Colors are all around and yet most people take the impact of their significance for granted. Color can alert people to danger, express emotion and is a way of identifying and organizing the environment. Therefore, people attach particular meanings to colors (Holtzchue 11). People respond to color not only as a visual event but also on interpreted intellectual, conscious, unconscious and subconscious levels. Psychologists have learned that particular colors can arouse the senses, cause emotional responses, alter behaviors, and induce particular moods (Holtzchue 2-3).

In 1992, psychologist Ulrich Beer wrote in his book, What Color Tells Us, “Seldom, surely, is the psychological part of an appearance in nature so great as it is in the case of color. No one can encounter it and stay neutral. We are immediately, instinctively, and emotionally moved. We have sympathy and apathy, pleasure or disapproval within us as soon as we perceive color” (Mahnke 6). Dating back to the time of early civilizations, humans have attached meaning to their perception of various colors. Therefore, learned associations are important contributing factors in the way people perceive and attach meanings to colors. If color perception is subject to these learned associations, does it suggest that different cultures view the meaning of various colors differently, or is it possible that there are basic links among diverse cultures? Historical information and contemporary research on the meanings associated with basic colors indicate that there are more similarities than differences cross-culturally.

Within every culture, there are various meanings associated with each basic color. However, within this context there are many similar core associations in both historic and contemporary times (Fine 445-7). Historically, evidence suggests that humans have attached particular meanings to colors and that many of those associations have withstood the test of time. Color assignments in the religious and cultural rituals in many parts of the world throughout history and in contemporary times; offer ways to gain insight into those cultures. Evidence of color associations have been also found in political and social representations of various countries such as in the colors of their flags or modes of dress. The written languages of cultures also show many color references and symbols. Many contemporary studies provide further proof that there are many similarities with regard to color preferences and meanings. Finally, globalization in the 21st Century further solidifies the concept that there are far more similarities than differences in the color associations of people cross-culturally.

It is important here to note that there are a great deal of variations and subtleties of various colors. Therefore, the focus will be to concentrate on purely saturated hues of black, white, red, yellow, blue and green.

Hue refers to the name of the color. Value relates to the lightness and darkness of a particular color, and saturation or chroma is a term meaning the intensity or brilliance of a color. The extreme polarity of black and white has been universally symbolic throughout history in most cultures. Black symbolizes evil, emptiness, death, and dirtiness, but also power, dignity and strength. Since black symbolizes death, it is the color worn by
many cultures in times of mourning. "Its use in mourning is very old, it probably comes from the ancient Semitic custom of blackening the face with dirt or ashes to make it unrecognizable to the malignant dead, as well as a mark of grief and submission" (Genov 4). At the extreme opposite is white. This color symbolizes purity, sterility, innocence, and goodness, but also sterility in most cultures (Sharpe 47). Most religions use white to indicate spirituality, hope, and innocence. Jewish, Christian and Hindu religions use the color white in rituals to indicate purity, chastity, virginity and inner peace. The symbol of the white dove signifies a state of perfection, peace, and blessedness. In marriage ceremonies of many cultures, women wear white. Since white is symbolizes cleanliness and sterility in most cultures, it is not surprising that it is the flag color used in hospital and health care facilities throughout the world. While most countries designate black as the color of mourning, in China and most of Asia, the color of mourning is white (Mahnke 64-5). This is not a complete contradiction, however. In many religions, there is the belief that death is not an end but a beginning. The use of white in this context means that a person brings purity into the next life. Today as in the past, black has mostly negative connotations due to the fear of the unknown associated with darkness, night and the absence of light. White is representative of a positive color. This distinction between black and white as extreme opposites is symbolic in most cultures.

Red is the color of blood and therefore relates to life itself. It is associated with fire, energy, passion and love, but it is also associated with rage and war. It is a color used as a sign of provocation and revolution. In Greek mythology, it was the color designated for the planet Mars and god of war (Mahnke 61-2). Red is a dominant color in China and is the color of good luck and happiness, since it is a belief that this color promotes long life. Red permeates Chinese New Year's celebrations and is the traditional color the bride wears. When a Chinese baby is between one month to one year old, red colored eggs and ginger are what they use to mark the celebration ("Chinese”11). As is the case in many Asian cultures there is a strong association of the color red with the sun, the fiery ball giving life to the universe. In Japan’s Shinto religion, red is the symbol of life. For Hebrews this color represents sacrifice and sin. Christian art depicts Christ wearing red robes symbolizing not only the blood he shed as a sacrifice, but also his passion and love. It is also interesting to note that the term “red light district” to designate places of prostitution is neither culture specific nor a contemporary concept. While cultures and religions may vary, the use of red as a powerful symbol of life, passion, love, and war still appears in many places throughout the world.

Yellow is reflective and luminous. In most cultures, it has an association to the sun, the dominant force in the solar system. It is associated with wisdom, glory, light, joy, enthusiasm and optimism in many parts of the world. In Greek mythology, it is the color of Mercury, the messenger of the gods, and the communicator of mental and spiritual enlightenment (Mahnke 62). It is also the Chinese color for royalty, and during the Ch’ing Dynasty, only the Emperor could wear yellow. It is still in use in ceremonies that “pay homage to the earth”. Christians consider yellow the color of the “gates of heaven” (Theroux 3). Yellow also has negative meanings in most cultures. It is associated with aging, and illness, since it is the color of jaundiced skin, decayed teeth, infection and pus. Contemporary author T.S. Eliot described the fog in London as yellow in his poetry to depict psychological illness (Theroux 68-78). Author Alexander Theroux states, “We go into yellow, I suppose, each in our own way, with values attuned, no doubt, to whatever mode of empathy our particular vision aspires” (78). Yellow has spiritual significance throughout many cultures dating back to Ancient civilizations who believed that
their lives were ruled by an “omnipotent power within the sky” symbolic of yellow (Birren 24).

Blue is symbolic for calmness, peace, loyalty, truth, dignity, royalty and contemplation, but also sadness. It is associated with the sky and the sea, and looked upon in many cultures as infinite and mysterious (Hibi 26). The ancient priests and physicians of Britain known as the Druids considered blue to be the color of harmony, truth, and wisdom (Birren 28-9). In Christianity, it is Christ’s hue, and the color of heaven where he resides. Blue symbolizes the color of “The Divine Light” and the Virgin Mary. In early Christian mosaic art, blue was a dominant color used as the background of many artists’ works (Gage, “Color and Culture” 58). During the Middle Ages, blue was never a color used to designate social position. It was also not a choice of liturgical vestments. For these reasons, blue enjoys the designation of a non-threatening color, which everyone can use (Pastoureau 92-3). After the 12th Century, blue became extremely popular. “The fact that blue is the favorite color of more than half the population is at the very least a sign that it is neither violent nor transgressive, and probably an expression of its relatively weak symbolic potential” (Pastoureau 180). Today many studies and polls rank blue as a color least disliked by all cultures. Perhaps it is because blue in most cultures is a calm, peaceful, and neutral color.

Green is the color of nature in most cultures. It combines gay yellow and dignified blue. It is tranquil, refreshing, quiet, and natural. Early rituals centered on the hope of a good harvest with fresh green vegetables, the food sustaining life itself. It is the color of hope, healing, immortality, and fertility. Where there are seasonal cycles, green signifies spring, rebirth, youth and freshness (Mahnke 63). Islam attaches significant importance to green and is still a sacred color to Muslims since it is symbolic of virtue. Those who have gone to Mecca wear green turbines and only those of perfect faith can wear green. In the holy book, the Koran, Mohammed promises glory to the virtuous on the day of final judgment. “There will be gardens of dark green, fountains, fruit trees, and pomegranates. Therein shall they delight themselves, lying on green cushions and beautiful carpets” (Birren 32). In Japan, there are no negative associations to the color green since it is the symbol of life. A different green plant is associated with each of the four seasons in all aspects of the Japanese culture especially representative in their artwork. For example, pine evergreens adorn New Year’s decorations. The meticulous care taken in shaping miniature trees known as “bonsai” is a way of keeping “the green in nature close at hand” (Hibi 46). Even moss, which has somewhat negative associations in some cultures, only has a positive association for the Japanese. “The green of moss signifies the pleasing patina of age. On rocks or trees, it is considered a valuable adjunct, a touch of fresh, moist green, to the long established beauty of a traditional garden” (Hibi 46). The strong universal association of green and nature accounts for its popularity in most cultures.

Rituals are not the only place that we find various symbols for colors. During historical and contemporary times, societies have assigned meaning to colors politically and as a means of social identity. It is important politically to assign significant colors to local and national flags. The flags provide powerful non-verbal images identifying a particular society. It is interesting to note that many flags come about in the early stages of a country’s history during or after a time of turmoil either religiously or philosophically. While generally flags only contain a few colors, each country or locale has a unique way of displaying those colors as a
means of identity. In 1969, Martin Lindauer analyzed the colors of 107 flags from Asia, Africa, Europe, Latin America, the Middle East and the United States. Ninety-seven percent of flags in those locations contained red, blue, green and yellow. Of the counties using these four colors, 38% used red as the dominant color. In Africa, however countries use a disproportionate amount of green and black in their flags (Sharpe 33-6). In addition to this study, it is common knowledge that certain color combinations in flags are not unique. For example, France, the United Kingdom, and the United States use red, white, and blue in their national flags. Red to signify the blood shed for liberty, white for purity, and blue to signify the domination over sky and sea (Fine 448). Studies conducted on flag colors indicate that while the philosophy and government might be different, the meaning of colors used in flags has more of a universal acceptance.

Political assignment of color is not only prevalent with national flags, but also as a means of social identity. We see the association of color politically in the mandatory or voluntary dress in both the historical and contemporary world. Throughout history, social divisions have been color-coded in both political and religious contexts. This division is still relevant today (Gage, “Color and Meaning” 34).Traditionally in India for example, specific colors designated the four castes or classes. Brahmans, the sacred caste, wore white. They studied and taught. The Kshatriyas or the militant caste wore red. Vaisyas, the mercantile caste wore yellow while the Sudras, the servile class, wore black. These color assignments follow many symbolic similarities such as the color white with spirituality and red with passion and war. In China, during the Sung, Ming, and Ch‘ing Dynasties, officials of the Emperor wore designated colors according to their rank. Respectable Chinese wore somber hues of blues, grays, and browns. These are still popular dress colors in China today (Birren 29-31). During the Middle Ages, black for clothing became popular and in the Renaissance it was worn by the wealthy and nobility in all parts of Europe (Gage, “Color and Meaning” 31). During the Protestant Reformation, proper dignified attire was required according to rank and sex (Pastoureau 86-91). Puritans believed in somber dress and ornament. They imposed fines on people who wore bright colored clothing. Radical Protestants wore blue-greens as a sign of achievement (Sharpe 34). They viewed black as the most virtuous and dignified color to wear (Pastoureau 99). Traditionally, wearing the color red had its link to sexuality, as we see in the literary reference to Hester Prynne, the main character in the book, The Scarlet Letter (Fine 450-1). Today, street gangs use colors as a means of identification. “...color per se does not have any particular set of meanings. But when interpreted within a cultural domain, based on previous contexts, (Fine 1992) and grounded in expectation and socialization, such collective representation seem self-evident and inarguable” (Fine 452). Over the years, the use of color as a means of social identity has taken on many interpretations. Today, even within the diversity of cultures there are striking similarities. Wearing flashy or inappropriate colors of attire can still place a person outside social boundaries. The use of somber dark colors such as black still signifies dignified and respectable dress in many societies today.

Linguistics provides further evidence on how cultures express color meaning. There are many examples of the use of color as metaphors, which have cultural significance, in most languages throughout the world. Greenhorns, bluebloods, blackmail, green with envy, green of youth, red carpet, true blue and the blues, are some examples. However, some color metaphors lose their power as the reason for
their reference fades. For example, the term “blue collar” worker originally referred to the blue shirts worn by people working in manual labor positions as opposed to the white shirts of a skilled “white collar” worker. Today people wear a wide variety of colored clothing in all areas of the work force which will eventually make these terms seem less significant. It is safe to speculate that while the reason for the reference of a color metaphor might no longer be relevant, the metaphor itself will still remain and be adapted cross-culturally. “As these and other measures indicate, color serves as part of our cultural “tool kit” (Swidler 1986)- or put more directly, part of the crayon box by which we shade social reality” (Fine 444).

While the observations of past and present cultures are important, it is equally important to gain an understanding of the psychological and emotional aspects of color meaning. During the Modern Age when science and psychology evolved, there was a need for more research in order to gain knowledge about all the variables regarding color. In conducting cross-cultural studies, it became evident that verbal identification alone would be inadequate in gauging how people experience color, and identification could be problematic. It became clear that in order to conduct proper studies on this topic there needed to be rational color order systems, which would include not only individual colors but also “laws of harmony in color combinations” (Holtzchue 6 & 83-4). In 1666, Sir Isaac Newton conducted experiments observing the wavelengths of colors as seen when light passes through a prism. He hypothesized that color is light. Seven colors red, orange, yellow, green, blue, indigo and violet, can be seen through this visible spectrum of light. Each color possesses a separate wavelength. Red is at one end of the spectrum and violet on the opposing end. This discovery placed the colors blue and green in the center. This contradicted earlier ancient and medieval theories, which placed red at the center. Newton’s discovery was a breakthrough and still utilized today in all aspects of color study. Even Newton’s most vocal opponent, German poet J.W. von Goethe (1810) agreed with his scientific findings especially with regard to warm and cool colors (Holtzchue 85-7). Goethe recognized Newton’s theory that warm colors, those with long wave lengths, are exciting and vital; while cool colors, with short wave lengths, have a muted response and feel more comfortable (Sharpe 1-3). Subsequent theories such as those of Albert H. Munsell (1858-1918) and Chemist, Wilhelm Ostwald (1931), consider colors that are inherently harmonious and arrange colors in mathematical equations (Sharpe 4). Ostwald’s system uses color solids arranged in a circle in the color order of Newton’s visible spectrum. Each saturated hue has a number designation of 1 to 24. Two letters after the number indicates the amount of white or black added to the color, designating all the variations of the saturated colors. This color notation system is a convenient way to work with color and is especially helpful in studies related to color (Pile 36-8).

Contemporary cross-cultural studies can hypothesize about color preferences and meanings. Since preference of a color is subject to emotional and learned associations, color preference can also provide insight about the meaning people attach to color. Chongourian, supported by the American University of Beirut, conducted studies on the color preference of adult college students in Iran, Kuwait, Lebanon, & the United States. Red and blue was preferred by Americans but had the lowest preference by the people of Kuwait. Blue-green had the highest preference in Kuwait and Iran. Green on the other hand was highly preferred by all in this study (Sharpe 36). A combined Japanese and American study conducted by Oyama et al., found many similarities in both nations. Red was the most exciting color and blue the most calming in both cultures. Japanese and Americans evaluated blue-green and blue as good colors and orange, red, and purple as
distasteful. The difference between the cultures was that Americans preferred primary colors (Sharpe 36-41). Studies conducted by H. J. Eysenck (1941) at University College in London, looked at color preferences of men and women in a multitude of cultures and races in both European and non-European countries. Of the ten Ostwald colors, the majority preferred blue, red and green in that order (Eysenck 385-9). While there were some distinctions in the color preferences of the cultures in the preceding studies, it is clear that there were far more similarities than differences.

Research on special populations, such as different age groups and sexes within countries, set out to determine if these special populations had more in common cross-culturally. American and Lebanese children and adults partook in studies conducted by A. Chongourian. Most men preferred blue, while most women preferred blue-green. Older people preferred green, blue, and red. In America, five-year-old children preferred red while Lebanese children had no true color preference. Of adults’ aged 20 to 61, green, red, and blue were the most preferred colors in that order in all the cultures studied (801-3). J.E. Williams et al. (1966-99) investigated the affect of color-coding of particular races, especially people in the black and white races. The results of these studies indicate that the cross-cultural meaning of the colors black and white, with good vs. evil, and clean vs. dirty, affect not only how individuals think of themselves, but also how a person deals with members of the other race (Sharpe 42-8). In a two-part study conducted by Mark Meerurn Terwogt, et al. (2001), seven-year-old children, eleven-year-old children, and adults, linked colors to emotions. The study of 72 participants resulted in the conclusion that color and emotional preference change with age in all cultures. The younger the child, the more the child related emotion to color preference. Therefore, color and the emotion itself are far more inter-related for this group. It also appears from this study that the color preferences of children change, as they get older. This result seems to indicate that factors other than culture, not touched upon in this study, influence preference (5-13). The relevance of these studies seems to prove that specific age groups have far more in common cross-culturally than they do with people of different ages in their own culture.

In another broad based extensive cross-national research project undertaken by Charles E. Osgood, William H. May, and Murray S. Miron, the premise was “to test the hypothesis that, regardless of language, or culture, human beings utilize the same qualifying (descriptive) framework in allocating the affective meaning of concepts” (6). Sites in America, Finland, Japan, Hong Kong, India and Iran represented six language families. Social scientists and graduate students from every country conducted studies, which began in 1963 and ended in 1974. They had to undertake many precautions in order to insure that there would be adequate language translation and proper data collection in order to make a thorough analysis (3-49). In terms of color associations and symbols, four different criteria were analyzed, “concrete identifications”, “concrete associations”, “abstract associations”, and “abstract symbolism” (328). Concrete identifications of color such as white with snow for example, were the same for every culture. The majority of the cultures studied, shared the same concrete associations. Concrete associations included black with dirt, red with sacrifice and heat, yellow with the plague and green for spring and nature. Abstract associations showed similarities among cultures with very few exceptions. Abstract associations included white with eternity, virtue, innocence, purity, heaven, and light; and black with death, mourning, murder, sin and devils. Abstract symbolism was a bit more arbitrary and related more closely to deities, religions and social classes such as castes. For example black and yellow designated a particular caste in India only, and green
symbolized Mohammed in Islamic countries. However, even in this category there were many similarities cross-culturally. For example, universally white was a symbol for a flag of truce, and red for martyrs (328-30). In three out of the four criteria analyzed in these studies proves that color meanings cross-culturally have many more similarities than differences.

Many contemporary studies not only further scholarly research but also help in monetary ventures. It is common knowledge in the field of marketing that color plays a substantial role in creating a positive and lasting corporate image in customers' minds with regard to products, services, logos and web sites. IBM (blue), Coca Cola (red) and UPS (brown) are examples of multi-national companies who use color to represent them. The issue of studying color meaning in a multitude of cultures becomes extremely relevant for companies who compete in international markets. Thomas J. Madden, et al. conducted a study to find the preferences, similarities, differences, and meanings of color in order to help global firms choose colors that best fit their corporate image. Eight geographic locations in the study represented a broad scope of cultures. They were Australia, Brazil, Canada, Colombia, Hong Kong, the Peoples Republic of China, Taiwan and the United States. The study focused on basic colors used in prior research. In terms of preference, blue was the number one color preferred by subjects in five of the eight countries and was number two for the three remaining countries. Another interesting aspect of this study was the creation of perceptual maps of color clusters to determine what meanings were associated with these clusters. The cluster of blue, green, and white appeared in all eight countries and shared similarities in the meanings associated with the cluster. This cluster had associations with “peaceful, gentle and calming” feelings (Madden 5). Another combination, black and brown was categorized as “sad and stale” by most participants in the study (Madden 6).

While these associations were universal, individual countries also had unique meanings that they associated to the color clusters. For example, four countries associated blue-green and white with beautiful, and four countries indicated that black and brown were masculine. The color red however, had universal association. This was the only color seen as unique and not part of any cluster. All countries in the study strongly associated red with “active, hot, emotional and vibrant” (Madden 5-7). The use of color in designing web sites is also an important issue today. People around the world access the World Wide Web and therefore, the colors selected must not only have a broad appeal, but they also can not be offensive. Jill Morton, author, designer and professor at the University of Hawaii, found that blue is the safest color to use on any web site for most cultures. “There’s nothing on the planet that exists in isolation except the sky that stands alone” (Holzschlag 38-9). She points out that the location of the deity is in the sky in most religions. The results of these studies, important for corporate profitability, prove that many color meanings have international acceptance.

Today there are many indications that people in many parts of the world have access to information they never had in the past in what is termed globalization or the concept of one world. This means that customs, traditions and ideas are becoming increasingly universal. We see those trends already occurring in many areas in society especially for the younger generation. Color symbols are more widely accepted cross-culturally because of this phenomenon. For example, brides have traditionally worn red in China for centuries, but this custom is changing. Now brides typically wear white for the church ceremony and later change into a

http://www.bwwsociety.org/feature/color.htm
red jacket known as a “cheongsan” over the gown (“Chinese” 1). In Thailand where white was the traditional color of mourning, now people wear black (Adams 146-7). Today, black has become the dress of sophistication worldwide, made popular by New York’s cosmopolitan inhabitants. Grass-roots social, environmental and ecology movements use the color green as a universal symbol as exemplified by “Green Peace” and “green politics” (Fine 449). Even a song sung by American singer, Tony Orlando, shows how global exposure provides universal color meaning. In this song, Tie a Yellow Ribbon Around The Old Oak Tree, the placement of a yellow ribbon on a tree welcomes the return of a prisoner. This symbol is now in use worldwide to indicate the hopeful return of anyone in harms way (Theroux 71). These are only a few examples of how cultures are adapting color meanings from exposure to other cultures around the world.

All these observations on color meanings seem to indicate that while there are different races and cultures throughout the world people are far more similar than different. It appears that a range of stimuli, thoughts and emotions are interrelated with symbolic meaning of colors, causing a chain reaction (Mahnke 7). Perhaps it is the fact that the individual wave lengths of each color stimulates all people similarly leading to more universal associations of particular colors. Another explanation of this universality is the fact that all humans have a common relationship to the universe, sky, plants, nature, etc. It could also be that all of mankind has common links to ancient origins. Swiss psychologist, Carl Jung believed in what he called an uncontrollable “collective unconscious” (Mahnke 14). This model is the “Inherited memories of mankind’s entire experience...Millions of years of knowledge are stored in the genetic building plan of our brain. Throughout human life the individual refines this building through experience and learning” (Mahnke 14-5). Another explanation is that the recent impact of globalization has helped in making cross-cultural connections. It is evident that there is a need for more studies in order to prove if one, all or a combination of these factors is responsible for similarities in color associations. However, it is clear from all the information obtained that people cross-culturally attach meanings to colors, which transcend cultural boundaries. There are probably other areas where there are strong connections between cultures. Perhaps focusing on common links and similarities will help make this truly one world.

Works Cited:


---

*Marie Byrne is currently an Assistant Professor in the School of Architecture and Design at New York Institute of Technology (NYIT). She was a member of the adjunct faculty at Queensborough Community College and NYIT. In 1997 she joined NYIT as a full-time educator in the Interior Design Department. Ms. Byrne achieved certification from NCIDQ, a national organization qualifying interior designers in 1997. She is a New York State Certified Interior Designer and a Professional Member of the American Society of Interior Designers (ASID). Ms. Byrne concurrently is an active partner in an interior design practice working on commercial and residential projects.*