



LEFT Cruz-Diez, drenched in color.

OPPOSITE Installation of a “Chromosaturations,” 1965/2010, at the Miami Art Museum.

MAKING COLOR 3D

THE TITLE SAYS IT ALL:

“Black + Blue = Yellow.” Carlos Cruz-Diez holds up a geometric abstraction he made in 1963, a weaving of black-and-blue lines on paper.

“What do you see? Yellow. Yet there is no yellow in this work, none at all. You see yellow because, when the blue hits the black, that is the effect on the retina,” Cruz-Diez explains, pointing to what looks like a pattern in shades of intense lemon. “It’s an optical effect known as simultaneous contrast.” One of the artist’s early achievements was to isolate the phenomenon on the easel, as he did in this piece, whose full title is *Induction chromatique: Bleu + noire = jaune*. He says, “I was able then to move past a simple demonstration of an optical phenomenon and incorporate it into my artistic discourse.”

A pivotal figure in Latin American abstraction, Cruz-Diez creates works of vibrating color, using cardboard or corrugated aluminum and strips of acrylic. Less an actual painting than a pictorial system of colors and shapes, a Cruz-Diez work can look blue from one angle, green or red from another, or some combination of them all, depending on the light and position of the viewer.

Pioneering Venezuelan artist **Carlos Cruz-Diez** has built his career on light, making immersive installations that allow visitors to explore color in three dimensions

BY ROGER ATWOOD

Cruz-Diez also makes sprawling installations known as “Chromosaturations” that feature walk-through chambers of neon light that, when projected into space, produces immersive baths of pure color. These, in addition to the artist’s often heroic-size sculptures installed in public spaces and airports around the world, encourage audience engagement. The phenomenon is associated with the utopian ideals of Latin American artists and intellectuals of the

Roger Atwood’s last profile was of the Spanish artist Francesc Torres in the May issue. His website is www.rogeratwood.com.

1950s and '60s, including the Neo-Concretist Brazilian artists Hélio Oiticica and Lygia Clark.

"Color has been his obsession, yet behind his work is a quest for color as a social experience," says Gabriela Rangel, head of the visual-arts program at the Americas Society in New York, which presented the 2008 Cruz-Diez show "(In)formed by Color." The exhibition, curated by Estrellita Brodsky with Isabela Villaneuva, included a full-scale "Chromosaturation." It was one of several recent major exhibitions that helped raise the 87-year-old artist's profile in the United States. Following that show was this year's "Cruz-Diez: The Embodied Experience of Color" at the Miami Art Museum, and in February the Museum of Fine Arts in Houston will present a 150-work retrospective.

"He's one of the key figures in color of the 20th century," says Mari Carmen Ramírez, chief Latin American curator at the Houston museum. "His artistic practice derives from research into color and continual experimentation over many years."

TODAY Cruz-Diez is a man in constant motion. Over the last year or so, he has given talks in New York and Miami, appeared at the Pinta Art Fair in London, and completed a book-length interview with art historian Ariel Jiménez that was published by the Fundación Cisneros in September. He also closely supervises a workshop in Paris, the Atelier Cruz-Diez, where he directs an army of assistants while a back-office staff, including his son Carlos and daughter Adriana, handles requests from galleries and collectors. The atelier assistants restore older works, particularly those Cruz-Diez constructed of cardboard before he switched to working with mostly aluminum in 1973. The artist has two other workshops, one in Panama and another in his native Caracas, which he visits regularly, and there is a Houston-based foundation that bears his name.

More than a dozen galleries in at least eight countries show and sell his work, including RJ Fine Arts in New York, Galería Cayón in Madrid, and the Mayor Gallery in London, although Cruz-Diez prefers to sell new pieces directly out of his workshops. His prices range from \$700 for a small silkscreen print to \$200,000 for a large recent work, although private sales have topped \$900,000, according to the artist's grandson Gabriel, who also works at the Paris studio. Older works, which are more likely to be handled by galleries, tend to be more expensive than recent ones, he said.

The monumental scale of his works and his use of colored light has led to comparisons with Olafur Eliasson and Dan

Flavin. "The difference with Flavin is that Cruz-Diez is interested in projecting the light into space, whereas Flavin's work is more about the tube itself," says Gabriel Pérez-Barreiro, director of the Colección Patricia Phelps de Cisneros, a private scholarly art research organization based in New York and Caracas. And he differs from Eliasson because Cruz-Diez's concern is for "the dialogue between you and the work, the way your perception of the work changes depending on your position in relation to it."

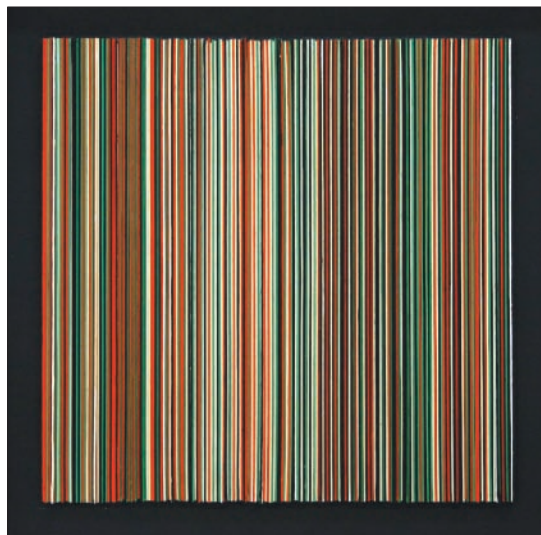
"The real breakthrough," says Pérez-Barreiro, came in 1959, when Cruz-Diez "started to relate geometry to color." That year, he placed two slightly askew lines, one red and the other green, on a black background and found that "what you see is a yellow that's not there. And that's the kernel of everything that follows." The work was called *Amarillo aditivo* (Additive Yellow).

"Painting bored me," says Cruz-Diez. "So I started to do something else. What I tried to create is a dialectical relationship between the viewer and the work. When you're in front of a Rembrandt, you see what Rembrandt created. With the kind of art that I and [Jesús] Soto, [Julio] Le Parc, and [Jean] Tinguely made, you see a situation—an instant. It constantly changes because light constantly changes," he says.

Although Cruz-Diez is often referred to as a Kinetic artist, his emphasis on color rather than movement and the absence of motors in nearly all his work place him outside the Kinetic mainstream, says Ramírez. He was not included in the 1955 breakthrough show of Op art at the Galerie Denise René in Paris that included works by Victor Vasarely, Alexander Calder, Yaakov Agam, Soto, and Tinguely, although he was visiting the city at the time and was deeply influenced by the exhibition.

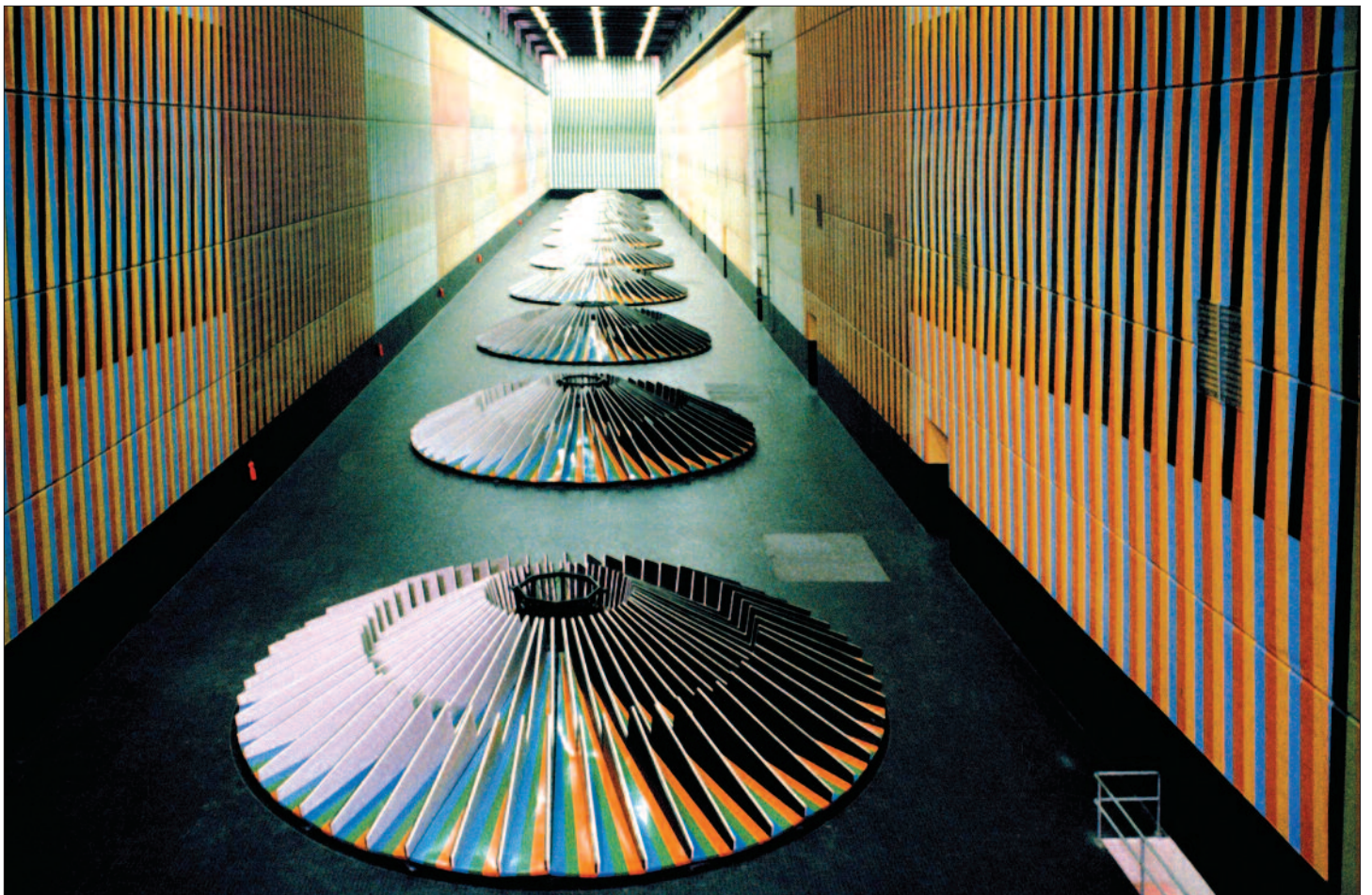
By 1965, when Kineticism and Op were in their heyday, the Museum of Modern Art presented "The Responsive Eye," a wildly popular, critically loathed show that included only one Cruz-Diez piece, *Physicromie No. 116* (1964), although his work was already in the museum's permanent collection.

Kinetic art—or "perceptual abstraction," as some experts call it—is experiencing a revival of interest, and, with it, a better understanding is emerging of the Latin American contribution to the movement. This is nowhere more evident than in Caracas, where works by Soto, Cruz-Diez, and Alejandro Otero—"the holy trinity of Venezuelan abstraction," says Pérez-Barreiro—are ubiquitous. They're at traffic circles, on walls, and on sidewalks. The city's international airport interior is a Cruz-Diez design, and city buses have featured his colored stripes. Few cities are as identified with a particular artistic



ABOVE *Fisicromía No. 1*, 1959, composed of acrylic, cardboard, aluminum, plastic, and wood.

OPPOSITE *Duchas de inducción cromática* (Showers of Chromatic Induction), 1968/2010 (top), and the machine room at Raúl Leoni Hydroelectric Station in Guri (Bolívar), Venezuela, 1977–86 (bottom).



style as Caracas is with Kineticism and its first cousin, Op art.

Cruz-Diez doesn't mind being called a Kinetic artist. He has fond memories of Soto, a lifelong friend who died in 2005 and whose museum, the Museo de Arte Moderno Jesús Soto, in the Venezuelan river town of Ciudad Bolívar, remains a temple of kineticism. Cruz-Diez forsook traditional oil-on-canvas painting at around the same time as Soto and became convinced that the medium was a dead end. Both artists also dismissed Abstract Expressionism, with Cruz-Diez referring to it as "painting as if you were playing the drums, like letting off steam."

"Oh, Soto and I used to play the guitar together for hours," says Cruz-Diez. "We used to paint landscapes together in Venezuela. Once when we were painting the Avila [a mountain outside Caracas], I put on yellow shades to capture that golden light of the afternoon in my eyes." He claims it was that shifting, subtle light of the tropical afternoon—the light that has beguiled generations of Venezuelan painters—that inspired him to deconstruct the nature of color and its relationship to light.

In his Paris office, Cruz-Diez wears blue-and-red striped suspenders that, over a black work shirt, look a bit like his paintings. He is astonishingly fit for his age, bounding up stairs, roving through the rooms of his atelier, and strolling through his neighborhood near the Gare du Nord. He has a taste for Caribbean dance music, especially Celia Cruz, and he's a voracious reader.

BORN in 1923, Cruz-Diez had gained a reputation in Caracas as a skilled illustrator and graphic designer by the late 1940s. He earned his living writing comic strips, and studied at the Escuela de Artes Plásticas under teachers whose ideas about painting rarely extended beyond Cézanne. Tender landscapes and vignettes of life in the hillside slums around Caracas were the subjects of his paintings at the time.

Again, the spark to change came from Soto, who had arrived in Paris first. Cruz-Diez recalls, "He'd write to tell me about Mondrian and what a discovery it was. I didn't know Soto was doing his own Kinetic work, or even that there was such a thing as Kineticism, until I arrived in Paris in 1955 and saw the exhibit at Denise René. That opened my eyes." He notes, "Painting in Paris in those days was dead. I saw a huge room of paintings at the Salon de Mai and thought these must all have been painted by the same artist. They all looked the same. Abstraction had become the academy."

Returning to Caracas later that year, Cruz-Diez began to develop his non-gestural style. It was in 1958 that he had a key insight. He had designed the program for the New York Philharmonic's visit to Caracas and noticed in the finished program that a red page gave a pink tint to the white page facing it.

"I saw then how I could bring color into space," he says. "Not a direct reading of color as Albers had done, but an indirect reading, in space. And three-dimensional." Then, in 1959, when he applied a series of colored strips of cardboard to wood, he discovered that he could modulate the intensity of red or green by interspersing them with black and white. He named the work *Fisicromía No. 1*, the first in a series known in French as the "physicromies" that now numbers in the thousands.

Cruz-Diez soon achieved a radically distinctive style, but his first major show, at the Museo de Bellas Artes in Caracas in 1960, flopped. "Nobody understood anything. People said, 'What is this? You've lost your way, man,'" he remembers. He returned that year to Paris and has lived there ever since. Artists like Roberto Matta, Wifredo Lam, Le Parc, and Soto had created a vibrant Latin American artistic community in Paris in those years, investigating themes that dictatorship and provincialism prevented them from exploring back home.

"The 'physicromies' he did in Paris were hugely important until the late 1960s," said Pérez-Barreiro. "And then they started to level off in the 1970s and became a little less interesting. That's when he started to develop the 'Chromosaturations,' his real masterpieces."

The "Chromosaturations" had humble beginnings as a series of booths with transparent colored walls outside a metro station in Paris in 1969. Later they developed into the multiroom labyrinths of their current form. In fact, many of Cruz-Diez's creations start with a small concept and expand into something huge. His public-art projects include relatively small efforts like a sculpture in Paris's Place du Venezuela, a "chromatic environment" on the walls and ceilings of a Zurich bank's headquarters, and, recently, a geometric floor design for the Marlins baseball stadium under construction in Miami that will

be visible from planes landing at Miami International Airport.

Yet little, if anything, can match the scale of his design for the machine room at the Raúl Leoni dam in central Venezuela, a visual complex covering the walls and turbines of a 118,403-square-foot space, bigger than several airport hangars. It's art of the pharaohs, and, to some critics, it has a crushing, "official" feel to it, an example of the "rational desert of Venezuelan kineticism," as the late critic and art historian Marta Traba wrote.

On the grandest scale and the smallest, Cruz-Diez makes art that intends to be slightly different every time you look at it. To him and a generation of Kinetic artists, that aspiration was more than a question of esthetics; it was an effort to create the eternal. "There is a yellow here and a red there, but they are permanently in the process of becoming. They are never fixed," he says. "This work is not happening in the past. It is forever in the present."



ABOVE *Physicromie á double face*. Place du Venezuela, 1978, in Paris. **OPPOSITE** "Chromosaturations" cubicles, 1965/2004, at the Museum of Fine Arts, Houston.

