

VISUAL SENSATIONS

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“Color is the place where our brain and the universe meet.”

– Paul Cézanne, as quoted by Maurice Merleau-Ponty in *The Primacy of Perception*

For over forty years Robert Swain has dedicated his practice to the investigation, application, and experience of color sensations in abstract painting. He states: “Color is a form of energy derived from the electromagnetic spectrum that stimulates our perceptual processes and is instrumental in conveying emotions.”¹

It is an extraordinary and concise observation—made not by a scientist, but by a painter. Indeed, the history and theory of color organization is peopled not only by art historians but also by many experts from diverse scientific disciplines, such as biology, experimental psychology, philosophy, physiology, and chemistry.²

Painters have always been interested in color, for pigment is one of their principle materials. Any discussion about the colorists among them could begin with Giotto, for example. But color served as an index and a sign; in painting it was used as local, or surface color, as a means to identify a depicted object. Painting has a long memory, but in the twentieth century—relatively recently—a break occurred, namely the advent of abstraction. This development allowed color to free itself from its subordination to objects and to emerge as an autonomous element in painting. Artists began developing an entirely new language, one that still awaits its analytical and critical assessment.

Fast forward to the mid-1960s, when Robert Swain arrived in New York City. Visual effects such as luminosity, luster, and iridescence were already known and had been explored in art. A new (though short-lived) international movement, Op art, spawned simultaneous investigations by many artists living in different countries.³

Around the same time, new scientific investigations of color perception were published. The study of the perceptual properties of color is founded on the biological basis of artistic behavior. With the revolutionary techniques of Positron Emission Tomography (PET) and Magnetic Resonance Imaging (MRI), during the 1970s and 1980s the study of the human brain became possible, and by the 1990s MRI technology was monitoring neural activities in “real time.” We painters discovered that the seemingly countless variations among color’s mysterious sensations—though dauntingly difficult to enumerate—could be studied systematically, as many of their psychological and physiological causes were finally being revealed.

When Swain decided to devote his life’s work to color phenomena he was well aware that there was no available paradigm to reference and no consensus about the subject in the art world. He found that the prevailing cultural dialogue did not suffice. Post-structural thought, with its focus on words and other symbolic codes, consigned thinking about cultural history and the philosophy of the human subject to the margins. Feelings, emotions, intuition,



Untitled #1, 1967
Acrylic on canvas, 30 x 90 in.
Private collection

sensations—the life of embodied experience—was essentially ignored in favor of semiotics. With the study of sensations and perception, however, an understanding of our humanity is available to us. The above-mentioned innovative scientific technologies allow a new type of direct access to the complexity, flexibility, and vitality of our mental resources. In contrast, the signification of text, discourse, and code seems limiting. But color painters and art historians had kept up a conversation about color and sensorial perception in parallel to more well-known post-structuralist conversations. And the evidence of science made that sense-based artistic dialogue harder to ignore. In 1984, in the second edition of *The Sense of Order*, the eminent art historian E.H. Gombrich stated that “there exists a sense of order which manifests itself in all styles of design and which I believe to be rooted in man’s biological inheritance.”

Swain has an empirical but essentially intuitive way of working that yields visual expressions of great resonance and beauty. He knows that the feelings produced in the viewer by colors are a direct effect of sensory perception and not a result of cultural or historically conditioned associations. And he is aware that different viewers with normal color vision can actually perceive colors in slightly different ways. (It has been suggested that part of the problem lies with the naming of colors.) Color painters, like Swain, devote their attention to the durational observation of the properties of color in perceptual abstractions. The groundwork for such investigation was laid with the establishment of painting as an experimental activity in the 1880s by Seurat; after the death of Cézanne in 1906 it became more insistently so. In a way, painters were experimenting in the early days of abstraction as the experimental psychologists did. The Danish psychologist David Katz, himself a painter, has described experiences of local and film color effects that Kandinsky writes about in his 1913 autobiography *Reminiscences* and that artists and teachers, such as Josef Albers and Johannes Itten, expanded upon during the middle of the last century. Their instructional books on color phenomenology and in particular their ideas of color strategies for painters, first published in the mid-1960s, are still in use.⁴

How, then, does a young painter go about setting up his studio to make abstract color paintings? When Swain painted *Untitled #1* in 1967, a thirty-by-ninety-inch painting that consists of five rows of seventy-five discrete color squares, organized in a grid formation of modulated hues—ranging from intensely glowing saturated colors at the top to largely unsaturated colors at the bottom—he had deliberately addressed and controlled the three dimensions of color, namely hue, value, and saturation. He could have stayed there, content to keep making these very satisfying paintings.

But Swain was interested in color phenomena. When he painted the larger-than-life-size tondo, *Red and Green Color*, in 1969, he applied red and green, which are direct complements, of similar value in a brushy manner. The afterimage heightened both colors dramatically, offering a well-known and predictable effect. But there occurs a second effect at their horizontal border, a flickering halo of intense light, known as the Mach band. A third effect ensues, as colored light intermixes to a medial sensation, known as the subjective gray, at the bottom and seems to work its way up, as if a cloth was unfolding upwardly.

These sensations are fleeting but powerful. They involve eye, mind, and body. It seems that paintings like this one set the course for Swain, and he devoted himself in subsequent years to unlocking the mysteries of perception. To do so, he had to turn inward and find a personal approach, his own language of color.

How, then, does a painter find and determine color relationships? The most

straightforward expression of these is the color circle, and Swain proceeded to paint several versions of it with an increasing number of segments, beginning in 1971 with a twenty-four-part wheel that had an eight-and-a-half-foot diameter. It is interesting to note that the color yellow is placed at the top center in several of these early works, such as the color wheel studies and his *Untitled #1* of 1967. As an organizing principle this choice is perhaps indicative of Swain's particular sensitivity toward the polarity of tonal light/dark values. And it is one of the reasons why his early work can never be confused with color charts: it always involves a spatial dimension.

Over the years, in an effort to gain insights afforded by his practice into the ever-expanding vocabulary of color behavior and effects, Swain has devised a catalogue of close to five thousand color samples. Organized according to his unique numerical system, these color chips are carefully filed in narrow drawers in his studio and serve as aids in formulating color relationships for his paintings. It becomes self-evident that Swain's concern is neither to expose the hierarchy of colors nor to illustrate a theory or symbolism of cultural codes. Rather, his impulse stems from the desire to make us *see*, and thus *feel* and *think*, color at its most active, existential, and most refulgent.

His works are not immersive. Instead, factureless and painted in precise, modular grids, they demand a practice of looking with heightened attentiveness that engages us completely in the disquieting visual, cognitive, and intensely sensuous experience of color's constant flux. Our reward? There is knowledge and understanding to be gained by active and attentive looking. For instance, Swain seems to favor the two extremes of color organizations: contrasts and assimilation. Similar colors have the tendency to group together—we call them analogous colors—while complementary colors contrast and heighten each other's presence. Here reality and the sensation of color collide. When contrasting colors are precisely painted with a focused, definitive edge, they will not only create phantom lights that seem to come forward into the viewer's space but also create two ways of seeing color; one of which is the "true" color (seen at the center of the shape) and the other a kind of flickering around the edges where multiple colors meet. Diffused or unfocused edges, as in the paintings by Mark Rothko, for example, cause the viewer to "move" into the picture space, a way of viewing paintings familiar since the Renaissance. On the other hand, if we are patient and quietly observe Swain's paintings from varying distances, they can lead us to a new understanding of color painting: we are invited to participate in the complication and fluidity of color experiences that appear to change, move, and glow with heightened intensity. But the colors also come to rest again as the individual shapes take their turn at the center of our attention. Since viewers create these effects within themselves, each may experience them at slightly different times and in varying spatial modes of appearances. Such effects are considered intensely private experiences and therefore it is tempting to associate these paintings with religious or mystical states. The contemplation of Swain's paintings, while they always retain their own identity, provokes a concentrated, even heightened awareness of our direct access to our own consciousness. And for Swain, each of his paintings is hard-won in this way, by empirical investigations of color's behavior, its relationships and interactions. Swain selects individual colors by looking at one given color, say a saturated orange, and then attentively waiting for its complementary partner, a certain saturated blue, to emerge in his mind's eye. The same method holds true for his "Value" paintings of black, white, and gray. Color painters consider the achromatic tones of black, white, and gray as colors since they are subject to similar psychological effects as chromatic tones, but only their brightness changes within the



Robert Swain, photograph of the artist with
30 Part Circle, 1971, Acrylic on canvas, 8 ft. 6in. diameter
Private collection

context of a painting. Once the color structure is determined by Swain's choice of the colors' location and quantity, a particular and unique color expression is arrived at. After he has mastered this set of relationships, he subtly altered his considerations—and entered a new phase of work. During the 1980s, for example, he broke down the compositional structure of his paintings into differently sized blocks of colors. They were still set in relation to each other, but were shifted around. Some works were organized according to the Golden section, a mathematical ideal that, Swain said, came to him intuitively.

Phenomenological energies can be experienced as well when we look at Swain's large-scale mural work. This involves peripheral vision. While we observe the center of the painting, its edges can only be sensed and the colors seem to blend in motion. Throughout the 1980s and 1990s Swain explored subtle but innovative adjustments to the scale and the size of individual elements, their order and configurations. Each painting exists on its own terms; nothing is arbitrary in this work. Its structure arises purely from formal or expressive considerations generated by its component parts. It takes awareness, time, and imagination to figure out the individual experiential sensations these paintings evoke. It is up to viewers to enter into a dialogue with the work.

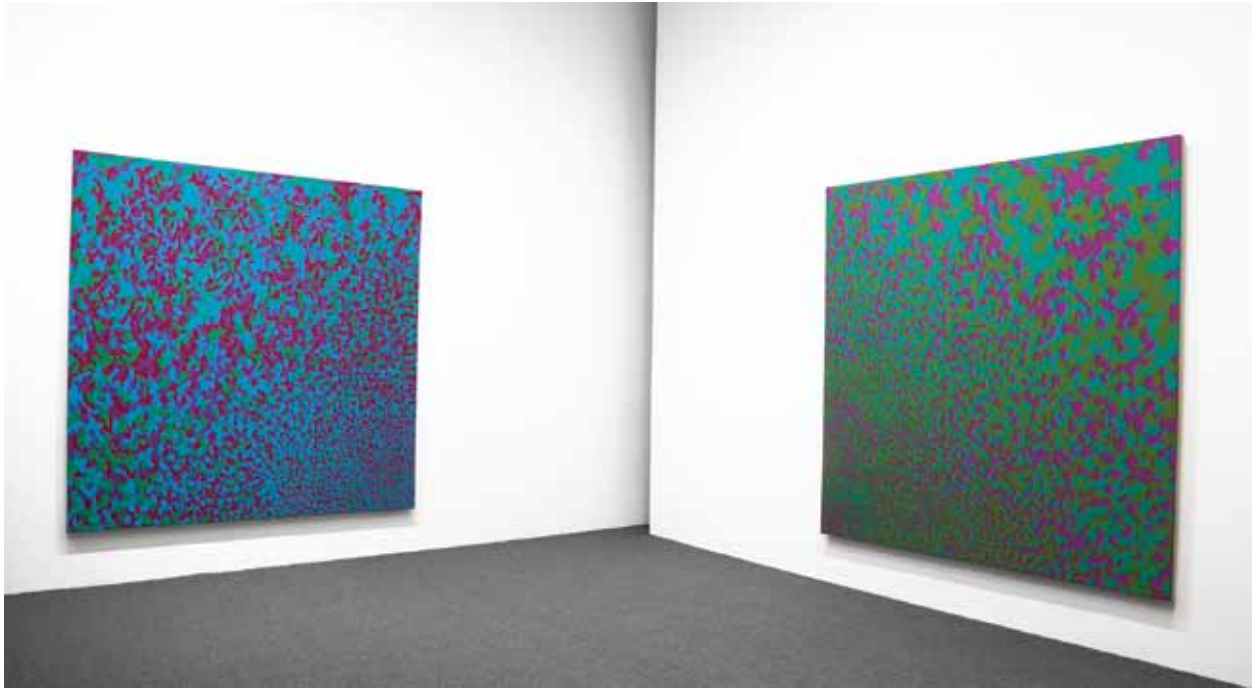
New Work

Inspired by new insights, in 2006 Swain set out to radically change his style. With this new body of paintings, he returned to earlier problems that had been abandoned for want of clarity. He revisited his efforts from the mid-1960s, when he attempted to combine the irregular shapes of the brushstroke with particular color concepts. It was a way to grapple with the heritage of Abstract Expressionism. But this new work is not merely a cultural citation.

To Swain, all his previous work began to appear passive. It seemed to evoke a certain kind of quietness, if one can manage to disregard the often bright color. A quietness or equilibrium, due perhaps to the vertical and horizontal divisions of the pictorial field. But this new body of paintings, he decided, would be given open structures of irregular lines that mimic brushstrokes. And in them, viewers can discover discrete elements of curved structures, repetitive units of individually jagged edges, and torn shapes unlike any encountered in nature. Almost always organized from top to bottom and diagonally across the picture plane, Swain's shapes reduce in size as they descend toward the lower left of the composition. Suddenly, afterimages appear within these shapes due to the effects of successive contrasting pairings. Their movement and frequency of pace creates the tension between control and aliveness of the paintings' surface. Swain's earlier concern with color contrasts has expanded in this new body of work to include the "active shape." Tensions arise, not just on the surface, but between such applicable characteristics as expansion and contraction, static and active, accumulation and dispersal, and the cross-blending of fields and structures. Every visual element is run through every possible permutation.

These new works read as dynamic fields without referring to landscapes. Further, the jagged edges of the "brushstroke" shapes are applied in thicker layers of impasto, and their shadow line lends an additional visual element, further rendering unique each new painting. And even in paintings where we discern not more than three colors, they are set into a disruptive contrast by the closeness in value and hue relationships and varying distribution of changes in size, quantity, and location.

In the former work, viewers could observe in time all the apparent movements of



Untitled, 9-25-8 x 13-25-7 x 19-25-6 x 25-25-6 (left), 2010

Untitled, 11-25-7 x 23-25-6 x 27-25-6 (right), 2010

Both acrylic on canvas, 7 x 7 ft.

Collection of the artist

immaterial, merry blocks of light and color in their stimulating, advancing, and receding restlessness. These new canvases ask viewers to engage with the materiality of color as paint, something visceral and physical, the “physical fact” that Albers spoke of in relation to “psychic effects.” Reduced in number, the colors still emanate light and sensation, as, for example, in an untitled 2007 painting, a seven-foot-square canvas that consists of the split complementaries of red-violet, yellow-green, and blue-green median value. They are distributed in an all-over manner, in dramatically decreasing marks as they approach the lower left of the painting; the effect is of a fan-like spread. At that corner small patches of colors of a close value tend to mix optically. But when the texture is too coarse, the pure complementary hues create a phenomenon called complementary vibration, whereby the constituent colors seem to repel each other and cause optical movement or vibration. Observe the lower left areas of this canvas carefully. Which is it? Optical mixture or optical contrast? Scanning the entire surface, viewers notice a distinct sensation of everything being animated. The agitated lines of the brushstroke shapes, as they shrink in size, appear to collide with the colors that flare up in contrasting and successive afterimages of luminous light. At a heightened state of consciousness the tension is almost unbearable, the equivalent of an epic struggle: shape and color are enmeshed between states of emergence and resolution, existence and extinction, until closure sets in and all concern fades away.

Summary

Painting can be comprehended only through direct experience. With these new works Robert Swain has achieved a visual expression that can be seen both all at once and in all its permutations. Viewers are presented with a series of particular problems that are solved differently in each individual work. His repertoire is vast. Swain has at his disposal a seemingly unlimited palette and his sequences of experiential sensations, such as simultaneous contrasts, after-images, and other induced effects, keep viewers in a reciprocal relationship with the paintings. Luminous shapes, brighter and more brilliant than the painted shapes that generate them, can be observed to appear, disappear, reappear, or cyclically fade out as our color-sensitive cones become fatigued. Swain has pushed the limits of perceptually functioning art from a gentle but lively impression of individually interacting color phenomena to a more aggressive and energetic fusion of cause and effect. The result is a new color expression that can reach all of us since we share the biological make-up to perceive it. But its experience is individual and private, taking us beyond visual sensations to our own radiant universe.

ENDNOTES

- 1 www.robertswainexhibit.org
- 2 To devote an exhibition to the experience of color in painting at this moment seems only fitting when we remember that Johann Wolfgang von Goethe's seminal work on color phenomena, *Theory of Colours*, was published exactly two hundred years ago, in 1810. First trans. by Charles Lock Eastlake, London, 1840. First MIT Press paperback edition, March 1970.
- 3 Key texts include: Faber Birren, *Color Psychology and Color Therapy* (1950); Rudolf Arnheim, *Art and Visual Perception* (1954); Johannes Itten, *The Art of Color* (1961); Maurice Merleau-Ponty, *The Phenomenology of Perception* (1962); Josef Albers, *Interaction of Color* (1963); *The Responsive Eye*, exh. cat. by William C. Seitz, New York, Museum of Modern Art (1965).
- 4 John Gage, *Color and Meaning: Art, Science, and Symbolism* (1999).