

Color Trends and Selection for Product Design



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Color Trends and Selection for Product Design

Every Color Sells A Story

Doreen Becker



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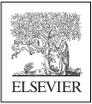
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Dedication

This book is dedicated to those who struggle daily with colors. This includes my technical colleagues in the laboratory, the design teams who envision inspired products, the chemists and engineers who characterize and perfect these colors, all of my friends from the Color Marketing Group who spend their weekends and free-time pouring over color boards and debating the need for a new shade of green or eliminating them entirely from a certain demographic in a specified time period.

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Introduction

Colors can be comforting, provocative, seductive or even offensive. Frequently colors for products are selected by personal or committee preferences rather than what the market requires. It is also frequently one of the last decisions made in the design process. The impact of the color in a product launch can mean the difference between a raging success or a complete failure. Every new product that comes into the market has a story behind it and that story usually consists of why the product was developed, for whom the product was developed, and also the story of the developer and designer as well as their motivations for creating this product. Since we live in such an image-driven society, one of our first impressions of a product is visual. Internet advertising and print media only allow for a two-dimensional snap-shot of a product's shape and relative size. The third dimension that is instantly perceived is color. Most innovative products are developed based on unmet needs, solutions to problems or an opportunity to improve life experiences of the consumer. Generally, a great deal of time and attention is paid to the functionality and style of the product to create a product of desire. Choosing the correct color or pallet of colors will sell the story of these products and their intended path for commercial success. There is a science, history and artistic perception behind color selection and its perceived value. It is frequently over-looked and often elusive. It is the intention of this book to elucidate this process and provide guidance to the industries that need color to sell the story of their products.

SECTION I

Color Trends: An Historical Perspective

Introduction

This section will outline dominant colors and trends of each era. This is a distillation of these time periods and their significant colors. One can easily identify colors or important events that were evident in these eras that are not mentioned. The intention is to highlight colors and trends that best represent these time periods. Each of these eras contain information about important areas of influence including, art, fashion, cosmetics, automotive, architecture, interior design and in later time periods, appliances, toys and electronics.

1 1900s Edwardian Era/La Belle Epoque

Mass-produced fabrics were an offshoot of the industrial revolution that was in full swing by the early 1900s. These emerging materials paved the way for the ready to wear fashion market and softer fabrics and fashions emerged from these new advances in technology. These softened effects worked well with pale and pastel colors that were in sharp contrast to the stiff fabrics and bold colors of the late 19th century. Conversely, this was also an era of very high quality, bespoke fashion that was marked by enormously creative and elegant designs that still influence much of the modern couture market. The Belle Epoque was known as the last age of elegance for the 20th century. Many of these garments for the upper classes were designed with bright colors and a variety of exquisite jewel tones. Summer whites dominated the fashions of all classes of society and were combined with overlays of linen and lace. The Edwardian Era was punctuated with sophisticated shades of celadon, heather, spicy pinks, teal and shades of copper for the masses.

Colored cosmetics were still quite taboo in the Edwardian Era and men were permitted to divorce their wives if they painted their lips so lipstick colors for most women were quite natural and uniform. Colors tended to mimic healthy or bitten lips and these light stains were often derived from natural products such as carmine or carminic acid which is extracted from Cochineal insects. These cactus lice are native to Mexico and the female of species contains large amounts of vibrant red carminic acid which is extracted by squeezing the carapace of the tiny insect. Today carminic acid is also synthetically manufactured and both the synthetic and naturally derived versions are used to color cosmetics, food and many red beverages.

Prior to 1900, automotive colors and technologies were based on the carriage industry and automotive colors varied widely. In 1901, Ransom Olds developed the first modern automotive assembly line and proved its success with the production of the Oldsmobile Curved Dash. Olds built his first steam-driven automobile in 1894 and his first gasoline-powered car in 1896. He also built two different models of

electric cars around this same time period. In 1903, the Ford Automotive Company was officially incorporated by Henry Ford and cars were hand-painted in red, green and blue.

Although the Art Nouveau era officially started in the 1890s, it was in full swing by the first decade of the 20th century. This “whiplash” style of ornate architecture, like the entrances to the Paris Metro, favored the use of, materials such as steel and glass so colors were in keeping with these materials. Residential architecture of the early 1900s favored either the lingering Victorian style from the late 19th century or the more austere Colonial style. The Victorian homes favored more lavish decoration with ornate wallpaper schemes and velvet furnishings. Taupe, ivory and deep shades of red, green and accented with golds were typical whereas Colonial homes were more sparse and employed warmer color schemes of deep browns, grayish greens and softened whites. In 1909, Frank Lloyd Wright built one of his last Prairie Style homes, the Robie House, in Chicago. The Prairie Style is closely aligned with the Arts & Crafts Movement but also is distinctively American. Wright designed not only the exterior of the home but also the interior spaces and furnishings thus the color schemes were highly architectural and many neutral, metallics and red brick tones were evident in the furnishings and color schemes throughout. As the art movement of Tonalism was in full swing in this decade, it heavily influenced home décor and design with its emphasis on neutral shades of blue, green and brown awash in a muted or misted effect.

In 1903, Edward Binney and Harold Smith commercialized their first line of Crayola Crayons. The first box of eight crayons contained the traditional ROYGBIV colors along with brown and black. No white crayons were offered. The first box was sold for 5 cents.

In 1908, the first Silver Ghost Rolls-Royce was shipped to India. Off-white with apple green stripes; the Pearl of the East was painted with a lacquer that was rumored to contain crushed beetles to yield a unique luster to the paint.

In 1903, every country that participated in international automotive racing competitions was assigned a unique color. The United States was white and blue, Italy was red, Germany was white, France was blue and Great Britain was green. German cars were also permitted to race in unpainted (silver) to decrease the weight of the vehicle. It is interesting to note that how these colors are still important in the identity of automobiles in these countries today.

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2 1910s Trends: Arts & Crafts Movement

Although the Arts & Crafts Movement was an international design movement of antiindustrialism that officially started in the 1880s by artists and architects such as the writer William Morris and the designer/architect Charles Ashbee in the British Isles, it grew in strength in breadth throughout Europe and the Americas and was in full swing by the 1910s decade. Much of Ashbee's work was dominated with bright enamels complemented with wrought iron and hand-wrought coppers. The colors that were evident in fashion in the late 1900s decade were also used in the interior of homes where white walls and furnishings were replaced with jewel tones, heavy creams and mossy greens. The Arts & Crafts Movement was an all-encompassed style esthetic and included such items as ceramics, fabrics, metalwork, fabrics and furniture. Many of the designs contained nature-inspired line drawings of plants and animals and flat shades of reds and greens were prominent. William Morris frequently cited that his colors and patterns were inspired by Gothic tapestries but favored natural colorants over the recently developed synthetic dyes that he deemed as garish and more in line with outdated notions of Victorian frivolities and portentous gloom rather than his modern pallet of natural greens, madder reds and dark masculine blue shades.

There were great changes in kitchen design in the first two decades of the 20th century. The great heat waves of the late 19th century underscored the importance of food preservation and kitchen sanitation. Ceramic tiles lined the walls and floors of kitchens and were designed for families, rather than servants. Previously, pantries were used for washing and food storage but during this period, these items and activities became centralized in the kitchens of the bungalow houses that were popular for single, middle class family homes.

As a backlash to the restrictive uses of cosmetics in the previous Edwardian Era, Suffragettes fought for their right to wear lipstick and take charge of their appearance and chose red lipstick as a symbol of their independence. Lip and rouge colors were vibrant and in sharp contrast to very pale almost theatrically white foundation. 1915 is the

first date of commercial lipstick in the United States when a French cosmetician, Anthony Guash and Maurice Levy, a NY investor, formed the French Cosmetic Manufacturing Company in Connecticut. Prior to this, women would mix dyes to create their own formulations obtained at local pharmacies.

In 1917, Cutex offered their first tinted nail enamel in a rose shade of pink. This was the first evidence of colored nail enamels as a fashion statement in modern society but nail decoration was certainly not a new concept. Ancient Babylonians and Egyptians decorated their nails as an indicator of social status. Babylonian, middle class males wore green nails and upper class males were decorated with black nails. The pigmentation was created from grinding kohl, antimony sulfide and a grayish black salt that oxidizes to a jet black upon exposure. This was not the most health-friendly cosmetic since its toxicity is similar to arsenic. Queen Nefertiti also decorated her nails with gold and a Henna extract to create a red-iron oxide color. Lower class Egyptian women were only permitted to use pastel colors on their nails.

This was also the era of Brass Automotive vehicles whose many fittings were comprised of brass but colors were mostly relegated to shades of black or white. In 1913, the concept of “Fordism” or mass-production of automobiles was officially born and was also the advent of the Japan Black lacquer paint that dried quickly and was much easier to apply than earlier varnishes and lacquers that were hand-brushed on wood and metal surfaces. Ford selected black as the color of choice for the sake of efficiency and durability. However, there were many automotive companies around the world that offered numerous styles and colors but Ford’s mass-produced black varnished vehicles were most common. The George V coronation in Delhi in 1911 represented the zenith of imperial rule in India. Rolls-Royce exported eight silver ghosts for the coronation ceremony and the eyes of India’s most wealthiest citizens were upon the Rolls-Royce vehicles vying for future purchases.

In 1918, there was an article written in Earnshaw’s Infant’s Department, a trade publication which stated that pink was a perfect color for boys because it is a stronger and more determined color and blue was better for girls because it was viewed as a more delicate and flattering color for blonde haired, blue eyed babies. Other sources felt that pink was better for brunette babies with brown eyes, regardless of gender. In 1927, Time Magazine published a chart confirming this pink for boys and blue for girls idea and the trend continued until the 1940s when the industry looked to consumers to see how they implemented these ideas and realized that most consumers preferred to dress their

boys in blue and their girls in pink and then the manufacturers changed their color schemes to compensate for consumer trends.

French artist Henri Matisse was an important artist and color influencer of this era and also in the 1990s after his retrospective in the MOMA, New York. In both instances, his use of bright colors, strong reds, balanced with bright and passive blues, turquoise and chartreuse combined with natural yellows and oranges, influenced home and fashion design in the years following his exhibitions. His use of layering and lining strong, arbitrary colors shocked the established art world that called his work beastly or *bête sauvage* led to the formation of the Fauvist art movement.

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3 1920s Trends: The Roaring Twenties and the Art Deco Era

After the end of World War I, an economic boom was evident in many parts of the world. The development of new synthetic colorants and materials such as Rayon (synthetic silk) was explosive in the 1900–30 time period and most of the colors that were developed prior to this period were rarefied versions of naturally derived colorants. Clothing became more comfortable and sportswear was born. The era of the “Flapper” began with more relaxed morality codes and personal freedom was evident in clothing styles and colors. Zelda Fitzgerald, wife of F. Scott Fitzgerald, was the embodiment of this Flapper style and a muse for the Jazz Age. Zelda was frequently seen in short flared skirts in shades of orange, red, green and gray. In 1926, American Vogue featured Coco Chanel’s “Little Black Dress” and called it the “Little Boy Dress.” The first version was constructed of silk and had long sleeves. It was calf-length and quite straight. The dress was also very fashionable and comfortable. It was stripped away of excesses and more practical than other designs of this time period. This dress has been fashioned for day wear and evening wear in different fabrics, always remaining black but still an enduring wardrobe staple. In contrast, the Liberty of London pallet of the 1920s shifted from dusky and somber colors to a much brighter pallet of bright blues, yellows and reds similar to Wassily Kandinski’s colors of the same time period. Liberty of London was a textile manufacturer that started in London in 1875 and was inspired by colors of Asian fashion and art. This Asian Exotica was introduced to the British middle class and their peacock feather motif was wildly popular in the 1920s. There was also a subtle shift in coloration from the Arts & Crafts influence of the early 1900s with their dark hues, shifting to Liberty’s grayed colors as a sharp contrast to coral, pink and bright greens. Wassily Kandinski is sometimes referred to as the Godfather of Modern Art who celebrated the emotional content of color in his paintings.

In 1927, Time Magazine published an article indicating gender-appropriate colors for boys and girls. This information was based on

marketing strategies by major US retailers such as Marshall Fields in Chicago and Filene's in Boston who suggested that shades of pink were more appropriate for boys and blues were better for girl's clothing. This was reversed in the 1940s when consumers forced today's preferences of pink for girls and blue for boys through their buying patterns.

After the war, an abundance of scrap metal allowed for the development of metal lipstick tubes, replacing the fragile cardboard or paper tubes that were dominant in the United States and Europe. Lip and nail colors of the 1920s were very dark. A very popular color was an aubergine or dark brown eggplant color, even black was used as a contrasting color for the black and white film industry to accentuate the shape of the lips and differentiate from lighter skin tones. However, off the screen and stage, many women opted for lighter, more natural shades and it was during this era that the still-popular "Tangee" lipstick was developed. This was developed as a novelty formulation containing Eosin that appeared orange prior to application and then shifted to a moderate shade of pink or even more of a seductive shade of red depending on the pH of the wearer. Tangee was very critical of the painted look of some of its competitors and appealed to a more wholesome clientele. Initially, they offered only two shades: "Natural" for everyday wear and "Theatrical Red" for those in theater industry. In 1926, Helena Rubenstein developed the "Cupid's Bow" lipstick applicator in shades of Red Raspberry for medium complexions and Red Geranium for lighter skin tones or blondes. The lipstick tip was molded into a V-shape that allowed for perfect application to the natural shape of the vermilion border. Additionally, in 1927, Paul Baudecroux introduced a Black Magic lipstick in France that appeared black in the tube and transitioned to pink or red after application. This change is due to the use of Eosin in the formulation.

In 1917, there were 127 automotive manufacturers in the United States. This is known as the Vintage Era of automobiles. The competition in the automotive market was brisk and manufacturers realized that they needed to compete for the attention of women drivers. The marketing strategy designed more comfortable, plush upholstery, interior heaters and colors other than Henry Ford's black.

Despite the decline of luxury cars because of World War I, many Rolls-Royces were imported into India in the 1920s by the Maharajahs and were known as the mechanical elephant. Chassis and engines were delivered to the coach builders where the body was custom-designed for their owners, by such companies as Windovers in London in luxurious shades of deep blue, hunter green and burgundy. In 1921, Rolls-Royce decided to commission several prominent coach builders to design all of the bodies

for their automobiles and the fully manufactured vehicles were sent to the new showrooms that had opened throughout India. Rolls-Royce also sent drivers and mechanics to service the vehicles for their owners and cemented their loyalty with India's elite. In 1925, Rolls-Royce introduced the Phantom 1 that was used as a tiger-hunting vehicle that was clad in stainless steel and brass for durability.

In 1923, General Motors introduced a vehicle painted with a new nitrocellulose-based paint from Dupont called Duco. This fast-drying, easy to color paint revolutionized the automotive paint industry by decreasing painting time from 2 weeks to 2 days. At this time, Ford also expanded their color pallet to a wider range of colors on the Model T and the subsequent model A. Most of these were darker shades of green, blue and red but also continued with the classic black. Many two-toned vehicles entered the market and a new era of colorful automobiles graced the emerging highways. The Grant touring cars were painted in exquisite shades of blue and turquoise and were so esthetically appealing that they were exported to England as Whiting-Grant vehicles. Luxury vehicles were often distinguished from commodity cars, in part, by the use of tan and cream paint schemes.

Single-family homes were smaller in the 1920s than in earlier decades. Two popular styles were the bungalow and the four-square. Most of these were wood-frame structures and were painted with a variety of subdued, greens, grays, browns and brick reds with a contrasting white trim.

The Art Deco movement originated in the 1920s and was popular for many of the following decades. It was inspired by Cubist art that favored repetitive lines and clean geometric patterns that developed in the previous decade by artists such as Pablo Picasso and Georges Braque. The Expressionist Architecture movement was also an important design movement of the 1920s and emphasized architecture as an art form rather than a primarily structural edifice. The Expressionist style was more elemental and geometric whereas the Art Deco style was more floral and organic in volume and tone.

In 1927, General Electric revolutionized kitchen sanitation with the introduction of the Monitor Top Refrigerator which was an hermetically sealed refrigeration unit atop of a moderately sized rectangular fixture. The name "Monitor Top" was attributed to the protruding compressor that looked similar to the turret of the warship; the USS Monitor. Most of these refrigerators were painted in pure white or off-white shades. Other shades of reds, yellows and blues were introduced in the 1930s.

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4 1930s Trends: A Golden Age of Growth-Bauhaus, Art Deco and De Stijl

Although the German Bauhaus, movement of modernist architecture started in 1919 and ended in 1933, its greatest era of influence was clearly in the 1930s and is an example of how intellectual schools of thought predate actual industrial and manufacturing trends. Bauhaus was quite unique in its attempt to unite art, architecture and design, including typography, into one esthetic movement. The Bauhaus color pallet was quite muted and earthy that ranged from a pallet of blues to browns and oranges to dark greens and pale yellows. All of these colors were quite subdued in nature and reflect how the psychology of nature reflects the spirit of space and composition in architecture. Color proves to be key for this composition. Rich and full colors not only rhythmatize and structure the arrangement, but also represent pictorial values in their own right, which are not integrated in a homogeneous whole. Conversely, Piet Mondrian's artistic movement, De Stijl (The Style) or Neoplasticism, was also born in the earlier 1900s but emerged in the 1930s a defining study in color contrasts employing the primaries, red blue and yellow versus three values of black white and gray. It is generally thought that De Stijl artists were highly inspired by medieval stained glass patterns but the strict primary colors were also in response to the violence of the World War I. In 1937, Surreal artist Salvador Dali and fashion designer Elsa Schiaparelli presented surrealistic fashions including the Shoe Hat which was a stiletto-shaped black felt hat with a shocking pink heel. Marlene Dietrich and Wallis Simpson were two style icons of the 1930s for very different reason. Marlene Dietrich defined her own style esthetic, wearing exquisite white gowns and black evening wear as well as men's clothing in shades of grays and blues. Wallis Simpson was the wife that George VIII chose over his British crown and her style was classic and sophisticated. On her wedding day, she wore silk gown that was styled in a sapphire color that was dubbed, "Wallis Blue" because the color was matched to her eyes. She also wore light blue sueded pumps to complete the ensemble.

By the 1930s, over 90% of urban households were wired for electricity in the United States. This caused a surge of new electrical appliances, including washers and dryers, to appear in American kitchens mostly in shades of white but that also shifted into more highly chromitized shades after the World War II. Similarly, kitchen colors were still mostly pure white but for the wealthy there were also emerging colors in vibrant shades of bright yellow, spicy red, royal blue, pink and botanical greens complemented with patterned or checkerboard flooring and wall coverings. Unlike the 1920s kitchens, cabinetry was mostly built-in steel with white porcelain sinks rather than the free-standing Hoosier cabinets that functioned as work and storage space in the kitchen.

Despite poor economic conditions, lipstick sales soared in the United States. This is a trend that often accompanies difficult economic times where microluxuries flourish as a coping method to counteract larger difficulties. Another reason lipstick use flourished in the 1930s is because it feminized the militaristic styles of clothing which were prominent in this era. In the 1930s, Max Factor invented the gloss lipstick and lipstick colors start lighten to a more red-shade purple. In 1935, Cutex, the nail polish company, introduced the self-serving idea that nail enamels should match lipstick colors and issued four new shades of lipsticks to perfectly align with their nail enamel colors: Natural, Coral, Ruby and Cardinal.

Automotive colors became brighter shades of red blue and green but the Great Depression hit the automotive industry very hard and many luxury brands and manufacturers disappeared along with the cream and tan shades of automotive paint.

Ferdinand Porsche invented the VW Beetle in 1934, creating the ultimate people's car. Adolf Hitler asked him to design the German version of Ford's ubiquitous Model T. Hitler then tapped Porsche to make tanks for World War II and the production of the VW Beetle's ceased until 1949 in Germany when it was imported into the United States.

Although polyamide was invented by Wallace Carothers at Dow in 1927, it took Dow 10 years to formally introduce nylon to the commercial market. In 1939, Dow began researching and replacing silk parachutes with the new nylon material. After the war was over, these nylon parachutes were recycled into the clothing market for dresses and stockings.