

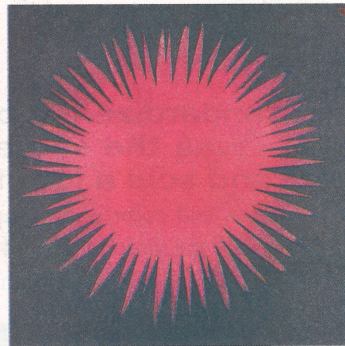
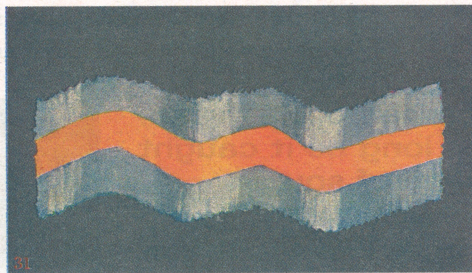
A COLOR THAT IS A FORM OF THINKING

BY CAROLYN CHRISTOV-BAKARGIEV

Color is an obvious aspect of the world, and yet so elusive when you stop and think about it. Certain material surfaces absorb all electromagnetic waves except those that bounce back from them. These waves hit our trichromatic retinas and then through some form of alchemy, unknown to the finest neurologists, they are processed in the V4 part of our brains in the back of our heads where we translate and "see" them as hues of particular saturation or brightness.

Different species see different colors and some have more cones than we do. Because of our involuntary mental ability called “color constancy,” our brains correct and render uniform all the myriad and changing perceptions we experience (within boundaries) in the world. In other words, we transform those changing and vibrating hues until their color appears constant and stable within those boundaries: an apple is overall red, a lemon is overall yellow, et cetera, thus achieving an awareness of a world made up of many different bodies, animate and inanimate. **Color constancy allows us to distinguish one thing from another rather than experience the world as a large blur or blob of changing colors and fluid shapes, because we change what we perceive to make areas of color homogeneous.**

Also, our brains see colors a fraction of a moment before they distinguish shapes, so we see a red ball first as a red something and then as a ball. For thousands of years we ground rocks, crushed flowers, and boiled small bugs to extract from them particles detached from their original thingness; we called them pigments and we made them stable through mixing them with various other natural elements in order to reproduce the colors of flowers, of fish, of butterflies in our human world—so poor in color diversity, so rich in analytical thinking. Let’s say this is “analog” chemistry, fooling around with the elements and seeing how they recombine. We did this so that we could paint, so that we could dye, so that we could signal, so that we could decorate, so that we could seduce, so that we could love. We sought to make color eternal and stable, yet often failed. We learned color by subtraction—how to mix colors, aware that too many of them together would blend into gray, brown, or black, because all rays would be absorbed and none returned toward our eyes.



Annie Besant and Charles Leadbeater, *Thought Forms*, The Theosophical Society (details), Adyar, 1905

So we think of color perception as something concerning vision, and vision has been overwhelmingly criticized over the last fifty years as the most hierarchical of senses, one that allows for detachment and power over what is being looked at, the gaze of the guard in the Panopticon. Yet color vision is perhaps the most sensual of all the senses, or at least it is no less about touching than so-called touch.

In 1704, Isaac Newton told us that colors were objective and measurable, that they were like numbers—usually invisible—yet surely “out there” in the world. A century later, the empirical experimenter Johann Wolfgang von Goethe published his *Farbenlehre* (Theory of Colors, 1810,) in which he ridiculed Newton. He proved that Newton’s theory of the spectrum as white light split into differently colored rays when viewed through a prism (like a rainbow through mist after the rain) was just one specific case (albeit a perfect one) of a multitude of other possible cases, and that strange colored things occurred at the boundaries of black when looking through a prism. He also named “afterimages,” the fact that we see a complementary color (such as green) when we look at its complement for long enough (in the case of green, red), thus proving that color was produced in the brain. It was perceived differently according to what was next to it.

To liberate color from its obligation to faithfully represent something in the world outside, and to see it theoretically, abstractedly, some artists in the mid-1800s such as Édouard Manet chose one simple element, such as a lemon, and centered it in their paintings. This was a democratic gesture, removing all the exotic and expensive delicacies from the still life, and leaving only the simple fruit that could be found in his garden in Paris or in the South of France.

In the early 1800s in Germany, a follower of Goethe’s experimental attitude, Friedlieb Ferdinand Runge, changed the world. Fooling around with coal tar, a derivative of the industrial processing of coal that was up to then thrown away, he produced the first chemical color to be synthesized from carbon fossil fuel. He called it cyan blue, and it was aniline. It was a color made out of dark brown, made from tearing carbon fossil from the bowels of the Earth—a kind of magic proving the unstoppable progress of science. He published his book of chemical color experiments, *Der Bildungstrieb der Stoffe* (The Formative Tendency of Substances), in 1855. Walter Benjamin expert Esther Leslie (Benjamin color-coded his thoughts and notebooks well before highlighters were invented) wrote about this in 2005, suggesting how the chemical turn of the nineteenth century ushered in a positivistic blind faith in modernity’s ability to harness the universe through science—we could make anything artificially, virtually any color in the natural world.¹ This blind faith in progress and science ultimately transformed into



Edouard Manet, *Le citron*, 1880. Courtesy: Musée d’Orsay, Paris. Bequest of comte Isaac de Camondo, 1911

1. Esther Leslie, *Synthetic Worlds. Nature, Art and the Chemical Industry* (Harmondsworth, Middlesex: Reaktion Books, 2005).



Above - Olafur Eliasson, *Room for one colour*, 1997, installation view at Moderna Museet, Stockholm, 2015. © 1997 Olafur Eliasson. Courtesy: the artist; neugerriemschneider, Berlin; Tanya Bonakdar Gallery, New York. Photo: Anders Sune Berg

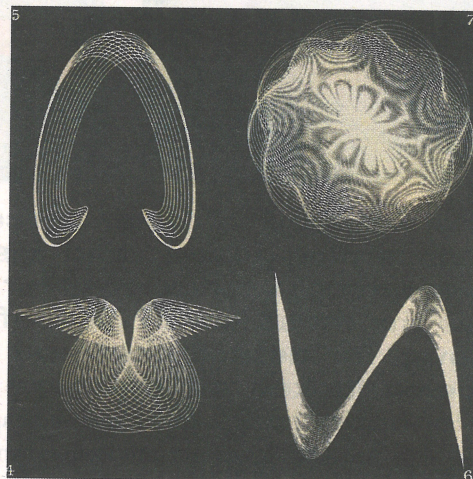
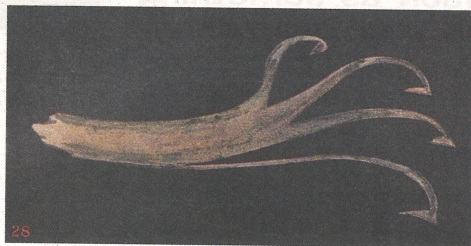
Below - Annie Besant and Charles Leadbeater, *Thought Forms, The Theosophical Society* (details), Adyar, 1905

Alighiero Boetti, *01.130 verde vagone, 1133 rosso adrianopoli, 2233 bleu positano*, 1967. Private collection, Turin

Opposite - Gustav Metzger, *Supportive 1966-2011* installation views at Musée d'Art Contemporain, Lyon, 2013. Collection du Musée d'Art Contemporain, Lyon. Photo: © Blaise Adillon / Musée d'Art Contemporain, Lyon

As color became standardized, it became Pop; a green, blue, or red *Marilyn* was the same as long as it caught people's attention, and sold a lot of cans of soup.

Thirty years after television and color photography became a normal presence in people's lives, in the mid-1990s came the digital turn and the birth of a screen-based society dependent on devices. With today's handheld smartphones, all of a sudden, color took yet



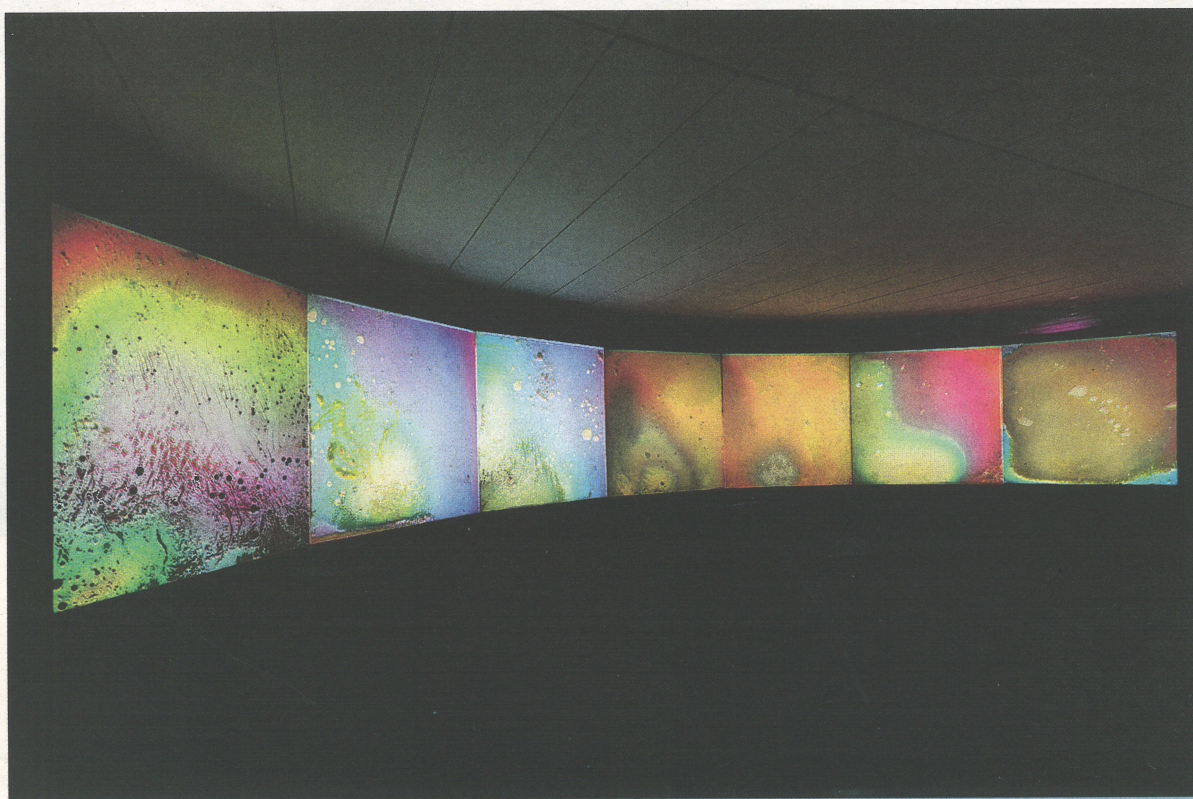
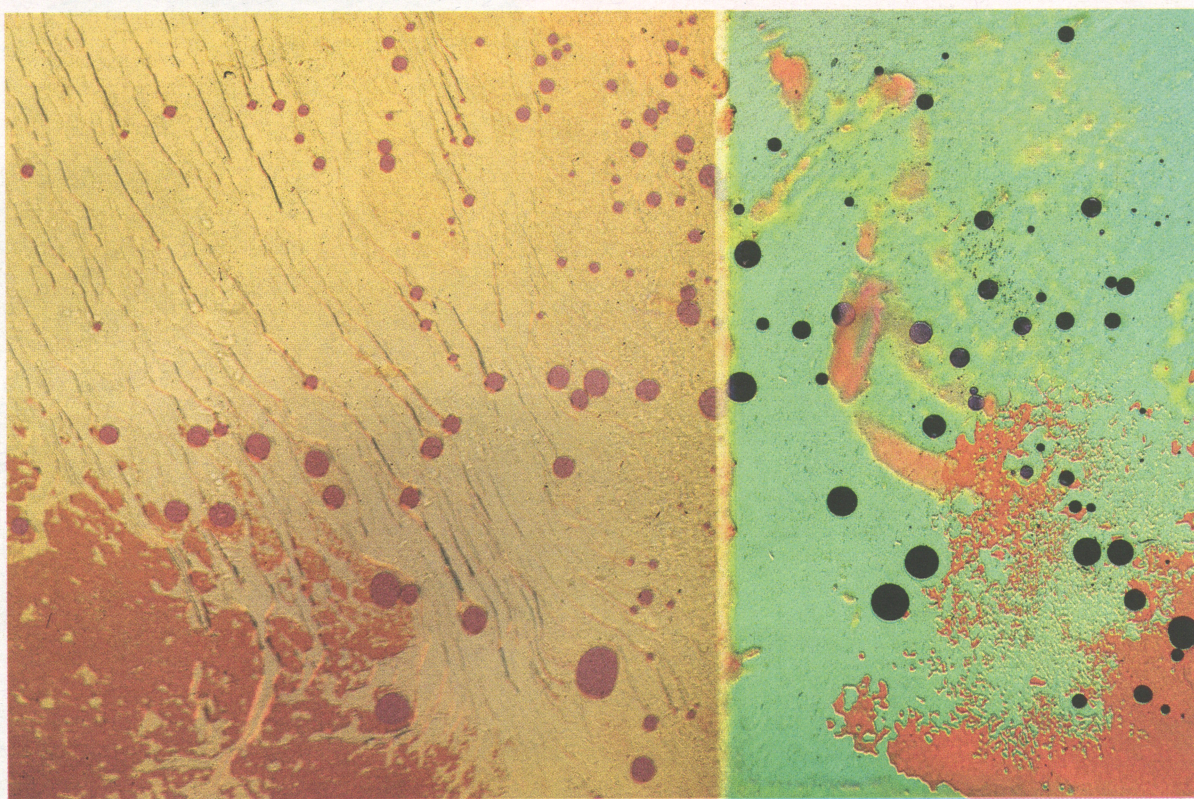
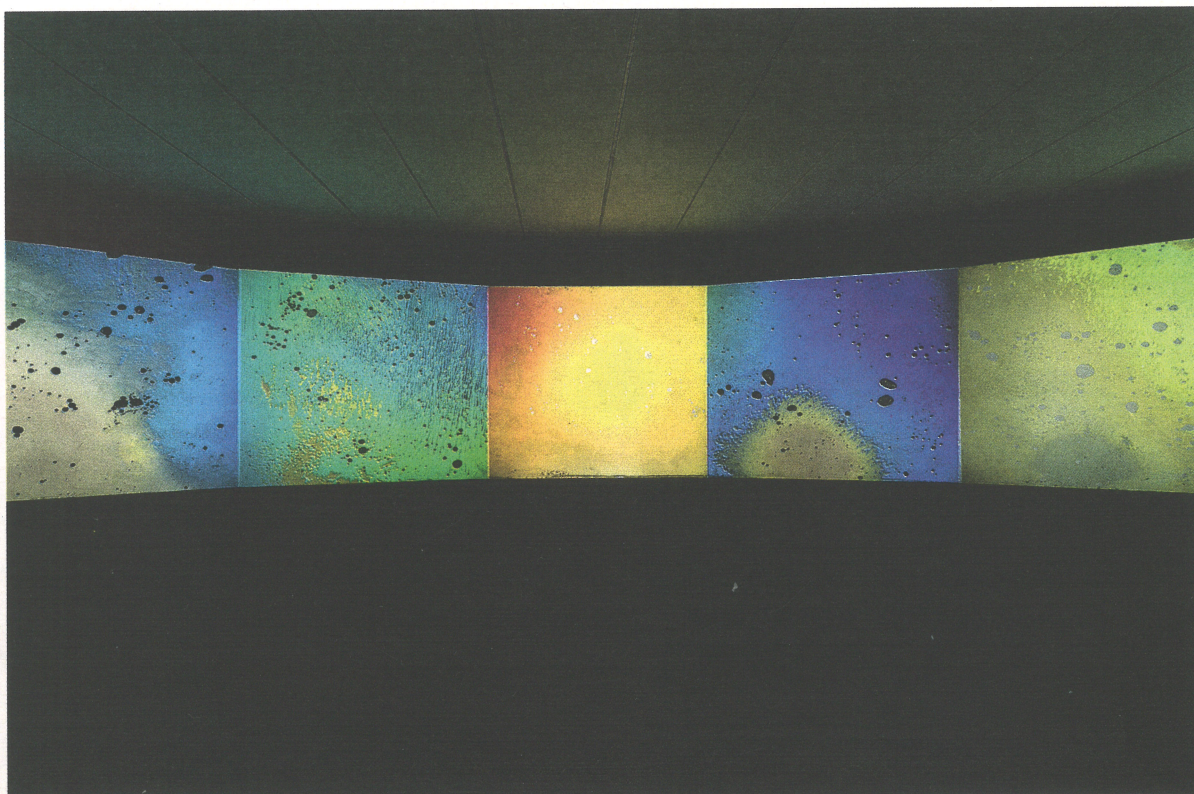
another turn in our lives. Today, the "elsewhere" generation, always in touch with some "other" place through social media, spend more time training their retinas on RGB colors—those of the backlit screen, those of the spectrum that Newton was talking about, those that when mixed all together turn into white. Offline, analog colors—colors of pigments printed onto paper with CMYK inks, the color of cloth imbued slowly with extracts from a cola nut (Otobong Nkanga), the Ottoman red of a boiled Armenian cochineal bug (Asli Çavuşoğlu)—become hard to distinguish one from another. We "see" fewer tones.



2. Michael Taussig, *What Color Is the Sacred?* (Chicago: University of Chicago Press, 2009).

3. Quoted in Dino Formaggio, *Tintoretto* (Milan: Arnoldo Mondadori, 1951), 22.

"Verso la fine della sua vita, lui, che aveva una tavolozza che poteva rivalleggiare con l'arcobaleno, diceva di non amare altro più che il nero e il bianco... Sua figlia era morta... Per il fatto che i colori sono maligni, torturatori, capite. Per dipingere questa rosa di gioia, turbinante, bisogna avere sofferto molto."





Etel Adnan, *Landscape*, 2016. © Etel Adnan.
Courtesy: Galerie Lelong, Paris / New York





Heather Phillipson, *WHAT'S THE DAMAGE* (detail), 2017. Courtesy: the artist

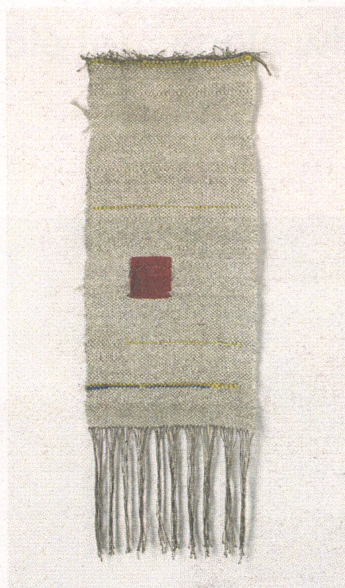
As digital palettes are standardized and commercialized, direct vision seems correspondingly more sad and dull—not “bright enough.” The stories of colors (Michel Pastoureau), to think about colors and pigments historically, and differently, are avenues for their individuation, avenues of attention.

We wonder if there are more complex ways to think about colors. What if Goethe’s “afterimages” could lead us to the notion of “before-images,” a term recently coined by Bracha Ettinger,⁴ so that what we perceive as color in the outside world is understood as a residual image harking back to an electrical neurological activity in the brain, like when we see chakra colors during intense meditation, or during dreams and hallucinations? And what are those colors produced in the brain, in the deepest darkness, in black holes,

by fish in the deep blue sea (Chus Martínez), forms of light that do not come from the sun nor from any externally originated electromagnetic wavelength?

Would that not mean that thought can be produced also in sheer bodily perception, in the touching of the retina and the meanderings of V4? That nature, as Goethe called it, *is* theory? And if so, then wouldn’t Annie Besant’s colored thought-forms be nothing esoteric, but merely the study of our abilities not only to see color constancy within bound forms, but also to break away from those boundaries that we create to distinguish all the animate and inanimate makers of the world, and allow a deeper form of perception, in order to see colors as they constantly intra-act (Karen Barad), producing auras and vibrations, instability, entanglement, and cosmic continuity? **Although, or perhaps because, colors are used to seduce, manipulate, design, and control behavior, can we muddle them up, play and produce a different logic, a different color than that of our screens?**

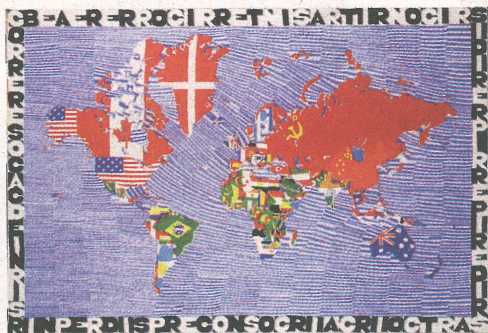
A color that is a form of thinking? “They needed colored fire,



Top - Etel Adnan, *Soleil Carré*, 1989. © Etel Adnan.
Courtesy: Galerie Lelong, Paris / New York

Left - Etel Adnan, *Train in the Snow*, ca. 1975. © Etel Adnan.
Courtesy: Galerie Lelong, Paris / New York

Right - Alighiero Boetti, *Mappa*, 1973.
Courtesy: La Gaia Collection, Busca



and had only ground earths,” Besant said of visual artists in 1905. Now that we have only colored fire and liquid crystals (Gustav Metzger), we need new tools. The gecko lizard can distinguish blue from gray in the dark. Bees and butterflies see more colors than humans, their vision reaching into the ultraviolet range. They also appear variously colored to us, and their colors shimmer. To perceive a surface as shimmering means to experience quickly changing hues and brightness.

When bombs fall, the differently colored animate and inanimate things that make up our cities, streets, homes, people, and gardens fall into rubble; they mix until they reach an entropic shade of brownish gray. And so Henri Matisse, in the middle of World War I, and again in the middle of World War II, painted paintings of lively, vital color. Etel Adnan, in late 2016, told me that “color is life. And as long as we live, we are alive.”

Carolyn Christov-Bakargiev is an author, an organizer of events and exhibitions, and a researcher of artistic practices, the histories of art and the politics of aesthetics. She is the director of Castello di Rivoli Museo d'Arte Contemporanea and GAM Galleria Civica d'Arte Moderna e Contemporanea in Turin, Italy. Additionally she is Edith Kreeger Wolf Distinguished Visiting Professor in Art Theory and Practice at Northwestern University (2013-ongoing). Previously, she drafted the 14th edition of the Istanbul Biennial (*SALTWATER: A Theory of Thought Forms*) in 2015 and was the artistic director of *DOCUMENTA* (13) which took place in 2012 in Kassel, Germany as well as in Kabul, Afghanistan; Alexandria and Cairo, Egypt; and Banff, Canada. She was the artistic director of the 16th Biennale of Sydney, *Revolutions—Forms That Turn* in 2008; and senior curator at P.S.1 Contemporary Art Center, a MoMA affiliate in New York, from 1999 to 2001.

4. Bracha Ettinger, Turin lecture, Fondazione De Fornaris at GAM-Turin, December 5, 2016.