# Enough Beige: The Rejuvenating Essence of Color

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#### Abstract:

This paper examines the relationship between color and architecture in the context of urban placemaking and rejuvenation. The authors propose that color is both a material and a system, and should be considered as any other in the architectural construction compendium. Though color is often perceived as mercurial and decorative, it has a power to influence issues of culture, community, emotion and identity in ways that other architectural elements cannot, often at a lower cost and with greater adaptability over time. Color can infuse the built environment with "the quality without a name" (Alexander, 1979) and contributes significantly to human character and vitality.

The seemingly safe default of using beige (a warmer tone of gray) as a neutral common denominator has a severe implication on the development of urban identity. At first glance the diffuse application of various inoffensive tones seems safe, and even culturally respectful. Yet, the result is the visual equivalent of white noise where there is no resonance of the collective or individual self. This neutrality reflects back nothing of who we are.

This position is supported by an analysis of historical and contemporary precedents and the work of color researchers, theorists and practitioners. An historical overview of color use by diverse cultures across the globe to enrich their built environments and establish an identity of place will be used to connect color use to patterns that support vital communities. Case studies and examples of color use in contemporary architecture and urban design, including community-driven interventions, are used as a call to action to designers and citizens to consider color as more than a decorative element, but as vital nutrition, as "a power, which directly influences the soul." (Kandinsky, 1911)

Keywords: Color Theory; Color and Environment, Metamerism; Placemaking; Humanscape;

## 1. Introduction

Though color is often perceived as mercurial and decorative, it has an inherent power to enrich culture through the buildings that characterize it, in ways that other architectural elements cannot.

"Color may be culture's least recognized, but most direct visual signature. More than any other formal attribute, color represents a direct response to the particularity of the natural context, a human dialogue with the environment - a humane recording or responsive signature of its influence." (Swirnoff, 2000)

In our era of heightened environmental consciousness, with sustainable principles at the forefront of present architectural discourse, we propose that color be considered an essential resource in the rejuvenation of our urban and suburban 'humanscapes'. Color contains energy that can be harnessed to enliven and transform the ubiquitous built environments ravishing our American landscape, into places of distinctive character.

"Generally speaking, color is a power, which directly influences the soul. Color is the keyboard, the eyes are the hammers, and the soul is the piano with many strings. The artist is the hand, which plays, touching one key or another, to cause vibrations in the soul." (Kandinsky, 1977)

Color has a direct effect on our physiology and psychology, and as such, designers need to be highly sensitive to color's impact, and mindful to the consequences it causes on the built environment we inhabit. With this said, the transformative power of applied color is readily accessible and economical to accomplish.

## 2. Pattern Language

In the *Pattern Language*, Pattern 8 - 'Mosaics of Subcultures', the authors maintain how differentiated character is necessary for a society to be whole, vital and alive.

"Character can only occur in a self which is strongly differentiated and whole: by definition, a society where people are relatively homogeneous, is one where individual selves are not strongly differentiated." (Alexander, Ishikawa, Silverstein, 1977)

Our prevailing American culture of homogenous beige and similar lack of color expression has muted local character and identity, so there's no longer any visual distinction from place to place. There's no difference between colors applied in Concord, California to those applied in Indianapolis, Indiana even though the cultural and geophysical context is significantly different. The authors further state:

"The metropolis must contain a large number of different subcultures, each one strongly articulated, with its own values sharply delineated, and sharply distinguished from the others." (Alexander, Ishikawa, Silverstein, 1977)

Via the resource of applied color, we can articulate, strengthen and support our identity with a diverse tapestry of color, which is embedded in the particular place, reflects the community's vision, and creates alive distinct places for people to connect to, and thrive in their daily lives.

## 3. Color as a Factor in Health

Color has the ability to impact our physical, psychological and emotional health and well being. This dimension is often overlooked when considering color in the built environment. Much as nutritionists tout eating a colorful plate to ensure proper consumption of vitamins and minerals (Brody, 2002), visual contact with color as wavelengths of light can have a biological effect on the human body (Mahnke, 1996) Some colors can impact our cardio vascular system, while others influence our nervous system. For example, blue light has the ability to reset the circadian rhythm (Holzman, 2010) and prolonged exposure to red can increase heart rates and aggressive behavior and can heighten the intensity of pain (Martinez-Conde, Macknik, 2014).

While not entirely within the domain of an architect when planning a project, colors' biological impact is verifiable and experienced through the architect's work. An awareness of this impact should be part of the discipline's body of knowledge. What is known-that can be readily applied in practice-is that environmental color is best used with variation in hue, tone, shade, temperature, proportion and intensity. The monochromatic use of pink in holding cells to calm prisoners has a short-term effect. If left too long in this single-color environment, the occupants become even more agitated than when they arrived (Walker, 1991). In nature, monochromatic environments such as deserts and tundra, are among the most harsh and extreme (Firestone, 2010).

Jill Pillaroscia, a designer and color consultant, puts it plainly in an interview with Rebecca Firestone,

"Monochromatic space is dangerous and boring...Our eyes need variety in both color and value and intensity...staring at a neutral fabric in an office cubicle, with a neutral wall beyond will cause your eye to grow fatigued."

Humans are drawn to color. It is a vehicle for communication and can keep us safe from harm (Meerwein et al., 2007, Firestone 2010). Our ability to see in color differentiates us from other animals and allows us to perceive the emotional and physical health of our fellow humans (Changizi, 2009). Should we not try to support vitality through the use of multiple colors in the built environment?

## 4. Color and Architecture

In his 2014 essay, *The Power of Paint: Three Case Studies on Colour in Architecture*, Jacob Reidel speaks frankly about architects reluctance to embrace applied color as an elementary tool:

"Let's admit it, architects are suspicious - if not a little scared - of colour... perhaps architects' mistrust of applied colour owes something to the profession's well-known controlling tendencies and the fact that colour is one of the most mutable aspects of a building;"

By contrast, architects are trained to focus on elements such as form, space, materials, program and organization which are viewed as more 'important' and 'architectural' (Reidel, 2014).

These fundamental elements are indispensable in generating supportive humanistic architecture, but we must not overlook color's contribution, and how our visual built environment benefits from its application. Reidel makes a case how three prominent governmental buildings from diverse cultures use the simple power of paint, to surpass architectural style and form to communicate a clear and iconic identity. He reveals this phenomenon with three official residences of heads of state: the White House in Washington, D.C, the Pink House (*La Casa Rosada*) in Buenos Aires, and the Blue House (*Cheongwadae*) in Seoul:

*"three iconic buildings popularly defined far more by their exterior color than by any formal or stylistic architectural characteristics."* 

Reidel also contends that,

*"these three buildings demonstrate colour's ability to communicate at a level more basic and universal than architectural form or style,"* 

and further states,

"Given the demonstrated ability of colour to supplant architectural form as a communicator of power, perhaps architects are right to fear the paintbrush. However, by doing so they relinquish an effective yet simple tool. After all, what better way to establish a new order than by quite literally painting (or re-painting) the house?"

Sadly, the majority of what we visually experience in our American cities, towns and neighboring suburbia is a mundane collection of lifeless beige. We're inundated by this epidemic which numbs our senses, disconnects us from place and silences our **aliveness**. This banality and/or absence of color, has not always been so.

## 5. History of Applied Color

In Faber Birren's essay, *Color and Human Response*, he takes us on a brief journey into the history of human connection and associations with color. Birren touches on universal subjects such as: Architecture, The Earth, Philosophy, Religion, Ancient Science, Healing and Magic, where color has had a pivotal role in the "story of humankind". The color choices and associations may have varied depending on the culture's geophysical location, material and pigment availability and traditions, but the fact that color has been so essential for diverse cultures to express their identity in this world is undeniable.

As far back as 2300 B.C.E. at the 'Mountain of God', at Ur between Baghdad and the Persian Gulf, one of the oldest buildings in the world, Dr. Leonard Woolley discovered in the 1920's that,

*"the lower stage of the tower was black, the uttermost red, the shrine was covered with blue glazed tile and the roof with gilded metal."* 

From his description, we see the implementation of applied color, utilized to communicate with, and to connect the people of Ur as a society through a clear, simple representation of their world view. Woolley writes, "These colors had mystical significance and stood for the

various divisions of the universe, the dark underworld, the habitable earth, the heavens and the sun." (Birren, 1983)

Another ancient example is The Temple of Nebuchadnezzar, commonly known as 'Tower of Babel', ca. 500 B.C.E. According to the architectural historian James Fergusson (1808-1886), the tower

"was dedicated to the seven planets or heavenly spheres, and we find it consequently adorned with the colors of each. The lower, which was also richly paneled, was black, the color of Saturn; the next, orange, the color of Jupiter; the third, red, emblematic of Mars; the fourth, yellow, belonging to the Sun; the fifth and sixth, green and blue, respectively, as dedicated to Venus and Mercury; and the upper probably white, that being the color belonging to the Moon, whose place in the Chaldean system would be uppermost." (Birren 1983)

From these archeological discoveries of ancient ruins, we have proof of some of the earliest uses of applied color integrated into architecture. These ancient cultures used color to articulate and communicate their vision of the world they inhabited, and the worlds they imagined.

It seems major resistance to applied color on buildings and structures in Western culture began to occur during the Renaissance, when classical antiquities first began to emerge from the earth, with pure white marble valued as the supreme exemplar of beauty (Gurewitsch, 2008). For centuries, western scholars, artists, and architects embraced the view that Antiquity valued purity of form with the material's natural color, and that applied color had negligible value in architecture and sculpture.

In the 18th century, the archaeologist and art historian Johann Joachim Winckelmann, proclaimed that the Greek artifacts are pure. He wrote,

#### "The whiter the body is, the more beautiful it is as well."

Against growing evidence to the contrary, Winckelmann's view prevailed. For centuries to come, antiquarians who envisioned Ancient Greece in full color, were dismissed as eccentrics and were ignored (Gurewitsch, 2008).

Goethe in his color theory (1810), relates vivid hues with something uncultured, uncouth, or lacking in development:

*"wild countries, with uneducated people and children, prefer bright colors; animals become angry with certain colors and refined people reject brighty colors in dressing and the objects of the surrounding, and seem to avoid them from the environment." (Serra, J. et al. 2012)* 

Through the current work of German archaeologist Vinzenz Brinkmann, with his equipment of high-intensity lamps and ultraviolet light, we have evidence to the contrary; Classical Greece was beaming with color. Brinkmann's meticulous work clearly demonstrates Greece's sculptures and temples were rendered with applied color, creating resonant environments for the citizens to walk amongst, engage community, and be enlivened with the joy and optimism that color offered (Gurewitsch, 2008).

What once was thought to be the Classical aesthetic, and represented an ideal to replicate, was not so, yet the damage had been done. Chromophobia through intellectuals' misinterpretation and ambivalence to applied color, became rooted in Western culture. On Regent Street in London, it was stipulated in the leases that all facades must be painted. Toward the end of the 19<sup>th</sup> century, these smooth, colorful facades were regarded as essentially dishonest. "Paint on the exterior of a house was reprehensible as paint on a lady's face."

The Victorian architects' feelings about paint was basically a moral one; honest materials were only permissible (Rasmussen, 1965).

One of the defining principles of the Modern Movement that surfaces should be devoid of applied ornamentation, became embedded in teachings that swiftly spread across the Atlantic into America in the early part of the 20<sup>th</sup> century. This new wave of architectural ideas—with its ideal of expressing natural materials at the abandonment of vernacular traditions' use of applied color—may have been a major contributing force to the colorless shadow covering our American landscape into the 21st century.

It's feasible to speculate, that Corporate America's adoption and proliferation of glass boxes of steel and concrete in the 1950's, created a collective sense of disconnection from the local vernacular, which then fueled alienation and anonymity in the American psyche. The need to fit in, "to keep up with the Joneses", while donning your white shirt and khaki pants, has subtly been programmed into our subconscious; the fear of expression and vulnerability of being seen, may have led to a homogeneous beige, that has affected localized identity and contributed to the lack of place, that we suffer from today in our American cities, towns and suburbia. This monotonous application of beige, has suppressed the unique characteristics of each region, community and neighborhood, and in turn has fostered an undifferentiated character, where mediocrity and detachment has become the accepted norm.

## 6. Color and 'The Quality Without a Name'

Christopher Alexander in his book, The Timeless Way of Building, speaks of an essence— 'the quality without a name.' We can get close to describing it, but no word alone can capture it. It germinates from being whole and true to itself. When whole,

"it states its own nature, visibly, and outwardly, loud and clear, for everyone to see."

"Places which have this quality, invite this quality to come to life in us. And when we have this quality in us, we tend to make it come to life in towns and buildings which we build. It is a self supporting, self maintaining, generating quality. It is the quality of life. And we must seek it, for our own sakes, in our surroundings, simply in order that we can ourselves become alive." (Alexander, 1979)

Being fearless to embrace the power of color as a tool to animate and invigorate places to have a special character is critical to help reverse the malaise presently permeating America. We can learn from vernacular traditions from across the globe, whose long standing perceptual experience rooted in their geophysical context, can guide us in our choices of which colors to harness in any given situation (Swirnoff, 2009).

## 7. Context and Architectural Color

The human perception of color in spatial environments can be distilled down to two essential components: light and context (Swirnoff, 2009). The simplicity of this equation defies the complexity of each part. The study of light crosses multiple disciplines of objective science, while context is a subjective amalgam of influences and factors. Depending on the point of view of the architect, designer, planner, developer, client, inhabitant or passer-by, context could include geography, building materials, natural landscape and environment, local culture, history, brand identity, personal identity among others. It is no simple task to fully consider how to respond to these factors in the creation of an environment, yet as architects and designers we are trained to think systematically and create a cohesive concept from a system of moving parts. However, our discipline often shies away from using this same mode of thinking when it comes to the use of color in architectural environments.

On balance, there have long been architects who have championed the use of color. Not only is color seen as a critical component in design, but one that should be considered at the outset of a project. In 1901, German architect and urban designer, Fritz Schumacher wrote in *Der Kunstwart* 

*"It is extremely hard to take a building which was not conceived with color in mind and, through choice of materials or pigments alone to create color effects after the fact." (Düttmann, Schmuck, Uhl, 1981)* 

In Color for Architecture Today, Lois Swirnoff states that color should be thought of

"as a component system of the building itself, rather than as surface embellishment."

She further explains,

"Color confers identity and meaning...thus humanizing the connection of the individual to the place." (Porter, Mikellides, 2009)

# 8. Case Studies: Color in the Built Environment

Any spatial environment can be judged for its use of color, regardless of the designers' intent. However there is more value in examining precedents where color has been considered as an explicit part of the design strategy. The four following project examples demonstrate how color can be used in architecture and urban design to create vitality, growth, community engagement and a sense of place.

#### 8.1. Pacific Design Center



#### Pacific Design Center. Source: Frontiers Media

In 1978, the Pacific Design Center made waves in West Hollywood as a big shape that appeared to have been dropped from the sky into the low-rise unincorporated community of Los Angeles County (Masters, 2011). The building is clad entirely in reflective blue glass. Designed by Cesar Pelli for Gruen Associates, its color was no accident. Pelli painstakingly chose the appropriate shade of blue glass to both allow the building to bleed into and reflect the sky (Cohen, 2014).



Pacific Design Center Blue Building. Photo Source: Pelli Clarke Pelli



Pacific Design Center Blue Building. Photo Source: Unknown



Pacific Design Center Blue Building. Photo Source: Wikipedia

Bringing vitality and unity to a diverse community, the building was both controversial and beloved and served as a catalyst for a larger urban development initiative Affectionately called "The Blue Whale," the first building has since been joined by two additional structures, one green, one red, both designed by Pelli and Associates. The color of these later buildings were part of the original project plan and together they serve as a defining feature of the City of West Hollywood, which has been a diverse community for generations (Tugend, 2000).

#### 8.2. Superkilen Park

The Superkilen Park in Copenhagen was completed by the Bjarke Ingels Group (BIG) in 2012. This project unfolds over an urban space in "one of the most ethnically diverse and socially challenged neighborhoods in Denmark" (BIG 2012). This project emerged from an indepth public participation process, which engaged the community and set the stage for its revitalization (Superkilen Park, 2013).



Superkilen Park, Photo Source: Bjarke Ingels Group

Color was used as an organizing system to define the zones of activity and function. Hues range from bold red and magenta in areas used for sports and a weekly market to subtle shade-shifts of seasonally responsive vegetation in the 'green square' designed for relaxation and picnicking. These two areas are bridged and balanced by the 'black square', a monochromatic zone that acts as an urban living room where locals can gather to converse and play familiar board games (Superkilen Park, 2013).

When viewed from above the magenta-red striped pattern streams across the ground plane. At pedestrian level the reflective light is warm and the tonalities mirror the existing brick structure of the adjacent buildings. The black square contrasts the intensity of the red square and creates a neutral backdrop for residents to bring their individual color identities to the environment. The green square offers a universal aspect of color to the neighborhood through plant life.



Superkilen Park, Red Square Detail, Photo Source: Bjarke Ingels Group



Superkilen Park, Black Square Detail, Photo Source: Bjarke Ingels Group



Superkilen Park: Left: Green Square, Right, Red and Black Square Image Source: Bjarke Ingels Group

#### 8.3. Avalon Ocean Avenue

Perhaps less visually bold, but no less impactful is the Avalon Ocean Avenue urban infill project by Pyatok Architects in San Francisco. This mixed-use development demonstrates a thoughtful consideration of context in its color and material strategy. The project is located in a part of the city that needed an infusion of vitality and density (King, 2013). Respectful to both the natural landscape and the existing urban character of the streetscape, the buildings balance forms and shapes to provide dimension and interest that is in harmony with the scale of the street, making it visually comfortable at both pedestrian and vehicular scale.



Avalon Ocean Avenue, Photo Source: Pyatok



Avalon Ocean Avenue, Courtyard. Photo Source: Pyatok



Avalon Ocean Avenue, Photo Source: Pyatok

To quote John King in his San Francisco Chronicle review,

"The colorful collage serves as a transition from the bulk of City College to such offhand wonders as the jaunty neon Beep's Burgers sign across the way."

Marcial Chao of Pyatok further explains,

*"It's about movement along the street, not a single design. We wanted to introduce a sense of rhythm without repeating things over and over."* 

### 8.4. Philly Painting

The Philly Painting initiative of Philadelphia's Mural Arts Program is an example of color applied after the fact, but in a way that both engages and empowers an underserved community. The Philly Painting website states,

"The goal is to mobilize the community to completely transform the commercial corridor and bring a new look to their neighborhood: A social and artistic experiment of urban acupuncture, beautification, and economic stimulus."



Philly Painting, Huntington Street Facade. Photo Source: Fred A Bernstein



Philly Painting, Germantown Avenue Street Facade. Photo Source: Philly Painting



Philly Painting, Before Intervention. Photo Source: Google Earth

The project is spearheaded by Haas and Hahn, a team of two Dutch designers who have immersed themselves in the community in north Philadelphia along Germantown Avenue (Bernstein, 2012). They have worked with the shop owners and residents to develop color palettes and patterns that connect to the community context while bringing bold graphic artistry to the street façade. As a topical layer of color, the murals act as a unifying skin over the existing architecture, unifying active and abandoned structures. The result has brought vitality to the area as a tourist destination that now helps to support new businesses (Benfield, 2012).

The project has been well received by residents and more property owners are participating. Dre Urhahn, one half of Hass and Hahn, says of the neighborhood residents and business owners,

"Not only do they like the way the painted buildings look, but they say, 'Thank you for giving so many of the brothers work." (Bernstein 2012).

## 9. Architectural Color: A Practitioner's Perspective

To build upon historical and objective examples, designer and architectural color consultant, Emily Lauderback, shares her firsthand experience of working with color in the built environment.

## 10. The Divine Order of Color: Mother Nature's Design Principles

As stated previously, Christopher Alexander in *The Timeless Way of Building* (1979), speaks of

"A central quality which is the root criterion of life and spirit in a man, a town, a building, or a wilderness. This quality is objective and precise, but it cannot be named: the quality without a name."

We can get close to describing it, but no word alone can capture it. It germinates from being whole and true to itself.

In human lives, Alexander states that,

"the quality without a name is the most precious thing we ever have.... This wild freedom, this passion, comes into our lives in the instant we let go. It is when all our forces can move freely in us. In nature, this quality is almost automatic, because there are not images to interfere with natural processes and making things."

Alexander declares that each of us knows from experience the feeling which this quality creates in us, and for this reason, we also recognize this quality when it occurs in buildings.

"Places which have this quality, invite this quality to come to life in us. When we have this quality in us, we tend to make it come to life in towns and buildings which we build. It is a self-supporting, self-maintaining, generating quality. It is the quality of life. And we must seek it, for our own sakes, in our surroundings, simply in order that we can ourselves become alive. This is the central scientific fact in all that follows." (Alexander, 1979)

'The quality without a name' has been speaking to me and through me, I now know. I have childhood memories of architectural color experiences and am now conscious that I actually feel architectural color in my body. After working almost exclusively with Benjamin Moore Paint® colors for the last 20 years on three of my own homes and thousands of clients' homes, I have collected extensive experience and data on how to use architectural color most effectively to create 'the quality without a name'.

The directly experienced phenomena I feel and use to create 'the quality without a name' through color, is based on the fact that human beings are creatures of nature and the natural

environment is what feels and supports our physical beings best. The design language of the Arts & Crafts movement has been a central influence in my work, since most of the dwellings in Seattle were built during this time in the early 20<sup>th</sup> century. While the Arts & Crafts movement of merging exterior and interior spaces and working with nature from a design perspective has been intellectually inspiring, more importantly, it supports my direct experience and what I know to **feel** best. If 'the quality without a name' can be attributed to any one cause, I would argue that it expresses a divine order that we directly experience in nature.

*"It is the quality of life. And we must seek it, for our own sakes, in our surroundings, simply in order that we can ourselves become alive. This is the central scientific fact in all that follows." (Alexander, 1979)* 

"**Central scientific fact.**" A bold statement. Can 'the quality without a name' be proven to be a primary contributor to allowing us to be alive? In order to be declared 'scientific fact,' does it need to be tested and proven?

The natural state of being human is to make meaning and draw conclusions from our experiences. Scientifically, natural patterns and occurrences are questioned, hypothesized, tested, observed and recorded to draw conclusions and create meaning. While some in our culture have now attached the meaning of a belief system to science, science is purely a prescribed process and protocol for inquiry. Protocols for scientific inquiry have assisted human beings in establishing definitions and natural laws that had been accepted as having divine origin for millennia. Alexander's statement of "scientific fact"--that 'the quality without a name' reinforces life and being alive--refreshingly provides the framework for my own direct experience and work with architectural color. Perhaps scientific fact can begin to include more elusive and intangible phenomena as well. Or at least honor those experiences as we would scientific fact. Einstein once stated,

"The scientist is possessed by the sense of universal causation. His religious feeling takes the form of a rapturous amazement at the harmony of natural law, which reveals an intelligence of such superiority that, compared with it, all the systematic thinking and acting of human beings is an utterly insignificant reflection." (Calaprice, 1996)

For many individuals whose consciousness resides more in their bodies than in their brains, patterns of divine order are at the forefront of their awareness in the natural environment. (Wilson, Leslie Owen, Ed.D. thesecondprinciple.com/optimal-learning/naturalistic-intelligence/) Seeking the scientific research or theories to substantiate their direct experience feels necessary to establish validity in our culture. One could argue that indeed the role of scientific inquiry is to break down the divine order of things to provable rules and theories, and frequently falls short of including phenomena which can be described by 'the quality without a name.'

Two fundamental scientific theories emerged to support my experience and approach and are integral to my architectural color consultation practice:

- 1. The architectural application of color is best understood as a concept of physics/light/ energy developed by Sir Isaac Newton in the 1670's.
- 2. The phenomenon of **metamerism**, or chromatic shift, as defined by A.H. Munsell, is generally unknown, and people cannot even fathom that such a magical event occurs. [Paint companies' marketing of color presents misinformation that architectural color is a static item. I have encountered people who genuinely feel there is something wrong with their perception when they begin to experience how architectural color shifts and changes.]

As a former mathematics educator trained in Constructivist methods, I have now worked with thousands of clients performing architectural color consultations in the role of facilitator. Assessing clients' understanding, or lack thereof, of the architectural application of color and building upon that is necessary to work with them to create their spaces. I operate very linearly within a unique paradigm that I developed based on my understanding of how architectural color makes sense on both scientific and intuitive levels: that which Alexander describes as 'the quality without a name.'

The basis for the structure of the paradigm is Sir Isaac Newton's Color Wheel/Color Theory, Albert H. Munsell's Color System, principles identified by Johannes Itten and Josef Albers, and feng shui. Utilizing traditionally formulated paint, primarily Benjamin Moore® products, I call upon the full spectrum through the intentional balance of complementary colors (simplified for neutrals as warm & cool colors), which results in higher vibration. While the color designs co-created with my clients are naturally aesthetically pleasing, they also energetically enhance the environment in which they are employed, creating 'the quality without a name.'

Without light, we cannot see color. When we see color, it is light reflected back to us. Color is light, and light is a form of energy with its own frequency and wavelength. That's why thinking of architectural color through a scientific or physics lens is often more helpful. This energy (color) is not static. It fluctuates and changes, reflecting the light conditions at the time and responding to the other colors (energies) surrounding it, which is the phenomena of **metamerism** or Chromatic Shift in Munsell's color system.

**Metamerism** is an effect where a color appears to be different in different light conditions. Metamerism is a phenomenon of nature, and paints are often mistakenly blamed when metamerism is really the cause. The reason is that different types of light render color differently. For example, natural sunlight contains more blue light, whereas artificial lights contain more orange. Thus blues will appear more intense in daylight than in artificial light. In my direct experience, colors' appearance is also greatly affected by adjacent colors.

Every color has only one complement. The complementary pairs are red & green, blue & orange, yellow & purple. Each of the primary colors' complements is a combination of the other two primary colors. Complementary colors (similar to complementary angles in geometry) make a complete whole, and what they complete is the spectrum of light: between the two colors in the complementary pair, all hues are present. Thus using a balance of complementary colors and relationships allows us to experience the full spectrum.

In each complementary pair, one of the colors is classified as a warm color and the other a cool color. When complementary colors are seen together, they actually enhance each other's energy and appear brighter and cleaner. We often say that they appear to sing together. The colors energetically lift each other and are more luminous.

We can create this same energetic enhancement by using a balance of warm and cool colors. This basic principle is the foundation of my color work and operates in a different dimension than just how the color designs look. The resonance of intentionally balanced warm and cool colors in architectural designs is nurturing because of the energy they produce together: 'the quality without a name'.

A.H. Munsell's color system has proven fundamental in providing more context for how to classify and make sense of architectural colors' multi-dimensionality. Every color can be looked at in three ways:

1. **hue:** the only dimension that most people think of as color, which is why "color" has become synonymous with "hue"; the primary (red, yellow, blue) and secondary (or-

ange, green, purple) colors, along with neutral terms such as gray, brown, beige, taupe, tan, black, white, etc.

- 2. **saturation or chroma:** the intensity of a color affected by adding gray or the color's complement. Tertiary colors are typically low in saturation. Does it feel soft and muted or vibrant and intense?
- 3. **value:** the lightness or darkness of a color. A tint can be made by adding a hue to white. A shade can be made by adding black to a hue.

In my direct experience, architectural colors with varying degrees of saturation are what resonate with our beings energetically most and affect other colors more beneficially. Mother Nature's color designs most often include more complicated colors with depth and varying degrees of saturation. Used intentionally, these are the colors that emit 'the quality without a name', providing a generally soothing and resonating environment. I often describe that the colors and energies in the space 'sing' together.

Fortunately, feng shui, the ancient Chinese system used to balance and enhance environmental energy, has increasingly been accepted as a valid and beneficial solution for improving lives in our culture as well. Fundamental to feng shui is the common sense understanding that harmony and balance, especially with nature, have healing effects. As our culture is awakening to what ancient Eastern cultures have known for thousands of years, we are witnessing the success and healing effects within people's spaces.

When observing Mother Nature's use of color, we experience the inherent balance of warm and cool tones and the energy to which so many of us are attracted. For example, while the main color of wood is warm, on very close inspection, the grain is typically a cool color. The way in which the tones dance together on a deep level--that we often do not perceive--is the reason I experience so many of us desire wood decor and architectural finishes in our homes. We don't necessarily see the complementary relationships, but we feel them. Humans are also animals of the Earth, and the energetic balance that resonates with us outside in nature is possible to be brought inside our homes and employed on exterior surfaces in the built environment to support us most effectively.

Newton's Color Theory, the science behind Mother Nature's divine plan, has been a very effective tool to educate people about this basic principle of feng shui. Color Theory illustrates that by balancing complementary colors, we can create an energetic whole much greater than the sum of the parts.

Undoubtedly, the architectural application of color is an infusion of energy. We are able to manipulate and balance that energy to better support us. Educating our culture about the energetic depth of the architectural application of color--the full spectrum—and employing it, not only benefits us individually. The benefits ripple out to our greater collective whole. On a mass level, we even have the ability to heal the Earth with the conscious and intentional use of color, especially when we relieve the anxiety and confusion surrounding it for so many.

#### As Lin Yun has stated:

"According to feng shui, our life and destiny are closely interwoven with the workings of the universe and nature. All permutations, from cosmic to atomic, resonate with us. The force that links man and his surroundings is called ch'i (translated as human spirit, energy, or cosmic breath).

The point of feng shui is to harness and enhance environmental ch'i to improve the flow of ch'i within our bodies, thus improving our life and destiny. Harmony and balance are both crucial factors in feng shui – they pervade the process linking man and the universe." (Rosebach, 2000)

In my direct experience, 'the quality without a name' resonates with the principles of feng shui.

In the pursuit to substantiate my direct experience, I have read and encountered many theories about architectural color, most of them based upon scientific knowledge of light and geography. While I am not disputing any of the findings in these works, I am questioning the applicability when faced with creating color designs in the built environment. Working directly with the color choices by building a balanced palette of warm and cool tones with varying degrees of saturation is what is most important and actually quite simple. Working with the palette in the designated environment and light conditions is paramount to assessing its effectiveness and whether it reflects 'the quality without a name.'

## 11. In Closing

The ideas presented in this paper are meant not as unilateral admonishment or praise for what has or has not been done with color in our cities, but as an introduction to a collection of ideas and points of view. It is our belief that this knowledge can serve as a launch point for further investigation and experimentation. Color has incredible potential to influence our communities and to help connect individuals to themselves and the places in which they live.

As we work to shape our environment we must consider color as a perceptual element of the 'human spirit synergistic system', which visually nourishes our individual and collective well being. Color can unite communities, spark economic growth and most importantly, radiate 'joy'.

"Joy inspires and encourages people to be participatory, not passive. The outcome of creating and experiencing joy is a strong sense of place and a stronger community." (Wong, 2016)

With color, our cities, towns and neighboring suburbia will become more friendly, livable and alive. The 'quality without a name' that architectural color evokes will filter through our environment, shift attitudes and remind us of our humanity in our everyday life experiences.

The application of intentionally balanced color reflects light which creates a resonance akin to Mother Nature's divinely ordered color application: '**the quality without a name**'. This inspires us to have the courage and strength to be true to ourselves. With a strong sense of individuated self, we can contribute wholeheartedly to the healing and transformation of the communities we live in and world we share.

"Color is life, for a world without color seems dead. As a flame produces light, light produces color. As intonation adds color to the spoken word, color lends spiritually realized sound to a form." (Itten, 1973)

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