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The Evolution of "American Historic Color Palettes"

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Abstract

"Historic Color Palette" is a group of paint colors placed together that are supposed to have a historic connection to architecture. This paper takes a look at how these color palettes came into existence and how they have developed over time. The concept of linking certain color groups to particular time-periods and places is an intriguing one. It first emerged in the United States as a descriptor of historic colors discovered at Colonial Williamsburg. With time the palettes have extended beyond Colonial period and even the midcentury modern. These palettes have grown over time to become a popular means of creating visual connections to the past. But what do these colors represent?

The thesis was initially undertaken to explore where "historic color palettes" came from and to examine the evolution of the special color collections that form the American "Historic Color Palettes." Representing specific regions and time-periods in history, the "historic color palette" is an important means of telling the story of the nation.

For this research, a number of "historic color palettes" were selected as case-studies. These were not limited to palettes being produced commercially, and also included lesser-known palettes, which have made significant contributions to the development of respective areas. The research process entailed the study of historic paint brochures and early paint advertisements, along with archival research and interviews with people working in the development of the historic palettes. Advances in architectural paint research techniques and methodologies in the twentieth century have made it possible to identify many of the original colors that were used in different periods of the American history.

The study and examination of these palettes led to the discovery that the "historic color palette" has not always been developed using evidence found in and on historic buildings. It has evolved as an amalgam of scientific paint analysis, historical research and imagination. It has also played a variety of roles primarily as a sales tool, educational model and proponent of historic preservation. The findings from this research however raise important questions of authenticity of the "historic color palette" and its effect as a tool promoting historic preservation in the United States.

Introduction

The discovery of the *National Trust Historic Colors* produced by Valspar acted as the impetus for this thesis, whereupon research began on "historic color palettes" available in the American market at the present time. Initial research found that there are a number of companies that offer some form of "historic color" collections to the American consumer, and these are displayed quite prominently in paint stores today.

Historic color lines sold by companies today exhibit dissimilarities in their nomenclature and categorization; some palettes lack specific time-frames associated to them while others fail to recognize certain "periods" altogether. For instance, Valspar offers over 250 historic colors; their collection is made up of four categories – Georgian, Neo-Classical, Southwestern, and Victorian - of which Southwestern appears to be more regional than a "period" specific palette. In contrast, Sherwin-Williams has a total of 80 Interior and Exterior colors in its corresponding Preservation Palettes - divided into seven subcategories ranging from The Classics of 1600's to the Suburban Modern of the 1950's. However, not all the periods have been given specific date ranges. Benjamin-Moore offers a palette of 191 colors known as the Historical Collection completely separate from its Williamsburg® Color Collection of 144 colors; the latter is focused on Williamsburg during the 1770s, which was the decade of the American Revolution.¹ On the other hand, California Paints, having worked with Historic New England, provides 149 Historic Colors of America divided into five groups; Colonial, Federal, Greek-Revival, Victorian and 20th Century Eclecticism.² Interestingly, within this collection a few colors are repeated for different eras; e.g. Stagecoach is categorized as both Federal and Victorian, while Georgian Yellow appears in the Colonial, Federal as well as Victorian lines. Moreover, most of these collections provide little in-depth explanation behind their specific lines and the choice of their proprietary colors.

¹ "Benjamin Moore Color Collections," https://www.benjaminmoore.com/en-us/color-overview/find-your-color/color-collections

Historical Collection – A collection of 191 time-honored hues comprises our most popular palette. Steeped in tradition, the refined, elegant colors of the Historical Collection deliver timeless color that can be used in traditional as well as contemporary spaces. Unveiled in 1976 to celebrate the US bicentennial, a collection of 191 colors inspired by America's historic landmarks. *Williamsburg Color collection* – A historic collection that fuses Revolutionary design with revolutionary paint, bringing Colonial style to Contemporary lifestyle.

² "California Paints Color Collections," http://www.californiapaints.com/find-color/color-collections/historical-colors-of-america.aspx

Historic Colors of America – Designed in conjunction with Historic New England, the *Historic Colors of America* collection features 149 authentic shades used from the 1600s to 1895. Each color has been researched and verified for authenticity.

Methodology

For the purpose of the thesis, a "historic color palette" has been defined to be the following:

"A group of paint colors, which were selected either by an individual or a committee, to represent colors, believed to be used in architecture during the different historic periods in America, and can sometimes be specific to distinct places from across the country."

Owing to the lack of secondary literature concerning the evolution of historic color palettes, a number of approaches were taken to develop this thesis; the major part of which included the identification and use of primary data sources. As a first step, archival materials constituting trade catalogues starting from the early twentieth century and old house magazines at the Avery Classics were reviewed. This was an attempt to find the first instance of "historic" colors on sale and the company involved with it. However, it became clear that there was one particular regional palette that was being promoted in the early 1940s – these were the *Colonial Williamsburg* colors. This discovery led to the selection of the first case study for the thesis – The Colonial Williamsburg Restoration Project.

The next step was to choose other case studies, which may or may not be produced commercially, in order to draw comparison between such projects and get a better understanding of "historic color palettes." These were selected primarily on the basis of specific color palettes known to be used on buildings in the areas. For each of the case studies, the reason for the creation of specific palettes, person(s) responsible for selecting certain colors to put the palette together, and the after-effects of using the palettes in the area were examined. Necessary information was gathered by a combination of literature review and correspondence with responsible people within organizations where possible.

Case studies

Four case studies that look into the diverse ways in which "historic color palettes" have developed in America are presented in this paper. The first commercially available historic color palette appears to have come from the Colonial Williamsburg Foundation (CWF). This palette reflected early paint colors discovered during the restoration of the city of Williamsburg – the colonial capital of Virginia – that began under the direction of the Boston architectural firm Perry, Shaw, and Hepburn.

1. Colonial Williamsburg, Virginia

In April 1928, with financial support from John D. Rockefeller Jr., and at the initiative of Reverend W. A. Goodwin, the local Episcopal minister, a large scale restoration project for the town of Williamsburg was initiated.³ From its inception, special attention was given to ensure that restorations carried out on site stayed true to the original appearance of the houses from the Colonial period. Recreating the original paint colors for these structures became an important aspect of the project. Williamsburg was one of the earliest areas where color research of historic buildings was undertaken on such a large scale, and it is believed to have set precedent for modern day architectural paint research and the subsequent "historic color palette" that it produced.

It was during this time that Susan Higginson Nash, an interior designer who was hired by the firm to design and furnish Williamsburg's interiors, began what is believed to be the first systematic paint study effort in the United States. Her techniques included archival research to document 18th-century paint materials, and scraping through deteriorated paint layers to uncover, identify, and record original colors and finishes in Williamsburg's houses and those from the surrounding region. Although her technique was later labeled as the "scratch and match" method, it has long since been replaced at CWF by more accurate scientific techniques. However, it was the colors discovered by Nash in her early research that sparked great enthusiasm among early visitors, who requested Williamsburg paint formulas to use on their houses. ⁴ And thus, paint was added to the growing list of items reproduced and sold by the Williamsburg Craftsmen, Inc.,

³ Pappas, Nicholas A. and Thomas H. Taylor, "Colonial Williamsburg Colors – A Changing Spectrum," in *Paint in America: The Color of Historic Buildings* (Washington: Preservation Press, National Trust for Historic Preservation, 1994), 87-88.

⁴ Pappas and Taylor, 88.

which ran the CW Reproductions Program that supported the educational component at Williamsburg. Paint was amongst the earliest list of products that were being reproduced by the CWF, including fabric, furniture, and silverware. This was perhaps the earliest indicator of a growing public interest in historical colors that facilitated the creation of a "historic" or "period" color palette. Commercial production and advertising of these "period" colors began shortly afterwards, and is a trend that still continues through the present time.

Major paint companies were soon involved with the commercial reproduction of Colonial Williamsburg colors. In 1936 the John W. Masury Company was the first to produce 16 Williamsburg-approved colors that quickly expanded to 24 include exterior colors. Around the same time, Ditzler Color Company (which was part of the Pittsburgh Plate Glass Company) brought out the Williamsburg collection of 42 colors in finishes suitable for the automotive industry. The company was well known for its role in promoting special color palettes in the automotive industry; e.g. their King Tut series was motivated from the colors used by ancient Egyptians.

PPG was licensed to produce the Williamsburg collection around 1940. One interesting addition that PPG made to the CW palette in the late 1940s was its "let down" system – where by adding White in varying proportions, different shades of an original source color could be produced. This method was quite helpful in providing consumers with a greater range of choices within the Williamsburg color collection. More colors were added in the 1960s when there was an apparent discovery of more varied hues in the historic houses. PPG offered the collection till 1965 when Martin-Senour Paints took over the franchise and greatly expanded the color line. The color chart from 1986 in *Image 2* shows how the collection was expanded to comprise 119 colors. And until 2013 Martin-Senour paints offered a line of 184 CW colors along with Pratt & Lambert, which was the largest by far.

Interestingly, many of the colors were still based on Susan Nash's early research. Four years ago, Benjamin Moore released the "The Williamsburg Color Collection". Comprising 144 colors, this updated palette is the product of close collaboration with CWF experts using modern Architectural Paint Research methods including microscopy, instrumental analysis, and colorimetry complemented by archival research to provide a range, which is believed to accurately reflect 18th century Williamsburg's architectural finishes. The latest CW color chart

comprises large range of grays in the columns at both ends of the chart (*Image 3*). These appear to be much modern than what would have been used in the Colonial era, implying to the expansion of the palette to include colors popular among the modern consumers. This is because, Benjamin Moore felt that by limiting the palette to only comprise those discovered by Architectural Paint Research did not offer a broad enough range for the modern consumer's demand for more nuanced shades of historic color – owing to which colors were developed from other sources like wallpapers, 18th century buildings in the surrounding area and colors were also made using 18th century materials from information gathered from advertisements from that period.⁵

Nevertheless, the majority of colors in the CW palette are supported by scientific research and evidence-based analysis supported by historical study of 18th century archival materials. Following this process, it seems only fitting that in creating any historically authentic color palette – with the intention to represent a certain period and place – paint analysis will be an obligatory step in the process. However, scientific research and education have not been the only factors governing the creation of many historic color palettes available today.



Image 1: This is the earliest paint color card showing interior & exterior colors approved by Colonial Williamsburg Inc., which was produced by *John W. Masury & Son* in1937.

⁵ All information on commercial production of the CW color palette and the various companies involved has been collected by author from studying *General Correspondence Records* at the Colonial Williamsburg Foundation: John D. Rockefeller Jr. Library: Corporate Archives Collection, and through interviews with *Matthew Webster* (Director of the Grainger Department of Architectural Preservation) and *Kirsten Travers Moffitt* (Conservator & Material Analyst at the Conservation Department) of CWF.



Image 2: This is paint brochure for the Williamsburg Interior and Exterior Colors by the Martin-Senour Paints from 1986. The palette comprises 119 colors in total.



Image 3: This is the latest "Williamsburg Color Collection" from Benjamin Moore. 2017.

In contrast to historic color palettes that were developed from the examination of paint samples and historical records, there are palettes that have originated from people's imagination, and yet have had great impacts on the aesthetic quality of respective areas. The palettes for Columbus Storefront Restoration Project in Indiana and South Beach in Miami are two such examples.

2. Columbus Storefront Restoration Project, Indiana

In March 1961, Alexander Girard, an architect from New Mexico, was given the task of *cleaning up and beautifying the fronts of the stores and other business houses up and down Washington Street (in Columbus, Indiana)* by S. E. Lauther, the president of the Irwin Union Trust Company. The purpose of the project was to save the business district from turning into a 'jungle' of conflicting colors and neon signage of various shapes and sizes.

Girard was well known for his keen sense of order. He was better known as a Designer or Artist for his works with color in furniture and textile design. Not surprisingly, color was one of his most important tools in the storefront restoration project.

He created a palette of twenty-six colors that he thought was historically appropriate for the Victorian storefronts and commercial buildings along Washington Street. Girard and his associates decided on the colors by examining and studying the architectural details on the Victorian structures – the exact methodology was not explained. The color scheme was intended to accentuate the period architectural details on the buildings, and work simultaneously with the addition of new porcelain enamel signs and fluorescent lights installed above the marquee level on all stores to create a unified streetscape. Certain shades predominated the scheme in their application on store elevations – orange, green, white and buff along with a sky-blue. The bright colors were used primarily to emphasize decorative elements such as the cornices, windows, and their lintels and trim, while more restful shades (like sky-blue and beige) were applied on the main body of the buildings, creating what Girard felt was a balanced aesthetic for the block fronts.

The project came to be known as "the model block project" and "pattern painting of downtown Columbus," as it was carried from one block to the next in phases.⁶ After the first model block

⁶ This information was gathered from early articles on the project in newspapers in the collection of the Columbus Indiana Architectural Archives.

between Fifth and Sixth Streets on the east side of Washington Street was completed in 1965, store owners from adjacent blocks began to ask for design schemes for the buildings in their blocks. The whole process was never legislated or strictly enforced but was executed through voluntary acceptance from owners. This approach allowed the community to become involved in the restoration project, which led to an appreciation for the historic buildings in the area. The Columbus Storefront Project drew national attention for its success and became a model for later main street transformation projects.⁷ Today, the mock-up scale models that Girard first used to convey his idea of a harmonious streetscape to the public are considered artwork themselves. These models are used in tandem with the color-coded maps (*Image 4*) by building owners who want to recreate the look from Girard's design from 1965.⁸ The palette, which draws inspiration from colors used on Victorian houses, is not based on scientific paint analysis; neither does it rely on historical documents specific to the storefronts. Therefore, while it is promoted as historic, it is not. The colors are a mid-twentieth century view of early twentieth century color schemes.

The main street revitalization program added to the burgeoning architectural movement in Columbus, Indiana in the late 1960s. Girard's color scheme along with modern buildings by well-known architects, all helped to attract more visitors to the city, promoting Columbus as an "archi-tourism" center for people to appreciate modernism.⁹

⁷ Lange, Alexandra, "Alexander Girard in Columbus," in *Alexander Girard: A Designer's Universe*, (Germany: Vitra Design Museum, 2016), 281-282.

A 1975 Washington Post editorial pointed to Girard's Columbus storefronts as a model for the transformation of G Street, while designer Ruth Adle Schnee also referred to it when she consulted on the repainting of Monroe Street in Detroit's Greektown in the late 1960s.

⁸ Lange, 278.

Girard took scale photographs of all of the storefronts in the central business district, and then he and his staff painted each building a combination of the 26 colors he had selected for the project, mounted these paintings on Masonite boards and shipped them to Columbus, where they were exhibited on Washington Street. These panels were set up on wood stands to simulate the continuous street front along individual blocks.

⁹ Susan Stamberg, "Columbus Ind.: A Midwestern Mecca of Architecture," *WNYC Radio*, July 31, 2012, accessed on April 27, 2017 http://www.npr.org/2012/08/04/157675872/columbus-ind-a-midwestern-mecca-of-architecture

The Modernist buildings — mostly geometric and made of glass and steel — are not immediately visible, interspersed as they are with old, 19th-century, gingerbread-like structures; but more than 60 public buildings in Columbus have been built by a veritable who's who of modern masters — I.M. Pei, Eero and Eliel Saarinen, Cesar Pelli, Richard Meier, Harry Weese, Robert Venturi and James Polshek, to name a few... Then, in the 1960s, thanks to some design-conscious decisions by the biggest business in town, the architectural revolution soared, with schools, fire stations, an all-glass bank, a courthouse, city hall, a world-class golf course and a jail — a really attractive jail.



Image 4: This is the plan of the color scheme designed by Alexander Girard for the commercial facades along Washington Street, Columbus, Indiana.



Image 5: View of Washington Street, Columbus, Indiana, around the mid-1960s, before Alexander Girard's restoration. The facades are all painted in different colors and have various shapes and sizes of signage installed.



Image 6: View along Washington Street, Columbus, Indiana; with the same facades renovated according to the design scheme by Alexander Girard in 1965. Here, colors transition smoothly from one facade to the next along the entire block, enhanced by similar styles and sizes of signage and lighting across all stores.

3. The Pastel Palette, South Beach, Miami

The "Miami Beach Architectural Historic District" of South Beach is known internationally for having one of the largest collections of Art Deco buildings in the world. Its signature is a range of colors used on the buildings lining the oceanfront, which include pastel shades of yellow, pink, blue, purple, green and many more.

Popularly known as the "Art Deco District," the area was listed in the National Register of Historic Places in May, 1979 following a large campaign by the Miami Design Preservation League (MDPL) against a multi-million urban renewal project that threatened to displace the elderly population in the area, making it the nation's first urban twentieth century Historic District.^{10,11} However, being listed on the National Register proved inadequate to prevent landmark buildings from being destroyed. Significant structures like the Boulevard Hotel at 775 Dade Boulevard (demolished in April 1980) were torn down in order to make way for what was thought to be more profitable construction. Developers thought new construction would increase revenue and "save" the district from the changing demographics of South Beach in the 1970s. There had been a shift in the district's population; as older and retired people moved in, crime increased, businesses were in decline, and the older buildings were in disrepair. The National Register listing did little to persuade people to spend money on restoring these buildings and to save the neighborhood of South Beach. This is where the color palette (Image 7) created by an interior designer, Leonard Horowitz, was able to make a difference.

"I'll take care of the buildings. I'll do the frosting on the cake because these look like they're going to be a lot of fun to play with."

- Leonard Horowitz, in a film called "Pastel Paradise," 1988.¹²

¹⁰ Miami Design Preservation League, "A Brief History of MDPL," http://www.mdpl.org/about-us/about-miami-designpreservation-league/a-brief-history/

The Miami Design Preservation League (MDPL) was formed through the efforts of Barbara Baer Capitman and her son John Capitman. The initial impetus was to find a project to honor the United States' bicentennial; the Capitmans worked with designers Leonard Horowitz and Lillian Barber to identify a concentration of 1930s buildings in South Miami Beach that the group felt could be a historic district of 20th century architecture. ¹¹ Stofik, Mary Barron, *Saving South Beach*. (Florida: University Press of Florida, 2005), 26.

The Miami Design Preservation League was made up of people whose focus was primarily on the design and time period of buildings and was concerned with the people who lived there. At its inception, the purpose of the organization was to preserve the neighborhood of South Beach by creating a historic district called "Old Miami Beach."

¹² Julia Duba, "Meet the Man behind all those South Beach Pastels," WIRN Public Radio and Television, July 26, 2013, accessed April5, 2017, http://wlrn.org/post/meet-man-behind-all-those-south-beach-pastels

With his love for Art Deco designs, Horowitz shared Barbara Baer Capitman's (founder of MDPL) dream to rejuvenate South Beach, and reinstate its old glory from the 1930s. The significance of the area, however, lay not only in its large concentration of Deco buildings but also on the wide variation and fine composition of Mediterranean and Moorish architectural influences, creating a unique vernacular style of Deco buildings.¹³ Horowitz envisioned the Deco revival through the use of color, which he believed would add excitement to the dull gray dilapidated buildings on the beach. His idea was to accent the building decoration attracting attention to the details on the Art Deco structures. Historically, the hotels, apartment buildings, and stores were mostly painted white with little touches of jade green, ochre, or coral.¹⁴ But the color scheme that Horowitz visualized was radically different. His goal was not merely to save the stylish Deco structures but to call attention to them and to create a unified streetscape. The body color of one building would transfer to the trim of the next while the colors would change shades to maintain continuity. Horowitz's color palette for Miami Beach was created using colors from his surroundings; the sun, the sky, the sand and the ocean. As a result, South Beach today is filled with buildings that are painted in colors such as peach, cream, mauve, aqua, shell pink, golden sand, seafoam green, Caribbean blue and sunrise orange. The buildings along Ocean Drive bring to life the idea of the continuous streetscape that Horowitz dreamed of.

The first building to be painted using the colors developed by Horowitz was the Jewish Friedman's Bakery on the corner of 7^{th} and Washington Avenue – now *Manolo*, a restaurant. It was painted with shades of cotton candy pink, periwinkle blue, buttercream and mint green, giving it the appearance of a fancy birthday cake (*Image 9*). Although the color combinations were not unfamiliar on the streets of Miami, the public reactions initially were not very favorable.

Within a year, as more buildings were painted, people started accepting Horowitz's pastel color scheme. It expanded into the "paint and awning" project – which had the trim and awnings of storefronts match the new color scheme along the commercial strip from Fifth Street to Lincoln Road.¹⁵ In 1982, the Bakery was featured on the cover of *Progressive Architecture* magazine,

¹³ Stofik, 31.

¹⁴ Ibid, 78.

¹⁵ Stofik,102-103.

Lynn Bernstein, the assistant director of the Miami Beach Development Corporation, scored her first success (in persuading owners of retail stores to freshen up their buildings with a new coat of paint) with the owner of sixteen storefronts in the 600

photographed by the famous Steven Brooke, who was of the opinion that Horowitz had drawn inspiration from Chicago's second World's Fair of 1933-34.¹⁶ The magazine feature along with television shows like "Miami Vice," (which showcased the Art Deco setting as a backdrop) helped the district reach a greater audience, and gain the much needed national attention to save its buildings from further demolition.

The Pastel Palette was not the only factor that contributed to the eventual preservation of the Art Deco District, but it certainly played an important role in attracting and generating public opinion regarding the significance of buildings in the Historic District and the need for their preservation. More people began to voluntarily paint their buildings in South Beach with colors from Horowitz's palette. Today, the Historic & Environment Preservation Board (HEPB) in the City of Miami regulates the colors used on buildings within the historic district and recommends the use of light pastels similar to those developed by Horowitz.¹⁷ Moreover, the City of Miami has a list of approved colors, which can be obtained from the Building Department, and at present uses color numbers assigned by the Sherwin-Williams Company. No information, however, was found regarding any company that may have worked with Horowitz at the beginning, or about any commercial production of the Pastel Palette in later years. Nevertheless, the palette is very popular in Miami, and has been translated into other building finishes such as the "Cement Tiles" by the Villa Lagoon Tile Company, which offers over seventy "South Beach" colors.

block of Washington. The first building to be painted was a Jewish bakery. Bernstein's next task was to convince merchants to pay \$25 to paint their awnings to match the new color scheme.

¹⁶ Luke Crisell, "The Most Beautiful Art Deco Buildings in Miami, Chosen by a Man Who Spend 30 Years Photographing Them," December 2, 2015, accessed April 5, 2017. http://www.wearesweet.co/culture/art-design/g328/most-beautiful-art-deco-miami/

[&]quot;When efforts to revive the district began, colorist Leonard Horowitz chose sophisticated new color schemes for the buildings based on 1930s World's Fair colors," Brooke says. "The new colors were as much a draw as the architecture itself, providing, for example the backdrop for programs such as *Miami Vice*."

¹⁷ City of Miami, "Historic Preservation General Design Guidelines," (City of Miami: September 2011), 33.



Image 7: The Pastel palette by Leonard Horowitz, created for the Deco buildings in South Beach Historic District in Miami.



Image 8: This is a view along the Ocean Drive in south Beach, showing the use of pastel colors from Horowitz's palette creating a harmonious streetscape.



Image 9: Friedman's Bakery, before and after being painted with the colors from Horowitz's palette: cotton candy pink, periwinkle blue, buttercream and mint green,

Older palettes of prominent architects have also been reissued. The Frank Lloyd Wright (FLW) color collections for Taliesin West and Fallingwater are such examples. Here, the palettes were either developed from old color cards used in the past (by Wright himself), or from colors identified through architectural paint research carried out on the structure and was also a result of extrapolation of Wright's original design scheme, where inspiration was drawn from the surroundings. Representing a mid-century modern architectural style, the FLW colors were the latest addition to the growing collection of American historic color palettes.

4. Frank Lloyd Wright Color Collections

"Go to the woods and fields for color schemes. Use the soft, warm, optimistic tones of earths and autumn leaves."

– Frank Lloyd Wright.¹⁸

Recognized as the "greatest American architect of all time" by the American Institute of Architects, Frank Lloyd Wright was a true believer of the philosophy of organic architecture in which man-made structures existed harmoniously with the natural environment. Color played an essential role in achieving this philosophy. Wright believed that it was color that unified the aesthetic of organic construction with architectural elements and its surroundings, and therefore almost always had specific color themes for his designs.¹⁹ The two sources that inspired Wright in determining his palette for any given project were the nature of the site and the nature of the building materials that he generally collected from the locality. Colors of natural elements like the sun, trees, stones and water influenced the majority of colors used by FLW in his designs.²⁰

Fallingwater – the Kaufmann House – built in 1935, conveys Wright's philosophy in the implementation of its colors, both outdoors and indoors. It was Wright's idea to continue the stone and concrete of the exterior to the inside of the house to create a neutral palette of gray and

¹⁸ Legler, Dixie, "Natural Colors," in *Prairie Style*, (New York: Stewart, Tabori & Chang, 1999), 36.

¹⁹ Lynda Waggoner, Vice-president & Director of Fallingwater, said on the significance of color in Wright's works: Color was very important to conveying Frank Lloyd Wright's aesthetic of organic architecture as a unified whole. He drew from two sources in determining his palette for a given project: the nature of the site and the nature of the building materials. In the early projects, particularly the Prairie houses that were constructed of brick and stucco, autumnal colors predominate: warm shades of red, gold, brown and yellow-green. These restful yet intense colors were accented by a palette of related hues and created a harmonious, unified and serene environment for the client. At Fallingwater, Wright employed both a limited palette of color and a limited number of materials in his desire to create an organic and integrated whole.

²⁰ Schlotter, Dee, "Frank Lloyd Wright's Approach to Color," *Voice of Color*, March 1, 2006, accessed April 5, 2017. http://www.steinerag.com/flw/Artifact%20Pages/FallingwaterPPGColor.htm

rosy ocher. For the interior of the house, Wright used earth tones including warm shades of red, gold, brown and yellow-green as is evident in the furniture and other decoration of the living room. Lynda Waggoner, the vice-president and Director at Fallingwater, explains that Wright had individual concepts behind all his color choices. For instance, Wright limited the use of the "Cherokee Red" – which has come to be known as his personal favorite – only on metal and ironwork in Fallingwater. He explained that the color red best expressed the nature of steel, a metal that he frequently used, which was *a product of red iron ore and fire*.²¹ Similarly, the floors were painted in several colors, indicative of the varied tones of natural stone that was quarried from nearby; the palette included white, raw umber, burnt umber, black, gray, and yellow-brown.²² The overall theme reflected colors from the landscape with trees and stones surrounding the house. Wright followed a similar concept in choosing the colors for Taliesin West, Wright's winter abode, in the desert of Arizona. Here too, Wright used colors that reflected the nature of the terrain and his choice of building materials that included concrete with large aggregates, stones collected from the desert, and steel.

Today there are color palettes derived from those used at Fallingwater and Taliesin West. In 1955, FLW selected color from existing contemporary paint colors offered by the Martin-Senour Paints. He selected thirty-six colors that he thought best represented his choices for Taliesin West (*Image 11*). This was part of a larger development of home products marketed to people who did not live in one of Wright's designed homes, or could not afford to have Wright design their residences. The line included furniture, fabrics, rugs, wallpaper and most importantly the selection of specific paint colors for houses from the Martin-Senour Paints (who started promoting them as the Frank Lloyd Wright color palette).

After working with the Western Pennsylvania Conservancy (current owner of Fallingwater) in an in-depth color analysis of the Kaufmann House, the PPG Pittsburgh Paints Company introduced a palette of thirteen shades in 2007, inspired from the building and its surrounding (*Image 10*).²³

²¹ Waggoner, Lynda, "Visiting Fallingwater: the Director's Tour," in *Fallingwater* (New York: Rizzoli International Publications, Inc., 2011), 54.

²² Bonfilio, Paul, "Painting the Building: The Palette is not just Cherokee Red," in *Fallingwater: The Model*, (New York: Rizzoli International Publications, Inc., 2000), 67.

The Cherokee Red resembles a terracotta color, and is a mixture of burnt sienna and red. It is now available in Pittsburgh Paints Color #FLLW68 and PPG13-02.

²³ Old House interiors, "Dark and Rich," (November – December, 2007):16.

The shades are available as part of the new 13-color Fallingwater Color Palette from Pittsburgh Paints, offered in an environmentally friendly, no-VOC formula.

In 2014, PPG also acquired the thirty-six color Taliesin West palette from Martin-Senour Paints. It worked with Frank Lloyd Foundation to develop specific paint formulas with modern ingredients to match the original 1955 colors from Martin-Senour that Wright had selected. The palette is labeled as "The Original Taliesin Color Palette from 1955" and appears slightly darker than the original palette from Martin-Senour.²⁴ These palettes both represent the mid-century modern style of architecture made popular by FLW.

From the case studies presented in this paper (and others that have not been mentioned here) it appears that the earliest "historic color palette" started with researching original paint colors for the restoration of historic buildings by historic preservation organizations. Soon, paint manufacturers got involved and it expanded into commercial palettes, and colors began to be added from sources other than paint in and on historic buildings. "Historic color palettes" (either commercially produced or not) helped in creating attractive and sometimes harmonizing aesthetics, supported economic motives such as tourism (e.g. CW, South Beach and Downtown Columbus) and also acted as a disseminator of historic knowledge (e.g. CW, or even the FLW color collections). Overall, it would seem that these palettes have encouraged historic preservation among people in the United States.





 24 PPG Pittsburgh Paints has an exclusive Frank Lloyd Wright^M collection within its "The Voice of Color" Program.



Image 11: The "Taliesin Palette" in Martin-Senour Paints from 1955.



Image 12: "The Original Taliesin Color Palette From 1955" by the PPG from its Frank Lloyd Wright color collection.

Conclusion

Examining the genesis of the "historic color palettes" it becomes clear that their evolution was driven by a variety of factors including educational goals, community preservation, aesthetics, and historical documentation. But all are the result of attempts to preserve the nation's historic past.

It would appear that there are three distinct trends in the ways that "historic color palettes" were created. One arises from academic architectural paint research, second from the study of historical documents, and the third derives from a good imagination and design knowledge of compatible shades that would resonate with the contemporary market. In reality, the process of creating a "historic color palette" is likely to involve all three factors with imagination taking up the bigger role. The historic color palettes that do not follow any academic research are highly decorative but inaccurate representations. This leaves a question of what happens when we try to recreate history without understanding what really existed, as it ultimately affects our interpretation of history. To the average consumer there is now way of knowing which "historic color palettes" are based upon architectural paint research and which are creations without any accurate evidence.

When examining historic color palettes and their popularity, it would appear that consumers today have little, if any, concern regarding the accuracy of colors included in these palettes. The sources of historic colors remain unclear and can hardly be determined from the paint brochures and color charts that are provided by companies and preservation organizations today. Which colors were originally used on the interior and which on the exterior? What type of buildings were the colors originally used on – residences or public buildings? Companies and organizations rarely make this information available to the consumer. As a result, it is likely that historic colors from these palettes are not being used as they were historically. Colors from the palettes are more likely to be used wherever the consumer feels appropriate or based on the consumer's own personal preferences. Companies do provide suggestions for color combinations according to a primary body color in order to assist the consumer in selecting the right colors for highlighting architectural features like the cornice, windows and trim.

Another issue with authenticity and the use of historic colors is the physical paint itself. Current "historic" colors are made with modern materials using modern techniques. They are no longer

made from historically appropriate materials such as lead white, whiting, or hand ground pigments. Consequently, the modern "historic" paint color is unable to recreate original surface finish or the exact texture and appearance of the original historic paint colors. Even then the historic color palettes continue to remain popular among consumers today, reinforcing a lack of awareness amongst consumers regarding the issue of authenticity in historic preservation.

The popularity of historic color palettes among consumers does tell an interesting story of people's attraction to colors regardless of the type of paint and finish. In this context, paint simply becomes a medium, which allows for a color to be put on a surface. People's fascination with historic colors was first seen with the Colonial Williamsburg collection in the 1930's, and it has grown over the years continuing even today. Looking at the case studies and other historic color palettes available in today's paint market, and their gradual development over the years, it is evident that there is a need among people to connect with the past; even if it is merely through the use of a modern color that has been labeled "historic." People are applying historic colors to non-historic buildings, and colors from the Frank Lloyd Wright collections are being used on buildings not designed by Wright and on buildings that are not even mid-century modern. "Historic color palettes" have created this notion of the "past & prestige," and companies have marketed historic "colors" to play into this.

Lastly, despite a number of limitations, this thesis was able to collate a number of "historic color palettes" and understand their development processes and the roles they continue to play. Beginning with data gathered from scientific and historical research, "historic color palettes" branched out to include colors derived not only from historic buildings but also from surroundings and contemporary color trends at the time of their creation. However, moving away from historical evidence has in no way lessened their effectiveness as a marketing tool, nor their value as an educational medium. They have been successful in preventing historic buildings from being demolished and have saved unique architectural characteristics of many districts. By creating aesthetics that were attractive to people, these palettes were able to highlight the value of historic buildings to the local communities and created a link to the past. As a result, the "historic color palette" continues to be a simple, cheap, and effective tool advocating historic preservation across the country.

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