skies of landscapes", and many other parts of modern pictures, shew the loss of it by their changing from a warm, or clear blue, to a faint greenish or olive tint." George Washington did not seem to be swayed by Dossie's criticism of the new color. In 1785 he chose Prussian blue for the wall color in the *Front Parlor*, a favorite room in the mansion.

Prussian Blue was among the earliest synthetic pigments. As with many colors since, the discovery of this shade of blue was an accident. Around 1704 a colormaker named Diesbach, working in Berlin,

Germany, was experimenting with shades of red using cochineal, alum and oil of vitriol. He added some waste potash* to his mixture and the resulting color was a blue rather than a red. Because the ash was waste ash, it had been contaminated, and the accident became a color that has been popular for the last three hundred years.

Indian Red, Yellow Ochre and Prussian Blue (shown above) are one set of primary* colors. They can be mixed in varying proportions to create an entire color wheel. One step back from the color wheel is the ability to mix pigments in



2

Book connection: A scan of Robert Dossie's book "The Handmaid to the Arts" is available online.

3

Color connection: Gather the primary colors in a variety of media. Keeping the media consistent (all acrylic paint, all watercolor, all colored pencils), create color wheels using different combinations of primary colors: Indian red vs. Alizarin crimson; Cobalt blue vs. Phthalo blue; Cadmium yellow vs. Yellow ochre.

1

History connection: Analyze the heraldic coat of arms used by the Washington (Wessyngton) family. What do each of the individual elements mean?

6

spectrum



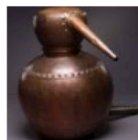
7



The original Washington family name was Wessyngton. In the thirteenth century, the Wessyngton family began styling the coat of arms that George Washington used in the eighteenth century. The heraldic symbol included two horizontal bars under three five-pointed stars.



The most familiar image of George Washington is on the one dollar bill. The engraving for the bill was based on a portrait by Gilbert Stuart. Above is an age-regressed image of George Washington at about 19 years of age. His light blue-gray eyes are a strong contrast to his reddish-brown hair.



This object, used at the distillery, is just one of many in the world of George Washington that are made of copper. Other copper implements could be found in the garden, in the kitchen, carried in hand, and mounted on walls.



The self-sufficiency of Mount Vernon meant that a blacksmith shop was necessary. In the shop blacksmiths made nails, hooks, and various other implements for use all around the property: in the kitchens, in the fields, and in the barns. A blacksmith's shop was built at Mount Vernon in 1768.



George Washington owned two versions of Miguel de Cervantes' novel *The History and Adventures of the Renowned Don Quixote*. He owned both the original Spanish version and an English translation. How do you think it happened that he had both?



Once the sun went down, George Washington's world was illuminated only by firelight and candlelight. Candles were placed in candlesticks and on candlestands to provide light that made it easier for people to move around both indoors and outdoors.



The Marquis de Lafayette wrote to George Washington asking for the General's help in securing seeds from America to be sent to the King of France. Among the requested seeds was that of the cardinal flower shown here in the Mount Vernon gardens.

2

Literature connection: Read "The History and Adventures of the Renowned Don Quixote" (in English or Spanish!). The novel is the source of the English idiom "tilting at windmills." Research the phrase to discover what it meant in the novel. The phrase has taken on other meanings, among them the idea of taking action based on heroic or idealistic ideals that may have been misperceived. Discuss in what ways George Washington and the American Revolution may have been perceived as "tilting at windmills."

1

Enslaved people connection: Who is Frank? Find out more about him and other Mount Vernon's enslaved population through the exhibit "Lives Bound Together" on the Mount Vernon website.

8



Up on the Roof

Today we visit a paint store that uses computer analysis to exactly match the color we would like to put on the walls, ceilings, and exteriors of our homes. For the eighteenth-century homeowner, painting a house required the manufacture of paint, probably onsite. Item number 264 of a 1761 inventory of the Mount Vernon estate says, "Paint some red Lead & 1 table - 211-10s. - No. 162, 4s.7d." This inventory was taken about seven years after George Washington had acquired the Mount Vernon estate, so Washington had already begun making his mark on the property.

In a 1793 letter, Anthony Whiting, master painter and Mount Vernon's estate manager from 1790 to 1793, wrote to George Washington: "Tom Davis is now beginning to work but cannot yet paint the buildings being so very wet he has been mixing & preparing paint & I intend putting Frank with him to forward the work." The house paint used in 1792 would have been hand mixed. That is, someone (according to Whiting's letter the job was given to Tom Davis) would have had the job of mixing pigment with linseed oil to form a paste and then boiling oil that would be added to the paste to thin it to a paintable consistency. Only then was the paint ready to apply to walls, wagons, or any other surface needing painting.

One of the most recognizable painted surfaces

at Mount Vernon is the mansion's roof. Most people would say the roof is red, but the color was known as Spanish Brown in the eighteenth century. The color was made from clay (dirt) mixed with an iron oxide (red lead). The proportion of red lead to clay determined the resulting color. Spanish brown could be a burnt orange color or one of any number of reds or even a solid brown. The components of the paint made it relatively inexpensive, but it was popular even among those for whom expense was less of a concern.

As iconic as it is now, Mount Vernon's roof was not always the color it is now. For a time it was painted gray to mimic the appearance of slate. At some point the mansion roof was painted Spanish Brown and then, in 1792, the roofs of the estate outbuildings were repainted to match the mansion. In April 1792, George Augustine Washington, Mount Vernon's farm manager, and nephew of George Washington wrote his uncle: "Spanish brown will I think answer very well for painting the Roof of the Green House and the wings to it for white lead which if the principal paint in forming a slate color is very expensive I think there is in the store half as much Spanish brown as will be wanting for the purpose mentioned and the further quantity that may be required may perhaps be obtained on as good terms in Alexandria as in Philadelphia and Oil also of which a good deal will be wanting but of this I will inform myself the first time I go to Alexandria which will be tomorrow if I am well enough which I at present have little expectation of—if it should appear best to get it from Philadelphia will endeavour to make an estimate of the quantity of Paint and oil that may be required."

Two paintings attributed to Edward Savage show the mansion between 1787 and 1792. One composition is of the side of the mansion facing



the Potomac River with a series of fences and grazing animals. The other painting shows the west front along with outbuildings and people walking the grounds. The paintings can be dated within the above years because the weathervane was added to the roof in 1787 and the outbuilding roofs were painted Spanish Brown in 1792. In both paintings the weathervane is atop the mansion and the outbuildings have gray roofs. Savage may have made sketches as he passed through the region and visited the estate.

Painting a roof may seem to be an ordinary activity. In the eighteenth century, though, painting Mount Vernon's roof had worldwide connections. Advances had to be made in trade and transportation in order for the estate to acquire the supplies that could not be manufactured onsite, such as iron oxide and linseed oil which were needed for paint. In addition, recipe books, such as Robert Dossie's *Handmaid to the Arts* provided important information on how to make paint once the supplies were acquired. The labor of men like Tom Davis and Frank was required to make the paint—and to make enough to paint the roof of the mansion and later the outbuildings. Further labor was required to climb to the roof, raise buckets of paint, and change slate gray to Spanish Brown with brushes. The roofs that covered Mount Vernon's buildings required information, skills, tools, and ingredients from far beyond the estate's boundaries.



9

*Vocabulary

Calcined materials are heated to a very high temperature though not to the point of melting. At the high temperature all moisture evaporates, leaving a material that is easier to grind to a powder.

Gum arabic is a natural gum made from the sap of acacia trees. Gum arabic is a good binder for watercolor because it dissolves in water, making it easy for the pigment to disperse in water.

Lapis lazuli is a brilliant blue variety of lazurite. This semiprecious stone is used as a gemstone and as the source of Ultramarine pigment. Found naturally in Asia, the stone was shipped to Europe. Since it came from far away and was shipped by boat, the pigment that came from the stone was called "ultramarine" (*ultra*, beyond + *marinus*, of the seas).

Landskip is an archaic form of the word *landscape*. Dossie was commenting on the comparison between a sky painted with Ultramarine Blue and a sky painted with Prussian Blue.

Potash was, historically, wood ash stored in water-filled pots to be used as a fertilizer.

Primary colors are red, yellow and blue. These colors are the building blocks of all other colors but cannot be mixed themselves. Mixing two primary colors yields a secondary color (green, orange, violet). Mixing a primary and a secondary color produces a tertiary color (blue-green, red-orange).

Synthetic pigments are made of chemical compounds where natural pigments are found in nature.

About the coloring page

Atop the mansion roof is a cupola crowned by a weathervane featuring a dove of peace. The cupola is documented as early as 1778.

2

Life in Color connection: See the article about Dossie's book and connections to it in the Autumn issue.

3

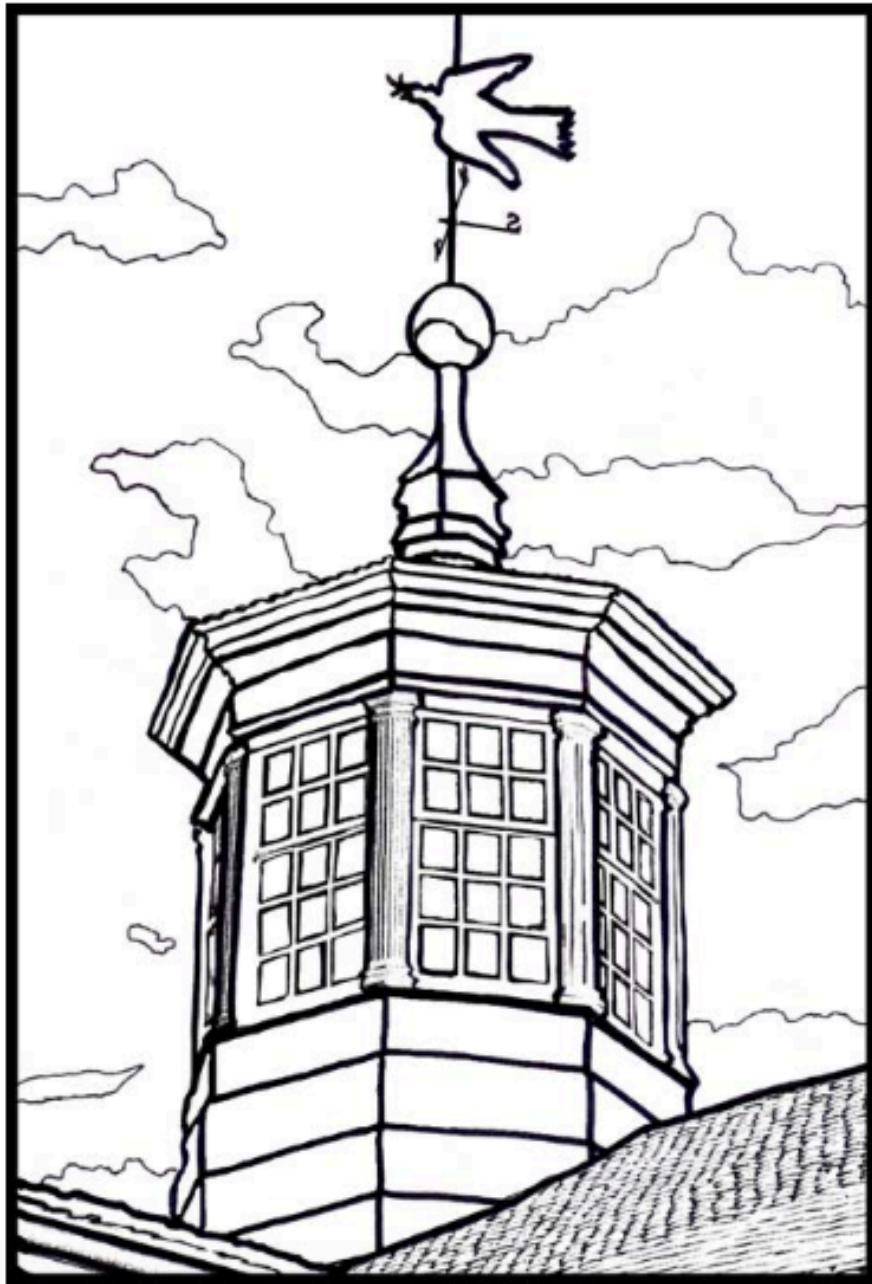
Geology/geography connection: Where on earth are the largest deposits of lapis lazuli? Learn about how this mineral is mined today.

4

Life in Color connection: The Spring edition of George Washington's Life in Color includes an essay on the dove weathervane that sits atop Mount Vernon's cupola.



Add your own color to George Washington's world.



Architecture connection: George Washington chose this symbol for the highest point on his house. What figure stands at the top of the U.S. Capitol building?