

Todos nuestros catálogos de arte All our art catalogues desde/since 1973

CARLOS CRUZ-DIEZ COLOR HAPPENS

2009

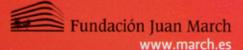
El uso de esta base de datos de catálogos de exposiciones de la Fundación Juan March comporta la aceptación de los derechos de los autores de los textos y de los titulares de copyrights. Los usuarios pueden descargar e imprimir gratuitamente los textos de los catálogos incluidos en esta base de datos exclusivamente para su uso en la investigación académica y la enseñanza y citando su procedencia y a sus autores.

Use of the Fundación Juan March database of digitized exhibition catalogues signifies the user's recognition of the rights of individual authors and/or other copyright holders. Users may download and/or print a free copy of any essay solely for academic research and teaching purposes, accompanied by the proper citation of sources and authors.



"I follow the practices of both the researcher and the experimenter, because the 'supports' I have managed to structure are a source of surprises and imponderables. I put light traps into play according to color behavior. In my works, nothing is left to chance; everything is anticipated, programmed and codified. Freedom and affection only matter when it comes to choosing and combining colors. I impose only one restriction on this task: to effectively communicate what I want to say. It is a combination of the rational and the emotional. I do not seek to be inspired: I reflect."

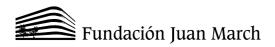
Carlos Cruz-Diez Paris, 2007





GARLOS CRUZ-DIEZ COLOR HAPPENS

R **IFZ Z-N** HAPPENS



This catalogue accompanies the exhibition *Carlos Cruz-Diez: Color Happens*, the first solo exhibition devoted to the work of Cruz-Diez at a Spanish museum or, to be more precise, two museums. Since the 60s, the works of Cruz-Diez have been featured in major exhibitions dedicated to Kineticism and in important group shows focusing on Latin American art and kinetic movements. However, as has happened with other key Latin American avant-garde figures and artists active in the 1950s, 1960s and 1970s, a Spanish institution had never before organized an exhibition entirely devoted to the artist. This, therefore, is the first one on the work of Cruz-Diez, who constitutes one of the most relevant and consistent examples of the Kinetic Art movement, a term that has perhaps been overly used.

The intensely systematical, reflective and organic character of Cruz-Diez's work made it possible to organize a representative exhibition of his oeuvre without it needing to be comprehensive, as is the case with this presentation. In fact, the two dozen works selected for this show span the entire range of his entire career and are displayed in chronological order. Simultaneously, the works are presented taking into account the series of which they originally formed part. These series not only structure the artist's body of work, but also reflect his line of thinking and the numerous and ambitious experiments behind it. Specific neologisms coined by the artist himself, such as "chromatic induction," "physichromie," and "chromosaturation" are the names given to these series and are ample proof of his originality and inventiveness.

Anyone perusing this catalogue will immediately realize that the artist's originality – the effective but difficult objectives that have guided and continue to guide his work – is not based on a subject, pictorial motif or artistic theme, but on a "medium." For Cruz-Diez, it is *the* medium, one that constitutes a real and originating event: color.

The exhibition also features some of his early works – including those realized during his stay in our country, in the town of Masnou, before settling in Paris, where he has lived and worked for several decades – as well as illustrations he produced as a graphic designer. In addition to "The Truth of Color," the main essay written by Osbel Suárez, which focuses on the reason behind Cruz-Diez's work, this catalogue also includes an extended and valuable interview with the artist by Gloria Carnevali as well as relevant exhibition and bibliographic entries.

The Fundación Juan March would like to express its gratitude to the people and institutions that have made this exhibition and its accompanying publications possible. First, we would like to thank Osbel Suárez, guest curator of this exhibition, which has benefited from his proven expertise and knowledge of the work of Cruz-Diez, the kinetic movement, and Latin American artists. Our gratitude also goes to the Allegro Private Foundation; Musée National d'Art Moderne, Centre Georges Pompidou, Paris; Atelier Cruz-Diez, Paris; and MUBAG (Council of Alicante), for their generous help in arranging decisive loans. We are also grateful to the Atelier Cruz-Diez Documentation Service, especially Catherine Seignouret, Connie Gutiérrez Arena, Ana María Durán and Maïwenn Le Bouder, for their assistance in managing and gathering documentation and images. We must also acknowledge the catalogue design of Guillermo Nagore, who has once again effectively conveyed the artist's spirit throughout this catalogue, as well as in its complementary publications: the second, revised and extended edition of *Reflexión sobre el color*, the opusculum published by Cruz-Diez in 1989 in Caracas, and the first English edition of this text, *Reflection on Color*.

And, of course, our special thanks go to Carlos Cruz-Diez and his family, whose constant help, enthusiasm and truly contagious optimism were decisive in the development and successful outcome of this project.

Fundación Juan March

February 2009

This catalogue and its Spanish edition are published on the occasion of the exhibition

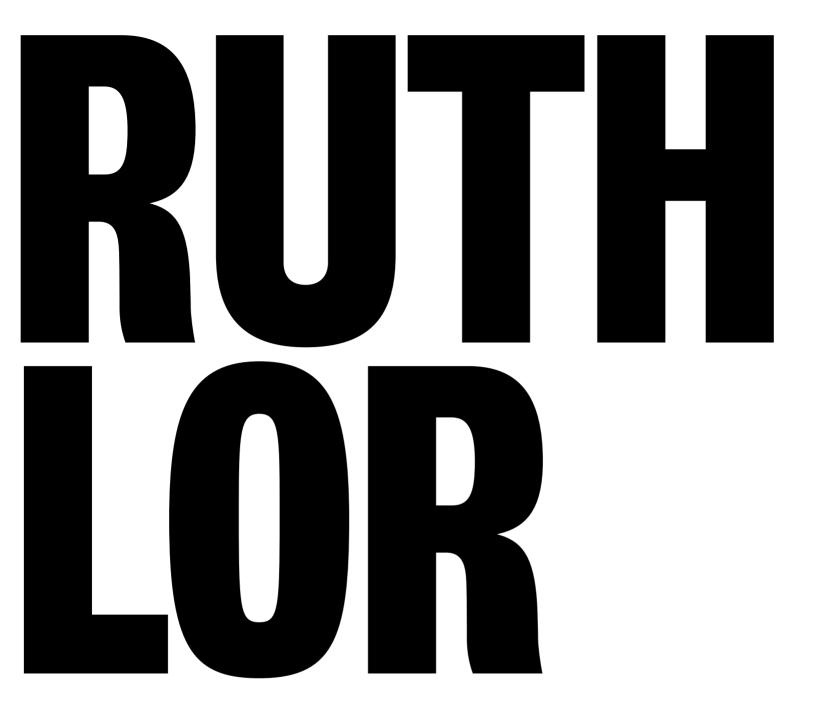
CARLOS CRUZ-DIEZ: COLOR HAPPENS

Museu d'Art Espanyol Contemporani (Fundación Juan March), Palma February 25 – June 27, 2009 Museo de Arte Abstracto Español (Fundación Juan March), Cuenca July 17 – November 15, 2009

Contents

6	The Truth of Color Osbel Suárez
18	The Series
22	Works Works (1954-2009) Selection of Graphic Works: Books and Magazines (1941-1974)
66	"My aesthetic [is] the effectiveness of evidence" Gloria Carnevali interview with Carlos Cruz-Diez
94	Chronology (1923–2009) Osbel Suárez
106	Exhibitions (1947-2009)
116	Bibliography and Filmography
126	Catalogue of Works in the Exhibition
132	Credits







Cruz-Diez in the Vaux-le-Vicomte gardens, Maincy, 1987

When Carlos Cruz-Diez arrived in Paris for the first time in mid-1955, he sought out his friend and fellow Venezuelan, Jesús Rafael Soto, with whom he had completely lost touch in 1950, when Soto moved to the French capital. On the day of their re-encounter Soto invited Cruz-Diez to see an exhibition in which he was involved and which had the intriguing title of *Le Mouvement*.

The exhibition, conceived by Victor Vasarely, a young painter of Hungarian origin living in Paris since the early 1930s, took place at the Galerie Denise René from April 6-30, 1955, and is unanimously considered by art historians and critics to be the exhibition that heralded the beginning of Kinetic Art.¹ Artists who took part were Pol Bury, Alexander Calder, Yaacov Agam, Jean Tinguely, Marcel Duchamp, Egil Jacobsen, Victor Vasarely himself and Jesús Rafael Soto, the latter being the only Latin American featured in this inaugural event. Within the framework of the exhibition, and as part of the accompanying catalogue, the *Yellow Manifesto* was distributed (so-called because of the color of the paper on which it was printed), which reproduced texts written for the occasion by Pontus Hulten and Roger Bordier. "Notes for a Manifesto" was written by Victor Vasarely.

Cruz-Diez drew a conclusion from that first re-encounter with Soto (which so faithfully reproduces the classic voyage made by so many Latin American artists in the mid-20th century, first to Paris, then to New York) that would influence all the major decisions he would make over the next five years. He concluded that he was not alone in his intellectual adventure, that the so-called "death of painting" was a premise already in use to explain artistic creation and that it was Paris, and no other European city, that welcomed and showed the work of artists who saw in the possibilities of movement the last reason for creativity or what has been termed "the last avant-garde." The intention to take art into everyday life, its experimental nature, certain sensation of instability and profound exploration of the relationship between the viewer and the work of art, were some of the elements that would define the basic principles of Kinetic Art, to which Cruz-Diez would devote the rest of his life. His fundamental aesthetic, however, involves a particular facet that, while not completely unknown to other members of the movement, for Cruz-Diez became the raison d'être of his work, namely color as an evolving situation, or in his own words, understanding that the chromatic phenomenon is a continuous, unstable event.2

The first results of that trip can be traced to a very small series of works that Cruz-Diez carried out, for the most part, in Masnou, a small village on the Maresme coast and a former holiday resort of the Catalan middle-classes. Entitled *Signos vegetales* (Organic Signs), the series consists of paintings that reproduce the conventional sense of two-dimensionality in painting and that reveal an insistence on a demonstration



Mirtha Cruz-Diez, Denise René and Carlos Cruz-Diez in the Rue Pierre Sémard studio, Paris, 1975



Cruz-Diez and Jesús Soto, Caracas, 1992





Physicromie 1, Caracas, 1959 (front view, right view and left view)

of the painter's craft. Aside from these features, which would in themselves be sufficient to describe the series as characterized by a certain academic rigor,³ what should be emphasized and understood is its attempt to extract more or less pure color from the superimposed webs represented on the canvas. The series can thus be considered the start of one of the most fascinating and long-lasting adventures in the history of art in the second half of the 20th century, an adventure that still continues today. An obsession, an assault on light and color, whose maximum expression and high point of intensity and involvement would be Cruz-Diez's Physichromies and Chromosaturations. This is the moment when Cruz-Diez grasps and explores the "chromatic body" as phenomenology itself and as a discourse independent of the historical and reductionist hegemony of form.

The year 1959 marks the outset of this "sabotage" of the way in which color had been tackled in the creation of 20thcentury art.⁴ In contrast to other artists who had previously experimented with planes of color, Cruz-Diez understands it from a more dynamic, functional and autonomous perspective, until he arrived at its reinvention, taking it to its maximum degree of maturity and turning it into a "profoundly affective" experience, in the artist's own words. Cruz-Diez offers what is probably the best and earliest definition to be found in the literature on the meaning and context of his Physichromies:

Physichromies are a light trap; a space in which a series of webs of color interact in order to transform each other, to generate new ranges of color and to invade the surrounding space between the vertical sheets that cover the work. In addition, the movement of the viewer or of the light source also creates a series of chromatic variations that, like those that come about in the real space of landscape, endlessly repeat themselves with each revolution of the sun without ever being exactly the same, as the intensity and type of light that bathes them will never be identical. Hence the name Physichromies, from the fact of putting color, physical color, into play.⁵

At the outset, Cruz-Diez works with "various groups of very fine and thin sheets, interwoven in regular sequences, whose principal function was that of offering a new chromatic sensation [...] and created on a flat surface from which the light slides off."⁶ The "experience" of the Physichromies evolves when he succeeds in half-submerging some of the sheets while others stand out slightly, giving the work of art as a whole more nuances. The first works in the series only used black, white, green and red,⁷ but this narrow color range expanded in the late 1970s, coinciding with the end of the completely manual production of the "Physichromies," which was replaced by other more technically sophisticated methods.

In his Physichromies, Cruz-Diez points out that color should not be accepted as something definitive, but rather that it



Physicromie, Union des Banques Suisses head office, Zurich, 1975-79

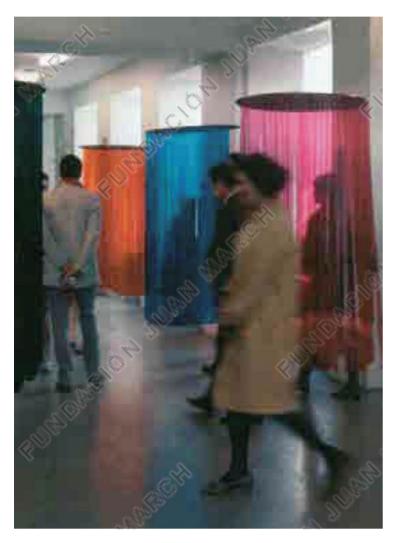
creates a subtle chromatic mesh that is constantly renewed and re-energized with regard to scope and complexity in relation to the degree to which the viewer is able to interact with it. He also echoes one of Josef Albers' most innovative ideas, which explains how colors interact through contact or proximity to the point of modifying their appearance, undergoing a true metamorphosis before the human eye. With the arrival of his Chromosaturations, Cruz-Diez's exploration of mutating color and his investigations into optical phenomena achieve their optimum and most spectacular visual solution. Here, color is nothing less than an event that envelops and overwhelms, and one of which we are necessarily a part as it has already invaded the third dimension. The barrier of the two-dimensional, possibly the one feature that could still be identified with pictorial tradition, has now been surpassed.

The Chromosaturations emerge when Cruz-Diez had spent little more than five years living in Paris, and had as their accomplice and witness one of his unfinished Physichromies:

[...] I was closely observing a Physichromie under construction. I looked attentively at one of the many bands produced by a sequence of transparent color strips that generate the continuous change of color in the work, what I call "chromatic event modules." A table lamp evenly lit these modules, causing the colors in the background to become saturated with green under a subtraction effect caused by the intensity of the lighting. The module had an atmosphere of



Ángel Luque, Sergio de Camargo and Carlos Raúl de Villanueva in the Cruz-Diez studio, Rue des Dames, Paris, 1965



Chromosaturation Showers. Bonalumi, Cruz-Diez, Honneguer, exhibition at the Museum am Ostwall, Dortmund, 1968

green light that virtually detached itself from the surface and shot out into space. $^{\rm 8}$

The cabins that the artist built to isolate and dominate color offered the public a pure chromatic experience and allowed Cruz-Diez to enter into a universe that recovered the psychological possibilities of color. "How can one arrive at isolated, absolute color?," Frank Popper asked in one of his famous books on the role and the new function of the artist in modern society, to which his reply was, "[by] isolating the phenomena of color in given spaces."⁹ The constructions that Cruz-Diez made for this purpose (cabins, showers) are merely the necessary technical support to capture the phenomenon, but the idea that the artist throws at us should not necessarily be understood as subject to a specific architectural structure and goes beyond any temporal impediment to which we are subjected by technology. Cruz-Diez goes much further in his aims when he assures us that:

[...] the original idea was to show color without the aid of a support or the means to which I am now forced to resort. When the laws of math and science manage to control magnetic fields, then we will be ready to project volumes of color into space, enabling spectators to perceive them, to experience them.¹⁰

With the Chromosaturations the physical support of the work matters less than its effects and resonances, as the overriding element here is the ambiguity of color and its absolute autonomy. In this sacrosanct encounter with color, the viewer particularly interacts with the work, which manifests itself in time and space. In other words, the work takes place as it unfolds.

The first of the Chromosaturations took place in 1968 within the context of the exhibition *Cinétisme*, organized by the Maison de la Culture de Grenoble, but it received more media attention in the context of the exhibition *Bonalumi, Cruz-Diez, Honneguer*, held the same year at the Museum am Ostwall in Dortmund, Germany. Ultimately, however, the exhibition that is best remembered and had the most repercussions (and which has given rise to various misinterpretations) was the one that took place in Paris on the Boulevard Saint-Germain at the exit of the Odeon metro station during Christmas 1969.¹¹

The Chromosaturations are a felicitous re-encounter with many of the classic texts on physics and optics that nurtured the young Cruz-Diez's formative years, from the Quaker Thomas Young's experiments on the diffraction of light to Newton's color theory, which was harshly criticized by Goethe in one of his most fascinating books.¹² To achieve these successive monochromatic situations of red, green and blue, it was essential to have read and absorbed the writings of Edwin Land and Ramón y Cajal. As a result, Cruz-Diez also formulated his own theories on this issue, which he explains in *Reflection on Color*, the book in which he set out his interests and concerns regarding color and reflection in relation to his own work: The retina is accustomed to perceiving a wide range of colors simultaneously, experiencing these monochromatic situations causes disturbances. This activates and awakens notions of color in the viewer, who becomes aware of color's material and physical existence. Color becomes a situation happening in space, without the help of form, or even a support, and free of cultural conventions.¹³

As in all of Cruz-Diez's series, the pathway embarked upon by the Chromosaturations is filled with modifications and adaptations to specific spaces. Initially, the compartments of color were separated by narrow passages of black, which functioned as transitional zones from one color to another. In another version, some walls of the rooms were constructed from transparent Plexiglas, producing an





Chromosaturation, Labyrinth for a Public Place. Art in the Street, exhibition organized by the Centre National d'Art Contemporain. Odeon metro station, Boulevard Saint-Germain, Paris, 1969







Induction of Chromatic Spectrum through a Change in Frequency and Chromosaturation. Lo[s] cinético[s], exhibition at the Museo Nacional Centro de Arte Reina Sofía, Madrid, 2007. Photos by Joaquín Cortés



Transchromie. De l'art constructive au mouvement, *exhibition at the Galerie Denise René, Paris, 1965*



Transchromie. Cruz-Diez, exhibition at the Galerie Denise René, Paris, 1969



Random Transchromie, Mechanical Work, Torre de la Cancillería, Caracas, 1973

interesting relationship between those viewers who entered into the work and those who observed it from the outside. In other interventions, the chambers became opaque and all relationship with the outside world disappeared, thus increasing the sense of isolation and possibly the degree of meditation on the part of the person experiencing the space. Later, Cruz-Diez omitted the transitional zones and took the idea into the machine rooms of hydroelectric plants. A ballet performed in Caracas in 1975 "chromosaturated" the stage, with color acting as the entire scenery.

A parallel line of investigation can be observed in Cruz-Diez's Transchromies (color transparencies). These consist of an interplay of superimposed, mobile sheets in which the color is substantially altered in the continual combinations and transparencies through which the viewer chooses to look. Chronologically, these works pre-date the Chromosaturations.

Cruz-Diez's first works were directly associated with the world of advertising, newspaper and magazine illustration as well as the medium of photography. It is clear that his early professional activities were of great use to him when undertaking a synthesis of different formal devices and when establishing the correct proportions in his numerous interactions with the urban space. This particular ability to translate his ideas into public spaces, always achieving a perfect balance between the work and its surroundings (following a meticulous process of prior research), is what ultimately allowed for a sustained dialogue between the work of art and its architecture. As a result, Cruz-Diez's insertion of his work into the urban space is among the most refined and judicious of all the kinetic artists.¹⁴

The lengthy and fruitful dialogue between Cruz-Diez's work and architecture (with which it establishes a close relationship) began with the Transchromie designed for the entrance to the Phelps Tower in Caracas in 1967, and spans more than 40 years, up to his most recent creations of 2008. Within this context, his most spectacular works are Additive Color Atmosphere (Machine Room n.º 1), the Physichromie and ten Chromostructures (Machine Room n.º 2) for the enormous hydroelectric plant in Guri, Venezuela, a project on which the artist worked for approximately ten years. Alongside these works, mention should also be made of Planned Chromosaturated Atmosphere for the José Antonio Pérez Hydroelectric Plant in Santo Domingo, Venezuela, of 1973; Chromatic Environment for the Simón Bolivar International Airport in Maiquetía (1974); the Physichromie for the headquarters of the Banco Consolidado in Caracas (1987-88); and the Chromatic Induction Seats recently created for the Organización de Orquestras Juveniles, also in the artist's native city (2007). These can all be considered among the







Raul Leoni Hydroelectric Plant, Guri, 1977-86





Chromatic Environment, Union des Banques Suisses head office, Zurich, 1975. Various works installed on the six floors of the main hall.

most successful examples of Cruz-Diez's integration of art in urban spaces and architecture, which necessarily recalls the tradition begun in Latin America in the 1950s by the architect Carlos Raúl Villanueva. Following Bauhaus precepts, Villanueva created a remarkable synthesis of art and architecture of which the finest example is his masterpiece, the Ciudad Universitaria in Caracas, which has been declared a UNESCO World Heritage Site.

Outside his native country, Chromatic Environment and the Transchromies for UBS in Zurich (1975), the Chromostructure for the walkway ceiling in Saint Quentin station in Yvelines, France (1980) and 1980 Vegetal Chromostructure in Medellín, Columbia (basically a Physichromie but one in which traditional building materials are replaced by flowers and tropical plants), again reveal Cruz-Diez's close and ongoing relationship with the conception and use of space.

Despite the fact that the term "Kineticism" covers a wide range of artists with very different aims (making it impossible for the etymology that supports and gives name to this movement to remain suitable today), some of the precepts of this concept can be used to lend a certain unity to such a variety of disparate elements. One of these is the understanding of space as a dynamic element always subject to potential transformation. If the kinetic work reactivates the mechanisms of communication between the viewer and the work, and the latter – to the degree that it is consequently capable of suggesting new discursive possibilities - becomes more self-referential and omits any anecdotal element, we can say that Cruz-Diez's most important contribution (although not his only one) lies in grasping the true purpose of color as an autonomous and unstable body. This does not mean that it ceases to belong, in a historical sense, to what has come to be called Kinetic Art. The bases of his art and life lie in the vast possibilities of that constant movement and constitute one of the most rigorous intellectual adventures of the second half of the 20th century.

1. In his essay "La utopía cinética," Emmanuel Guigon explores the co-ordinates between Kinetic Art and the utopia of taking art into life. See La utopía cinética [exh. cat.]. Palma: Centro Cultural Sa Nostra/Seville: Caja de San Fernando, 2006. 2. Interview with Carlos Cruz-Diez by Gloria Carnevali, which took place in Paris in 1981, for the catalogue of the artist's retrospective exhibition at the Museo de Arte Contemporáneo Šofía Imber (MACSI), Caracas, May 1981. The interview is

reproduced in the present catalogue (pp. 66-93). 3. In *Signos vegetales* (Organic Signs) (1954-56), we find an expression of the craft of painting, meticulousness and an emphasis on drawing that could associate this series with conventional painting, but the artist's choice of subject and ultimate intention distance the work from this aim.

The first of Cruz-Diez's Physichromies was created in Caracas in 1959.
 Cruz-Diez [exh. cat.]. Caracas: Museo Nacional de Bellas Artes, 1960.

6. Cruz-Diez. Caracas: Ernesto Armitano Editor, 1975. Cruz-Diez also designed the book. 7. The artist considered green and red to be exclusively primary colors, while white only interested him for its reflective capacity and black for its negation of light. 8. "History of Structuring a Discourse on Color," prologue to Carlos Cruz-Diez, Reflection on Color. Madrid: Fundación Juan March, 2009

9. Frank Popper, Arte, acción y participación. Madrid: Ediciones Akal, 1989. 10. Interview with Carlos Cruz-Diez by Gloria Carnevali, op. cit. (pp. 66-93). 11.Critics have on occasion considered this to be the first version of these works, but in fact they preceded it. Almost all catalogue illustrations of Chromosaturations are of this one, not earlier ones.

12. Johann Wolfgang von Goethe, Zur Farbenlehre. Tubingen: J. G. Cotta'sche Buchhandlung, 1810

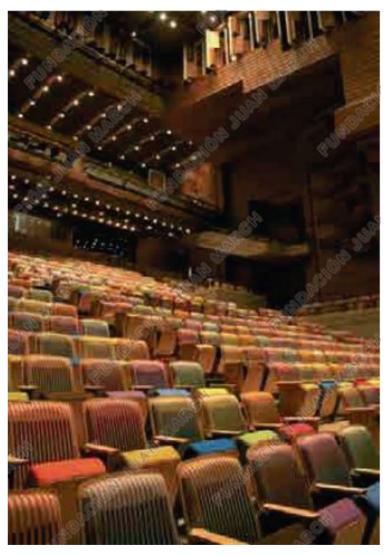
13. Carlos Cruz-Diez, Reflection on Color. Madrid: Fundación Juan March, 2009. 14. For more information on Cruz-Diez's relationship with architecture, see the interview with the artist by José María Salvador, which took place in Paris in May 2004, on the occasion of the exhibition organized by the Centro Cultural Consolidado in Caracas.



Vegetable Chromostructure, Universidad Simón Bolívar, Caracas, 1994



Railroad Station Walkway, Saint-Quentin-en-Yvelines, 1980



Chromatic Induction Seats, Sistema Nacional de las Orquestas Juveniles de Venezuela, Caracas, 2007





"The Series" is a brief text that serves as a glossary, gathering broad descriptions of the diverse series into which Cruz-Diez has organized his works: from the earliest of these – Additive Color – to the most recent, which he has termed Color into Space. The letters that appear alongside each of the series titles also accompany the captions identifying each work in the "Catalogue of Works in the Exhibition," which is organized chronologically and not by series.

Texts by Carlos Cruz-Diez and Ariel Jiménez

Additive Color

These works present and isolate a particular phenomenon: the optical mix of two or more colors and their transformation into different ranges of color depending on lighting and the viewer's position. It is a work – like all those by Cruz-Diez – in which our conception of the world becomes relative. What happens in them, takes place before them, exists in neither the work nor the human eye but between the two, in their essential interrelation. This elemental phenomenon manifests itself in Cruz-Diez's work around 1959, and represents a point of departure, the revealing of a world that constitutes the fundamental basis of his work and an end never truly attainable: the total liberation of color.

B

Physichromie

These works are best defined in the artist's own words: "the Physichromies are a light trap, a space where a series of color strips interact and transform one another. They generate new ranges of color and invade the space that surrounds the vertical bands that cover the entire work. Moreover, the movement of the viewer and the light source create a series of chromatic variations, similar to those produced in a real landscape with each revolution of the sun. They will never be exactly the same because the intensity and nature of the light that is shed upon them will never be the same. Hence the name Physichromies, because they put into play the color of light, a physical color."

C

Chromatic Induction

Whereas the Physichromies contain a complex range of optical effects, the Inductions manage to isolate one of the most interesting phenomena that result from the close relationship between color and the eye: the optical creation of a complementary color and its induction on "receptive" surfaces, such as a white sheet of paper. As we are experiencing a situation where reading the event becomes difficult due to the juxtaposition of a blue and black band on a white background, the eye creates the complementary color of the color that is opposed to the black band on the same back-ground. It is interesting to observe how the Inductions manage to stabilize and make visible a phenomenon we can only perceive for an instant and under specific circumstances. The yellow that appears is in front of us, yet it is not; it exists virtually, but is as real as the pigments that have been used.

D

Chromointerference

The chromatic event modules that cover the plane are superimposed and engender a coloration that varies according to the spectator's viewpoint. By superimposing a series of mobile modules, either by mechanical means or through the viewer's interaction, a second transformation occurs, revealing colors different from those that appeared to be on the original surface. Undulating movements, which differ from the modules' actual movement, give these colors a brightness they would not be able to generate individually. Through this effect, what appeared to be a two-dimensional surface acquires an illusory volume.

E

Transchromie

Son obras basadas en el comportamiento del color por sustracción. Superponiendo una estructura de láminas de colores transparentes a diferentes distancias y determinado orden, se producen combinaciones sustractivas que se modifican por el desplazamiento del espectador, por la intensidad de la luz y por el color ambiente.

El hecho de la transparencia permite observar la naturaleza a través de estas láminas, pero modificada por el fenómeno de la sustracción cromática que crea situaciones visuales ambiguas.

F

Chromosaturation

Chromosaturations are tied to the idea that all "culture" is based on a "primary event" that has always served as its starting point; a simple situation that, nonetheless, is transformed and generates patterns of thought that affect our sensitivity and create myths. As cultural conventions regarding notions of color have not changed throughout the centuries, perhaps by changing the support – by coloring space instead of form – one may perceive color as an evolving situation in time and space, and not necessarily as a colored anecdote of form.

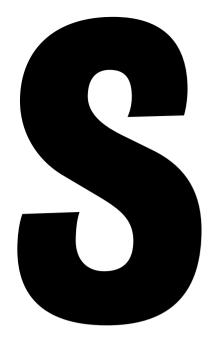
This monochromatic situation, which has a disturbing effect on the spectator's retina, activates and awakens our awareness of color as a physical situation evolving in space, without the help of form or even any kind of support.

G

Color into Space

Carlos Cruz-Diez writes: "with the aim of making more evident the vital experience of color coalescing and dissolving in space, I isolated one of the shafts that form the chromatic event modules and separated it from the plane. In this way, the viewer can create a color spectrum that is not the background support. This spectrum evolves according to our shifting viewpoint and the natural light." The first Color into Space work dates from 1993.





WORKS (1954–2009)

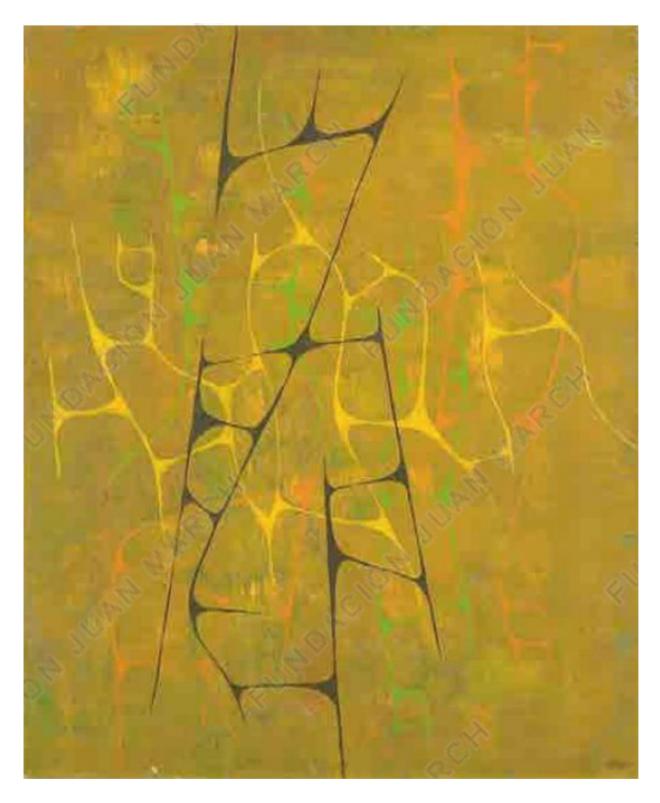


Proyecto para mural exterior (Project for an Exterior Wall), Caracas, 1954 Painting on wood 71 x 55 cm Cruz-Diez Foundation, Houston, Texas

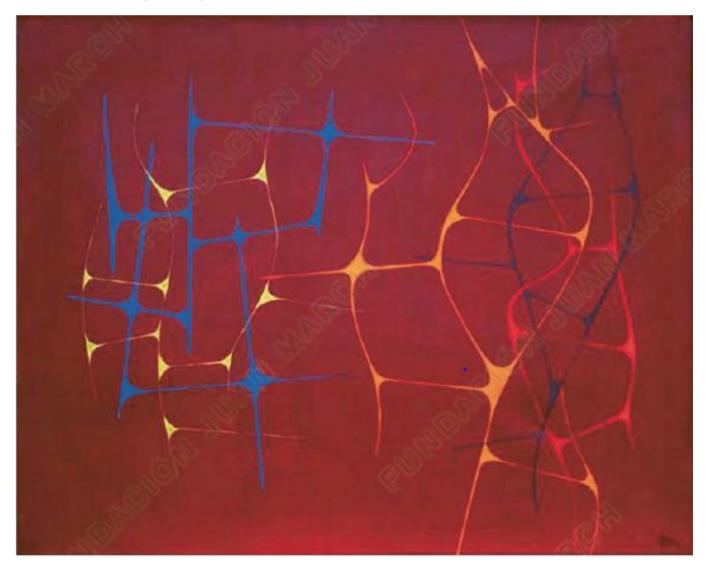


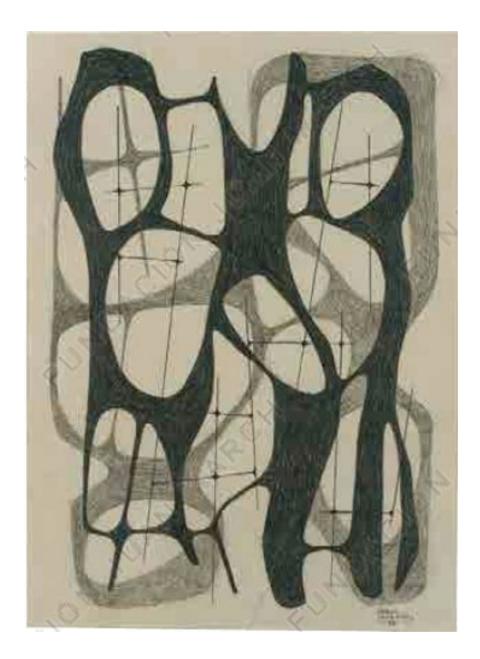
Cat. 1

Primer proyecto para muro exterior (First Project for an Exterior Wall), Caracas, 1954 Painting on wood 70.5 x 55.5 cm Musée National d'Art Moderne – Centre Georges Pompidou, Paris

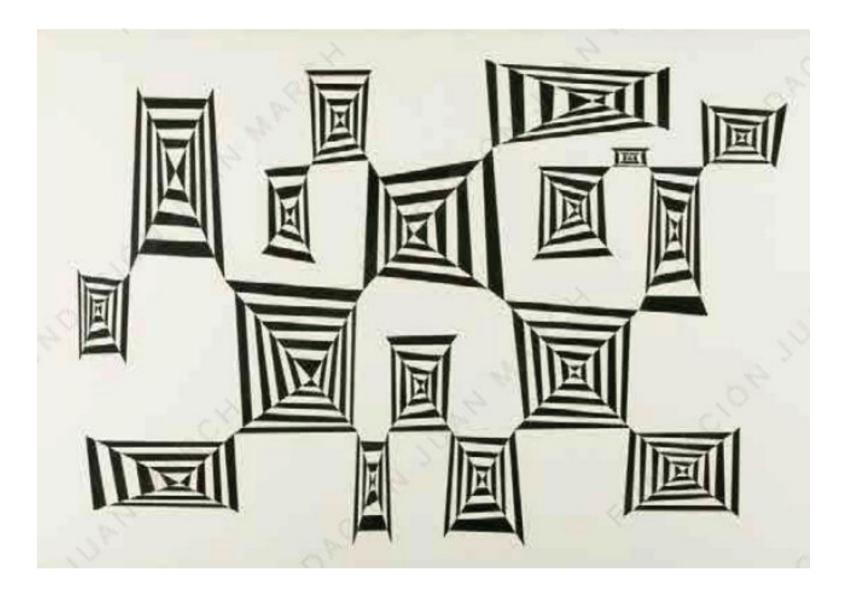


Cat. 2 *El muro amarillo* (Yellow Wall), Caracas, 1956 Oil on cloth 73.5 x 60 cm Allegro Private Foundation *El muro rojo* (Red Wall), Masnou, 1955 Casein on cloth 66.5 x 82.5 cm Cruz-Diez Foundation, Houston, Texas





Cat. 3 *Untitled*, Masnou, 1956 Graphite, charcoal and ink on paper 48 x 34 cm Allegro Private Foundation

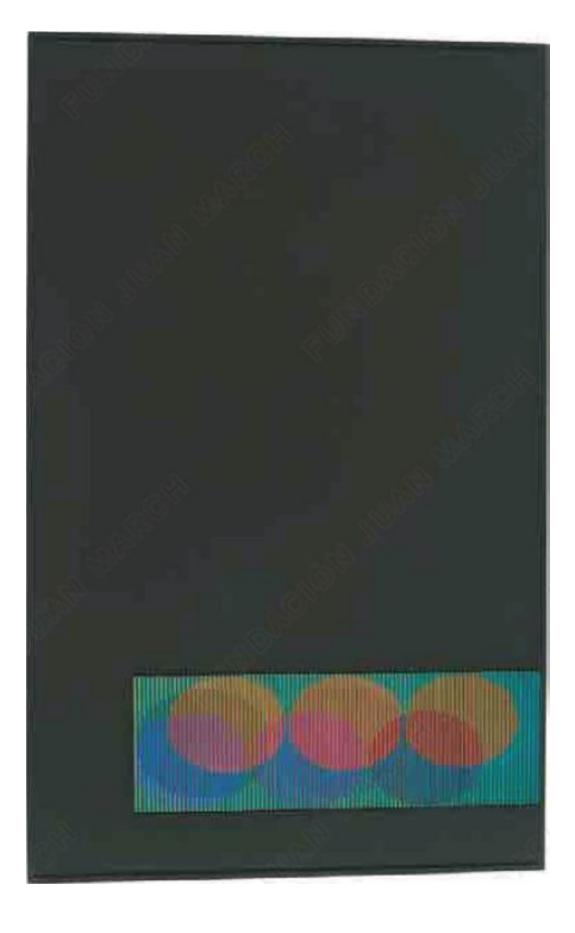


Construcción en el espacio (Construction in Space), Caracas, 1957 Acrylic on wood 85 x 122 cm Allegro Private Foundation



A Cat. 5

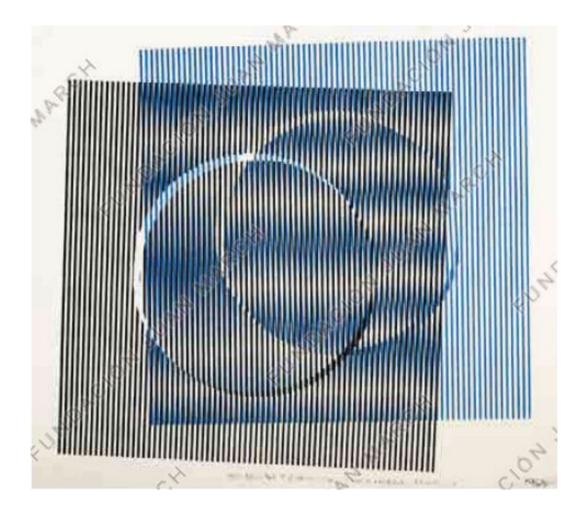
Amarillo aditivo (Additive Yellow), Paris, 1959-84 Silkscreen on paper 74.5 x 74.5 cm Atelier Cruz-Diez, Paris





Cat. 6 *Physichromie 103*, Paris, 1963 Rhodoid, flash paint, cardboard and wood 67.5 x 42 cm Allegro Private Foundation

Fundación Juan March



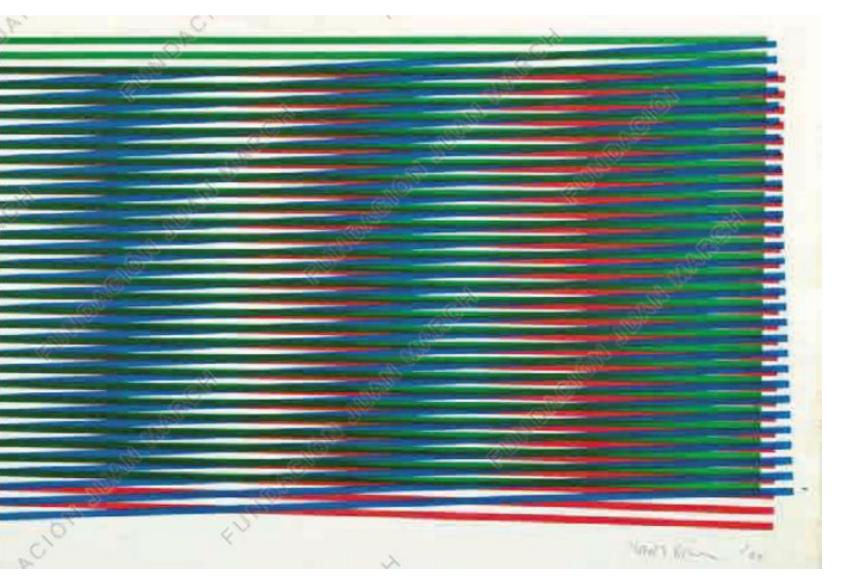
C Cat. 7

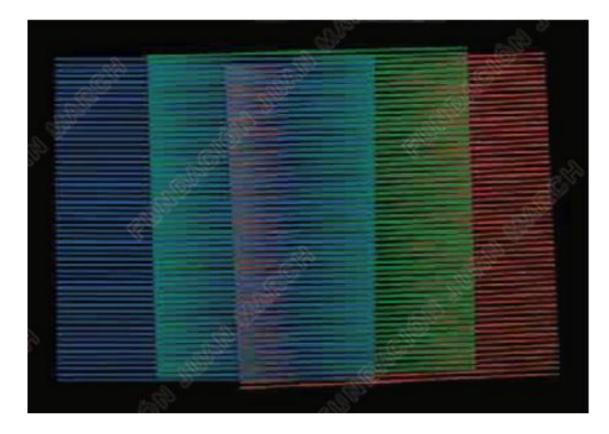
Inducción Cromática azul + negro = amarillo (Chromatic Induction Blue + Black = Yellow), Paris, 1963 Silkscreen on paper 20 x 20 cm Atelier Cruz-Diez, Paris



A Cat. 8

Couleur additive P.T. (Additive Color SP), Paris, 1964 Silkscreen on paper 40 x 75 cm Atelier Cruz-Diez, Paris

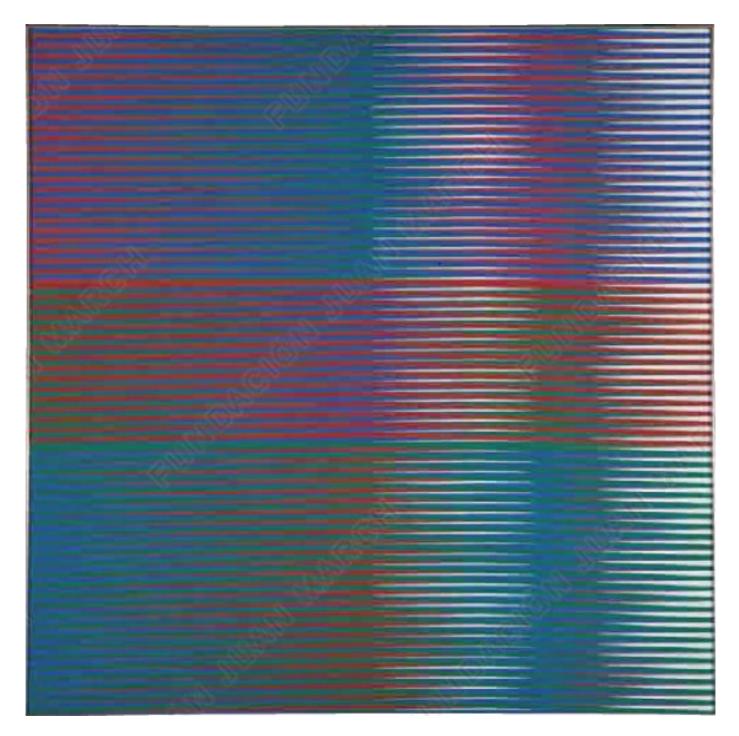


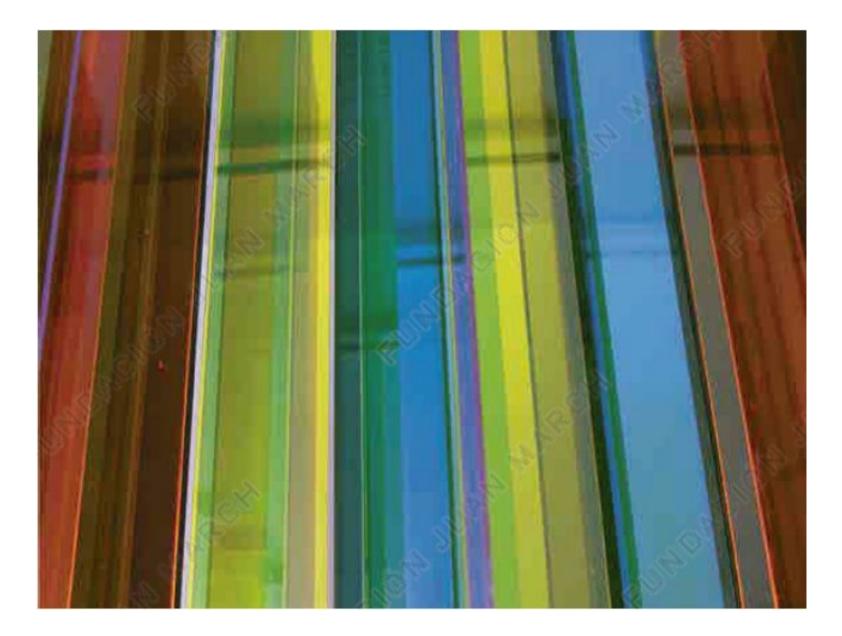


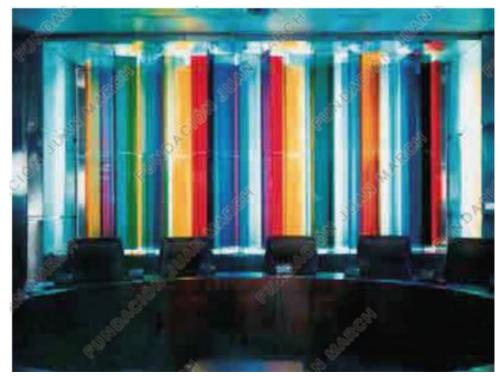
A

Cat. 11 *Couleur additive ED'A* (Additive Color AP), Paris, 1970 Silkscreen on paper 48 x 68 cm Atelier Cruz-Diez, Paris

Couleur additive (Additive Color), Paris, 1974
 Acrylic on canvas glued on panel
 80 x 80 cm
 Galería Guillermo de Osma, Madrid







Transcromía aleatoria. Obra mecánica (Random Transchromie. Mechanical Work), Cancillería Tower, Caracas, 1973

Ε

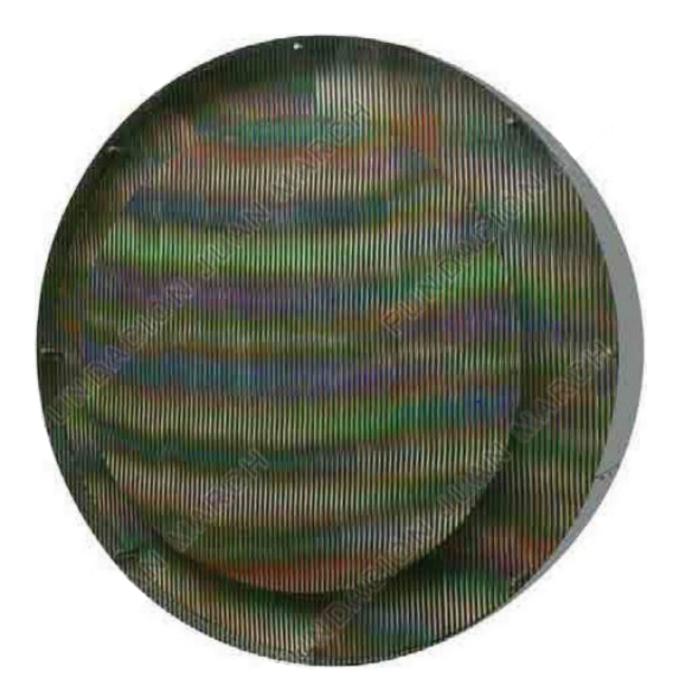
E Cat. 9

Transchromie, Paris, 1965-2007 Transparent acrylic sheets 200 x 240 x 60 cm Atelier Cruz-Diez, Paris

B Cat. 12

Physichromie 578, Paris, 1972 Aluminum, acetate and acrylic paint 70 x 70 cm Allegro Private Foundation





D Cat. 15

Chromointerference Mecanique (Mechanical Chromointerference), Paris, 1973 Wood, Plexiglas and aluminum; mechanical motor Ø 100 x 15 cm Atelier Cruz-Diez, Paris



D Cat. 10

Chromointerference Mecanique (Mechanical Chromointerference), Paris, 1967 Wood and acrylic paint; mechanical motor 66 x 140 x 13 cm Atelier Cruz-Diez, Paris





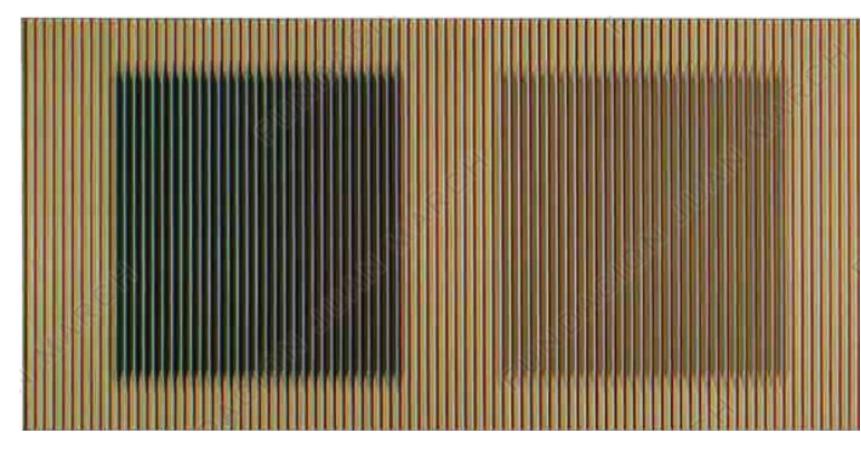
B Cat. 13

Physichromie 589, Paris, 1972 Aluminum, acrylic paint, acetate 120 x 100 cm Allegro Private Foundation

B Cat. 14

Physicromie 587, Paris, 1972 PVC, wood and aluminum 60 x 120 x 5 cm Atelier Cruz-Diez, Paris



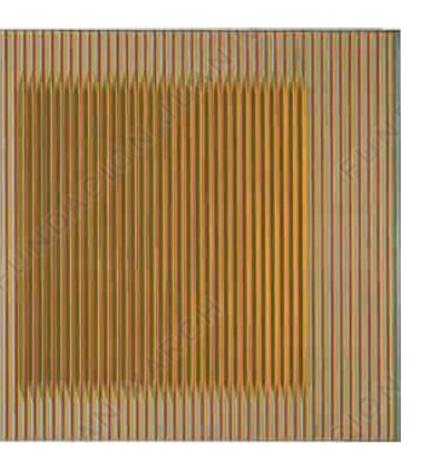


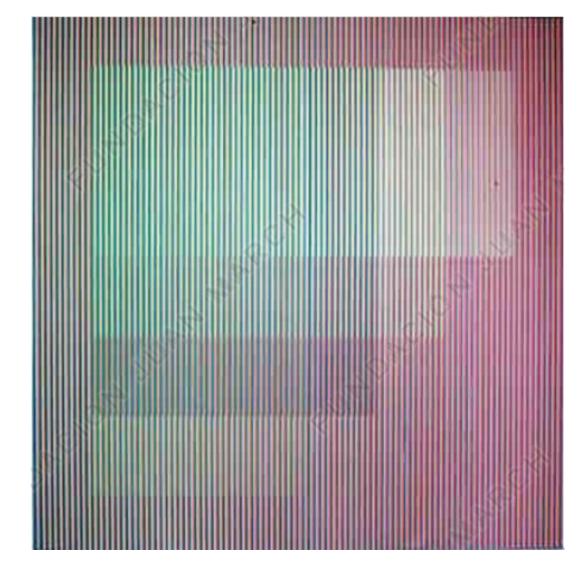
A Cat. 18

Fisicromía 2235 (Physicromie 2235), Paris, 1988 Metal, acetate and acrylic paint 60 x 180 cm Allegro Private Foundation

B Cat. 17

Physichromie 756, Paris, 1975 Steel plates and acrylic on wood 100 x 100 cm MUBAG, Council of Alicante





	and the second se
Cold and a second se	
and a second sec	
10000	
4	
	CA HINA
	ALL NO CONTRACTOR OF ALL NO
	Contraction of the local division of the loc
	LA IV
	and the second se
	1 Comments
	APRIL 1
	Carl Parent
Statistics of the second se	
deline and the second s	
dia	
and the party of the local data and the local data	
	Jul Com
0.00	
	200
a loss and a loss of the loss	
Color Marcola	
Contraction of the second s	the second se
	PG 3
derth .	
Carlos Ca	

C Cat. 16

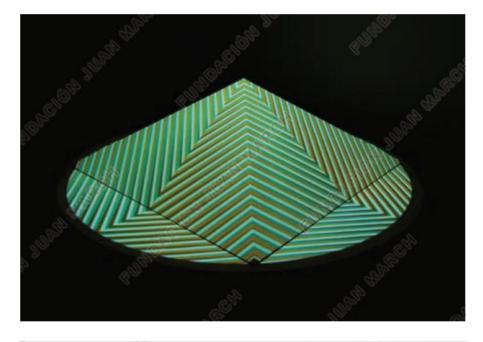
Induction Chromatique 63 (Chromatic Induction 63), Paris, 1974 Acrylic on cloth on wood 60 x 60 x 4 cm Atelier Cruz-Diez, Paris

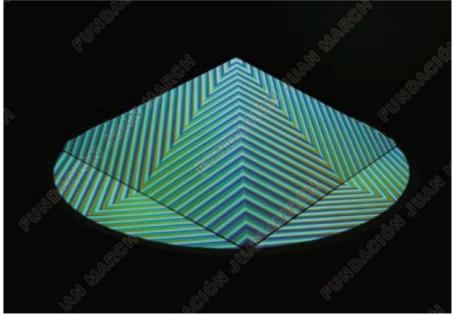
G Cat. 22

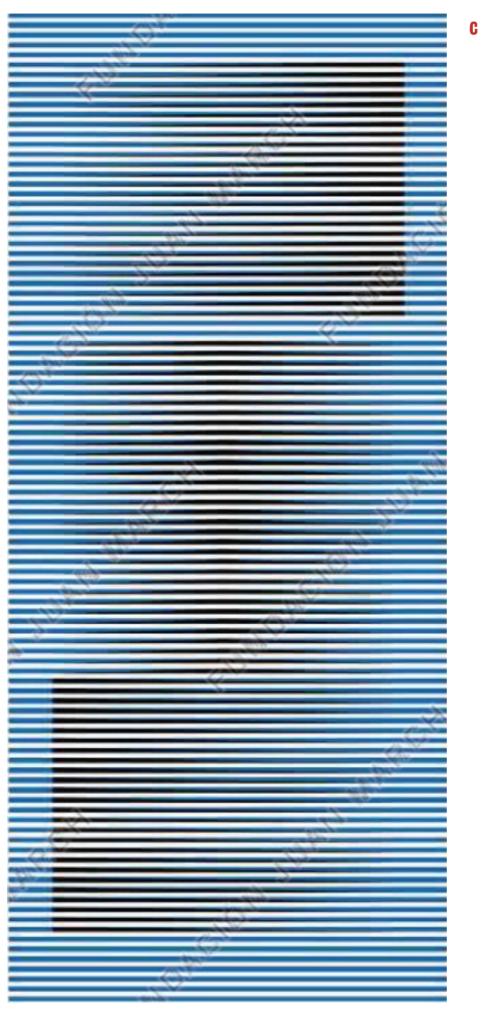
Couleur à l'espace Série Ligia A 1 ED'A (Color into Space. Ligia A 1 Series AP), Paris, 1993-2008 Color print 120 x 20 x 8 cm Atelier Cruz-Diez, Paris



Cat. 19 Pirámide Cromointerference (Chromointerference Pyramid), Paris, 2006 Projection on a pyramid 100 x 100 x 40 cm Allegro Private Foundation



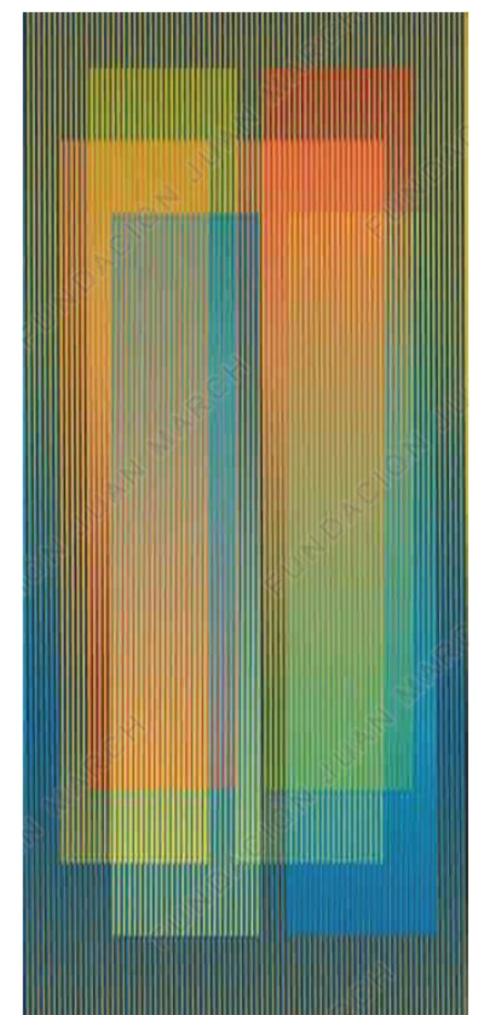




Induction du Jaune. Denise. ED'A I/III (Induction of Yellow. Denise. AP I/III), Paris, 2007 Color print on paper on aluminum 180 x 80 x 2.4 cm Atelier Cruz-Diez, Paris



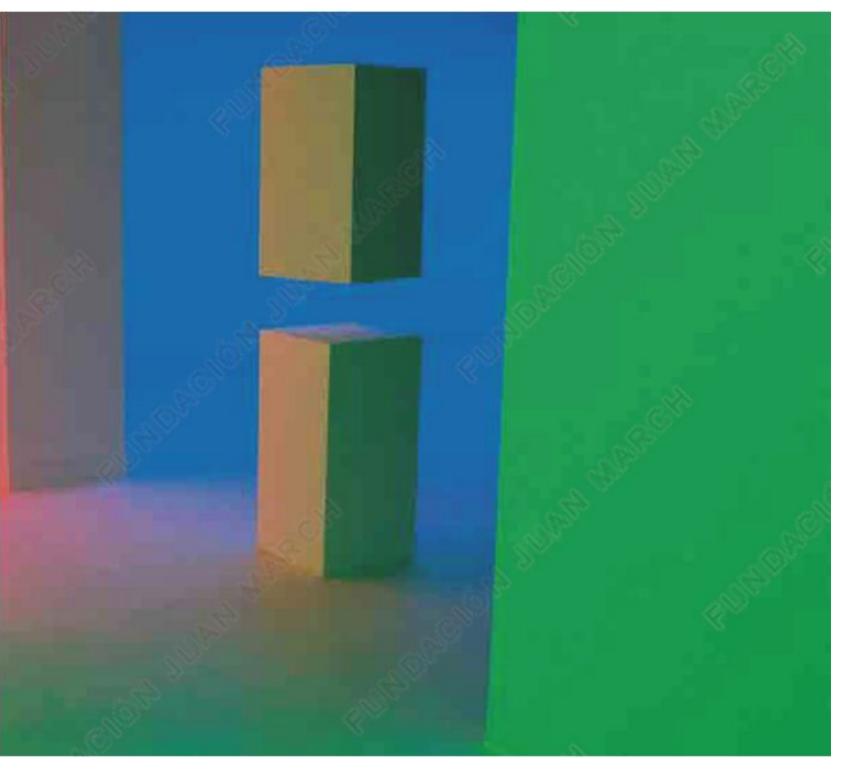
Couleur Additive Denise C ED'A I/III (Additive Color. Denise C AP I/III), Paris, 2007 Color print on paper on aluminum 180 x 80 x 2.4 cm Atelier Cruz-Diez, Paris







Sketches and installation view of *Chromosaturation, Labyrinth for a Public Place. Art in the Street*, exhibition organized by the Centre National d'Art Contemporain. Odeon metro station, Boulevard Saint-Germain, Paris, 1969



Chromosaturation. Exhibition Carlos Cruz-Diez, la vida en el color. Galería Fundación La Previsora. Caracas, 2006

F Cat. 23

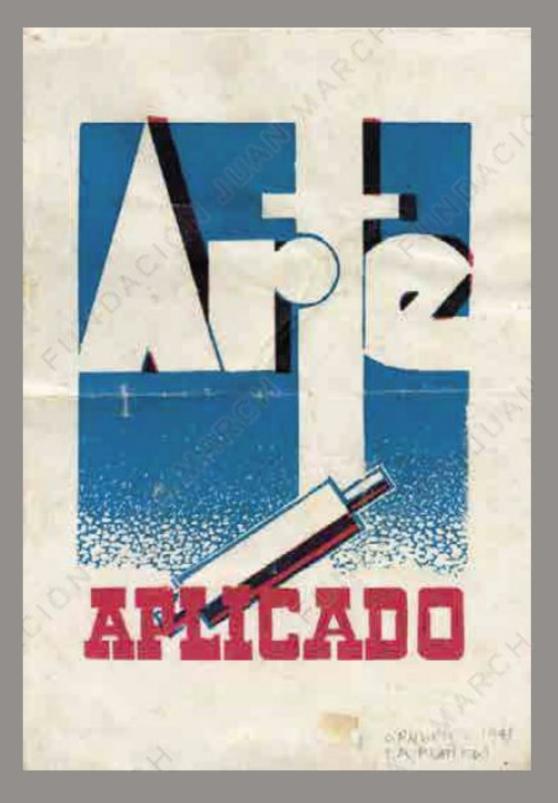
Cromosaturación y Ambientación cromática (Chromosaturation and Chromatic Atmosphere), 1965-2009

SELECTION OF GRAPHIC WORKS: BOOKS AND MAGAZINES (1941–1974)

From 1953 to about 1959, Carlos Cruz-Diez occasionally worked as an illustrator for the Department of Culture and Fine Arts at the Ministry of Education of Venezuela. On a monthly basis, the Ministry published monographs on poetry, almost entirely dedicated to Venezuelan poets. The exception was the January 1959 issue, devoted to the Chilean poet Pablo Neruda, though it presented solely a selection of his poems on Venezuelan subjects, such as the chants to Bolívar, the Orinoco and his letter to Miguel Otero Silva. Among the poets featured in these monographs were Rodolfo Moleiro, Vicente Gerbasi, Félix Armando Núñez, Manuel Villanueva, Jean Aristeguieta, Ramón Sosa-Montes de Oca and Pedro Rafael Gilly.

In any case, attention should be drawn to the illustrations in these volumes, as they reveal Cruz-Diez's transition from figurative painting – committed to social issues – to abstract painting, with a slight emphasis on geometric form. They also establish a connection with the Signos Vegetales (Organic Signs) series he began in Catalonia in 1954. Exhibited here for the first time, these illustrations are unique examples of his artistic production, conveying the moment he left behind all figurative practice in search of new means of representation, an aesthetic journey that would reach its climax in his affiliation with Kinetic Art.

Osbel Suárez



Gat. 24 *Arte Aplicado* (Applied Art), 1941 Atelier Cruz-Diez, Paris



Rodolfo Moleiro, *Poemas.* Caracas: Ministerio de Educación, 1953. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris

Vicente Gerbasi, *Círculos del trueno.* Caracas: Ministerio de Educación, 1953. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



Fundación Juan Marcł



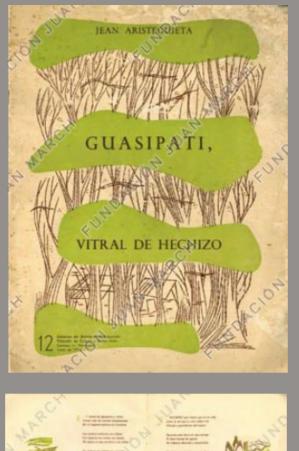
Tomás Alfaro Calatrava, *Décimas de amor y muerte*. Caracas: Voluntad, 1954. Vignette by Cruz-Diez. Atelier Cruz-Diez, Paris



Félix Armando Núñez, *Poema Filial.* Caracas: Ministerio de Educación, 1953. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



Manuel Villanueva, *Poema para César Vallejo*. Caracas: Ministerio de Educación, 1954. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



Cat. 30

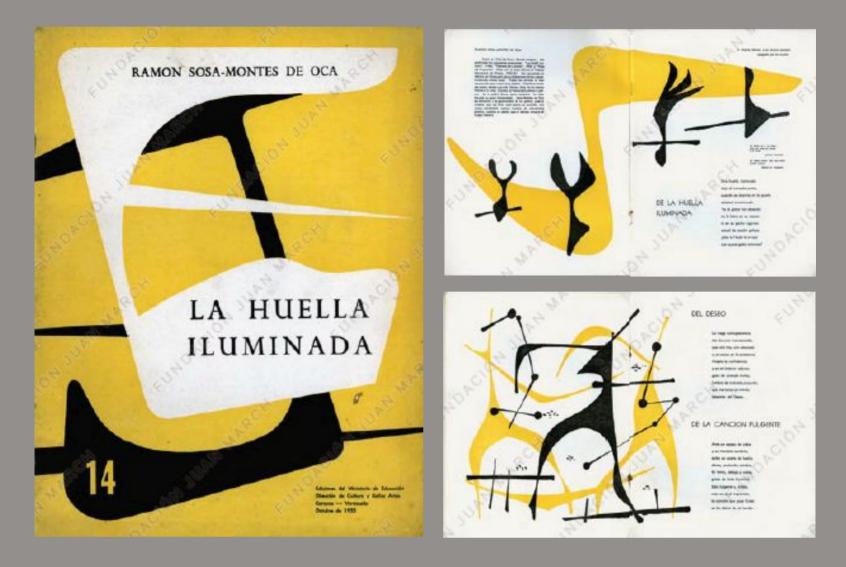
Jean Aristeguieta, *Guasipati, Vitral de hechizo.* Caracas: Ministerio de Educación, 1955. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris





No. of Address of A statements in colors on family on constration of the statement of the statements -





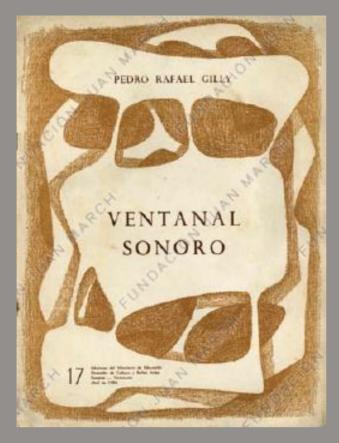
Ramón Sosa-Montes de Oca, *La huella iluminada.* Caracas: Ministerio de Educación, 1955. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris

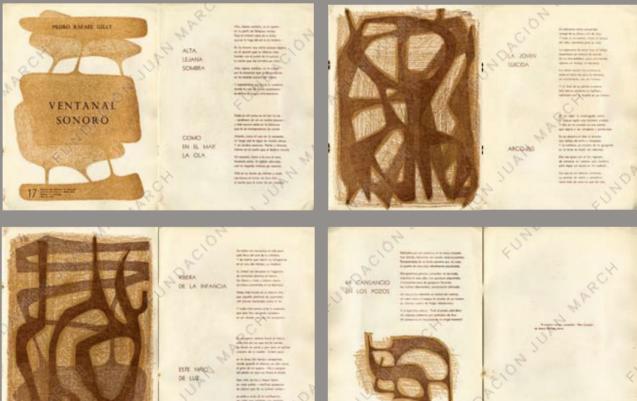


I



Exposición internacional de pintura, Ateneo de Valencia, 1955. Illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris





Pedro Rafael Gilly, *Ventanal sonoro.* Caracas: Ministerio de Educación, 1956. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris





Gat. 34 Pablo Neruda, *Todo lleva tu nombre.* Caracas: Ministerio de Educación, 1959. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris

Mene. Revista Cultural de la Mene Grande Oil Company. Caracas, 1962. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris





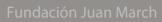






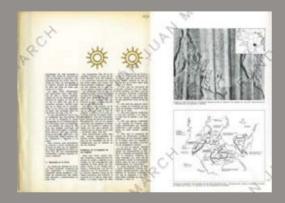












Cat. 36

El farol. La calidad de la vida. Caracas: Creole Petroleum Corporation, 1974. Art Director: Cruz-Diez. Atelier Cruz-Diez, Paris

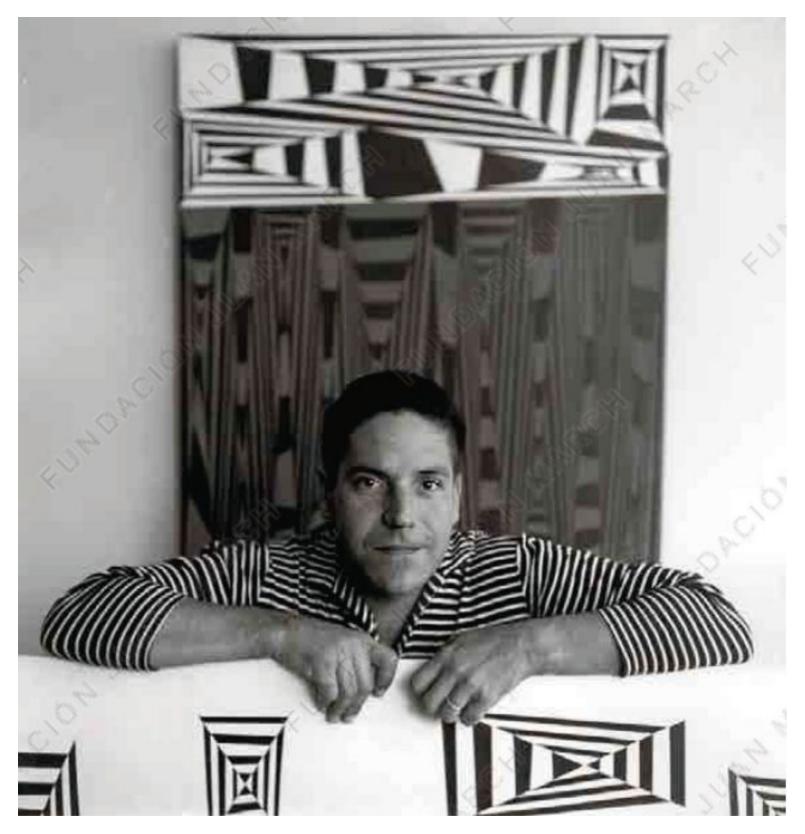


LORIA CARNEVA G **CARLOS CRUZ-DIEZ**

Fundación Juan March

VENESS

Fundación Juan March



Cruz-Diez in Caracas, 1959

Gloria Carnevali There are those who maintain that your approach to light and colored atmosphere is basically impressionist. Do you agree with this opinion? Do you share the impressionists' concerns?

Carlos Cruz-Diez *I* believe my work is coherent with its time, and as such obeys a historical pattern. My entire generation was influenced by Impressionism and the movements that followed. These tendencies were marked by fastpaced historical events, which resulted from constantly questioning the meaning of new concepts. This is the great difference between modern painting and historical painting. But my conceptual platform is based on more than just the impressionists' experiments. It also takes from Malevich's Suprematism, Cubism and Gabo, who in 1920 incorporated real movement into art. Analyzing the impressionists and Malevich's approach to art, I came to the conclusion that there was an anomaly within the basis of their thought, a contradiction that could not be resolved through the artistic means they had used. In that sense, my work is a logical consequence of their research and, for that precise reason, it refutes it.

GC Which brings us to two questions: What contradiction do you see in Impressionism and Malevich's painting, and in what sense does your work follow or refute theirs?

CD The impressionists saw things differently. By revealing the behavior of light and how it reflected on objects, they took painting to a phenomenological level. Yet, they continued to use representational practices rooted in traditional painting. Light, and its colors, create unstable situations that are constantly evolving and changing. Transposing these situations, which take place in time and space, to a stable support, such as the canvas, exposes a contradiction of purpose. A long process of transposition is needed to recreate a landscape. By the time one has observed, come to conclusions, mixed the colors on the palette and applied the first brushstrokes, a number of chromatic events have happened before one's eyes, alterations that cannot be frozen. In their quest for truth, the impressionists took their easels out of doors and confronted nature. In spite of their inquisitive attitude about the principles of academic painting, they did not change their technique. We could even say the result of their work was less authentic in the end. The academics spent hours examining and trying to represent a subject that, unlike light, remained stable. Impressionism has left us with an extraordinary way of seeing things, a vision that is filtered through memory, subjectivity and emotion. Yet, it does not represent reality. The outcome of their work led to a new type of painting that would take different paths in the years to come. A similar contradiction occurs in Malevich's White on White, where real, variable space is transposed to a stable support and space. This work follows two courses: one metaphysical and the other artistic. Although they both led to new concepts in art, the first could never materialize and the second reflects the same contradiction seen in the impressionists' work. I was



Cruz-Diez in Masnou, 1955

^{*}Interview conducted for the catalogue of the artist's exhibition at the Museo de Arte Contemporáneo Sofía Imber, Caracas, May 1981. We thank Gloria Carnevali and Carlos Cruz-Diez for generously granting permission to reprint the interview in the present catalogue.

"I cannot say that my approach to color was purely instinctive or emotional. From the very beginning, I knew that [...] it would require an indepth knowledge of the past, of what artists before me had done in this field. I had to ask myself if I could still do something interesting and unprecedented."

influenced by these enthralling contradictions, which derived from an urgent desire to apprehend the ephemeral dimension of reality. And so I decided my work should be based on situational, phenomenological and non-transposable concepts.

GC You enrolled at the School of Fine Arts as a child. One could say you have devoted half your life to studying color, which has also been the main subject of your work. Would you say you are a natural-born colorist, or is your approach to color more conceptual than instinctive?

CD I have asked myself that same question many times. Remembering my years at the School of Fine Arts, I still recall how much I wanted to paint. I now wonder if my fascination with being an artist was really founded on how much I enjoyed combining colors. However, there is an event that may have influenced my decision to study color. I always tell this story, and take the opportunity to pay my respects to Rafael Ramón González, our landscape painting teacher, for whom I felt great affection. Back then we would paint outside every afternoon. One afternoon we went to Calvario, where I began to paint a street, a little street of Calvario. I painted the street gray, the houses white and the lawn green. When Rafael Ramón came to review my work he said: "Why are you painting the sidewalk gray? Can't you see the shades of pink and violet? That gray is not made of black and white, you must try to see what's before your eyes ... ". I was taken aback by his remark because I could not see any of those colors, all I could see was gray. After a week it came to me like a revelation: I discovered the pinks, violets, yellows in the sidewalk's monotonous gray; and the greens I had used were no longer green, there were shades of purple and blue in them. With time, I realized what Rafael Ramón was trying to tell me: I was using cultural, conventional colors to paint. He suggested I try a typically impressionist experiment: blending surface colors, enhancing them, making them substantive. It was not a matter of painting the colors that were truly there, it was about inventing color, reconstructing it in your own eye and chromatically magnifying things. After this experience, I began to use all sorts of colors until achieving a tone similar to gray. I no longer painted the sky blue, but green and ochre. In short, I understood colors were a pretext for invention. Feeling blind when my teacher told me to "look at colors" motivated me and would eventually become one of the main concerns of my work. But I cannot say that my approach to color was purely instinctive or emotional. From the very beginning, I knew that creating a platform that could validate research on color would require an in-depth knowledge of the past, of what artists before me had done in this field. I had to ask myself if I could still do something interesting and unprecedented.

GC And what conclusions did you reach?

CD I realized color has always had a fundamental role in painting, but has not always served the same ends. Artists of the past and present have used color in different situations. However, it has always been expressed as a stable and permanent concept subjected to representational techniques.

GC In which situations, for example?

CD I have given this much thought throughout the years and have come to identify nine different situations. By this I do not mean that other situations do not exist, these are simply the ones I have found. I consider them to identify the main objectives established by artists throughout different periods. In some cases, color has simply been considered an auxiliary part of a two-dimensional surface along with design, perspective, composition, subject and chiaroscuro. At the time, form had a predominant role, color was attached to it, which leads to the common conception of color as an element that is inserted into something else. Abstract art, specifically the work of Albers and Vasarely, presents color-form relationships that balance and reinforce one another. Applying brown and green on a canvas to paint a tree, for example, does not truly represent these colors as a chromatic event. Instead, they have been used to transfer that tree, which was in the landscape, to a two-dimensional surface. Thus, the artist has used color as an auxiliary aid in transposing nature. When looking at Cézanne's apples, we see that color expresses volume and reveals the nuances that light is capable of generating. Artists of the Middle Ages, Renaissance and contemporary painters such as Herbin organized color according to strict symbolic structures and depicted situations that had little to do with color's true nature. By juxtaposing contrasting colors, Delacroix and the impressionists made the painting surface vibrate. Colors can be strategically placed so as to give the pictorial space life; abstract artists followed this path. And from Tintoretto to Tachism, color has been used for its own material qualities, as a way of obtaining texture. But, as I said, in all of these situations color was simply applied to a support, it constituted an element of a static and permanent object. None of the aforementioned artists ever suggested color could be an unstable situation continuously transforming.

GC Is that the innovative aspect of your work, the idea of changing color?

CD This is how I have codified color phenomena in its unstable condition. This phenomenon is older than man himself, for it is based on light, which is inherent to all individuals. I even use humans' own physiological traits to prove this fact. When studying color, I became aware that a work could not be created on the basis of simple, unrelated ideas. I needed a broader, more coherent concept to perform as the core of my research: color as an evolving situation in time and space, a real event that cannot be transposed.

GC Doesn't the core of your research imply the existence of other sub-concepts?

CD A changing situation of color can only take place in time and space, therefore my work also takes place in a real environment. The idea behind Chromosaturations, for example, is to materialize color in space. Although we are not aware of it, we live immersed in this type of space. Anyone living in Caracas can see the way the city becomes a chromatic spectacle of great beauty between five and seven in the evening, the way colors change by the minute as a consequence of the diffraction of sunlight, wind and humidity. But people don't see it. I call attention to it, through simplified means, so that people will discover it once again. Who stops to look up at the firmament nowadays? Can you imagine the display the Universe put on, when cities were dark and the only light they had came from the stars? But at present, the concept poses a different problem, it has gone beyond its own physical qualities and cannot be completed. In order to create colored space, I had to recur to simple means, such as electric lamps. However, my original idea was to show color without the aid of a support or the means to which I am now forced to resort. When the laws of math and science manage to control magnetic fields, then we will be ready to project volumes of color into space, enabling spectators to perceive them, to experience them.

GC Did you encounter the problem of generating space as a consequence of your research, or is it an artistic concern in itself?

CD Given the way ideas evolve. I consider the possibility of integrating time and space in the work to be one of the fundamental advances of contemporary art. When I visited Europe for the first time I found Las Meninas stunning. I had seen reproductions of this painting before but had never paid much attention to it, for I had mistakenly regarded Velázquez as an academic. I was confronted with a fictitious pictorial space that was so effective I felt I was part of it. I realized the notion of transposed space, though insinuated, had already reached its highest level. Velázquez and David's work at the Louvre confirmed this. New solutions were needed. And so I began to observe and analyze Cézanne and the cubists, who had given us the freedom to destroy and construct pictorial space, and showed us the relativity of things. Mondrian, on the other hand, proposed conceiving the picture plane as a flat surface and disposing of ambiguous volumetric forms. Thanks to Malevich, I understood space was something that could be handled and tamed. And there are several more reflections and conclusions that gradually gave shape to my conceptual platform, where I would establish what painting ought to be.

GC Would you say the destruction of form is also a necessary consequence of your research on color's changing properties?

CD I undertook the task of researching color, along with the problems that came along with it. Both form and color are present in each one of my works, in spite of the means I choose in the end. But the "destruction of form" is an attractive and controversial phrase that emerged in the 60s and has been used quite freely. No one has considered its real meaning. If a support still exists, we cannot speak of the destruction of form, because any type of support is form in itself. By using monochrome painting, Yves Klein also believed he was destroying form. However, the monochrome painting's support, with its rounded edges, is an elaborate form in itself. I believe it is more appropriate and logical to define this objective as the denaturalization of form, atomization of form, "dematerialization" or mutation. These are the true achievements accomplished by artists, like myself, who have examined this problem. Only those of us who have treated light can speak of "destruction of form."

"My works happen in sequence, they are produced in their entirety when the viewer has made certain decisive movements in front of them at different times and under different light conditions." My Chromosaturations, for example, are empty colored spaces, freed from support, form, volume and references; what is significant here is the event taking place, the "situation." In Physichromies, Inductions and Additive Colors a continuous transformation of color and complex color behavior take place. Consequently, color is transferred into space and separated from its formal meaning. This process is the first step in creating a work of art. The juxtaposition of planes, circles, squares and rectangles in the aforementioned works is reminiscent of traditional principles. However, these shapes do not have an emotional or symbolic meaning, as in Constructivism or Abstract Art; they simply obey the mechanical function of a work of art connected to chromatic phenomenon. This phenomenon becomes obvious when two color planes confront one another. Since these planes are integrated in the work, they experience different transformations. First, they are denaturalized and fractioned. This system turns them into autonomous elements of a repetitive module, a process I explain in Didactic and Dialectic of Color (1980).

GC Allow me to comment further on that last point: It seems your work is based on three notions. And if there happened to be a contradiction between them, the outcome would no longer be a Cruz-Diez. In other words, your work meets the following requirements: color must be presented as an unstable situation, space is not incorporated in the work, and forms should not have an expressive or decorative role. Is that right? But are these the only unbreakable rules?

CD I would add at least two more: a dialogue between the spectator and the work, and the fortuitous and unpredictable effects caused by light. My works happen in sequence, they are produced in their entirety when the viewer has made certain decisive movements in front of them at different times and under different light conditions. And of course, the viewer's movements are also influenced by his ludic instinct and creative energy. For example, the idea behind Physichromies is to create a monochrome situation that experiences a wide spectrum of color and finally evolves into a different monochrome. The spectator can only appreciate the nuances of color as it evolves by moving along with the light in front of the work. Thus, we are obeying the time-space relationship. If this process is not completed, only a partial view of the Physichromie is achieved.

GC This notion of a dialogue being established between the work and the spectator is present in the art of many kinetic artists...

CD Indeed, Kinetic Art is one of the most significant movements in contemporary art, precisely due to the idea that the spectator should actively and physically engage with the work of art. This premise shook conventional notions of art, just as Cubism, Constructivism, Dada and Surrealism did beforehand.

GC Before proceeding to a discussion of the historical development of your work, I would like to enquire a bit more about the conceptual platform your work is based on, and how it came about in the exhibition *Physichromies and Additive Color* held at the Museo de Bellas Artes de Caracas in

1960. My question is the following: Other than your pictorial analyses, do you turn to any other disciplines in search of information on color?

CD Let's say that three sources of information make up my conceptual platform: one of them is art history; a second, philosophical and scientific research of optical illusions; and finally, the practical knowledge that my experience as a typographer, photographer, and film enthusiast has provided me.

GC Do you study these sources at the same time or separately?

CD The first thing I do is analyze previous forms of art. I am a painter and painting is my area of study, therefore, it is also a common thread in my research.

Although artists of the past have not shown much interest in coloration and the problem it poses, I try to study the works and writings produced by the few exceptions who did. In general terms, there have been two main approaches to color in the past, on the one hand it was linked to the artisan, and on the other, it was attributed a symbolic or religious meaning.

GC Which of these artists are the "few exceptions"?

CD The impressionists, of course. But even before them, Delacroix was very intrigued and motivated by scientific theories of color, by Chevreul's recent discoveries for example. Seurat and Signac condensed the accomplishments and failures of several generations. I also read Delaunay's writings on his chromatic painting and the obstacles it presented, Léger and Del Marle's reflections on monochrome cities, as well as Itten's famous educational essays, written while he was at the Bauhaus. I also studied Albers' Interaction of Color and Homage to the Square. Only Alber's contributions have provided original solutions to color theory in recent times.

GC To what extent did Albers' *Interaction of Color* influence your work?

GD I have never been interested in how other painters resolve specific problems; but I am interested in their work, in its underlying concepts, and in taking my own conclusions a bit further. Albers studied how large colored surfaces interacted and altered one another when placed side by side. By studying these processes, Albers drew attention to the issues associated with perceiving painting. Although the impressionists and post-impressionists had foreseen this phenomenon, they believed it was just part of a different problem. Albers, on the contrary, gives these issues force and autonomy. In that sense, his text has been interesting and inspiring.

GC You mentioned you have also devoted time to philosophers and authors' writings on color. Why?

CD Because important paintings are always underpinned by a specific vision of the world, by a philosophical doctrine.

However, with time, these ideas disappear, whereas material evidence remains. I wanted to know if other disciplines had provided grand ideas concerning color. And reading confirmed my ideas: chromatic phenomenon is in fact an unstable event. Aristotle, for example, conceives color as "a battle between light and darkness," as a never-ending conflict. Goethe also reflects this idea in Theory of Colors. For him, colors "are not produced unless there is light, clarity and darkness."

GC Goethe refuted Newton's color theory. Although it was simple and easy to understand, it was almost impossible to apply. Auguste Herbin did not base his visual language on Newton, but on Goethe. Did these theories influence your research in any way? Which did you find more useful?

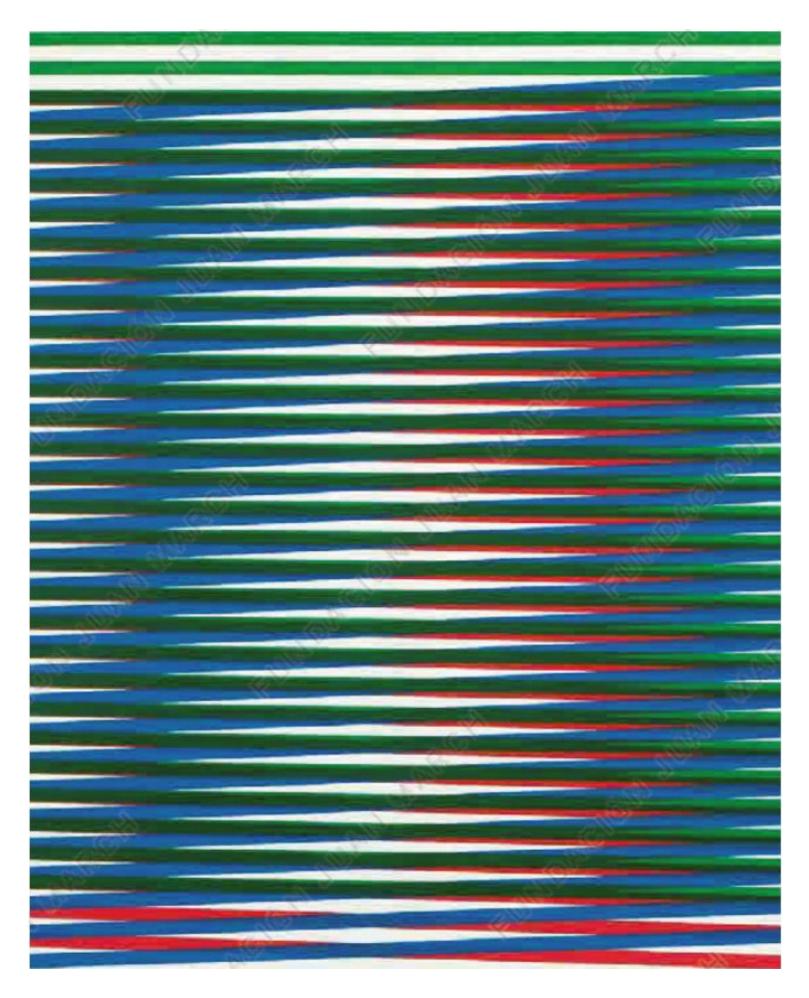
CD The controversy between Goethe and Newton encouraged me to study Newton's experiments with white light and simultaneous contrast with complementary colors. I do not think I was immediately influenced by his theories. But years later, while working on Additive Colors in Paris, I placed a red and green surface by a blue and black one and saw an intense yellow emerge. Now I know this was an effect of simultaneous contrast. As Newton established in his color wheel, yellow complements blue. In that case, my knowledge of Newton's theories enabled me to recognize an apparently fortuitous incident, study it, codify it and find better ways of applying it in the future.

GC So reading Newton did not directly inspire you to introduce simultaneous contrast in your work?

GD Chromatic Inductions were the result of a combination of factors: concept, information, research and, to some extent, chance.

GC Did you read the studies of any other scientists besides Newton?

CD I was mainly interested in Thomas Young's experiments with light interference and his theory of trichromatic color vision. He established that colors are formed by receptors that capture blue, red and green. In the 19th century, Heimholtz reintroduced and elaborated upon this theory by indicating that the retina has three types of cone photoreceptors that are sensitive to red, green and blue wavelengths. The photoreceptors transmit signals to the brain, where the wavelengths are combined and produce different colors. Furthermore, he divided the spectrum into four color bands, violet, blue, green and red; and explored the properties of the reflected colors. On the other hand, I also read about the experiment Maxwell carried out in 1860, on which modern photography is based. He managed to produce color images through additive synthesis, whereas Ducos de Hauron achieved this a few years later by means of subtractive synthesis. Ramón y Cajal's investigations concerning two types of photoreceptive cells - cones that perceive color and rods that modulate light's intensity – also drew my attention. These are some of the ideas I assimilated between 1954 and 1959; they not only refer to color, but to perception, light and its inevitable relationship with space. But the final push came from reading an excerpt from Edwin



Detail. Couleur additive P.T. (Additive Color SP). Paris, 1964

"What impresses and stimulates me is the simplicity of the experiment.

I imagined the possibility of working with only two colors, red and green, without mechanical help, without electronic help, by simply painting the support and generating other colors through additive synthesis." "I am not a scientist, I have no intention of being one nor do I have the training to be one. I am interested in acquiring knowledge and certain conceptual guidelines that allow me to direct my work."

Land's article, "Experiments in Color Vision." Thanks to the conclusions inferred from this article, originally published in Scientific American in 1959, I decided to take a practical stance.

GC Before I forget, did you read Chevreul?

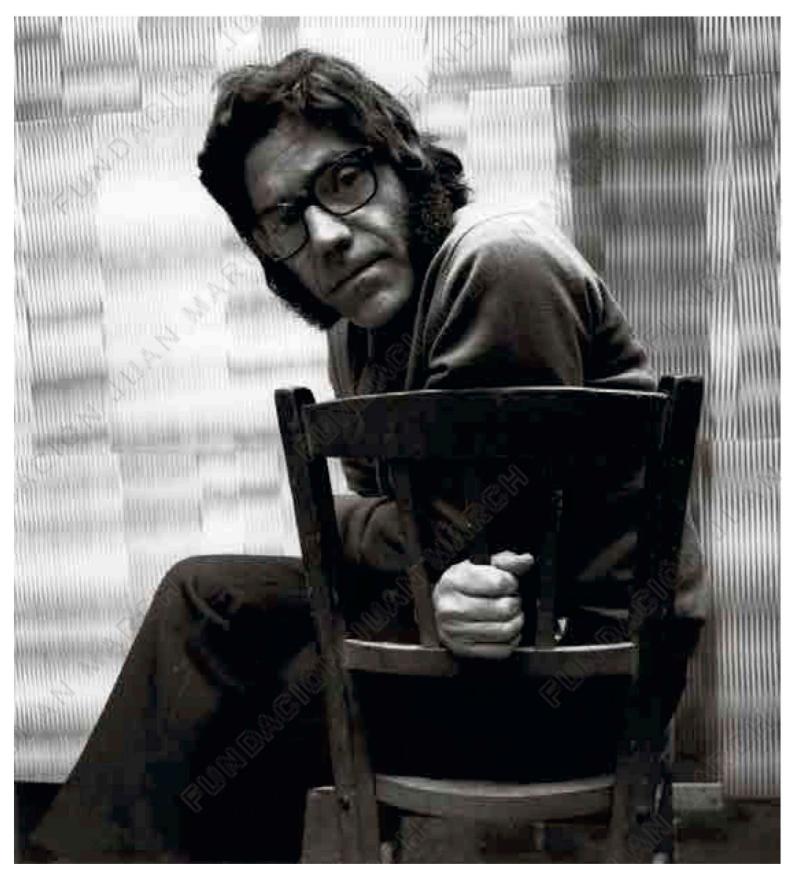
CD I was never able to get a hold of Chevereul's book, I think it was simply out of print. I came to know the fundamental principles of his work through references and fragments that had been published elsewhere, but I never read his theories first hand. I would like to point out that I conduct research from the artist's point of view. If I had devoted my time to thoroughly studying Newton's theories, the mathematical problems related to light transmission, etc., I would have been a physicist or a chemist, not a painter. Therefore, I look for information only to a certain extent, for I am not a scientist, I have no intention of being one nor do I have the training to be one. I am interested in acquiring knowledge and certain conceptual guidelines that allow me to direct my work. Considering the way ideas have evolved, an artist cannot risk being naïve or intuitive.

GC All right, let's go back to Land.

CD In his article, Land describes several experiments. Among them is a scene created by juxtaposing two identical black and white slides, one was projected through a red filter, and the second used only white light. When experimenting with the first image, he placed a red filter before the lens; and with the second, he placed a green filter before the lens. When Land projected the images he expected them to reproduce red, white and some shades of pink. However, the image reproduced the original colors quite realistically; in fact it was an accurate representation of reality. But regardless of the importance these experiments had on future notions of color, what impresses and stimulates me is the simplicity of the experiment. I imagined the possibility of working with only two colors, red and green, without mechanical help, without electronic help, by simply painting the support and generating other colors through additive synthesis. Additive synthesis is well-known process, used by both scientists and impressionist painters. Yet, not a single artist had analyzed this phenomenon, which ultimately is pictorial and can even be employed to give color autonomy. The exhibition Physichromies and Additive Color, which took place at Museo de Bellas Artes de Caracas in 1960, used these reflections as a basis.

GC And not to mention your experience as a graphic artist, photographer and amateur film director.

CD I used to take photographs back then, and I still do. I read plenty on reproduction processes, filters, photographic techniques and photomechanics. I was also interested in subjects related to film production and film systems, as seen in Lumière, Dufay Color, Technicolor, Kodachrome, etc. Reading information on color's physical qualities, physiology of vision and exchanging opinions and points of view with friends was a way of expanding my range of vision. Among these friends was Fernando Álvarez, whose writings were included in the introduction of the



Carlos Cruz-Diez in the Rue des Dames studio, Paris, 1975. Photo by Alfredo Boulton

"Looking back is only justified if one is searching for information or wants to know what ideas were proposed, which were carried out and which can be taken a step further. One should not return to the past to repeat, copy or imitate what other artists have already done." catalogue for Physichromies and Additive Color. Álvarez worked with industrial color and color applied to television and photography. He even invented a lens that could project black and white films in color. Then there were my typographer and photoengraver friends, Cromotip, Hans Weiss, Segundo Eizmendi and Jaime Catán. And also Sapkowski, who was an expert on optics and television transmission at a time when no one even thought of buying a television in Venezuela. On the other hand, thanks to the work I carried out as a typographer and graphic designer, I gained practical experience. Since I was a child, and even since elementary school, I had a vocation for typography and photography. I know how to handle a printing press and a photoengraver, and am fascinated by photomechanics. While working at El Nacional, I chose the colors for the illustrations, and gradually acquired knowledge of the technical and industrial aspects of color.

GC What definitive solutions do you find in graphic art?

CD I would say the ability to plan ahead, work methodically and develop a practical system for my ideas. I will tell you a brief anecdote that helped me understand things. In spite of having things before our eyes, we only become aware of them by chance, because sometimes chance and research go hand in hand. One day, while working on a pamphlet for the New York Philharmonic, I placed a red page next to a white one and observed that the red coloring tinged the white page. I envisioned a new technique: instead of painting a surface that was to be read frontally, I could turn this idea around. Thus, the surface would be read indirectly and lead to an immaterial, ephemeral result. Since my studio was in the same building as Cromotip's, I used the printing press to cut two-centimeter wide cardboard strips and painted one side green, the other red, and used one color for the edges. My first Physichromie was born from this experience in 1959. I gave it this name because it produced physical colors, in spite of being made of chemical coloring. This resulted from the atmosphere of color that was induced by light. I was finally close to achieving what I had pursued for so long: an unstable, arbitrary, evolving chromatic environment that changed according to the conditions of light and the spectator's viewpoint.

GC You are a strange case in Venezuelan painting. Although you belong to the same generation as the *Disidentes* and Soto, you joined their line of action, initiated in the 50s, almost ten years later. Your work was figurative until 1955, you traveled to Europe once in the 60s but did not visit Paris, where other artists had settled, instead you stayed in Spain, a country that was still recovering from a civil war... Why? What made you act so differently from your fellow painters?

CD Sometimes we hesitate and make mistakes. I decided to become a painter even before finishing high school. But back then my excitement soon turned into social awareness, I realized I was Venezuelan and lived in a society with several problems, plagued with contradictions and conflicts. As a painter, I felt it was my duty to address these problems. On the contrary, my fellow painters understood that being a painter meant "living as a painter" and confronting painting, and so they discussed Cézanne, Braque, Picasso, and Mondrian. I eventually realized I would not be able to solve labor and social problems by painting. Different problems require different solutions. But at the time I was very fond of my country, of its folklore tradition, music, geography, streetscape; and so I decided my work should depict all these things. I looked for information in narrative painting, in Flemish and Gothic art, in Brueghel. I figured these painters had witnessed their time, and by following their example I believed I could also be a painter and a witness of my time. Looking back, I realize my analysis of these paintings was superficial; I was dumbfounded by the detail of the work and its narrative and artisan qualities. Yet, I did not stop to think why they had painted a certain subject, or why narrative was so important to them. Otherwise, I would have understood that depicting reality no longer makes sense in our age. More effective means have been invented for that same purpose. I would have realized painting follows a logical path and looking back is only justified if one is searching for information or wants to know what ideas were proposed, which were carried out and which can be taken a step further. One should not return to the past to repeat, copy or imitate what other artists have already done.

GC There is a great amount of detail in your figurative painting. How did you achieve this effect? Did you paint outdoors or in your studio?

CD I used to go to a certain location, take notes or photographs, and then paint in the studio. But I was always very disappointed and unsatisfied with the results. I admired my colleagues who drew quite well, Otero, Guevara, Pascual Navarro... But I continued to look for sources of information, I studied Japanese painting and, for a brief period, favored gestural painting over drawing. I abandoned my studies in pure painting in 1942, but carried on with my courses to qualify as an art teacher. I was also in publicity, and worked as an illustrator for El Nacional for a few years, where I also made comic strips. And in a short period of time I found myself immersed in a work routine, while my friends were leaving for Paris. Soto sent a beautiful letter recounting how he had discovered Mondrian; Alejandro Otero and Mateo Manaure returned from France; I discovered Narciso Debourg's paintings, Miguel Arroyo and Arlirio Oramas' work at the Universidad Central de Venezuela and Cuatro Muros. I was also impressed by Carlos Raúl Villanueva's extraordinary work at the university campus and the artists with whom he had collaborated.

GC Besides other painters, what other sources of information did you have?

CD The publications I could get hold of in my country. I subscribed to several magazines and had a growing collection of books.

GC What magazines did you read?

CD Art d'Aujourd'hui, Art News, Domus, Du, I bought everything that reached Venezuela or at least leafed through the magazines at the De Moulines bookstore on Sábana Grande. I went there every Saturday and never missed a date. **GC** What kind of information did these publications contain?

CD Mainly information on Abstract Art, which was in its heyday at the time. It takes many years for an artist to find his work analyzed in a magazine. Same thing goes for galleries and museums. With the exception of painters, most people who visit museums and galleries are provided outdated information, for they only know the work of wellestablished artists. In order to see the latest tendencies, one must visit the artist's studio, his laboratory.

GC Did any other readings on art, other than those already mentioned on color, have a special impact on your work during this period?

CD Before setting out for Europe in 1955, I read a few books on the Bauhaus and Walter Gropius. I was intrigued by the idea of incorporating art into architecture and began my own mural projects, which were manipulatable, and cast shadows depending on the sunlight. I submitted these projects to the Official Salon in 1954 and heard comments such as, "Cruz-Diez has turned into an abstract artist." However, I was not breaking from the past. My work was simply the logical result of a process that had been many years in the making.

GC Why didn't you consider Paris when you first moved to Europe?

CD I thought of going to Paris. Not only had my generation settled there, so had the following generations of artists, Angel Hurtado, Oswaldo Vigas, Omar Carreño, Humberto Jaimes Sánchez, Hugo Batista... But I decided to go to Spain in the end, with the idea of moving to France afterwards. Instead of settling in a big city like Barcelona, I chose a town in Catalonia so I would have time to think, read and arrive at conclusions.

GC What were you reading then?

CD Artists' reflections on their own work, from Leonardo to Mondrian, including Vantongerloo, Malevich, Maholy-Nagy, Van Doesburg and Albers. I am very interested in what other artists think. Also, a peculiar thing happened during my stay in Masnou. I met two artists, Eduardo de Gregorio, a sculptor from the Canary Islands, and Miguel Villa, a post-cubist painter from Catalonia. We became good friends and met every afternoon at a café to discuss art, the only subject we ever talked about. I was amazed by the fact that they made a living out of art, whereas I had to do several non-related jobs to support my family in Caracas. I knew I was limited, and I believe any artwork is the result of acknowledging one's own limitations. I was 33 years old and still had not made anything that satisfied me, but there was still time to start over. For a long time, I had wondered why periods in art are defined by certain artists, when other first-class, or even superior, artists were also painting at the time. There were several painters contemporary to Goya and Velázquez. But why Picasso? Why Mondrian, if there are similar painters? Although posing this question may seem naïve, it was fundamental in my growth as an artist. From the academy, I inherited the belief that one had to paint well and be a painter. No one conceived the artist as an inventor who had

"The famous exhibition featuring the first kinetic works by Vaserely, Soto, Agam, Tinguely, Bury, Jacobsen, etc., had taken place at the Denise René gallery, which I visited. But all I can see and what truly has an impact on me is Soto's kinetic work, which was unknown to me."

to find his own language and create painting. Artists are usually on the lookout for new trends and movements, they try to improve them or develop them, and achieve different results depending on their talent and skill. The work had to respond to established aesthetic criteria, otherwise it would not be accepted or even considered art. I found the true starting point for my work when I realized art was invention and I required my own language to build it.

GC Do you think there is gap between your current ideas and the work you produced during that period?

CD I moved to Spain after completing my manipulatable murals in Caracas, and intended to continue my research using different materials with the aim of finally disposing of oil and canvas. But Spain was under great social strain, so obtaining non-traditional materials proved to be difficult. Hence, I returned to the picture plane and painted plantlike designs, which I called Parenchymas and Organic Signs. Although these paintings reveal signs of color vibration, I still had to elaborate a structure or method capable of presenting color in an unstable situation.

GC Do you consider *Parenchymas* and *Organic Signs* abstract works of art?

CD Do not forget I come from a long tradition of figurative and naturalist painting. I produced these organic forms because I still believed my obligation was to represent nature. Nevertheless, by using contrasting colors, I was able to create unstable forms and a virtual relief on the picture surface.

GC You went to Paris several times that year. Did anything there have a special impact on you?

CD The famous exhibition featuring the first kinetic works by Vaserely, Soto, Agam, Tinguely, Bury, Jacobsen, etc., had taken place at the Denise René gallery, which I visited. But all I can see and what truly has an impact on me is Soto's kinetic work, which was unknown to me. I felt very happy and optimistic to see he was inventing and developing his own language, because this confirmed we were on the right path. The next step involved individual growth and in-depth research. Nonetheless, art's role in society continued to be one of my main concerns. I believed it should reach as many people as possible and could not be kept in the privacy of a collection. Architecture began to appeal to me, and with this in mind I returned to Venezuela. I spoke with a number of architects, Julián Ferris, Fruto Rivas, but the country was not ready for the designs I proposed nor did it have the means to apply them. In that sense, the university campus was an exception. I had to go back to working as a graphic designer to subsist, but I also opened a Studio of Visual Arts and proceeded to carry out research. I began to polish my language and explore the eye's imperfections and the ambiguous visions it generated, in the hope of discovering an original and innovative technique. Thanks to these preoccupations, in 1959, I found a way of materializing the changing properties of color, which would serve as the basis of my future work.

GC You presented the first results of your investigations at the Museo de Bellas Artes de Caracas in 1960, and almost immediately returned to Europe. What influenced your decision to leave Venezuela this time?

CD *My* first solo exhibition Physichromies and Additive Color was received with indifference, but I knew I had finally found the platform that would enable me to develop my work. And if I had come to these conclusions in Caracas, quite surely other artists around the world had reached the same conclusions through different methods. I was afraid my effort would be in vain if another artist presented these ideas in a more receptive environment. I made the decision to leave Venezuela in August 1960. In 27 days, I shut down my Studio of Visual Arts, my home, sold all my personal belongings and left Venezuela to settle permanently in Paris.

GC What was the cultural atmosphere like there?

GD I was very optimistic upon my arrival, but found my work was received with the same indifference as in Caracas. Tachism and Art Informel were in vogue at the moment, Fautrier, Tàpies, Hartung were the vedettes of the time. The Denise René gallery was the only place where new ideas were well received. New concepts opposed to the latest trends also emerged in artists' studios.

GC What sort of concepts?

CD Just as I had proposed new investigations on color, other artists had set forth new forms of expression, such as collective art, the end of the romantic artist, programmed art, street art, movement incorporated into the work of art, new techniques to engage the spectator with the work, interaction as part of the work of art, phenomenology as a source of information, the application of electronics, mechanics, cybernetics and other technological and industrial inventions, etc. What all these concepts had in common was their rejection of the latest romantic display of art, which Art Informel represented. These artists and I would eventually go on to form part of a movement that was known as Nouvelle Tendence. This name was coined in 1963, during an exhibition at the Museum of Contemporary Art in Zagreb, where the work of more than 50 artists was on display.

GC How did you meet these artists?

CD Getting in touch with people in Paris is quite easy. My old friend Soto and Aimée Batisttini also introduced me to friends and gallery owners. I became acquainted with many artists who also wanted to change things. Julio Le Parc, Francisco Sobrino, Françoise Morellet, Yvaral and Joel Stein arrived shortly after I did and proposed I join their association Groupe de Recherche d'Art Visuel (GRAV). However, I declined their offer because I did not agree with their idea of collective work. Nonetheless, we kept in touch and continued to encourage, prepare and participate in group exhibitions and demonstrations across Europe. Denise René, whose exhibition Le Mouvement had caused sensation in 1955, liked our work and took us in. GC Did the artists of the Nouvelle Tendence meet frequently?

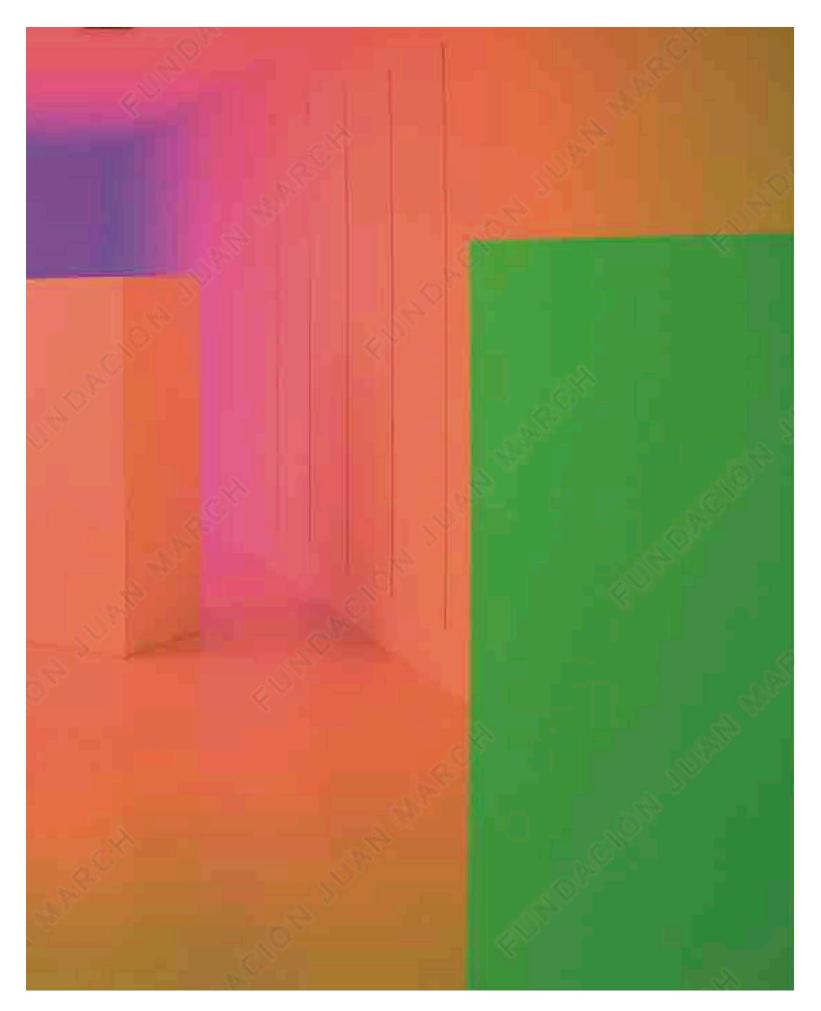
CD We met quite often. On occasions, we got together when new artists arrived from abroad, we would meet either at a café, a studio, or even at the Groupe de Recherche d'Art Visuel's studio. We discussed the causes that had led to our inquisitive spirit, and questioned our work with the intention of radicalizing concepts, not criticizing one another, in a joint effort to dismantle once and for all the scaffolding that held traditional art together. We believed traditional art was going around in circles and did not provide any new means of expression, whereas we had established the basis of a new language conveying elements and circumstances of our time. We prompted young artists, or anyone who had contributed to this new language, to express their ideas. Among other things, we agreed that only the artist should define and describe his own work. Hence, the artists themselves produced their own writings and catalogues. This caused indifference among critics, with the exception of Umbro Apolonio, Umberto Eco, Jean Clay, Frank Popper, Cyril Barret and Guy Brett. The emergence of Pop Art in the United States may explain the critics' lack of interest in Kinetic Art. Pop Art was closer to tradition, easier to understand, and therefore suited literary criticism.

GC Can you further explain what kind of critical analysis you carried out?

GD Our main objective was to move away from Surrealism, Art Informel, Contructivism, Abstract Art and its means of expression. We had to eliminate all traces of romanticism or sentimentalism. The work had to be precise and defined, a clear and simple interpretation of the perceptive problem proposed. It was important that the work be a rigorous, mathematical and programmed experiment, so as to avoid imitating what had been done by previous movements.

GC Isn't this desire to break with previous forms of expression one of the main characteristics of 20^{th} -century art?

CD We could say this desire to radically change previous forms of expression began at the end of the century, and continued to surface in the works of Gabo, Moholy-Nagy, Duchamp and Calder. Toward the end of Abstract Art it exploded and gave way to a coherent movement between 1955 and 1965 called Kinetic Art, Op Art or Environment. By 1951, artists from different countries had experimented with mathematics, serial art and transformable works. Among these artists were the Paris-based Venezuelans Soto, Debourg, Guevara, Carreño and Valera. A few years later, between 1957 and 1958, new groups emerged in Spain, Italy, Germany and France, with the objective of establishing the principles of a new language. I would like to point out Venezuela's significant contribution to renovating contemporary art's non-figurative language, especially when compared to the rest of Latin America. Naming artists such as Soto, Alejandro Otero, Debourg, Omar Carreño, Guevara Moreno, Mateo Manaure, Juvenal Ravelo, Francisco Salazar, Asdrubal Colmenares and Victor Lucena fails to do justice to the long list of artists who contributed to this project.



Chromosaturation. Inverted Utopias: Avant-Garde Art in Latin America, exhibition at The Museum of Fine Arts, Houston, Texas, 2008

"I use colors based on their effectiveness; I choose colors that conflict with one another,

producing a more powerful and noticeable effect of changing colors."

"We had to eliminate all traces of romanticism or sentimentalism. The work had to be precise and defined, a clear and simple interpretation of the perceptive problem proposed. It was important that the work be a rigorous, mathematical and programmed experiment, so as to avoid imitating what had been done by previous movements."

GC Besides meeting artists with concerns similar to yours, did living in Paris influence your work in any other way?

CD Thanks to the industrial materials I had access to there, I was able to develop techniques and find solutions to the problems I encountered in my work. Under specific circumstances, material can be the key to solving a problem; and technical difficulties may take research in new directions. For example, I began the Physichromies by using cardboard, then combined it with plastic and wood and now they are assemblages made of aluminum, acrylic, stainless steel and other materials.

GC Your studios in Caracas and Paris are full of machines of all shapes and sizes. Do these industrial materials require a long process of transformation before being incorporated into your work?

CD I have not only focused on technical difficulties, design problems and material behavior. I have also invented machines and instruments to make my work easier. When I began the first Physichromies, I encountered problems related to surface finish, time use and visual effects. Hence, I was forced to find a new direction. When a new possibility arises, I try to tackle the problem as a whole. Preparing an infrastructure to modify the materials provided by the market does not suit my purposes. I have to transform the materials, and this requires analyzing them and developing various techniques, including equipment. A traditional painter only needs to go to the shop to buy his canvas and pigments. My machines and equipment are to me what a palette and paintbrush are to the painter. My studio is full of special machines that silkscreen modules, cut and bend aluminum bands, split open dies, color them with a small amount of paint and high precision ... Sometimes I find these machines quite fun. A friend of mine says I build old machines using modern materials. The more elaborate the machine and process behind the work are, the less obvious the difficulties seem. This is precisely what appeals to me: the spectator should only perceive the spectacle of changing colors. If I had not proceeded in this manner, the defects would have been more obvious than the effects. On the other hand, problems of a different nature emerged in my architectural projects, as I had to find materials appropriate for public places and resistant to weather conditions. These limitations test your imagination and lead to new results.

GC You mentioned materials can modify the concept behind a work of art. Can you think of an example in your own work?

CD This is exactly what we were talking about earlier. You see, when I replaced the colored cardboard strips for U-shaped modules in Physichromies, I obtained a narrow plane instead of an isolated strip, which enabled me to print both diagonal and parallel strips. Stronger ranges of color could be used for each module and produce effects by interference.

GC Are you always ready to control the unpredictable elements that may arise in the Physichromies' color environments?



Carlos Cruz-Diez with journalist Abilio Suárez, Caracas, January 1960

"Above all, what interests me is effectively communicating what I want the viewer to see. My "aesthetic" can be summed up in a few words, the effectiveness of evidence. [...] Maurice **Denis was referring** to this phenomenon when he said that a square centimeter of green on a red surface was more significant than a square meter of green with no contrasts at all."

CD I can predict what is going to happen to a certain point. Several alterations occur between the strips of color. In addition to the dark diagonal that is cast on the additive color field – depending on whether it appears or not, certain strips of color vibrate – the color also reflects on the lateral aluminum bands and creates such a complex chromatic situation that I feel I am always in for a surprise. I cannot anticipate these phenomena beforehand, but I can imagine them happening, just as a musician can imagine hearing certain chords and sounds. When the chord is struck, he will experience pleasant or unpleasant surprises and know if his imagination was in keeping with reality. Once I have analyzed, rationalized and structured these surprises, I use them to improve my work, as well as my platform. Otherwise, they are just mere coincidences, a product of the past, a work without continuity.

GC I would like to take a close look at any of your Physichromies where the diagonal resource is used. How does the diagonal affect the parallel strips and bands? Does it necessarily have to be black?

CD They could be a different color, but I use black for a stronger effect. Above all, what interests me is effectively communicating what I want the viewer to see. My "aesthetic" can be summed up in a few words, the effectiveness of evidence. But going back to the diagonal mechanism, after several years of experience, I can confirm color vibration is inverted when applied on a surface. Maurice Denis was referring to this phenomenon when he said that a square centimeter of green on a red surface was more significant than a square meter of green with no contrasts at all. When a diagonal is superimposed on a series of four different colored bands bordering each other, the relationship between these colors intensifies. An interfering strip gives this relationship between colors even more dynamism and complexity. Let's look at a blue strip, an orange strip and their diagonal. As the oblique line covers the orange strip, its surface shrinks and consequently the color brightens. Since the orange is now more active, it influences the blue by modifying or reducing its intensity. But the diagonal follows its course, forgets the orange and gradually intensifies the blue, which, at the same time, alters its neighboring color, which will now vibrate with less intensity. This example applies to two strips, but in reality each band has four, which vary depending on the sequence of the colored surfaces. But as I mentioned earlier, we must also take into account the disappearing effect each lateral relief - which is either opaque or transparent – has on the four strips of additive color and the diagonal that modifies them. What's more, varying light's intensity or direction will also alter the result. Each one of my works is like a light trap that changes depending on light's intensity.

GC Can we take an even closer look at the "disappearing effect" the lateral reliefs produce on a band of four additive colors?

CD A lateral structure is really a vertical monochrome plane that changes according to the spectator's viewpoint and conceals part of its horizontal elements. Let's look at a band composed of a blue, green, red and ochre strip, in that specific order; and a gray lateral structure. If observed from the left, only a monochrome gray is perceived. But moving to the right will reveal that the gray zone has been tinged with blue. This occurs because the lateral structure exposes the blue strip that was previously concealed behind the surface. The more one moves, the bluer the gray appears. Subsequently, the green strip enters our span of vision, and from that moment on the blue and green together modify the gray. Nonetheless, the degree of alteration will depend on the surfaces one perceives. If at a given moment the green exceeds the blue, the result is a bluish-green; but if the opposite occurs, the blue emerges in full force. This is a consequence of the principle I mentioned earlier, color vibration is inverted when applied on a surface. The chromatic situation will change from gray to blue or green, but ultimately red will make its appearance and modify the gray, blue and green. If we move from right to left, the gray will be tinged with ochre first, then red modifies the gravishochre climate. Hence, the effect occurs in the opposite direction. If the spectator stands in front of the work, he will see all the colored strips and perceive the work as a whole.

GC Your lateral structures are made of polished steel, painted aluminum and transparent colored Plexiglas, which are all polished surfaces. Why did you choose this type of surface, and how does it affect the general outcome of a work?

CD The lateral structure reflects on each band's strips and is also reflected on its neighboring bands. A colored atmosphere floating above the strips is then created and modifies the spectator's perception. The combination of a real image and a virtual image reflected on the polished surface generates an additional effect related to double vision and eye focus. Since we cannot tell which lines are reflected and which are in the background, the eye perceives a sheer, transparent vision. It appears as if the two planes were separate and the one in the background were in front. Due to these color and spatial relationships, the Physichromies involve a complex process of metamorphosis. Each strip, each band, is a fascinating world in itself. Imagine what it is like when there are 60 of them, joined together to create a colored atmosphere. These phenomena are subtle and delicate, but we live in a crude, violent world, where we are constantly bombarded by color television and the polychrome universe of publicity.

GC We discussed your approach to color as having two main aspects, one emotional and the other analytical. Does this influence the creative process in any way?

CD I use colors based on their effectiveness; I choose colors that conflict with one another, producing a more powerful and noticeable effect of changing colors. Experience has shown me thin strips help create this effect, for they act more aggressively than large uniform surfaces. When different colors come into contact they are in tension, they vibrate and they cancel each other out. Additional research may involve studying which color associations are more effective. Varying the 56 or more colors I use is not enough; further selective criteria are necessary. I also have to choose between certain ranges and combinations of colors. This decision is based on a strict, functional method and my own sensibility. Although I reject personal taste because it contradicts the principles of research, I must admit I am fond of certain colors. We recognize painters' work by the particular color ranges they use, Van Gogh and Cézanne's colors are unmistakable, as are certain shades of blue that only Picasso could have painted. As any other painter I feel inclined toward certain tones of color, in spite of the rigorous method I have imposed on myself.

GC Do you use colors you are not fond of?

CD In almost all of my works, there are color surfaces that deeply satisfy me and others that leave me indifferent, but I keep those I don't like because without their presence I would be unable to put into play the dynamic of the work, what I want to communicate.

GC Have you ever gotten rid of a work that did not meet your expectations?

CD When I replace one color for another and forget about applying a method, the event of transformable color may not occur. In that case, the work would not meet my standards and I would dispose of it.

GC Do you work with all colors of the spectrum?

GD I use all colors until approximately the sixth degree. A degree is the unit a color lightens when it is mixed with white, black, or any other color.

GC Would you say artists usually aspire to achieving the best results with a minimum amount of resources? In other words, is there an unwritten law that says an artist's method should be simple?

CD That depends on the artist's personality, his emotions and his state of mind. Some artists have a baroque temperament and others are attracted to synthesis. However, these differences do not affect the final outcome and the work's effectiveness, which is what really counts.

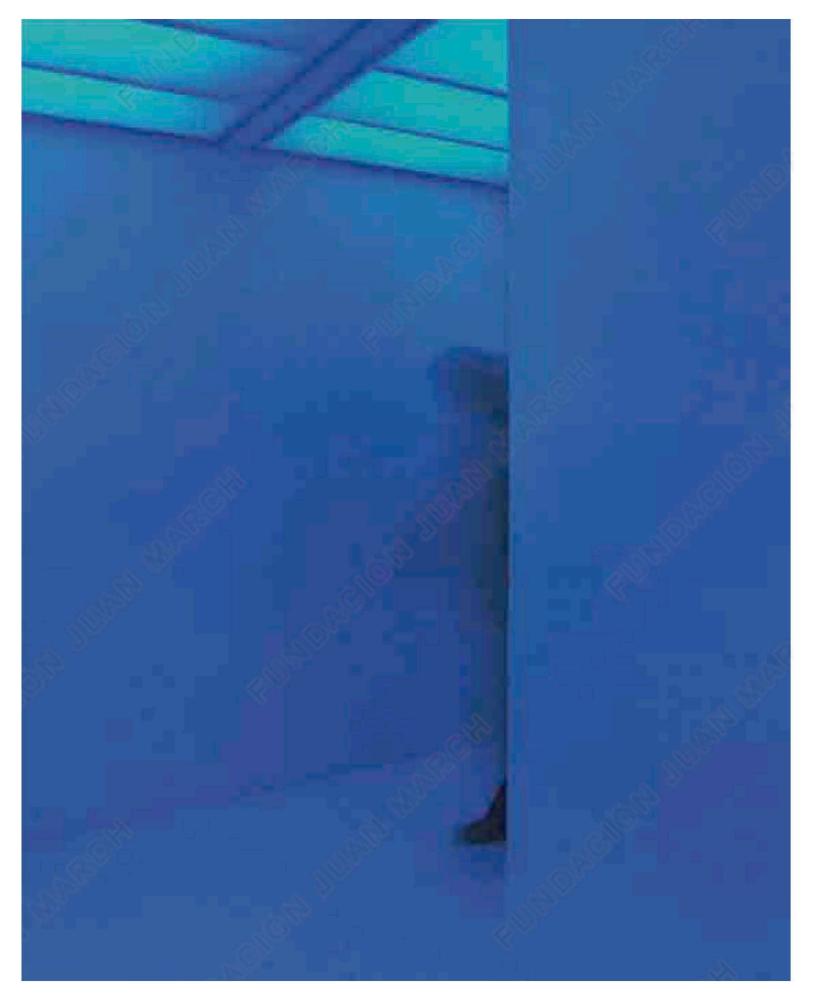
GC What about your temperament?

GD There are different ways of presenting and developing ideas. My method consists in starting at the most complicated stage and reaching the easiest one. I discard different options and select the ones I believe will be more effective once they have materialized.

GC We were discussing how a Physichromie is a monochrome situation that evolves toward another monochrome. Couldn't you construct a Physichromie where, instead of one evolving color, there were two or three?

CD A Physichromie is a complex work in itself. Adding unnecessary elements to it could be counterproductive.

GC When describing your work, you tend to use words such as "scientific" and "research" with a positive meaning. Do you also feel this way toward the scientific and technological aspects of present-day society?



Chromosaturation. XXXV Venice Biennial, Venezuelan Pavilion, Venice, 1970

"Anyone living in Caracas can see the way the city becomes a chromatic spectacle of great beauty between five and seven in the evening, the way colors change by the minute as a consequence of the diffraction of sunlight, wind and humidity. But people don't see it.

I call attention to it, through simplified means, so that people will discover it once again."

"In almost all of my works, there are color surfaces that deeply satisfy me and others that leave me indifferent, but I keep those I don't like because without their presence I would be unable to put into play the dynamic of the work, what I want to communicate." **CD** Science and technology have been decisive in our century, for good or for bad, whether we like it or not. Some artists reject the importance of this impact and their work reflects this attitude. Others accept it and believe the future of humankind lies in science, which will inevitably change the course of history. I certainly belong to the second group.

GC So you are not of the opinion that science and technology could lead to man's self-destruction?

CD No, I do not agree with that opinion. The one thing that will last in the world is humanity's sense of self-preservation. Thanks to common sense and the will to survive, human beings will not self-destruct or destroy their environment. The machine's dehumanizing role was a popular theme some time ago, however mechanization has resolved several of man's problems and has not destroyed him.

Computer science and telematics have already begun to shape our immediate future.

GC Do you think a better world awaits us?

CD Yes, why wouldn't I?

GC What is the basis for your belief?

CD I can tell from the information I hear and read everyday regarding world events, and from my own experience and knowledge of history, which allows me to draw conclusions. Circumstances, cultural contexts and the main aspects of each generation may vary; but I believe the true essence of humanity has not changed throughout history. Man forms part of the universe and is constantly looking for a sense of meaning and balance, which is closely linked to his sense of self-preservation, which I mentioned earlier. Each generation thinks it is in possession of some form of absolute truth, which is a logical way of thinking. But when compared to previous generations, it becomes obvious they all follow the same forward and backward process. The fundamental aspects of life do not vary: we move from one crisis to the other with the hope of finding balance. Although humanity may not be moving in a straight line, it is ineluctably moving toward a better ending.

GC Let's say art history represents a subset of the universal history of humanity. Would it also be affected by the same ineluctable, if imperfect, process of advancement toward a better ending?

CD Yes, the history of painting may have zigzagged, but it has never moved backwards.

GC How would you describe "moving forwards"? Does this conception of art history imply that artistic expression can only follow one path? Must one belong to an avant-garde movement in order to be considered part of the official history written by those who have contributed to painting?

CD Allow me to take a small detour in response to your questions. I have detected three variables in the history of painting that vary depending on the circumstances. The

first is artistic invention, the second is a tendency toward self-expression and the third is a desire to establish direct communication through representation. The methods used by painters to depict the world were constantly developing, and by the end of the 19th century, these techniques bordered on perfection in the work of Ingres, Géricault and David. On the other hand, the first two variables disappeared and deteriorated at certain points, as they were subjected to the artist's vision of the world. During the Renaissance, all three held an equally predominant place; Mannerism perfected its representational techniques but could not develop pictorial invention. When representational art came to an end in the 19th century, more appropriate ways of reproducing reality were finally emerging. The artist finally realized painting had found its true meaning: pure invention and communication based on the individual's ability to renew his notions of painting. As for whether painting could have followed a different path, I find this difficult to imagine because my work is part of this process. I had spent 20 years searching for the true meaning of art. So for me, finding different means to express color – a basic component of painting that few artists had taken advantage of – was a logical and necessary step to take. I found some solutions in my own research method. However, there were and continue to be methods different from mine. On the other hand, I also believe the factors leading to the development of painting were so diverse, that if one had been missing things would be different today.

GC In what way were these factors diverse?

CD There are three types of factors: external and circumstantial factors, such as political, economic, social or cultural conditions. A second would be the artworks themselves and the forms of thinking they represent. Finally, we would have to consider the artist's individual ability to react to these external and internal stimuli and apply creative techniques to his own work. I wonder if Cubism would have existed if all those ideas on relative vision had not been circulating; or if Surrealism would have prospered without Freud's writings. Scientific and mathematic progress led to the birth of Kinetic Art, for it revealed the ephemeral qualities of our world. We no longer paint as Gothic artists do, contemplating eternity, because our world is inexorably ephemeral.

GC Do you think you might run out of problems to solve within your own field of research?

CD Since I began to work under the concept of changing color I have applied diverse solutions to different works of art. Each solution has led to new problems with higher levels of difficulty. Until 1963, for example, the color climates in my work depended on the spectator's viewpoint, the position of light and certain physiological qualities of human vision. Under the same premise of engaging the viewer with the work, I considered incorporating mechanical and moveable structures. Some works are not completed unless they can be moved and manipulated, and a motor proved to be a suitable means for communication. Other factors unrelated to research also influence one's work, such as new technology, materials, etc. At present, electronics have opened a new field of possibilities and presents questions I have not posed in previous works.

GC Do you evaluate the impact of your work?

CD I have always believed that my profession as a painter requires constant research. For this reason, I consistently revise my previous work, as it may contain the starting point for a new idea. I also pay close attention to another aspect of my work, which requires evaluating the efficacy of the dialogue between the spectator and the work. Being able to confirm, determine and even explain how the viewer receives a message has been a constant guideline and reference throughout my research.

GC What is the contemporary painter's role in our society? What is his social function, and to what extent is his work linked to humanity's basic concerns?

CD There is a tendency to believe that artists must show some sort of commitment with the preoccupations and events of their time. This commitment eventually is reflected in their work, as they are expected to give their opinion on certain subjects that have nothing to do with painting. Kinetic Art has been accused of turning its back on social problems and limiting itself to optical, sensory and ludic matters. But I wonder what society really gains when an artist uses images to illustrate an event. All this does is slow down the natural evolution of pictorial ideas, taking us back to forms of thinking Géricault had already overcome in The Raft of the Medusa. These images will not bring back the dead or free the oppressed. On the contrary, they cause great harm to the history of humanity, for they hold back painting's conceptual progress, which has nothing to do with political activity. One can be revolutionary when it comes to politics and reactionary when it comes to art. The artist is especially sensitive to ideas that are crucial to his time. He feeds from different sources, takes from different disciplines and consistently applies new information to his work. Instead of simply incorporating data, he processes it and transforms it into an issue that will play a specific role within the artistic field. Under certain circumstances, the artist fulfills a certain prophetic function, ahead of his time - by several generations – and incorporating variables that, until then, no one had ever dreamed possible.

GC Do you believe researching the properties of color may reflect certain preoccupations of our era?

CD Chromatic phenomena may be one of man's preoccupations, along with a number of other activities and interests. To a certain extent, everything is important, but there are no absolute truths. Artistic expression forms part of a cultural context, of humanity's desire to improve, of society's evolving and changing properties. Color is an unstable and dynamic world. In this respect, it is similar to human beings, who are in a continuous state of transformation. But if research on color's changing properties has any sort of humanistic significance, it is thanks to its contribution to the field of art. Color experiments have increased awareness of the surrounding world and perceptive phenomena in general. "Under certain circumstances, the artist fulfills a certain prophetic function, ahead of his time – by several generations – and incorporating variables that, until then, no one had ever dreamed possible.

GC Earlier you mentioned something related to my following question, and I was hoping you could elaborate on this subject. By saying color cannot be apprehended as a whole, aren't you suggesting natural phenomena cannot be apprehended either?

CD Through my work I prove that color cannot be perceived as a permanent element. When I reveal that a certain color climate is not really red and can actually transform into any other color climate, I am suggesting, by means of an artistic discourse, that our surrounding world shares that red's unstable quality. Artistic means of expression are extremely subtle and touch different levels of sensibility. For that reason, they are didactic and teach us things at various levels.

GC It is unusual for an artist to define his work as didactic. What connotations does this word have for you?

CD The definition that is in the dictionary: the art of teaching and revealing situations that had not been apprehended before. Although a work of art may be extremely complex, it can still be didactic. For instance, Renaissance painting, despite the richness of its manifestations, demonstrates in an extraordinarily coherent way a concept that had been forgotten in Europe since the Greco-Roman era: the capacity of perceiving beauty in nature and man. My work responds to those same needs, which have been present in art throughout the ages. It is didactic in the sense that it shows individuals things they cannot perceive due to their lack of interest or competence. We become alert and awaken our perceptive abilities.

GC Aren't these didactic works meant to reach a larger number of people? Wouldn't they perform their real social function as elements integrated with architecture?

CD I would rather not speak of "integration," this term leads to many misunderstandings. The aims of architecture and visual arts are incompatible: one serves useful ends – in the good sense of the word – and the other responds to more spiritual needs. I would rather speak of "the artist's intervention in architecture," which is a function that is needed in contemporary society.

GC Why is that?

CD Because architecture is at risk of losing the humanistic qualities that characterize it. The contemporary architect tends to be more and more technical, who applies rules within a massive construction system based, above all, on economic profitability. This implies an alarming decrease in the quality of the work, an absence of creativity. The artist does not have knowledge of the rules and criteria followed by architecture. Nevertheless, it is his mission to create surprising and vivid structures within this context, transforming locations into something more than mere living and work spaces. In order to avoid mistakes and inconsistencies, a team of architects and artists must be formed before the constructive problem is resolved. When both professional criteria come together, then we can speak of art's intervention in architecture. We are very far from the methods used by traditional sculptors and muralists when they "intervened" in architecture by decorating walls or filled in constructed space. The kinetic artist cannot maintain a passive or contemplative attitude if he wishes to intervene in architecture. For this reason, he has generated a dynamic conception of space and has broadened his field of action. His work encompasses all types of architectural elements: the floor, ceiling, doors, walls, space itself, etc. These elements have the potential to become a perceptive event, an inclusive event, that will envelope, voluntarily or involuntarily, those who happen by.

CHRON (1923–2009)



OSBEL SUÁREZ

Fundación Juan March



Carlos Cruz-Diez, 1925

1923 Carlos Cruz-Diez is born in Caracas on August 17, the only child of Carlos Eduardo Cruz and Mariana Diez.

1940–**45** He studies at the Escuela de Artes Plásticas y Aplicadas in Caracas where fellowstudents include Jesús Soto, Narciso Debourg, Mateo Manaure and Alejandro Otero, among others. In 1942, he changes his major and studies to become a Teacher of Crafts and Applied Arts. At the same time, he earns money drawing comic strips and illustrations for Caracas newspapers. In 1944, he works as a graphic designer for the publications department of the Creole Petroleum Corporation (Exxon). One year later, after graduating, he starts work as a professor of painting and art history at the Escuela de Artes Plásticas y Aplicadas in Caracas. In 1941, the Rumanian artist Sandú Darié arrives in Havana. In 1944, in Buenos Aires, Gyula Kosice creates Röyi, a semiarticulated wooden sculpture that can be considered the first proto-kinetic work of art. Death of Kandinsky and Mondrian. Denise René opens her first gallery in Paris. Alejandro Otero visits Paris in 1945.

1946 Cruz-Diez is appointed artistic director of the McCann-Erickson advertising agency, a position he occupies until 1951. His artistic output during these years is characterized by the use of Social Realism. George Rickey produces his first mobile works. The Madí group is founded in Buenos Aires around the movement's two key figures, Gyula Kosice and Arden Quin.

1947 Cruz-Diez holds his first solo exhibition at the Instituto Venezolano-Americano in Caracas. Having lived in Palestine for ten years, Abraham Palatnik returns to Brazil and settles permanently in Rio de Janeiro. Narciso Debourg visits Paris.

1948 Gyula Kosice begins his investigations into Hydro-Kinetic sculpture. Eusebio Sempere makes his first trip to Paris.

1949 Sandú Darié's first solo exhibition is held at the Lyceum in Havana. Sempere makes his second trip to Paris, where he lives until 1960. Francisco Sobrino moves to Buenos Aires, remaining there for ten years. Josef Albers begins his major series *Homage to the Square*.

1950 Cruz-Diez designs the magazine *Taller* and is a member of the editorial board. Only two issues are published. In Paris, Alejandro Otero and a group of Venezuelan artists and intellectuals found the group *Los Disidentes* and the magazine of the same name.

1951 Cruz-Diez marries Mirtha Delgado. Abraham Palatnik's first Cine-chromatic device is shown at the I São Paulo Biennial on the condition that it not be considered for a prize as it did not conform to the prevailing artistic canon. In the end it is given a special mention.



Cruz-Diez and Mirtha, Paris, 1980

1952 Birth of Cruz-Diez's son Carlos.

1953 Birth of Jorge, their second son. Cruz-Diez works as an illustrator for the daily newspaper *El Nacional* in Caracas. Yaacob Agam exhibits his manipulatable reliefs at the Galerie Craven in Paris.

1954 Cruz-Diez starts to question his own output within the phenomenology of color. He works on various projects for exterior murals in which he plays with shadow and reflection. The Greek artist Takis moves to Paris. Eusebio Sempere and the Cuban painter Loló Soldevilla exhibit at the Club Universitario in Valencia. The Ciudad Universitaria is partially inaugurated in Caracas, an example of modern architecture in Latin America based on Bauhaus principles. Its architect, Carlos Raúl Villanueva, personally selected the artists involved in the project. The impressive roll call of names includes Alexander Calder, Victor Vasarely, Mateo Manaure, Alejandro Otero, Víctor Valera, Wifredo Lam, Jean Arp and Antoine Pevsner, among many others.

1955 In October, the Museo de Bellas Artes de Caracas Obras de 1949 al 55. The artist lives for a year in Masnou (Barcelona) and from there travels to Paris, visiting his fellow Venezuelan Jesús Soto, who that year had taken part in the legendary exhibition *Le Mouvement* at the Galerie Denise René. Invited by the architect Carlos Raúl Villanueva, Alexander Calder arrives in Caracas to work on the ceiling of the main hall of the Ciudad Universitaria. A retrospective of Calder's work is held at the Museo de Bellas Artes de Caracas. The Argentineans Marta Boto and Gregorio Vardanega investigate color in spatial contexts with the use of electronic devices. The Cuban painter of Rumanian origins Sandú Darié embarks on his "transformable structures."

1956 A solo show of Cruz-Diez's work is held at the Galería Buchholz in Madrid. Michel Seuphor organizes the exhibition *Mouvement* in Marseille. Antonio Asís arrives in Paris. Eusebio Sempere creates his first Luminous Reliefs. Victor Vasarely publishes the text *From Invention to Recreation*. Sandu Darié exhibits his "transformable structures" in the Social Sciences Pavilion at the University of Havana.

1957 Cruz-Diez returns to Venezuela and sets up his own graphic arts and industrial design studio. He becomes interested in the phenomena of optical perception and the color research undertaken by Isaac Newton, Johann Wolfgang von Goethe, Josef Albers, Piet Mondrian, Kasimir Malevich and others. Luis Tomasello moves to Paris. Gregorio Vardanega represents Argentina in the IV São Paulo Biennial. Gyula Kosice travels to Paris, where he lives for seven years. Death of Kupka. In July, the Galerie Denise René opens an exhibition on Equipo 57. Alejandro Otero exhibits his *Color*-

Carlos Cruz-Diez in El Nacional, 1952. Photo by Martínez Pozueta





Carlos Cruz-Diez in his Casa de las Mercedes, Caracas, 1959

Cruz-Diez in the galleries of the first exhibition of his Physichromies in the Museo de Bellas Artes de Caracas, 1960 *rhythms* at the Galería de Arte Contemporáneo in Caracas. Grupo Zero is founded in Düsseldorf, with original members Heinz Mack, Otto Piene and Günther Uecker.

1958 Cruz-Diez is appointed associate director and professor of the Escuela de Artes Plásticas in Caracas. Gyula Kosice exhibits at the Galerie Denise René. Julio Le Parc is awarded a grant by the French Cultural Service, allowing him to move to Paris. Vasarely holds an exhibition at the Museo Nacional de Bellas Artes de Buenos Aires that subsequently travels to Montevideo and São Paulo.

1959 Cruz-Diez produces his first Additive Color work and his first Physichromie. During this phase, his color range is limited to just four tones: red, green, black and white. Hugo Demarco executes his first works on optical vibration. Gruppo N is founded in Padua. The sculptor Alexander Archipenko visits Caracas and gives a lecture at the Sala Mendoza. Arturo Uslar Pietri publishes *Materials for the Construction of Venezuela*. An exhibition of paintings and drawings by Vasarely is held at the Museo de Bellas Artes de Caracas. Gregorio Vardanega and Marta Boto decide to move to Paris, as do Francisco Sobrino – who leaves Buenos Aires for that city – and Horacio García-Rossi. Gruppo T is founded in Milan.

1960 A solo exhibition of works by Cruz-Diez is held at the Museo de Bellas Artes de Caracas, which includes the first presentation of his Physichromies. In the catalogue, Cruz-Diez notes: "Starting from the additive process, I have taken red and green as the only primary colors, white as a source of light or color with more reflective power and black as the negation of light. This range applied to a single plane produces an additive mixture of colors that have not actually been applied. The result is thus a virtual or subjective color." Cruz-Diez moves to Paris where he settles permanently. Kosice exhibits with Denise René. François



Fundación Juan March

Molnar, Hugo Demarco, Morellet, Horacio García Rossi, Julio Le Parc, Vera, Francisco Sobrino, Movano, Yvaral, Stein and Servanes found the Groupe de Recherche d'Art Visuel (GRAV) in an old garage on the Rue Beautreillis in Paris. Following her decision to permanently abandon painting, Lygia Clark exhibits her Bichos (Creatures) at the Galería Bonino, comprised of metal sculptures made from cut-out aluminum sheets with hinges allowing for changes in their shape and that required the involvement of the viewer. Homage to New York by Jean Tinguely self-destructs in the garden of The Museum of Modern Art (MoMA), New York. Jesús Soto is awarded the National Painting Prize in Caracas. Carlos Raúl Villanueva publishes La integración de las artes (The Integration of the Arts). From April 5 to 30, April Gyula Kosice holds a solo exhibition of reliefs and hydraulic sculptures at the Galerie Denise René. The Chilean artist Matilde Pérez goes to Paris on a grant from the French government.

1961 Sergio Camargo moves to Paris.

1963 Cruz-Diez's daughter Adriana is born in Paris. Carlos Raúl Villanueva is awarded the National Architecture Prize. The director Enrique Pineda-Barnet makes a film of Sandú Darié's work for the Instituto Cubano de Arte e Industria Cinematográfica (ICAIC). Entitled *Cosmorama. Experimento visual y sonoro* (Cosmorama: An Audio and Visual Experiment), it is based on the principles of Kinetic Art. Hugo Demarco travels to Paris on a grant from the French government.

1964 Cruz-Diez embarks on the Chromointerferences series. From December 15 to February 28, 1965, Cruz-Diez participates in *Mouvement 2*, a group exhibition that takes up the title of the legendary exhibition of 1955, and presents itself as a form of second edition. The other participants are: Yaacov Agam, Josef Albers, Alexander Calder, Hugo Demarco, Equipo 57, Horacio García Rossi, Julio Le Parc, Gerstner, Mack, Mari, Morrellet, Mortesen, Schöffer, Sobrino, Soto, Stein, Tinguely, Uecker, Vasarely and Yvaral. Alfredo Boulton publishes the first part of his *Historia de la pintura en Venezuela* (History of Painting in Venezuela). Otero returns to Venezuela. Lygia Clark returns to Paris where she visits Soto and Sergio Camargo. That same year, she exhibits in the collective exhibition *L'Aujourd'hui de demain* (The Today of Tomorrow) together with Cruz-Diez, Camargo and Jesús Soto, among others.

1965 Cruz-Diez embarks on the Random Transchromies series. He takes part in the legendary exhibition *The Responsive Eye*, organized by New York's MoMA in collaboration with the City Art Museum of Saint Louis, the Seattle Art Museum, the Pasadena Art Museum and the Baltimore Museum of Art. Cruz-Diez explores the concept of space through the so-called *Sensory De-conditioning Box*.

1966 Cruz-Diez wins First Prize at the III Art of the Americas Biennial in Córdoba, Argentina. Carlos Raúl Villanueva publishes *Caracas en tres tiempos* (Caracas: Three Eras) and Arturo Uslar Pietri publishes *Petróleo de vida o muerte* (Petroleum: Life and Death). Julio Le Parc is awarded and accepts the International Grand Prix for Painting at the



Lygia Clark, Mirtha Cruz-Diez and Carlos Cruz-Diez in the Cruz-Diez studio, Paris, 1969. Photo by Jorge Cruz Delgado



Carlos Cruz-Diez, Jesús Rafael Soto and Narciso Debourg, Bern, 1966

XXXIII Venice Biennial, distancing himself from the founding precepts of GRAV and consciously opposing that group. Grupo Zero makes their last appearance at the Städtisches Kunstmuseum in Bonn. Equipo 57 disbands.

1967 Cruz-Diez shows *Physichromie 22* in the exhibition Lumière et mouvement at the Musée d'Art Moderne de la Ville de Paris (May-August 1967). Cruz-Diez participates in the group exhibition at the Galerie Denise René opening on December 15 and titled *From Mondrian to the Scientific*, along with Getulio Alviani, Martha Boto, Narciso Debourg, Francisco Sobrino, Jesús Rafael Soto, Luis Tomasello, Gregorio Vardanega and Victor Vasarely. In Paris, Frank Popper publishes La naissance de l'art cinétique. L'image du mouvement dans les arts plastiques despuis 1860 (published in English as Origins and Development of Kinetic Art. Greenwich, CT: New York Graphic Society, 1968).

1968 Cruz-Diez exhibits his *Chromosaturations* for *Cinetisme* at the Maison de la Culture, Grenoble. He also exhibits *Chromosaturation Showers* and *Chromatic Induction* at the Museum am Ostwall in Dortmund. Monte Ávila Editores is founded. GRAV disbands. Bridget Riley is awarded the International Prize for Painting at the XXXIV Venice Biennial. On June 25, Denise René opens a new gallery at 196, Boulevard Saint-Germain.

1969 Édition Denise René in Paris publishes Jean Clay's book *Cruz-Diez et les trois étapes de la couleur moderne* (Cruz-Diez and the Three Phases of Modern Color). Cruz-Diez holds his first solo exhibition at the Galerie Denise René. Having won the Centre National d'Art Contemporain competition, he creates the maze of Chromosaturations on Boulevard Saint-Germain in Paris at the entrance to the Odéon metro station. A retrospective of Jesús Soto is held at the Stedelijk Museum in Amsterdam and at the Musée d'Art Moderne de la Ville de Paris. Salvador Dalí exhibits a group of drawings and jewelry at the Museo de Bellas Artes de Caracas. Matilde Pérez founds the Grupo Cinético in Chile. Gego (Gertrud Goldschmidt) brings her exhibition *Reticulárea* to the Museo de Bellas Artes de Caracas. The critic and art historian Jean Clay proposes the basic principles for distinguishing Kinetic Art and Optical Art.

1970 Le Parc makes his second trip to Cuba for his solo exhibition at the Casa de las Américas. Lygia Clark, Soto, Takis and Jean Clay travel to Carboneras in Almería. An individual exhibition of the work of Getulio Alviani is held at the Galería Conkright in Caracas.

1971 Cruz-Diez is awarded the National Visual Arts Prize of 30,000 *bolivares*. The prize replaced the Official Arts Salons. The award also includes the organization of a retrospective exhibition and the publication of a monograph on the prize-winning artist. From November 17 to December 4, Cruz-Diez, along with Francisco Sobrino, exhibits for the first time in New York at the Galerie Denise René, showing 36 works. (Denise René had opened the new gallery in New York on April 29 with a solo exhibition of Yaacov Agam entitled *Transformable Transformables*.)

1972 Cruz-Diez teaches kinetic techniques at L'Unité d'Etudes et Recherches d'Arts Plastiques de l'Université Panthéon-Sorbonne (Paris I). Marta Traba, the bête noir of Soto, Cruz-Diez and all Latin American Kinetic Art, moves to Caracas and begins to write for *El Nacional*.

1973 From November to December, Cruz-Diez again exhibits at Denise René's New York gallery in the exhibition *Color Evolution*. The Museo de Arte Moderno Jesús Soto is established in Ciudad Bolívar following a donation of works by that artist.

1974 Cruz-Diez's Additive Color Atmosphere occupies the Iobby of the new Simón Bolivar International Airport in Caracas. In Caracas, he embarks on the Chromointerferences Environments series. The Museo de Arte Contemporáneo is founded in Caracas with Sofía Imber as director. In her publication *Mirar en Caracas* (Looking in Caracas. Monte Ávila Editores), Marta Traba attacks Venezuelan Kinetic Art. A Jesús Soto retrospective is held at the Guggenheim Museum in New York. Denise René brings a selection of her artists to the Galería Contacto in Caracas. She also holds an exhibition on Latin American art at the now-defunct Galería Aele in Madrid, featuring work by Cruz-Diez, Julio Le Parc, César Paternosto, María Simon, Jesús Soto and Luis Tomasello.

1975 On May 29, two exhibitions open at Denise René's two Paris galleries: *Oeuvres Récentes* (at 124, Rue de la Boétie), and *Intégrations à l'architecture. Réalisations et projects*, at 196, Boulevard Saint-Germain. Cruz-Diez executes the project *The Artist and the City* in Caracas. This project involves a series of temporary and permanent works, including the design for a street crossing and the decoration of city buses. That year, he also creates his *Additive Color Wall* and *Chromatic Induction Silos* on the Guaire river. Cruz-Diez opens a studio in Caracas. Death of Carlos Raúl Villanueva. Matilde Pérez establishes the Kinetic Visual Research Center at the University of Chile. The Galerie Denise René in New York presents a second showing of the legendary Paris exhibition *Le Mouvement* of 1955, an event that many critics believe heralds the end of the kinetic movement.

1976 Fondation Vasarely opens in Aix-en-Provence. Death of Josef Albers.

1977 Museo de La Asegurada in Alicante opens with the donation of Eusebio Sempere's private collection.

1978 Cruz-Diez, Soto, Gego and Mercedes Pardo execute various serigraphs on silk. They are exhibited at the Museo de Arte Contemporáneo in Caracas with the title La mano, la seda, el color – Taller Cobalto (Hand, Silk, Color





Additive Color Environment, Simón Bolívar International Airport, Caracas, 1974



Additive Color Wall and Chromatic Induction Cylinders, Silos of the port of La Guaira, 1975



Carlos Cruz-Diez and Sofía Imber, Caracas, 1980s



Otero, Cruz-Diez, Bocaranda and manager in Machine Room n.° 2, Raul Leoni Hydroelectric Plant, Guri, 1986

- Cobalt Workshop). Cruz-Diez exhibits at the Galería Aele in Madrid.

1979 Soto's work is exhibited at the Centre Georges Pompidou in Paris. Marta Traba leaves Caracas and moves with her husband, Ángel Rama, to Washington. Francisco Sobrino designs the Banca Cinética in Guadalajara, Spain (offices of the Banco Exterior de España, subsequently demolished).

1980 Exhibition *Didáctica y dialéctica del color* (Didactic and Dialectic of Color) opens at the Universidad Simón Bolivar in Caracas.

1981 On May 7, the Museo de Arte Contemporáneo de Caracas opens a retrospective of Cruz-Diez's work. A Julio Le Parc retrospective is held at the Museo de Bellas Artes de Caracas.

1982 Around 150 works by Jesús Soto are exhibited at the Palacio de Velázquez in Madrid, the artist's first major exhibition in Spain.

1983 The critics Marta Traba and Ángel Rama are killed in a plane crash on the outskirts of Madrid.

1985 A Luis Tomasello retrospective (1957-1984) is held at the Museo Español de Arte Contemporáneo. Eusebio Sempere dies in Onil (Alicante).

1986 Cruz-Diez participates in the II Havana Biennial as Special Invited Artist, showing five works (four Physichromies and a Color Additive). He is awarded the Order of Arts and Letters in France.

1988 Alfredo Boulton's *Art In Guri* is published, with graphic design and layout by Cruz-Diez. Lygia Clark dies at her home in Copacabana. Sandú Darié retrospective at the Museo de Bellas Artes de La Habana.

1989 The first edition of *Reflexión sobre color* (Reflection on Color) is published in Caracas.

1990 Death of Sergio Camargo and Alejandro Otero.

1991 Cruz-Diez executes *Physichromie for Madrid*, a 2 x 40-meter sculpture for the Recinto Ferial Juan Carlos I, Madrid. Death of Jean Tinguely in Bern on August 30. Death of Sandú Darié in Havana on September 2.

994 Death of Gego on September 17. Family members set up the Fundación Gego with the aim of preserving her legacy.

1995 With Random Chromatic Interactive Experience, Cruz-Diez begins to use digital technology in his works. Death of Hugo Demarco in Paris.

1997 Cruz-Diez is appointed president and member of the governing board of the Fundación Museo de la

Estampa y del Diseño Carlos Cruz-Diez in Caracas. Death of Victor Vasarely in Paris on March 14.

1999 Installation of Cruz-Diez's first and only sculpture in Havana, entitled *Chromatic Induction for Havana*, to commemorate the 40th anniversary of the founding of the Casa de las Américas. Retrospective of the work of Abraham Palatnik at the Museo de Arte Contemporáneo in Niterói.

2000 On November 30, the Ciudad Universitaria in Caracas is declared a World Heritage Site by UNESCO.

2002 Cruz-Diez is awarded the Order of Commander of Arts and Letters of France. Death of Yvaral.

2004 Death of Cruz-Diez's wife in Paris on September 10. Matilde Pérez publishes her autobiographical book Visiones geométricas (Geometrical Visions) in Santiago de Chile. Death of Marta Boto in Paris on October 13.

2005 Death of Jesús Soto in Paris on January 14.

2006 Cruz-Diez is made an Honorary Doctor by the Universidad Simón Bolívar in Caracas.

2007 Between March 27 and August 20, the Museo Nacional Centro de Arte Reina Sofía (MNCARS) presents Lo[s] Cinético[s], an exhibition that offers a trans-historical vision of Kinetic Art and emphasizes the contribution of Latin American artists. Cruz-Diez presents a Chromosaturation, Chromatic Induction and Mechanical Chromointerference on the Museum's plaza. The exhibition travels to the Instituto Tomie Ohtake in São Paulo, where it receives the Critics' Grand Prix, awarded by the Association of Art Critics.

2008 Cruz-Diez holds a solo exhibition at the Americas Society in New York, with the title (*In*)formed by Color.

2009 From March to November, the Fundación Juan March holds the first monographic exhibition in Spain on Cruz-Diez at two of its venues, the Museu d'Art Espanyol Contemporani in Palma, and the Museo de Arte Abstracto Español in Cuenca. It includes works from all periods of his career. The Fundación Juan March publishes a second, revised edition of Reflection on Color (1st ed. Caracas, 1989), as well as the first English edition, to coincide with the exhibition.



Madrid Physichromie, Recinto Ferial Juan Carlos I, Madrid, 1991



Chromosaturation, Casa de las Américas, Havana, 1999. Photo: Courtesy Casa de las Américas, Havana



Havana Chromatic Induction, Havana, 1999

EXHIB (1947–2009)



Solo Exhibitions

1947

• [*Carlos Cruz-Diez*]. Caracas, Instituto Venezolano-Americano, 1947

1955

- Carlos Cruz-Diez: Obras de 1949 al 55. Caracas, Museo de Bellas Artes de Caracas, 1955

1956

• *Carlos Cruz-Diez.* Madrid, Galería Buchholz, 1956

1960

- Cruz-Diez. Fisicromías.
 Caracas, Museo de Bellas
 Artes de Caracas, 1960
- Cruz-Diez. Fisicromías.
 Caracas, Facultad de Arquitectura y Urbanismo, Universidad Central de Venezuela, 1960

1965

- A Decade of Physichromies by Carlos Cruz-Diez. London, Signals Gallery, 1965
- *Cruz-Diez*. Turin, Galleria Il Punto Arte Moderna, 1965
- *Cruz-Diez*. Genoa, Galleria La Polena, 1965
- Physichromies de Cruz-Diez: œuvres de 1954 à 1965. Paris, Galerie Jacques Kerchache, 1965

1966

- *Cruz-Diez*. Essen, Galerie M. E. Thelen, 1966
- Fisicromías de Cruz-Diez. Caracas, Sala Mendoza, 1966

1967

- Carlos Cruz-Diez de 1964-1967. Caracas, Galerie Conkright, 1967
- Physichromien von Carlos Cruz-Diez. Cologne, Galerie Art Intermedia, 1967

1968

• [Carlos Cruz-Diez]. Cologne,

Galerie Art Intermedia, 1968

- Physicromies. Brussels, Galerie Accent, 1968
 Cruz-Diez. Oslo, Galerie Kaare Bertnsen, 1968
- Environment Tafelbild Licht und Bewegung Umgebung. Dortmund, Museum am Ostwall, 1968

1969

- Cinq propositions sur la couleur. Paris, Galerie Denise René, Rue de la Boétie, 1969
- Multiples. Paris, Galerie Denise René, Rive Gauche, 1969
- Fisicromías, transcromías y cromointerferencias.
 Caracas, Galería Conkright, 1969
- Cruz-Diez et les trois étapes de la couleur moderne.
 Paris, Editions Denise René, 1969

1970

- [Carlos Cruz-Diez].
 Frankfurt, Galerie Ursula Lichter, 1970
- [*Carlos Cruz-Diez*]. Macerata, Artestudio, 1970
- [*Carlos Cruz-Diez*]. Venice, Galleria Paolo Barozzi, 1970
- XXXV Venice Biennial.
 Venice, Venezuelan
 Pavilion, 1970

1971

- Physichromies/ Couleur Additive/ Induction Chromatique/ Chromointerférences. New York, Galerie Denise René, 1971
- Cruz-Diez, Color Evolution. New York, Galerie Denise René, 1971
- Couleur additive. Paris, Galerie Denise René, 1971
 Color aditivo. Corpose
- *Color aditivo*. Caracas, Galería Conkright, 1971
- Cruz-Diez. Caracas, Museo de Arte Contemporáneo de Caracas, 1971

1972

• *Cruz-Diez*. Munich, Galerie Buchholz, 1972

1973

- Cruz-Diez. Paris, Galerie Denise René, Rive Gauche, 1973
- Carlos Cruz-Diez: fisicromie, cromosaturazioni, induzioni cromatiche, cromointerfereze. Milan, Galleria Falchi, 1973
- Cruz-Diez. Turin, Galleria Christian Stein, 1973
- [*Carlos Cruz-Diez*]. Caracas, Museo de Arte Contemporáneo de Caracas, 1973
- Serigrafías. Caracas, Galería Conkright, 1973

1974

- [*Carlos Cruz-Diez*]. Rome, Galleria Trinità, 1974
- [*Carlos Cruz-Diez*]. Caracas, Galería Conkright, 1974
- Cruz-Diez. Caracas, Museo de Arte Contemporáneo de Caracas, Sala Cadafe, 1974

1975

- Cruz-Diez, integrations à l'architecture – réalisations et projets. Paris, Galerie Denise René, Rive Gauche, 1975
- Cruz-Diez. Paris, Galerie Denise René, Rue de la Boétie, 1975
- Carlos Cruz-Diez: Obras sobre el muro – gráficas de integración arquitectónica. Bogotá, Museo de Arte Moderno, 1975
- Carlos Cruz-Diez: Obras sobre el muro – gráficas de integración arquitectónica.
 Cali, Museo de Arte Moderno La Tertulia, 1975
- Cruz-Diez. Maracaibo, Galería Gaudí, 1975
- Cruz-Diez: Obras sobre el muro – gráficas de integración arquitectónica. Barcelona, Galería Barbie, 1975
- Cruz-Diez: Obras sobre el muro – gráficas de integración arquitectónica. Madrid, Galería Aele, 1975
- El artista y la ciudad: Cruz-Diez. Caracas, Palacio de la Gobernación del Distrito Federal, 1975

- Maquetas y fisicromías. Madrid, Escuela de Arquitectura, 1975
- Carlos Cruz-Diez. Caracas, Galería Adler-Castillo, 1975
- Cruz-Diez, integrations à l'architecture – réalisations et projets Düsseldorf, Galerie Hans Mayer, 1975

1976

- Cruz-Diez, integrations à l'architecture – réalisations et projets. New York, NY, Galerie Denise René, 1976
- *Cruz-Diez*. Bilbao, Galería de Arte Mikeldi, 1976
- Fisicromías (Cromocinetismo). Mexico D.F., Museo de Arte Moderno, 1976
- Cruz-Diez. Pamplona, Pabellón de Arte de la Ciudadela, 1976
- Carlos Cruz-Diez. Paris, Musée de la Chaux-des-Fonds, 1976

1977

- Couleur evénement. Arras, Centre Culturel Noroît, 1977
- Carlos Cruz-Diez Physichromien. Kreuzlingen, Galerie Latzer, 1977
- Carlos Cruz-Diez. Caracas, Alianza Francesa, 1977
- [*Carlos Cruz-Diez*]. Caen, Atelier de Recherches Artistiques, 1977
- Cruz-Diez Paintings & Drawings. New York, Galería Venezuela, 1977
- Art dans la rue. London, Imperial College, 1977
- Cruz-Diez. Madrid, Galería Aele, 1977

1978

- [Carlos Cruz-Diez]. Wolfsberg, Ausbildungszentrum U.S.B., 1978
- [Carlos Cruz-Diez]. Caracas, Graphic CB2, 1978
- [*Carlos Cruz-Diez*]. Zurich, Werd Pavilion, S.B.G., 1978
- Cruz-Diez, Umjetnik i grad.
 Zagreb, Galerija Suvremene, 1978
- Cruz-Diez Chromo-Kinetische/Integration

in die Architektur. Berlin, Ibero-amerikanisches Institut, 1978

- Carlos Cruz-Diez, Architectural Integration/ Art in the Street. Berkshire, University of Reading, 1978
- *Cruz-Diez*. Valencia, Centro Arte El Parque, 1978

1979

- Inducción-aducción. Caracas, Galería Arte Contacto, 1979
- [*Carlos Cruz-Diez*]. Sarajevo, Zgraf, 1979

1980

- Cruz-Diez: Didáctica y dialéctica del color. Caracas, Universidad Simón Bolívar, 1980
- Art in the Street. Liverpool, University of Liverpool, 1980
- [Carlos Cruz-Diez]. Havana, Casa de las Américas, 1980
- Carlos Cruz-Diez sérigraphie. Paris, Galerie Denise René, 1980
- Cruz-Diez. Puerto La Cruz, Galería Municipal de Arte Moderno, 1980

1981

- Cruz-Diez: Didactique et dialectique de la couleur.
 Caen, Triennale de Caen, 1981
- Cruz-Diez: Didattica e dialettica del colore.
 Pordenone, Centro Iniziative Culturali, 1981
- Intervenciones arquitectónicas.
 Caracas, Museo de Arte Contemporáneo de Caracas, Sala Cadafe, 1981
- Cruz-Diez: inducción cromática. Caracas, Museo de Arte Contemporáneo de Caracas, Sala Postel, 1981
- [Carlos Cruz-Diez].
 Düsseldorf, International Market of Contemporary Art, 1981
- Cruz-Diez. Lyon, Galerie Municipale, Saint-Priest, 1981
- Cruz-Diez: Didáctica y dialéctica del color. Havana, Casa de Las Américas, 1981

- [*Carlos Cruz-Diez*]. Stockholm, Galeria Konstruktive Tendens, 1981.
- Cruz-Diez. Mérida, Venezuela, Galería de Arte Ing. Rolando Oliver Rugeles, 1981
- Cruz-Diez: Didáctica y dialéctica del color. Maracay, Corpoindustria, 1981

1982

- Cruz-Diez: Didáctica y dialéctica del color. Mexico D.F., Museo de Arte Carrillo Gil, 1982
- Cruz-Diez: Didactique et dialectique de la couleur. Arras Centre Noroît, 1982
- Carlos Cruz-Diez. Ferrara, Palazzo dei Diamanti, 1982

1983

- Cruz-Diez en la arquitectura. Caracas, Facultad de Arquitectura y Urbanismo, Universidad Central de Venezuela, 1983
- [Carlos Cruz-Diez].
 Barquisimeto, Galería Lea, 1983
- Didactic and Dialectic in Colour. London, University of Reading, 1983

1984

- [*Carlos Cruz-Diez*]. Tokyo, Satani Gallery, 1984
- [*Carlos Cruz-Diez*]. Cali, Museo La Tertulia, 1984
- Cruz-Diez. Barranquilla, Galería Jairo Quintero, 1984
- [*Carlos Cruz-Diez*]. Valencia [Venezuela], Galería Centro Arte El Parque, 1984

1985

- Carlos Cruz-Diez. Medellín, Museo de Arte Moderno, 1985
- [Carlos Cruz-Diez]. Bogotá, Museo de Arte Moderno, 1985
- [*Carlos Cruz-Diez*]. Medellín, Galería Arte Autopista, 1985
- Cruz-Diez. Frankfurt, Interstoff Art Gallery, 1985
 [Carlos Cruz-Diez]. Castres,
- Hôtel de Ville, 1985

1986

- XLII Venice Biennial. Venice, 1986
- *Cruz-Diez*. Paris, Galerie Denise René, 1986
- [*Carlos Cruz-Diez*]. Roldanillo, Museo Rayo, 1986
- Cruz-Diez: Didactic and Dialectic of Colour.
 Belgrade, Bibliothèque
 Nationale de Serbie, 1986
- Cruz-Diez: Didactic and Dialectic of Colour. Krakow, Galerie Krzystofory, 1986
- Cruz-Diez: Didactic and Dialectic of Colour. Athens, Centre Culturel, 1986

1987

- Carlos Cruz-Diez. São Paulo, Gabinete de Arte Raquel Arnaud, 1987
- [Carlos Cruz-Diez].
 Stockholm, Galerie
 Construktiv Tendens, 1987
- Didactic and Dialectic of Colour. Copenhagen, Frederiksberg Raadhus, 2000, 1987
- Cruz-Diez, Autonomie der Farbe. Düsseldorf, Galerie Schöeller, 1987
- Cruz-Diez y el color.
 Caracas, Alianza Francesa, 1987
- Cruz-Diez. Didáctica y dialéctica del color. El Tigre, Complejo Cultural Simón Rodríguez, 1987
- *Cruz-Diez*. Ciudad Guayana, Sala de Arte Sidor, 1987

1988

- Cruz-Diez, Autonomie der Farbe. Kaiserlautern, Galerie Wack, 1988
- *Cruz–Diez, Autonomie der Farbe*. Bottrop, Quadrat–Josef Albers Museum, 1988
- *Cruz-Diez*. Valera, Ateneo de Valera, 1988
- *Cruz-Diez.* Táchira, Ateneo del Táchira, 1988



 Carlos Cruz-Diez, Bilder als chromatische ereignisse. Zurich, Stittung für Konstruktive und Konkrete Kunst, 1989

- *Cruz-Diez*. Munich, Galerie Hermanns, 1989
- Carlos Cruz-Diez. São Paulo, Gabinete de Arte Raquel Arnaud, 1989

1990

- *Cruz-Diez*. Châteauroux, Abbaye des Cordeliers, 1990
- *Cruz-Diez.* Munich, Galerie Hermanns, 1990

1991

- [Carlos Cruz-Diez]. Valencia [Venezuela], Espacio Simonetti, 1991
- Carlos Cruz-Diez en la arquitectura. Caracas, Centro Cultural Consolidado, 1991
- [*Carlos Cruz-Diez*]. Düsseldorf, Galerie Schöeller, 1991
- Couleurs additives.
 Otterndorf/Cuxhaven,
 Museum Moderner Kunst,
 1991
- Color-acontecimiento.
 San José, Museo de Arte
 Costarricense y Galería de
 Arte Contemporáneo, 1991

1992

- La visión del color. Maracay, Museo de Arte de Maracay, 1992
- Cruz-Diez: Didáctica y dialéctica del color. Caracas, CONAC, 1992
- [*Carlos Cruz-Diez*]. Venice, Galleria Verifica 8+1, 1992

1993

- Cruz-Diez: l'avvenimentocolore. Milan, Galleria Vismara Arte, 1993
- Cruz-Diez: l'avvenimentocolore. Turin, Galleria Narciso, 1993
- Carlos Cruz-Diez. Mannheim, Galerie Lauter, 1993
- 35 años de gráfica. Valencia [Venezuela], Espacio Simonetti, 1993
- [Carlos Cruz-Diez]. Mérida
 [Venezuela], Consejo
 Nacional de la Cultura
 CONAC, 1993
- Cruz-Diez: Colours Vision.
 London, Bolivar Hall, 1993
 Grug Diag Coloure
- Cruz-Diez: Colours

Vision. Cambridge, Clare Hall Gallery, Cambridge University, 1993

- [Carlos Cruz-Diez]. Puerto Ordaz, Del Sur E.A.P., 1993
- [*Carlos Cruz-Diez*]. Caracas, Museo de Bellas Artes, 1993
- Carlos Cruz-Diez. Caracas, Feria Iberoamericana de Arte (FIA), Galería Graphic/ CB2, 1993

1994

- Cruz-Diez: rétrospective et œuvres récents 1954-1994.
 Paris, Galerie Denise René, Rive Gauche et Espace Marais, 1994
- Cromosaturación de Carlos Cruz-Diez, metamorfosis de lo efímero. Santo Domingo, Museo de Arte Moderno, 1994
- *Cruz-Diez.* Bologna, Arte Feria '94, Galleria Vismara, 1994
- [*Carlos Cruz-Diez*]. Sevey, Château Courtry, 1994
- Carlos Cruz-Diez: color en mutación. Caracas, Graphic/CB2, 1994

1995

- Cruz-Diez. Oslo, Centre
 Culturel Français, 1995
- *Cruz-Diez*. Kaiserslautern, Galerie Wack, 1995
- [*Carlos Cruz-Diez*]. Caracas, Feria Iberoamericana de Arte (FIA), Galería Graphic CB/2, 1995
- [Carlos Cruz-Diez]. Seoul, Stand Manif Seoul 95,1995
- [Carlos Cruz-Diez]. Mérida
 [Venezuela], Galería La
 Otra Banda, Universidad de
 Mérida, 1995
- Reflexión sobre el color. Caracas, Museo Jacobo Borges, 1995

1996

- [Carlos Cruz-Diez].
 Maguncia, Galerie Gosse
 Bleiche, 1996
- Cruz-Diez, fisicromías, cromovelas, inducciones cromáticas. São Paulo, Gabinete de Arte Raquel Arnaud, 1996
- Carlos Cruz-Diez,
 - Physichromien. Düsseldorf,

Galerie Schöeller, 1996

 Cruz-Diez: el cromático acontecer. Caracas, Grupo Li Centro de Arte, 1996

1997

 Carlos Cruz-Diez, La Visión del Color. Maracaibo, Art Nouveau Galería, 1997

1998

- El color autónomo. Bogotá, Museo de Arte Moderno de Bogotá, 1998
- Carlos Cruz-Diez, Und gebe dem Raum die Farbe. Gelsenkirchen, Städtisches Museum Gelsenkirchen, 1998
- Homenaje al maestro Cruz-Diez. Caracas, Sala de Exposiciones PDV, 1998
- Carlos Cruz-Diez, un pionero del diseño en Venezuela. Caracas, Museo de la Estampa y del Diseño Carlos Cruz-Diez, 1998
- Cruz-Diez: Rétrospective 1954-1998. Ciudad Bolívar, Museo de Arte Moderno Jesús Soto, 1998
- Carlos Cruz-Diez, el arte en la arquitectura. Ciudad Guayana, Sala de Arte Sidor, 1998.

1999

- *Retrospectiva 1954-1998.* Maracaibo, Museo de Arte Moderno del Zulia, 1999.
- La obra múltiple.
 Maracaibo, Art Nouveau
 Galería, 1999
- Cruz-Diez, la visión del color. Barquisimeto, Fundación Juan Carmona, 1999.
- Carlos Cruz-Diez, acontecer cromático. Havana, Casa de las Américas, 1999
- Carlos Cruz-Diez, Chromatic Encounter. Miami, Durban Segnini Gallery, 1999

2000

- [*Carlos Cruz-Diez*]. Salies, Galerie 17, 2000
- *Miami Art Fair*. Miami, Palm Beach, 2000
- [*Carlos Cruz-Diez*]. Paris, Galerie Vivendi, 2000
- Carlos Cruz-Diez: originaux

multiples. Basel, Éditions Fanal, 2000

- Cruz-Diez: rouge, vert, bleu: les couleurs du siècle. Düsseldorf, Galerie Schöeller, 2000
- Cruz-Diez. Vernet-La-Varenne, Centre Culturel du Château de Montfort, 2000
- *Carlos Cruz-Diez, acontecimientos cromáticos.* Caracas, Galería Dimaca, 2000

2001

 Cruz-Diez: de lo participativo a lo interactivo. Caracas, Fundación Corp. Group, 2001

2002

- Carlos Cruz-Diez. Paris, Galerie Lavignes-Bastille, 2002
- *Cruz-Diez*. Créteil, Galerie d'Art de Créteil, 2002

2003

- *Carlos Cruz-Diez.* Essex, University of Essex Collection of Latin American Art, 2003
- Carlos Cruz-Diez. Basel, Espace FANAL, 2003
- Cruz-Diez: de lo participativo a lo interactivo, otra noción del color. Valencia [Spain], Salle d'exposition L'Almudí, 2003
- [*Carlos Cruz-Diez*]. Caracas, Fundación Museo de la Estampa y del Diseño Carlos Cruz-Diez, 2003

2004

- Cruz-Diez: couleur événement. Paris, Galerie Lavignes-Bastille, 2004
- [*Carlos Cruz-Diez*]. Basel, Art Basel, Atelier Éditions FANAL, 2004
- Carlos Cruz-Diez: Another Notion about Colour. London, Tambo Gallery, 2004
- Carlos Cruz-Diez, cámara de cromosaturación.
 Caracas, Fundación Museo de la Estampa y del Diseño Carlos Cruz-Diez, 2004
- Cruz-Diez. Aigües-Mortes,

Chapelle des Capucines, 2004

2005

- Carlos Cruz-Diez. Houston, TX, Sicardi Gallery, 2005
- Cruz-Diez: la couleur dans l'espace. Paris, Galerie Denise René, Espace Marais, 2005
- Carlos Cruz-Diez, petits formats, editions multiples.
 Paris, Galerie Lavignes-Bastille, 2005

2006

- Carlos Cruz-Diez, die farbe im raum. Sulzburg/ Breisgau, Galerie Edition Konkret Martin Wörn, 2006
- La vida en el color.
 Caracas, Galería Fundación Previsora, 2006
- Hommage à Cruz-Diez.
 Paris, Espace Meyer-Zafra,
 2006
- 50x50 Carlos Cruz-Diez. Caracas, Sala Trasnocho Arte Contacto, 2006
- Carlos Cruz-Diez, die farbe im raum, Kleinformate und Multiples. Ettlingen, Galerie Emilia Suciu, 2006

2007

- Carlos Cruz-Diez. Houston, TX, Sicardi Gallery, 2007
- *Carte blanche à Cruz-Diez.* Paris, Galerie Denise René, Rive Gauche, 2007
- *Cruz-Diez, la couleur dans l'espace.* Paris, Maison de l'Amérique Latine, 2007
- Cruz-Diez, a cor no espacao. São Paulo, Gabinete de Arte Raquel Arnaud, 2007

2008

- [*Carlos Cruz–Diez*]. Mexico D.F., Galería Pablo Goebel Fine Arts, 2008.
- Cruz-Diez. Madrid, Galería Cayón, 2008
- De lo participativo a lo interactivo. Frankfurt, General Konsulat Venezuela, 2008
- Cruz-Diez. Marcigny, Centre d'Art Contemporain Frank Popper, 2008.
- In (formed) by Color: Carlos

Cruz-Diez. New York, NY, Americas Society, 2008– 2009

- Carlos Cruz-Diez: el color sucede. Palma, Mallorca, Museu d'Art Espanyol Contemporani, Fundación Juan March, 2009
- Carlos Cruz-Diez: el color sucede. Cuenca, Museo de Arte Abstracto Español, Fundación Juan March, 2009

Selected Group Exhibitions

1949

- Exposiciones de las nuevas generaciones de pintores venezolanos. Caracas, Taller Libre de Arte, 1949

1953

 São Paulo Biennial. São Paulo, 1953

1958

- Exposition Internationale de Bruxelles. *Doce Pintores Venezolanos*. Brussels, Venezuelan Pavilion, 1958

1961

- Le mouvement.
 Amsterdam, Stedelijk
 Museum Amsterdam, 1961
- *Le mouvement*. Stockholm, Moderna Museet, 1961
- [title unknown].
 Copenhagen, Louisiana
 Museum of Modern Art,
 1961
- [title unknown]. Paris, Galerie Denise René, 1961
 [title unknown]. Paris, Galerie Iris Clerc, 1961

1962

- XXXI Venice Biennial. Venice, 1962
- Art latino-américain à Paris. Paris, Musée d'Art Moderne, 1962
- 17 Venezuelan Painters. New York, NY, 1962
- 17 Venezuelan Painters. Haifa, 1962
- Anti-peinture. Antwerp,

Hessenhuis, 1962

 Krit-Punto 2. Barcelona, Palacio de la Virreina, 1962



- Nove Tendencije 2. Zagreb, Suvremene Umjetnosti, 1963
- Panorama de la Nouvelle Tendance. Amsterdam, Galerie Amstel, 1963
- Venezuela: du paysage à l'expression plastique, 10 artistes contemporains. The Hague, Musée Maison de la Culture du Havre; Madrid, Museo de Arte Contemporáneo; Geneva, Musée Rath, 1963

1964

- Nouvelle Tendance. Paris, Musée des Arts Décoratifs, 1964
- First Pilot Show of Kinetic Art. London, Signal Gallery, 1964
- II Art of the Americas Biennial. Córdoba [Argentina], 1964
- Second Pilot Show of Kinetic Art. London, Signals, 1964
- Mouvement 2. Paris, Galerie Denise René, 1964
- 20 artistas suramericanos/20 South American Artists, Mexico D.F., Kaiser Foundation; New York, NY, Kaiser Foundation; Oakland, CA, Kaiser Foundation, 1964
- Neue Tendenzen. Leverkusen: Städtisches Museum, 1964
- Oeuvres de Pol Bury, Cruz-Diez, Harry Kramer y Soto.
 Paris, Galerie Kerchache, 1964

1965

- The Responsive Eye. New York, NY, The Museum of Modern Art; Seattle, WA; City Art Museum of Saint Louis, MO, 1965
- Lumière et mouvement. Bern, Kunsthalle Bern, 1965
- Lumière, mouvement et optique. Brussels, Palais des Beaux Arts, 1965
- Art and Movement. Tel Aviv,

Museo de Tel-Aviv, 1965

- Artistes latino-américains de Paris. Paris, Musée d'Art Moderne de la Ville de Paris, 1965
- De l'Art Constructif au mouvement. Paris, Galerie Denise René, 1965
- Soundings Two. London, Signals Gallery, 1965



- Lumière et mouvement.
 Baden-Baden, Staatliche
 Kunsthalle Baden Baden,
 1966
- III Art of the Americas Biennial. Córdoba [Argentina], 1966
- Art of Space. Johannesburg, Art Center, 1966
- Blanc sur blanc. Bern, Kunsthalle Bern, 1966
- [title unknown]. Paris, Galerie Kerchache, 1966

1967

- Lumière et mouvement. Paris, Musée d'Art Moderne de la Ville de Paris, 1967
- *Kinetica*. Vienna, Museum des XX Jahrhunderts, 1967
- Latin American Art 1931-1966. New York, NY, The Museum of Modern Art, 1967
- IX São Paulo Biennial: Venezuela. Cruz-Diez, Mario Abreu, Harry Abend. São Paulo, 1967
- Cinq voitures personnalisées. Paris, Fondation Rothschild, 1967

1968

- Art vivant 65-68. Saint-Paul-de-Vence, Fondation Maeght, 1968
- Art Cinétique et espace. Le Havre, Musée du Havre, 1968
- Art Optique. Oslo, Kunstnernes Hus Oslo, 1968
- Cinétisme. Grenoble, Maison de la Culture de Grenoble, 1968
- Environment Tafelbild Licht und Bewegung Umgebung. Dortmund, Museum am Ostwall, 1968

1969

 Festival International de la Peinture. Cagnes-sur-Mer, 1969

1970

- XXXV Venice Biennial. Venice, 1970
- Constructivist Tendencies. New York, NY, George Rickey Collection, 1970

1971

 IX International Exhibition of Graphic Arts. Ljubljana, 1971

1972

- 12 ans d'art contemporain en France. Paris, Grand Palais, 1972
- Las artes plásticas en Venezuela: primera exposición. Caracas, Museo de Bellas Artes de Caracas, 1972
- Art et technologie. Creusot, 1972
- Cruz-Diez Soto. Lyon, Galerie Formes et Muraux, 1972

1974

- Latin American Prints from MoMA. New York, NY, Center for Inter-American Relations, 1974
- Galerie Denise René à Madrid. Carlos Cruz-Diez, Julio Le Parc, Cesar Paternosto, Maria Simon, Jesus Rafael Soto, Luis Tomasello. Madrid, Galería Aele, 1974

1975

- Plural: An Exhibition of Painting and Sculpture by Twelve Latin American Artists. Austin, TX, University of Texas, 1975 L'agil on guestion Arras
- L'oeil en question. Arras, Centre Noroît, 1975
- Art-Cinétique. Montbéliard, Château de Montbéliard, 1975
- [title unknown]. Caracas, Sala de Exposiciones de la Gobernación del Distrito Federal, 1975

1976

- Panorama de l'art français contemporain (1960-75). Tehran, Galerie Mehre Sha, 1976
- Creadores latinoamericanos contemporáneos 1950-1976: pinturas y relieves. Mexico D.F., Bosque de Chapultepec, Museo de Arte Moderno, 1976

1977

- Trois villes, trois collections.
 Paris, Centre Georges
 Pompidou, 1977
- Panorama de l'art français contemporain (1960-1975). Rabat, Galerie Nationale de Bab-Rouah; Tunisia, Galerie Yahia, 1977

1978

- L'œil en action. Paris, Centre Georges Pompidou et Musée National d'Art Moderne, 1978
- Systèmes et séries. La Chaux-de-Fonds, 1978
- Foire Internationale de Bâle: Aspect de l'Art en France. Basel, 1978
- XII International Biennial of Graphic Arts. Ljubljana, 1978

1979

- Panorama de Arte Francesa. Lisbon, 1979
- Arte Constructivo venezolano 1945-1965: génesis y desarrollo. Caracas, Galería de Arte Nacional, 1979
- XV São Paulo Biennial. Retrospective of prize winners. São Paulo, 1979

1980

 Arte constructivo venezolano 1945-1965.
 Caracas, Galería de Arte Nacional, 1980

1981

• Trois jours d'Art Cinétique. Marseille, Ecole d'Art de Luminy, 1981

1982

- L'Amérique latine à Paris. Paris, Grand Palais, 1882

1984

- Aspects de la peinture contemporaine. Troyes, Musée d'Art Moderne, 1984
- Carte blanche à Denise René. Paris, Paris Art Center, 1984
- Échange d'art contemporain, Tokyo-Paris. Tokyo, Satani Gallery, 1984
- Journées de la couleur. Paris, Musée National des Sciences, des Techniques et des Industries, 1984

1985

- Forty Years of Modern Art: 1945-1985. London, Tate Gallery, 1985
- Estructuras repetitivas. Madrid, Fundación Juan March, 1985
- Forme constructive aspects de l'Art Géométrique. Zurich, S.B.G., 1985

1986

- *L'art et la couleur*. Cholet, Musée Cholet, 1986
- Primeira Exposição Internacional de Esculturas Efemeras. Fortaleza, 1989
- Jóvenes y maestros: arte contemporáneo latinoamericano. Rome, Instituto Italo-Latino Americano, 1986

1987

• XVII International Biennial of Graphic Arts. Ljubljana, 1987

1988

- *Konkrete Kunst*. Bonn, Blumenhalle, 1988
- Abstracto óptico cinético. Medellín, Galería de Arte Villanueva, 1988
- La couleur seule. Lyon, Musée d'Art Contemporain, 1988
- Latin American Spirit: Art and Artists in the United States, 1920-1970. New York, NY, Bronx Museum of the Arts; El Paso, TX, El Paso Museum of Art; San Diego, CA, San Diego Museum of Art; San Juan, PR, Instituto de Cultura Puertorriqueña,

1988

 Art Construit, lumière et mouvement. Paris, Galerie Denise René, 1988

1989

- Realities of Painting. Moscow and Leningrad, Pushkin Museum, 1989
- Art in Latin America: The Modern Era, 1820– 1980. London, Hayward Gallery; Stockholm, National Museum Moderna Museet; Madrid, Palacio de Velázquez, 1989
- Norske Internasjonal Grafikk Triennale. Fredrikstad, 1989
- *Révolution Flash-Back.* Paris, Paris Art Center, 1989
- Aventuras de la óptica: Soto y Cruz-Diez. Granada, Palacio de los Condes de Gabia, 1989
- The Aspects of Contemporary Painters in Paris. Taiwan, Taiwan Museum of Art, 1989
- Collection 1989. Lyon, Musée d'Art Contemporain de Lyon, 1989
- La couleur seule: l'expérience monochrome. Lyon, Musée d'Art Contemporain de Lyon, 1989

1990

- L'expérience de la couleur en France après '45. Marseille, 1990
- Homenaje al cuadrado. Madrid, Galería Theo, 1990

1991

- Erling Neby Collection. Oslo, Nordjyllands, 1991
- Tradition and Innovation. Washington D.C, Museum of the Americas, 1991
- Couleur de la vie, cent peintres témoignent pour l'homme. Châteauroux, Abbaye des Cordeliers Châteauroux, 1991



• Latin American Art of the Twentieth Century. Seville, Expo Sevilla '92; New York, NY, The Museum of Modern Art, 1992

- L'art en mouvement. Saint-Paul, Fondation Maeght, 1992
- *Visiones de américas.* Granada, Instituto de América, 1992
- Art d'amérique latine: 1911-1968. Paris, Centre Georges Pompidou, 1992
- Primer Simposio Internacional de Escultura. San Juan, PR, Jardín Botánico de la Universidad de Puerto Rico, 1992
- Mirando a la América Latina y el Caribe: cuarenta y tres pintores en la Plaza de América. Seville, Museo de Arte de las Américas, 1992

1993

- Latin American Artists of the Twentieth Century.
 Cologne, Köln Kunsthalle;
 New York, NY, The Museum of Modern Art, 1993
- Mouvement. Sydney, Museum of Modern Art, 1993
- Manifeste, une histoire parallèle 1960-1990. Paris, Centre Georges Pompidou, 1993
- First Egyptian International Print Triennial, Giza, 1993
- The George and Edith Rickey Collection of Constructivist.
 Purchase, NY, Neuberger Museum of Art, State University of New York, 1993

1994

 Otero, Cruz-Diez y Soto, tres maestros del abstraccionismo en Venezuela y su proyección internacional. Caracas, Galería de Arte Nacional GAN, 1994

1995

- La transparence dans l'art du XX siècle. Le Havre, Musée des Beaux Arts André Malraux, 1995
- Mednarodni Biennial of Graphic Arts. Lujbjana, 1995
- Fredrikstad Triennale.
 Norks Internasjonal Grafikk.
 Fredrikstad, 1995

1996

- 100 Peintres de l'école de Paris 1945-1975. Paris, Maison de l'Unesco, 1996
- Cinquante ans d'Art Construit: hommage à Denise René. Strasbourg, Hôtel du Département, 1996
- Lumière et mouvement.
 Paris, Galerie Denise René, 1996

1997

Erling Neby's Collection.
 Pori, Pori Art Museum, 1997

1998

 Kinetische Kunst.
 Gelsenkirchen, Stätisches Museum, 1997

1999

 Fanal: Konstruktive Kunst-Konkrete Kunst.
 Niebüll, Richard-Haizmann Museum, 1999

2000

- XXV São Paulo Biennial. São Paulo, 2000
- Heterotopía: medio siglo sin lugar, 1918-1968. Madrid, Museo Nacional Centro de Arte Reina Sofía, 2000
- 20th-Century Art Forms and Movements: Homage to Denise René. Ibaraki, Tsukuba Museum of Art; Marugame, Genichiro Inokuma Museum of Contemporary Art, 2000

2001

- Denise René l'intrépide.
 Paris, Centre Georges
 Pompidou, 2001
- El arte abstracto y la galería Denise René. Las Palmas de Gran Canaria, Centro Atlántico de Arte Moderno CAAM, 2001
- Estampes originales d'artistes contemporains de l'atelier Del Arco. Châtillon, Maison des Arts, 2001
- 20th-Century Art Forms and Movements: Homage to Denise René. Urawa, Urawa Art Museum; Himeji, Himeji City Museum of Art, 2001
 Light and Movement in

20th-Century Abstract Art. Seoul, Gallery Hyundai, 2001

Veranstaltungen. Ingolstadt, Museum für Konkrete Kunst, 2001



- 22 of the Future for the Future of Vukovar. Zagreb, Museum of Contemporary Art, 2002
- Geométricos e cinéticos.
 São Paulo, Gabinete de Arte Raquel Arnaud, 2002
- Paralelos: arte brasileira da segunda metade do século XX em contexto, Colección Cisneros. São Paulo, Museo de Arte Moderno, 2002

2003

- Une Tour Eiffel haute en couleurs. Paris, Centre Georges Pompidou, 2003
- Art in Motion. Tytsjerk, Kunsttentoonstelling Bos van Ypeij, 2003
- La donation Jeunet. Une collection d'art Contemporaine. Neuchâtel, Musée d'Art et d'Histoire, 2003
- Alternating Currents. Essex, University of Essex-Collection of Latin American Art, 2003

2004

- 50 quadrat ein aktueller überblick über die internationale konkrete kunst. Salzburgo, Galerie Konkret Martin Wörn, 2004
- Beyond Geometry: Experiments in Form 1940s
 70s. Los Angeles, CA, Los Angeles County Museum of Art; Miami, FL, Miami Art Museum, 2004
- Inverted Utopias: Avant-Garde Art in Latin America. Houston, TX, The Museum of Fine Arts Houston, 2004
- MoMA at El Museo: Latin American and Caribbean Art from the Collection of The Museum of Modern Art. New York, NY, El Museo del Barrio, 2004
- Movimiento, color y volumen. Maracaibo, Art

Nouveau Galería, 2004 **2005**

- Art construit Art concret, donation Eva-Maria Fruhtrunk. Cambrai, Musée de Cambrai, 2005
- Arte gráfico universal: selección de dibujos y obra gráfica universal. Valencia [Spain], Real Sociedad Valenciana de Agricultura y Deportes, 2005
- L'œil moteur: art optique et cinétique 1950-1975. Strasbourg, Musée d'Art Moderne et Contemporain, 2005
- Mouvement et lumière.
 Paris, Mairie du 10^e
 Arrondissement, 2005

2006

- Certain Encounters: Daros-Latin America Collection. Vancouver, Morris and Helen Belkin Gallery, University of British Columbia, 2006
- Cruce de miradas: Visiones de América Latina.
 Colección Patricia Phelps de Cisneros. Mexico D.F.,
 Museo del Palacio de Bellas Artes, 2006
- Die Neuen Tendenzen. Ingolstadt, Museum für Konkrete Kunst, 2006
 22 from the Euture: In
- 22 from the Future: In Memory of Anna Palange. Moscow, Museum of Modern Art, 2006
- Horizontales, verticales, seules: Art Concret.
 Pontoise, Museé Tavet-Delacour, 2006
- La utopía cinética: 1955-1975. Palma, Mallorca, Centro Cultural Sa Nostra, 2006
- The Sites of Latin American Abstraction. Miami, FL, Cisneros Fontanals Art Foundation, 2006
- Volume réel, couleur Virtuelle: oeuvres chromatiques de Carlos Cruz-Diez et sculptures d'Agüeda Lozano. Châtillon, Maison des Arts de Châtillon, 2006
- Riflemaker becomes Indica.

London, Riflemaker Gallery, 2006

2007

- After Image: Op Art of the 1960s. New York, NY, Jacobson Howard Gallery, 2007
- Paris du monde entier: artistes étrangers à Paris 1900-2005. Tokyo, The National Art Center, 2007
- Die Neuen Tendenzen-Eine europäische Künst Lerbewegung 1961-1963. Düren, Leopold-Hoesch-Museum, Hoeschplatz, 2007
- La utopía cinética. Palma, Mallorca, Fundación SA NOSTRA, Caixa de Balears; Seville, Caja San Fernando, 2007
- Lo[s] cinético[s]. Madrid, Museo Nacional Centro de Arte Reina Sofía; São Paulo, Instituto Tomie Ohtake, 2007
- *Op Art.* Frankfurt, Schirn Kunsthalle, 2007
- Optic Nerve: Perpetual Art of the 1960s. Columbus, OH, Columbus Museum of Art, 2007
- The Geometry of Hope: Latin American Abstract Art from the Patricia Phelps de Cisneros Collection. Austin, TX, Blanton Museum of Art; New York, NY, Grey Art Gallery, 2007
- Constructing a Poetic Universe: The Diane and Bruce Halle Collection of Latin American Art. Houston, TX, The Museum of Fine Arts, 2007
- Nyehaus Becomes INDICA. New York, NY, Nyehaus Gallery, 2007
- Oscar Carvallo/Printempsété 2008: du cinétique au digital. Paris, Musée des Arts Décoratifs, 2007

2008

- Color! die farbe in der konkreten kunst. Salzburg, Galerie Konkret Martin Wörn, 2008
- Collective cinétique. Paris, Espace Meyer Zafra, 2008
- Construyendo el vacío: Arte

moderno de la colección del Museum of Fine Arts de Houston. Mexico D.F., Museo de Arte Moderno, 2008

- *Escalera de color*. Madrid, Galería Cayón, 2008
- Experiment Marathon Reykjavik. Reykjavik, Reykjavik Art Museum, 2008
- Face to Face: Part 2. Zurich, The Daros Collections, 2008
- Revolução Cinética. Lisbon, Museu Nacional de Arte Contemporânea – Museu do Chiado, 2008
- Gestern war...heute ist.
 Otterndorf, Museum
 Gegenstandsfreier Kunst,
 2008
- *Sculptures*. Paris, Galerie Denise René, 2008
- Amérique latine, un certain art abstrait. Saint-Tropez, Musée de Saint-Tropez, 2008
- Latin American Art, Masters of the 20th Century. Seoul, National Museum Deck Su Kung, 2008
- Arte em movimento. Rio de Janeiro, Espaço Eliana Benchimol, 2008



RAPHY GRAPHY

CONTENTS

- I. Interviews
- II. Texts by the Artist
- III. Texts on the Artist III.I. Articles and
 - Monographs
- III.II. Catalogue Essays
- IV. General Bibliography
- V. Filmography

I. Interviews

- CANIZALES MÁRQUEZ, José, "Carlos Cruz-Diez y su pintura," *La Esfera* (Caracas, October 17, 1955).
- GASH, Sebastián, "Cruz-Diez," *Destino* (Barcelona, June 9, 1956).
- MYLOS, "Dans l'atelier des artistas," *Destino* (Barcelona, 1956).
- GUEVARA, Roberto,
 "Entrevista con Carlos Cruz-Diez," *Imagen* (Caracas, May 15, 1967).
- MARIELLE, Dominique and Brigitte Tetart, "Interview du peintre Carlos Cruz-Diez," (Paris, April 25, 1970).
- RAMOS GUIGNI, Ángel, "Entrevista a Cruz-Diez," Universidad de Carabobo, n.º 29 (Carabobo, 1971)
- BATALLÁN, Lorenzo, "Carlos Cruz-Diez. Cada artista debe sacudir el confort intelectual de su generación," El Nacional (Caracas, January 7, 1972).
- MADRID, Antonieta, "Los demagogos aún no se han dado cuenta que la cultura es promoción," Últimas Noticias (Caracas, January 16, 1972).
- RAMOS GIUGNI, Ángel,
 "Cruz-Diez a la ofensiva," 12 Pintores y Críticos de Arte (Caracas, Consejo Municipal del Distrito Federal, 1976).
- FREROT, Christine, "El arte es la invención pura" (Paris, August 4, 1979).
- ANTILLANO, Laura, "Entrevista a Carlos Cruz-Diez," Atelier de Cruz-Diez (Paris, July 22, 1981).
- CARNEVALI, Gloria, "Entrevista con Carlos Cruz-Diez," in *Cruz-Diez* [exh. cat., Museo de Arte Contemporáneo de Caracas, Caracas, 1981].
- ORTEGA, Gisela, "Carlos Cruz-Diez: la pintura es inofensiva," *El Diario de Caracas* (Caracas, May 2, 1982).
- ARMÁS ALFONZO, Alfredo. Inquietudes para motivar las reflexiones de Carlos

Cruz-Diez, Caracas, 1985.

- TOVAR, L., Entrevista con Armando Barrios y Carlos Cruz-Diez, Alcaldía del Estado Miranda, c. 1985.
- YÉPEZ, Corina, "Carlos Cruz-Diez: cada generación tiene que inventar su arte," La Antorcha (El Tigre, August 22, 1985).
- ABINADÉ, José, "El color conquistó su autonomía," *Kena*, n° 499 (Caracas, August 14, 1986).
- GARRIDO, Alberto, "Uruguay agradece a Venezuela su ayuda en los años difíciles. Carlos Cruz-Diez: A mí nadie me ayudó," *El Diario de Caracas* (Caracas, February 18, 1986).
- DÍAZ SOŚA, Carlos, "Una obra de Cruz-Diez en el corazón de Londres," *El Nacional* (Caracas, July 13, 1986).
- GORRÓCHOTEGUI, Haydée, "Siempre he sido cañonero," La Revista de Caracas (Caracas, 1986).
- CARNEVALI, Gloria, "Entrevista a Carlos Cruz-Diez," in *Cruz-Diez* [exh. cat., Sala de Arte Sidor, Ciudad Guayana, 1987].
- GUEDEZ, Víctor,
 "Escuchando a Carlos Cruz-Diez" (Caracas, 1990).
- SOCORRO, Milagros, "Somos el único país empobrecido por la riqueza," *El Globo* (Caracas, August 2, 1992).
- FERNÁNDEZ NAYS, Antonio, "El pintor desobediente," *La Revista de Caracas* (Caracas, 1992).
- BORZACCHINI, Chefi, "Carlos Cruz-Diez desafía el equilibrio," *Latinoamigo* (Caracas, 1992).
- VALERA, María Cecilia, "Entrevista a Carlos Cruz-Diez," in *Cruz-Diez* [exh. cat., Museo de Arte de Maracay, Maracay, 1992].
- SANCHEZ R., Óscar, "Carlos Cruz-Diez," Criterios. Revista de Economía y Finanzas, 4th yr., n.° 42 (Caracas, 1994)
- MONSALVE, Yasmín, "Carlos Cruz-Diez duende

de cuentos cinéticos," *El Nacional* (July 2, 1995).

- XURIGUERA, Gérard,
 "Entretien à Cruz-Diez: identité, influence et universalité," *Demeures* & *Chateaux*, n.º 86 (Paris, 1995).
- LLABANERO, Néstor Luis, "Carlos Cruz-Diez, Hay que inventar una nueva sociedad," Galería, 6th yr., n.° 308 (Maracaibo, 1997).
- WIROTZKI, Rubén, "En los países latinos el éxito es penalizado," *El Nacional* (Caracas, February 6, 1997).
- CARRANO, Ana María, "Tunga y Cruz-Diez, artistas de lo insólito," *El Nacional* (Caracas, October 25, 1998).
- BERTHEMY, Odile, "Carlos Cruz-Diez dans la fusion de la couleur," Angelines, n.º 20 (Fall-Winter, France, 1999).
- FERNÁNDEZ A., María Consuelo, "La consigna es la invención," *Feriado* (Caracas, 1999).
- GARCÍA RODRÍGUEZ, Agustín, "¿Demasiado feliz para ser artista?," Sivensa Global (Caracas, 1999).
- VILLAR LISTE, Violeta, "Alquimista 24 horas sobre 24," El Impulso de Gala, n.° 226 (Barquisimeto, August 27, 2000).
- TEMPEL, Íngrid, "La perfección es una acumulación de fracasos," *El País Cultural*, XII yr., n.° 586 (Montevideo, January 26, 2001).
- TORRES, Vladimir, "Carlos Cruz-Diez a todo color," Últimas Noticias, 1st yr., n.° 17 (Caracas, July 8, 2001).
- PÉREZ-URBANEJA, Elina, "Entrevista al maestro Cruz-Diez" (Paris, May 19, 2002).
- JIMÉNEZ, Ariel, "Entrevista a Carlos Cruz-Diez" (Caracas, 2003).
- PADRÓN, Leonardo, "El mundo en movimiento de Carlos Cruz-Diez," in Los Imposibles, conversaciones al borde de un micrófono.

Caracas: Ediciones Aguilar, 2006.

- SALUM, Rose Mary, "Ni pasado ni futuro: la historia empieza con uno y termina con uno mismo," *Literal Latin American Voices*, vol.
 9 (Houston, TX, Summer 2007).
- ULRIĆH OBRIST, Hans,
 "Carlos Cruz-Diez," in Conversations. Paris: Manuella Éditions, 2008
- CRUZ-DIEZ, Carlos, "Carlos Cruz-Diez, Interviewed by Hans Ulrich Obrist, 2007," in Sydney Biennial: *Revolutions-Forms that Turn*. Sydney, 2008.

ll. Texts by the Artist

- CRUZ-DIEZ, Carlos, essay in *Fisicromías Cruz-Diez* [exh. cat., Museo de Bellas Artes, Caracas, 1960].
- _____, essay in *Cruz-Diez* [exh. cat., Galleria II Punto Arte Moderna, Turin, 1960].
- _____, "Transchromies, 5 planches manipulables avec une introduction de l'auteur," in A Decade of Physichromies by Carlos Cruz Diez [exh. cat., Signals Gallery, London, 1965].
- _____, essay in Lumière et mouvement [exh. cat., Musée d'art Moderne de la Ville de Paris, Paris, 1967].
- _____, "Hacia un nuevo conocimiento del color," in *Cruz-Diez: color aditivo* [exh. cat., Galería Conkright, Caracas, 1971];
 "Toward a New Knowledge of Color," in *Cruz-Diez* [exh. cat., Galerie Denise René, New York, NY, 1971].
- , essay in *Cruz-Diez* [exh. cat., Galleria Christian Stein, Turin, 1973].
- , "Verso una nuova conoscenza del colore," in Carlos Cruz-Diez: fisicromie, cromosaturazioni, induzioni cromatiche, cromointerfereze [exh. cat., Falchi Arte Moderna, Milan, 1973].

_____, essay in *Cruz-Diez* [exh. cat., Galerie Denise René Rive Gauche, Paris, 1973].

_____, essay in *Cruz-Diez* [exh. cat., Galería Gaudí, Maracaibo, 1975].

_____, "Propositions faites pour l'aménagement de la Place du Venezuela par M. Carlos Cruz-Diez," in *La Place du Venezuela à Paris.* Caracas: Editorial Arte, 1975.

_____, essay in Cruz-Diez: intégrations à l'architecture-réalisations et projets [exh. cat., Galerie Denise René, Paris; New York, NY; Düsseldorf, 1975].

_____, essay in Cruz-Diez: obras sobre el muro – gráficas de integración arquitectónica [exh. cat., Galería Barbié, Barcelona; Galería Aele, Madrid; Museo de Arte Moderno de Bogotá, Bogotá; Museo de Arte Moderno La Tertulia, Cali, 1975; Galería de Arte Mikeldi, Bilbao, 1976].

_____, essay in *Cruz-Diez* [exh. cat., Pabellones de Arte Ciudadela, Caja de Ahorros Municipal de Pamplona, 1976].

_____, essay in *Carlos Cruz-Diez* [exh. cat., Alianza Francesa, Caracas, 1977].

• _____, "Kinetische Kunst," in *Carlos Cruz-Diez Physichromien* [exh. cat., Galerie Latzer, Kreuzlingen, 1977].

_____, essay in *Cruz-Diez: didáctica y dialéctica del color* [exh. cat., Universidad Simón Bolívar, Caracas, 1980].

_____, essay in *Cruz-Diez* [exh. cat., Galería Municipal de Arte Moderno, Puerto La Cruz, 1980].

_____, "Didattica e dialettica del colore," in *Cruz-Diez:* didattica e dialettica del colore [exh. cat., Galleria Sagittaria, Pordenone, 1981; Sala d'Arte "Benvenuto Tisi," Palazzo dei Diamanti, Comune di Ferrara, 1982];

"Didactique et dialectique de la couleur." in *Cruz-Diez*: didactique et dialectique de la couleur [exh. cat., Galerie Municipale d'Exposition de Saint-Priest, Saint-Priest, 1981; Centre Culturel Noroît, Arras, 1982; "Didáctica y dialéctica del color," in *Cruz-Diez*: didáctica y dialéctica del color [exh. cat. Museo de Arte Contemporáneo de Caracas, Caracas, 1981; Corpoindustria, Maracay, 1981: Museo de Arte Carrillo Gil, Mexico D.F., 1982; Complejo Cultural Simón Rodríguez, El Tigre, 1987]; "Didactic and Dialectic of Colour," in Cruz-Diez: Didactic and Dialectic of Colour [exh. cat., Athens Cultural Centre, Atenas; National Library of Serbia, Belgrado, 1986; Frederiksberg Raadhus, Copenhagen, 1987]: "Didaktik und Dialektik der Farbe," in *Cruz-Diez*: Didaktik und Dialektik der Farbe [exh. cat., Insterstoff Art Gallery, Frankfurt, 1985].

, "La construcción de un lenguaje," in Cruz-Diez exh. cat., Galería Quintero, Barranguilla, 1984]; El Espectador, n.º 100 (Bogotá, 1985); in Carlos Cruz-Diez en el Museo de Arte Moderno de Medellín [exh. cat., Medellin, 1985]; in Aventuras de la óptica: Soto y Cruz-Diez, [exh. cat., Palacio de los Condes de Gabia, Granada (Granada: Diputación Provincial, 1989)]; "La construction d'un langage," in Art d'Amérique Latine 1911-1968 exh. cat. Centre Georges Pompidou, Paris, 1992].

, "Pourquoi la réflexion sur la couleur," in *Cruz-Diez* [exh. cat., Galerie Denise René, Paris, 1986]; in *La couleur seule* [exh. cat., Musée d'Art Contemporain, Lyon, 1988].

_____, essay in *Cruz-Diez* [exh. cat., Sala de Arte Sidor, Ciudad Guayana, 1987].

, essay in *Cruz-Diez* [exh. cat., Ateneo de Valera, Estado Trujillo, 1988].

_____, essay in *Cruz-Diez* [exh. cat., Ateneo del Táchira, Táchira, 1988].

el color. Caracas: Fabri-Art, 1989.

, "Reflexión sobre el color," in *Cruz-Diez* [exh. cat., Museo de Arte de Maracay, 1992]; "Riflessione sul colore," in *Cruz-Diez: L'avvenimento-colore* [exh. cat., Galleria d'Arte Narciso, Turín; Galleria Vismara Arte, Milan, 1993]; "Reflection on Color," in *Chromatic Encounter* [exh. cat., Durban Segnini Gallery, Miami, 1998].

_____, "Pourquoi intervenir dans l'architecture?," in *Cruz-Diez* [exh. cat., Abbaye des Cordeliers, Châteauroux, 1990].

_____, essay in *Cruz-Diez: Inducciones Cromáticas* [exh. cat., Espacio Simonetti, Centro de Arte Contemporáneo, Valencia, Venezuela, 1991].

, "Vers une notion de la "bidimensionnalité," in *L'Art en mouvement* [exh. cat., Fondation Maeght, Saint-Paul, 1992].

_____, essay for Primer Simposio Internacional de Escultura en Puerto Rico, Jardín Botánico de la Universidad de Puerto Rico, San Juan, 1992.

, "Hacia otra visión de la bidimensionalidad," in *35 años de gráfica* [exh. cat., Espacio Simonetti, Valencia, Venezuela, 1993].

 _____, "Gedanken zum Thema Farbe, 1989" in [exh. cat., Museum für Konkrete Kunst, Ingolstadt, 1993].

_____, "The Street as Art/Event Venue," in *Carlos Cruz-Diez* [exh. cat., Galerie Lavignes-Bastille, Paris, 2002]. _____, essay in *34* *grafica opera prima* [exh. cat., Muzeum Okregowe w Toruniu, Torun, Polinia, 2000].

, essay in 22 of the Future for the Future of Vukovar [exh. cat., Museum of Contemporary Art, Zagreb, 2002].

_____, "Physichromien. Programm," in *Op Art* [exh. cat., Schirn Kunsthalle, Frankfurt, 2007].

, "The Construction of a Language," in Jiménez, Ariel (ed.), Alfredo Boulton and his Contemporaries: Critical Dialogues in Venezuelan Art 1912-1974. New York, NY: The Museum of Modern Art, 2008.

ll. Texts on the Artist

III.I. ARTICLES AND MONOGRAPHS

- ABADIE, Daniel, "La couleur virtuelle de Cruz-Diez," *Cimaise*, n.° 162/163 (special issue on Cinétisme, Paris, 1983).
- AREAN, Carlos, "La integración espectacular de Cruz-Diez," Gazeta del Arte (Madrid, 1975).
- BARCENAS, Alejandro. Carlos Cruz-Diez y Soto. Memoria, Escuela de Filosofía, Universidad Central de Venezuela, Caracas, [n.d.].
- BENKO, Susana. A todo color, Carlos Cruz-Diez.
 Caracas: Ediciones Tecolote, 2006.
- BORDIER, Roger. *Cruz-Diez ou la couleur comme événement*. Paris: Cimaise, 1971.
- BOULTON, Alfredo. *Cruz-Diez*. Caracas: Ernesto Armitano Ediciones, 1975.
- _____. *El arte en Guri*. Caracas: Ediciones Edelca, 1986.
- _____. La cromoestructura radial. Homenaje al Sol de Carlos Cruz-Diez. Caracas:

Macanao Ediciones, 1989.

- CLAY, Jean. Cruz-Diez et les trois étapes de la couleur moderne. Paris: Éditions Denise René, 1969. Reprinted in Plural (Mexico D.F., June 1974).
- CHARRIÉR, Edmond, "La couleur dans l'oeuvre de Carlos Cruz-Diez." Masters' thesis in Art History, Université de Genève, Geneva, 1972.
- DORANTE, Carlos. *Carlos Cruz-Diez*. Caracas: Ediciones Instituto Nacional de Cultura y Bellas Artes, Arte 4, 1967
- GONZÁLEZ TARBAY, Carlos, "L'oeuvre cinétique de Carlos Cruz-Diez, un art qui s'intègre à l'architecture, à l'espace urbain et à l'environnement." Masters' thesis, Máster Recherche 1, Histoire d'Art et de l'Archéologie, Université Paris IV La Sorbonne, Paris, 2006.
- GUERRERO, Ángel Ciro. Hay que meditar cada paso que deba darse en este difícil camino hacia la revolución... (Special issue commemorating the master of universal Kineticism). Mérida: Editorial Cambio de Siglo, 2001.
- JIMÉNEZ, Ariel, "Cruz-Diez et la couleur." Masters' thesis in Art History, Université La Sorbonne, Paris, 1982.
- PIERRE, Arnauld. *Cruz-Diez*. Paris: La Différence, 2008.
- POPPER, Frank.
 Physichromies de Cruz-Diez, oeuvres de 1954
 à 1965. Paris: Édition J.
 Kerchache, 1965.
- Place du Venezuela à Paris. Caracas: Editorial Arte, 1977.
- RODRÍGUEZ, Bélgica, "The Transformable Work of Art. Carlos Cruz-Diez: 1959-1965." Masters' thesis in Art History, Courtauld Institute of Art, London, 1976.
- _____. La pintura abstracta en Venezuela: 1945-1965. Caracas: Maraven, 1980.

- SCHARA, Julio César. Carlos Cruz-Diez y el arte cinético. Mexico D.F.: Ediciones Arte e Imagen, Consejo Nacional para la Cultura y las Artes, 2001.
- SILVA, Carlos. Carlos Cruz-Diez y la ciudad, 2000.
- SPÄTH, Franz Albert, "Carlos Cruz-Diez: le graphiste et l'inventeur au service de l'artiste, intégration du technique dans l'oeuvre plastique." Masters' thesis, DEA, Esthétique, Sciences et Technologies des Arts, Université Paris VIII, Saint-Denis, 2000.

III.I. CATALOGUE ESSAYS

- APARICIO, Antonio, essay in Carlos Cruz-Diez: obras de 1949 al 55 [exh. cat., Museo de Bellas Artes, Caracas, 1955].
- QUINTANA Castillo, Manuel, "La peinture vénézuélienne à la XXXI Biennale de Venise," in XXXI Biennale di Venezia [exh. cat., Venice, 1962].
- _____, "Carlos Cruz-Diez," in Segunda Bienal Armando Reverón [exh. cat., Museo de Bellas Artes, Caracas, 1963].
- DIEHL, Gastón, "Plastique vénézuélienne," in Venezuela. Del paisaje a la expresión plástica. 10 artistas contemporáneos [exh. cat., Musée Maison de la Culture du Havre, Le Havre; Museé Rath, Ginebra; Museo de Arte Contemporáneo, Madrid]. Madrid: Museo de Arte Contemporáneo, 1963.
- RINGSTROM, Karl K., essay in *Transition* [exh. cat., Galerie d'Art Ravenstein, Brusels, 1964].
- POPPER, Frank, "Cruz-Diez," in Physichromies de Cruz-Diez: œuvres de 1954 à 1965 [exh. cat., Galerie J. Kerchache, Paris, 1965].
- CLAY, Jean, essay in Fisicromías de Cruz-Diez [exh. cat., Sala de Exposiciones Fundación Eugenio Mendoza, Caracas, 1966].

- KULTERMANN, Udo, essay in *Carlos Cruz-Diez* [exh. cat., Galerie M. E. Thelen, Essen, 1966].
- CLAY, Jean, "Carlos Cruz-Diez," in IX Bienal de São Paulo [exh. cat., São Paulo, 1967]
- POPPER, Frank, essay in Environment Tafelbild Licht und Bewegung Umgebung [exh. cat., Museum am Ostwall, Dortmund, 1968]
- CLAY, Jean, "Cruz-Diez et les trois étapes de la couleur moderne," in *Cruz-Diez et les trois étapes de la couleur moderne* [exh. cat., Galerie Denise René, Paris, 1969].
- POPPER, Frank, "Cruz-Diez, l'avvenimento-colore," in XXXV Biennale di Venezia [exh. cat., Venice, 1970].
- _____, "L'art cinétique," in *L'art cinétique* [exh. cat., Palais des Sports, Nanterre, 1970].
- MIHALJI-MERIN, Otto,
 "Time, Light, Motion: Abstract Art since 1945," London: Thames and Hudson, 1971.
- ALLEXANT, Jean Luc, "Douze ans d'art contemporain en France," in 12 ans d'art contemporain en France [exh. cat., Grand Palais, Paris]. Paris: Ministère des Affaires Culturelles, Musées Nationaux, 1972.
- POPPER, Frank, "Cruz-Diez: l'événement couleur," in *Cruz-Diez-Soto* [exh. cat., Galerie Formes et Muraux, Lyon, 1972].
- GUEVARA, Roberto, "Carlos Cruz-Diez. Génesis, eclosión y absoluto del color," in *Cruz-Diez* [exh. cat., Museo de Arte Contemporáneo, Caracas, 1974].
- BESSET, Maurice, "Carlos Cruz-Diez, artista venezolano, Fisicromías (Cromocinetismo)," in *Creadores latinoamericanos contemporáneos 1950-1976: pinturas y relieves* [exh. cat., Museo de Arte Moderno, Bosque de Chapultepec, Instituto

Nacional de Bellas Artes, Chapultepec, 1976].

- BOULTON, Alfredo, "Soto y Cruz-Diez, expresiones de su tiempo, del barro de los indios a la inducción cromática" [exh. cat., OCI, Caracas, 1976]
- _____, "Carlos Cruz-Diez," in *Cruz-Diez* [exh. cat., Alianza Francesa, Caracas, 1977].
- SEYLAZ, Paul, essay in Carlos Cruz-Diez [exh. cat., Musée des Beaux-Arts de la Chaux-de-fonds, Paris, 1976].
- POPPER, Frank, essay in Cruz-Diez [exh. cat., Galería Aele, Madrid; Centre Culturel Noroît, Arras, 1977].
- CLAY, Jean, "Cruz-Diez y las tres etapas del color moderno," in *Cruz-Diez* [exh. cat., Galería Aele, Madrid; Centre Culturel Noroît, Arras, 1977].
- BESSET, Maurice, essay in *Cruz-Diez* [exh. cat., Galería Aele, Madrid; Centre Culturel Noroît, Arras, 1977].
- POPPER, Frank, essay in Carlos Cruz-Diez.
 "Architectural integration" / Art in the Street. Works and Projects [exh. cat., Ibero-amerikanisches Institut Preussischer Kulturbesitz, Berlin; Palmer Building (Foyar) Whiteknights, University of Reading, Berkshire, 1978].
- CLAY, Jean, "Cruz-Diez und die drei etappen der modernen farbe," in Carlos Cruz-Diez. "Architectural integration" / Art in the Street. Works and Projects [exh. cat., Iberoamerikanisches Institut Preussischer Kulturbesitz, Berlin; Palmer Building (Foyar) Whiteknights, University of Reading, Berkshire, 1978].
- BESSET, Maurice, essay in Carlos Cruz-Diez.
 "Architectural integration" / Art in the Street. Works and Projects [exh. cat., Ibero-amerikanisches Institut Preussischer

Kulturbesitz, Berlin; Palmer Building (Foyar) Whiteknights, University of Reading, Berkshire, 1978]

- APOLONIO, Umbro, "La obra cinética de Cruz-Diez," in Cruz-Diez: didactique et dialectique de la couleur [exh. cat., Centro Iniziative Culturali, Pordenone, 1981].
- _____, "Il cinestismo di Carlos Cruz-Diez," in *Carlos Cruz-Diez* [exh. cat., Galleria Sagittaria, Pordenone, 1981; Sala d'Arte "Benvenuto Tisi," Palazzo dei Diamanti, Comune di Ferrara, 1982].
- BESSET, Maurice, "L'opera di Cruz-Diez integrata nell' architettura," in *Carlos Cruz-Diez* [exh. cat., Galleria Sagittaria, Pordenone, 1981].
- CAYEZ, Pierre, "Cruz-Diez et l'art optique," in *Cruz-Diez* [exh. cat., Galerie Municipale d'Exposition de Saint- Priest, 1981].
- RIVERA, Francisco, "Diálogo con Carlos Cruz-Diez," in *Cruz-Diez* [exh. cat., Galería de Arte Rolando Oliver Rugeles, Mérida, Venezuela, 1981].
- _____, "Palabras de Cruz-Diez puestas a mover por Alfredo Boulton," in *Cruz-Diez* [exh. cat., Museo de Arte Contemporáneo de Caracas, Caracas, 1981].
- SALVADÓR, José María, "La colección del Museo de Arte Contemporáneo de Caracas en sus nuevos espacios: un valioso contenido para un continente nuevo," in *Museo de Arte Contemporáneo de Caracas. Obras de la Colección* [exh. cat., Museo de Arte Contemporáneo de Caracas, Caracas, 1982].
- ABADIE, Daniel, "Échange d'art contemporain Tokyo-Paris 8+8," in Échange d'Art Contemporain, Tokyo-Paris [exh. cat., Satani Gallery, Tokyo, 1984].
- ARGAŃ, Giulio Carlo, essay in *Exacta*. Milan, 1985.
- MARCHÁN FIZ, Simón, "A Rose is a Rose is a Rose...

Figuras de la identidad y el hacerse visible del arte desde lo elemental," in *Estructuras repetitivas* [exh. cat., Fundación Juan March, Madrid, 1985].

- BOULTON, Alfredo, essay in *Cruz-Diez y el color* [exh. cat., Alianza Francesa, Caracas, 1987].
- MAHLOW, Dietrich, essay in *Cruz-Diez, Autonomie der Farbe* [exh. cat., Museum Quadrat Josef-Albers, Bottrop, 1988].
- BAYÓN, Damián, "Forma y color en la obra de Carlos Cruz-Diez," in Aventuras de la óptica: Soto y Cruz-Diez [exh. cat., Palacio de los Condes de Gabia, Granada, 1989]. Granada: Excma. Diputación de Granada, 1989.
- ADES, Dawn, Guy Brett and Rosemary O'Neill. Art in Latin America: The Modern Era, 1820-1980 [exh. cat., The Hayward Gallery, London; Museum + Moderna Museet, Stockoholm, 1989; Palacio de Velázquez, Madrid, 1990]. New Haven/London: Yale University Press, 1989.
- ABADIE, Daniel, essay in Aspects of Contemporary Painter in Paris [exh. cat., Taiwan Museum of Art, Gallery A5, Taichung, 1989].
- XURIGUERA, Gérard, "Le même charme insinuant," in *Cruz-Diez* [exh. cat., Abbaye des Cordeliers Châteauroux, 1990].
- _____, essay in Cruz-Diez/color-acontecimiento [exh. cat., Museo de Arte Costarricense/Galería de Arte Contemporáneo, San José, 1990].
- SALVADOR, José María, essay in Carlos Cruz-Diez en la arquitectura [exh. cat., Centro Cultural Consolidado, Caracas, 1991].
- JIMENEZ, Ariel, "Carlos Cruz-Diez: la visión del color," in *Cruz-Diez. La visión del color* [exh. cat., Museo de Arte de Maracay, 1992].
 CARNEVALI, Gloria, essay in

Cruz-Diez: Colours Vision [exh. cat., Clare Hall Gallery, Cambridge University, Cambridge; Bolivar Hall, London, 1993].

- PINOTTINI, Marzio, "La cinevisualità plastica avvenimentale di Cruz-Diez," in Cruz-Diez: L'avvenimento-colore [exh.cat., Galleria Vismara Arte, Milan; Galleria Narciso, Turin, 1993].
- JIMENEZ, Ariel, "A la altura de los tiempos-Carlos Cruz-Diez, o la autonomía del color," in Otero, Cruz-Diez y Soto, tres maestros del abstraccionismo en Venezuela y su proyección internacional [exh. cat., Galería de Arte Nacional GAN, Caracas, 1994].
- ROMERO D., Rafael, "La exposición "Otero, Soto, Cruz-Diez. Tres maestros del abstraccionismo en Venezuela y su proyección internacional," in Otero, Cruz-Diez y Soto, tres maestros del abstraccionismo en Venezuela y su proyección internacional [exh. cat., Galería de Arte Nacional, Caracas, 1994].
- GUEDEZ, Víctor, essay in *Cruz-Diez: el cromático acontencer* [exh. cat., Grupo Li Centro de Arte, Caracas, 1996].
- BUDERER, Hans-Jürgen, "Movement as a subject of depiction," in Carlos Cruz-Diez, Und gebe dem Raum die Farbe [exh. cat., Kinetische Kunst, Stätisches Museum, Gelsenkirchen, 1998].
- LOPEZ QUINTERO, Juan Carlos, "Carlos Cruz-Diez, un pionero del diseño en Venezuela: de la empresa familiar a la invención de la fisicromía 1923-1959," in Carlos Cruz-Diez, un pionero del diseño en Venezuela [exh. cat., Museo de la Estampa y del Diseño Carlos Cruz-Diez, Caracas, 1998].
- CARRENO, Freddy, "Carlos

Cruz-Diez: el color más allá de la materialidad," in *Carlos Cruz-Diez. Rétrospective 1954-1998* [exh. cat., Fundación Museo de Arte Moderno Jesús Soto, Estado Bolívar, 1998].

- RODRÍGUEZ, Bélgica,
 "Carlos Cruz-Diez: territorio del color que revela un secreto," in Homenaje al maestro Cruz-Diez [exh. cat., Edificio PDV, Caracas, 1998].
- JIMÉNEZ, Ariel, "La visión del color," in Carlos Cruz-Diez, el arte en la arquitectura [exh. cat., Sala de Arte Sidor, Ciudad Guayana, 1998].
- TAPIAS, Anita, "Todo final es un comienzo," in *Del siglo que se va: 12 artistas del XX* [exh. cat., Espacios Unión-Banco Unión, Caracas, 1999].
- RAMIREZ, Mari Carmen,
 "Reflexión heterotópica: las obras," in *Heterotopías:* medio siglo sin-lugar, 1918-1968 [exh. cat., Museo Nacional Centro de Arte Reina Sofía, Madrid, 2000].
- JIMENEZ, Ariel, "Ni aquí ni allá," in *Heterotopías: medio siglo sin-lugar, 1918-1968* [exh. cat., Museo Nacional Centro de Arte Reina Sofía, Madrid, 2000].
 _____, "La visión del

color," in *Cruz-Diez: la visión del color* [exh. cat., Fundación Juan Carmona, Barguisimeto, 1999]

- GUÉDEZ, Víctor, "Cruz-Diez y el tránsito de lo participativo a lo interactivo," in *Cruz-Diez, de lo participativo a lo interactivo* [exh. cat., Fundación Corp. Group Centro Cultural, Caracas, 2001].
- GARNERÍA, José, "Carlos Cruz-Diez," in Carlos Cruz-Diez: de lo participativo a lo interactivo, otra noción del color [exh. cat., L'Almodí, Valencia, España, 2003].
- SALAZAR, Elida, essay in XXV Biennale de São Paulo. Iconografías

Metropolitanas: Países [exh. cat., São Paulo, 2002].

- JIMENEZ, Ariel, "Definindo espaços O espaço de uma coleção-Carlos Cruz-Diez liberar a cor," in Paralelos: arte brasileira da segunda metade do século XX em contexto, Colección Cisneros [exh. cat., Museo de Arte Moderna de São Paulo, 2002].
- JIMENEZ, Ariel, "Geometrías," in Geo-metrías, Abstracción geométrica latinoamericana en la Colección Cisneros [exh. cat., Museo Nacional de Artes Visuales, Montevideo, 2003].
- RAMIREZ, Mari Carmen, "A highly topical utopia: Some outstanding features of the Avant-Garde in Latin America," en *Inverted Utopias: Avant-Garde in Latin America* [exh. cat., The Museum of Fine Arts, Houston, Texas, 2004].
- JIMENEZ, Ariel, "Neither here nor there," in Inverted Utopias: Avant-Garde in Latin America [exh. cat., The Museum of Fine Arts, Houston, Texas, 2004]
- LOPEZ QUINTERO, Juan Carlos, "Un acontecimiento primario: las cromosaturaciones de Carlos Cruz-Diez," in [exh. cat., Museo de la Estampa y del Diseño Carlos Cruz- Diez, Caracas, 2004].
- BENKO, Susana, "Arte en Guri: una experiencia a gran escala del maestro Carlos Cruz-Diez," in *Carlos Cruz-Diez- Arte en Guri* [exh. cat., Museo de la Estampa y del Diseño Carlos Cruz-Diez, Caracas, 2004].
- PIERRE, Arnauld,
 "Accélérations optiques, le régime visuomoteur de l'art optique et cinétique," in L'oeil moteur: art optique et cinétique, 1950-1975 [exh. cat., Musée d'Art Moderne et Contemporain, Strasbourg, 2005].
- OLEA, Héctor, "The Chromatic Happenings of

a Kinetic Harbinger: Carlos Cruz-Diez," in *Carlos Cruz-Diez* [exh. cat., Sicardi Gallery, Houston, TX, 2005].

- ULRICH OBRIST, Hans and Pedro Reyes (ed.). The Air is Blue: Insights on Art and Architecture: Luis Barragán Revisited [exh. cat.]. New York, NY: D.A.P/ Mexico D.F.: Trilce Ediciones, [2006].
- DUVIVIER, Christophe, "Art concret-définition et situation historique," in Horizontales, verticals, seules: Art concret [exh. cat., Museé Tavet-Delacour, Pontoise, 2006].
- LEDEZMA, Juan, "The Sites of American: Notes on and for an Exhibition of Latin American Concrete Art Abstraction," in *The Sites of Latin American Abstraction* [exh. cat., Cisneros Fontanals Art Foundation, Miami, 2006].
- BENKO, Susana, "Color multiplicado al infinito: el Cinestismo de Carlos Cruz-Diez," in 50x50 Carlos Cruz-Diez [exh. cat., Sala Trasnocho Arte Contacto, Caracas, 2006].
- DEZEUZE, Anna, "Carlos Cruz-Diez," in Latin American Collection [exh. cat., Blanton Museum of Art, The University of Texas, Austin, TX, 2006].
- SUÁREZ, Osbel, "La lógica del éxtasis," in Lo(s) cinético(s) [exh. cat. Museo Nacional Centro de Arte Reina Sofía, Madrid]; "A lógica do êxtase," in O(s) Cinético(s) [exh. cat. Instituto Tomie Ohtake, São Paulo, 2007]. Madrid: Museo Nacional Centro de Arte Reina Sofía, 2007.
- PIERRE, Arnauld, "Optical blends and chromatic instabilities: The Physichromies of Carlos Cruz-Diez," in Carlos Cruz-Diez [exh. cat., Sicardi Gallery, Houston, TX, 2007]
- HUIZI, María Elena,
 "Presence and
 Transformation of Color," in Carlos Cruz-Diez [exh. cat.,

Sicardi Gallery, Houston, TX, 2007].

- PIERRE, Arnauld, "Mélanges optiques et bains chromatiques: situation matérielle de la couleur dans l'œuvre de Cruz-Diez," In Cruz-Diez, la couleur dans l'espace [exh. cat., Maison de l'Amérique Latine, Paris, 2007].
- _____, "Sensorialidad exéntrica: la utopía polisensorial del arte ópticocinético," in *La utopía cinética 1955-1975* [exh. cat., Fundación SA NOSTRA, Caixa de Balears, Palma; Caja San Fernando, Sevilla, 2007].
- , "La couleur dans l'espace," in *Cruz-Diez, a cor no espacao* [exh. cat., Gabinete de Arte Raquel Arnauld, São Paulo, 2007].
- ADAMS, Beverly,
 "Introduction to a Poetic Universe," in Constructing a Poetic Universe: The Diane and Bruce Halle Collection of Latin American Art [exh. cat., The Museum of Fine Arts, Houston, Texas, 2007].
- SANCHEZ, Osvaldo,
 "(un) Trade(d) Marks,"
 in Constructing a Poetic
 Universe: The Diane and
 Bruce Halle Collection of
 Latin American Art [exh.
 cat., The Museum of Fine
 Arts, Houston, 2007].
- KLEINE, Rasmus, "Die utopie der neun tendenzen," in Die Neuen Tendenzen – Eine europäische Künst Lerbewegung 1961-1963 [exh. cat., Museum für Konkrete Kunst, Ingolstadt; Leopold-Hoesch-Museum, Düren, 2007].
- PÉREZ-BARREIRO, Gabriel, essay in The Geometry of Hope: Latin American Abstract Art from the Patricia Phelps de Cisneros Collection [exh. cat., The Blanton Museum or Art, The University of Texas, Austin, TX; New York, NY, Grey Art Gallery, 2007].
- PÉREZ-ORAMAS, Luis,
 "Caracas: A Constructive

Stage," in The Geometry of Hope. Latin American Abstract Art from the Patricia Phelps de Cisneros Collection [exh. cat., The Blanton Museum or Art, The University of Texas, Austin, TX; New York, NY, Grey Art Gallery, 2007].

- MCKELLIGAN, Alberto, "Carlos Cruz-Diez, proyecto para un mural (Project for a Mural), 1954," in The Geometry of Hope. Latin American Abstract Art from the Patricia Phelps de Cisneros Collection [exh. cat., The Blanton Museum or Art, The University of Texas, Austin, TX; New York, NY, Grey Art Gallery, 2007].
- SESÍN, Martha, "Carlos Cruz-Diez, Amarillo aditivo (Additive Yellow) 1959.
 Physichromie n.° 21, 1960," in The Geometry of Hope.
 Latin American Abstract Art from the Patricia Phelps de Cisneros Collection [exh.
 cat., The Blanton Museum or Art, The University of Texas, Austin, TX; New York, NY, Grey Art Gallery, 2007].
- SESÍN, Martha, "Carlos Cruz-Diez, Physichromie n° 126, 1964," in *The Geometry* of Hope. Latin American Abstract Art from the Patricia Phelps de Cisneros Collection [exh. cat., The Blanton Museum or Art, The University of Texas, Austin, TX; New York, NY, Grey Art Gallery, 2007].
- ALBERRO, Alexander, "Face to Face with the Shared Content of Form," in *Face to Face, The Daros Collection Part 1* [exh. cat., Zurich, 2007].

IV. General Bibliography

- 25 ans d'art en France 1960-1985 Le Grand Larousse. Paris, 1986.
- Abstract Art since 1945. London: Thames and Hudson, 1971.

- AMSTUTZ, Walter (ed.).
 Who's Who in Graphic Art.
 Zurich: Amstutz & Herdeg
 Graphic Press, 1962.
- ARMAS ALFONZO, Alfredo. Diseño gráfico en Venezuela. Caracas: Ediciones de Maraven, 1985.
- BANN, Stephen, Key Gadney, Frank Popper, Philip Steadman. Four Essays on Kinetic Art. London, 1966.
- BARRET, Cyril. Op Art. London: Studio Vista, 1970.
 Boliof and Three
- _____. Relief and Three-Dimensional Structures. London: Studio-Vista, 1970. Reprinted in 1979.
- _____. An Introduction to Optical Art. London: Studio-Vista, 1971.
- BAYON, Damián. América Latina en sus artes. Paris: Siglo XXI Editores, Unesco, 1974. Reprinted in 1987.

_____. Aventura plástica de Hispanoamérica. Mexico D.F.: Fondo de Cultura Económica, 1974.

______. Artistas contemporáneos de América Latina. Barcelona: Ediciones del Serbal, Unesco, 1981.

- Arte moderno en América Latina. Madrid: Taurus Ediciones, 1985.
- BAYÓN, Damian and Roberto Pontual. La peinture de l'Amérique Latine au XXè siècle. Paris: Mengès, 1990.
- BORDIER, Roger. L'objet contre l'art. Toute l'histoire de l'art moderne est celle des vicissitudes de l'objet. Paris: Hachette, 1972.
- BOUDAILLE, Georges and Patrick Javault. *L'art abstrait*. Paris: Nouvelles éditions françaises, Casterman, 1990.
- BOULOGNE, Daniel. Les raisons de la couleur dans les espaces de vie et de travail. Paris: Éditions Alternatives, 1986.
- BOULTON, Alfredo. Historia de la pintura en Venezuela. Época contemporánea. Caracas: Ernesto Armitano, 1972, Vol. III.

- _____. Compendio de la historia de la pintura en Venezuela. Caracas: Museo de Arte Contemporáneo de Caracas, 1977.
- _____. La pintura en Venezuela. Caracas: Macanao Ediciones, 1987.
- BRETT, Guy. *Kinetic Art. The Language of Movement.* London: Studio Vista/New York, NY: Reinhold, 1968.
- CABANNE, Pierre. *Dictionnaire*. Paris: Les Éditions de l'Amateur, 2000.
- CALZADILLA, Juan, et al. *El* arte en Venezuela. Caracas: Ediciones del Círculo Musical, 1967.
- _____. *El artista en su taller.* Caracas: Ediciones La Huella, 1975.
- _____. Pintura venezolana de los siglos XIX y XX. Caracas: Inversiones Barquín, 1975
- ______. Visión de la pintura en Venezuela. Caracas: Dirección de Cultura de la Gobernación del Distrito Federal, 1975.
- _____. Movimientos y vanguardias en el arte contemporáneo en Venezuela. Caracas: Concejo Municipal del Distrito Sucre Estado Miranda, 1978
- CALZADILLA, Juan (ed.),
 "Obras singulares del arte en Venezuela," in La Gran Enciclopedia Venezolana, vol. 1. Bilbao: La Gran Enciclopedia Vasca/ Caracas: Euzko Americana de Ediciones, 1979.
- Cahiers de Psychologie de l'Art et de la Culture, n.° 17, "Les bonheurs de l'art (2)," Paris, 1991.
- Collection Art Contemporain. Paris: Éditions du Centre Pompidou, 2007.
- DE BÉRTOLA, Helena. El arte cinético. El movimiento y la transformación: análisis perceptivo y funcional. Buenos Aires: Ediciones Nueva Visión, 1973.
- Diccionario de las artes visuales en Venezuela.

Caracas: Monte Ávila, 1982.

- Dictionnaire de L'Art Moderne et Contemporain. Paris: Édition Hazan, 1992
- Dictionary of Twentieth-Century Art. London: Phaidon Press, 1973.
- DE MÉREDIEU, Florence. Histoire matérielle et immatérielle de l'art moderne. Paris: Larousse, 1999
- Encyclopédie Grand Larousse. Paris, 1981.
- FALCONI, José Luis and Gabriela Rangel (ed.). A Principality of its Own, 40 Years of Visual Arts at the Americas Society. Cambridge, MA: Harvard University Press, 2006.
- FILLACIER, Jacques. La pratique de la couleur.
 Paris: Bordas, 1986.
- GAUVILLE, Hervé. L'art depuis 1945. Groupes et mouvements. Vanves: Éditions Hazan, 1999.
- GRANADOS VALDES, Antonio. Artistas de América. Madrid: Edición Granados Valdés, 1993.
- GUEVARA, Roberto. Arte para una nueva escala. Caracas: Maraven, 1978.
- _____. *Ver todos los días.* Caracas: Monte Ávila, 1981.
- _____. Veinticinco años de premios nacionales y el desarrollo del arte contemporáneo en Venezuela 1961-1986. Caracas: Museo de Arte Contemporáneo de Caracas, 1987.
- HERWITZ, Daniel. Making Theory/Constructive Art. Chicago: The University of Chicago Press, 1993.
- JIMENEZ, Ariel (ed.). Alfredo Boulton and his Contemporaries: Critical Dialogues in Venezuelan Art 1912-1974. New York, NY: The Museum of Modern Art, 2008.
- KULTERMANN, Udo. Neue Formen des Bildes. Tübingen: Verlag Ernst Wasmuth, 1969.
- "L'art du XXè siècle," in Dictionnaire de peinture

et de sculpture Larousse. Paris, 1991.

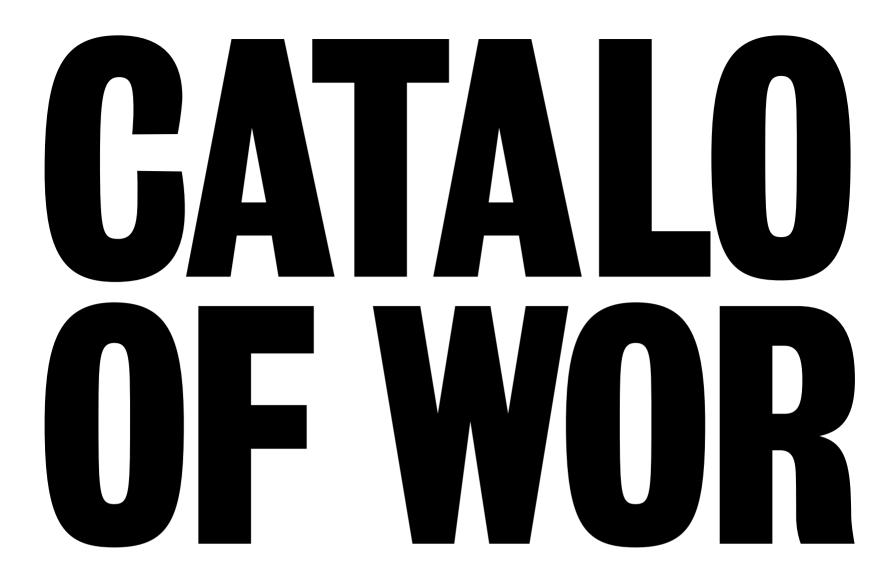
- L'art du XXè siècle.
 Benedikt: Taschen Verlag, 1998.
- LINTON, Harold. Color Consulting. New York, NY: Van Nostrand Reinhold, 1991.
- LUCIE-SMITH, Edward. Late Modern. The Visual Arts since 1945. New York, NY: Praeger, 1969.
- _____. L'art d'aujourd'hui. Paris: Nathan, 1977.
- _____. Movement in Art since 1945. New York, NY: Thames and Hudson, 1985.
- _____. Latin American Art of the 20th Century. New York, NY: Thames & Hudson, 1993.
- _____. *L'Art d'aujourd'hui.* London: Phaidon Press, 1995.
- _____. *Les arts au XXè siècle*. Köneman, 1999.
- MILLET, Catherine. *L'art* contemporain en France. Paris: Flammarion, 1987.
- MORAIN, André and Philippe Sollers. Les ambassadeurs (photographies). Paris: Éditions La Différence, 1989.
- NAYLOR, Colin and Genesis P'orridge (eds.). Contemporary Artists.
 London: St. James Press/ New York, NY: St. Martin's Press, 1977.
- "Panorama 78, De l'Art Optique au Cinétisme," in *XXème siècle*. Paris: L'Abeille, 1978.
- POPPER, Frank, Naissance de l'art cinétique. Paris: Gauthier-Villars, 1967.
- Origins and Development of Kinetic Art. Greenwich, CT: New York Graphic Society, 1968.
- Paris: Gauthier-Villars, 1970.

 ______. Le déclin de l'objet. Art, action, participation 1. Paris: Édition du Chêne, 1975. English ed.: Art, Action and Participation 1. London: Studio Vista, Cassel and Collier, 1975.
 ______. Art, action et participation. L'artiste et la créativité. Paris: Klincksieck, 2007.

- PORTER, Tom. *Colour Outside*. London: The Architectural Press, 1982.
- RAMOS GIUGNI, Ángel. 12 pintores y críticos de arte.
 Caracas: Concejo Municipal del Distrito Federal, 1976.
- RICKEY, George.
 Constructivism Origins and Evolution. New York, NY: George Braziller, 1967.
 Reprinted in 1971.
- RODRÍGUEZ, Bélgica. La pintura abstracta en Venezuela 1945-1965.
 Caracas: Ediciones de Maraven, 1980.
- RODRÍGUEZ, Myrna, essay in Primer Simposio Internacional de Escultura en Puerto Rico, Jardín Botánico de la Universidad de Puerto Rico, San Juan, 1992.
- SALVADOR, José María. Cien obras de la colección en los espacios del Museo de Arte Contemporáneo de Caracas. The Caracas Museum of Contemporary Art exhibits one hundred works from its collection. Caracas: Museo de Arte Contemporáneo de Caracas, 1984.
- _____. Arte para un cincuentenario: obras donadas al Museo de Bellas Artes de Caracas en su quincuagésimo aniversario. Caracas: Museo de Bellas Artes/Edisigma, 1989.
- SCHARA, Julio César, "Carlos Cruz-Diez y el arte cinético," in Arte e imagen. Mexico D.F., 2001.
- TOBEY, John. *The Technique of Kinetic Art.* New York, NY: Van Nostrand Reinhold, 1971.
- TRONCHE, Anne and Hervé Gloaguen. L'art actuel en France. Du cinétisme à l'hyperréalisme. Paris: André Balland, 1973.
- XURIGUERA, Gérard. *Regard sur la peinture contemporaine*. Paris: Arted, 1983.

V. Filmography

- HURTADO, Ángel. *Fisicromías*. Eastmancolor, 16 mm, 8'. Caracas, 1960.
- _____. Fisicromías II.
 Text by Jean Clay, music by Antonio Estévez. Color, 16 mm, 7'. Paris, 1967.
- CROCE, Iván. *Cruz-Diez.* Color, 16 mm, 15'. Paris/ Caracas, 1971.
- ROCHE, Luis Armando. Carlos Cruz-Diez. Color, 16 mm, 55'. Paris/Caracas, 1973.
- ABATE, Mario. *El artista y la ciudad*. Color, 16 mm, 8'. Caracas, 1976.
- ROBLES, Mario. *Cruz-Diez.* Color, 35 mm, 10'. Caracas, 1977.
- DE PEDRO, Manuel. *Cruz-Diez, el ilusionista del color*. Color, 16 mm, 17'. Caracas, 1978.
- Documentaire sur le Venezuela. 30'. Paris Pastel. 7', 30 Color videos, Air France Service Audiovisuel, Paris, 1978.
- JAMI-LONGUÉPÉE, Christine, Raconte-moi une sculpture... physichromie de Carlos Cruz-Diez. Passerelle de la gare de Saint-Quentin. Color, 7'. Tour d'Eclipse et TV Fil 78, Paris, 2001.
- GUIBERT, Claude. *Cruz-Diez.* Color, 14'. Imago, Paris, 2003.
- HOFILENA, Jane. ¿Qué tan amarillo es el azul? Color, 27'. Cl@se TV, Caracas, 2006.
- LUCIEN, Oscar. *Carlos Cruz-Diez, la vida en el color*. Color, 54'. Cine Archivo Bolívar Films. Caracas/Paris, 2006.





Works (1954-2009)



1. Primer proyecto para muro exterior (First Project for an Exterior Wall), Caracas, 1954. Painting on wood. 70.5 x 55.5 cm. Musée National d'Art Moderne – Centre Georges Pompidou, Paris



2. *El muro amarillo* (Yellow Wall), Caracas, 1956. Oil on cloth. 73.5 x 60 cm. Allegro Private Foundation



7. Inducción Cromática azul + negro = amarillo (Chromatic Induction Blue + Black = Yellow), Paris, 1963. Silkscreen on paper. 20 x 20 cm. Atelier Cruz-Diez, Paris



8. Couleur additive P.T. (Additive Color SP), Paris, 1964. Silkscreen on paper. 40 x 75 cm. Atelier Cruz-Diez, Paris



9. *Transchromie*, Paris, 1965-2007. Transparent acrylic sheets. 200 x 240 x 60 cm. Atelier Cruz-Diez, Paris



14. *Physicromie 587*, Paris, 1972. PVC, wood and aluminum 60 x 120 x 5 cm. Atelier Cruz-Diez, Paris



15. Chromointerference Mecanique (Mechanical Chromointerference), Paris, 1973. Wood, Plexiglas and aluminum; mechanical motor. Ø 100 x 15 cm. Atelier Cruz-Diez, Paris



16. Induction Chromatique 63 (Chromatic Induction 63), Paris, 1974. Acrylic on cloth on wood. 60 x 60 x 4 cm. Atelier Cruz-Diez, Paris



3. Untitled, Masnou, 1956. Graphite, charcoal and ink on paper. 48 x 34 cm. Allegro Private Foundation



4. Construcción en el espacio (Construction in Space), Caracas, 1957. Acrylic on wood. 85 x 122 cm. Allegro Private Foundation



5. *Amarillo aditivo* (Additive Yellow), Paris, 1959-84. Silkscreen on paper. 74.5 x 74.5 cm. Atelier Cruz-Diez, Paris



6. *Physichromie 103*, Paris, 1963. Rhodoid, flash paint, cardboard and wood. 67.5 x 42 cm. Allegro Private Foundation



10. Chromointerference Mecanique (Mechanical Chromointerference), Paris, 1967. Wood and acrylic paint; mechanical motor. 66 x 140 x 13 cm. Atelier Cruz-Diez, Paris



11. *Couleur additive ED'A* (Additive Color AP), Paris, 1970. Silkscreen on paper. 48 x 68 cm. Atelier Cruz-Diez, Paris



12. *Physichromie 578*, Paris, 1972. Aluminum, acetate and acyrlic paint. 70 x 70 cm. Allegro Private Foundation



13. Chromointerference Mecanique (Mechanical Chromointerference), Paris, 1967. Wood and acrylic paint; mechanical motor. 66 x 140 x 13 cm. Atelier Cruz-Diez, Paris.



17. *Physichromie 756*, Paris, 1975. Steel plates and acrylic on wood. 100 x 100 cm. MUBAG, Council of Alicante



18. *Fisicromía 2235* (Physicromie 2235), Paris, 1988. Metal, acetate and acrylic paint. 60 x 180 cm. Allegro Private Foundation



19. *Pirámide Cromointerferente* (Chromointerference Pyramid), Paris, 2006. Projection on a pyramid. 100 x 100 x 40 cm. Allegro Private Foundation



20. Induction du Jaune. Denise. ED'A I/III (Induction of Yellow. Denise. AP I/III), Paris, 2007. Color print on paper on aluminum. 180 x 80 x 2.4 cm. Atelier Cruz-Diez, Paris



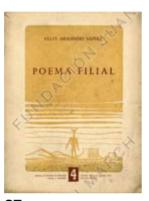
21. Couleur Additive Denise C ED'A I/III (Additive Color. Denise C AP I/III), Paris, 2007. Color print on paper on aluminum. 180 x 80 x 2.4 cm. Atelier Cruz-Diez, Paris



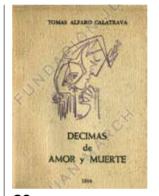
22. Couleur à l'espace Série Ligia A 1 ED'A (Color into Space. Ligia A 1 Series AP), Paris, 1993-2008. Color print. 120 x 20 x 8 cm. Atelier Cruz-Diez, Paris



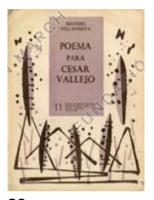
23. Cromosaturación y Ambientación cromática (Chromosaturation and Chromatic Atmosphere), 1965-2009



27. Félix Armando Núñez, *Poema Filial*. Caracas: Ministerio de Educación, 1953. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



28. Tomás Alfaro Calatrava, *Décimas de amor y muerte*. Caracas: Voluntad, 1954. Vignette by Cruz-Diez. Atelier Cruz-Diez, Paris



29. Manuel Villanueva, *Poema para César Vallejo*. Caracas: Ministerio de Educación, 1954. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



34. Pablo Neruda, *Todo lleva tu nombre*. Caracas: Ministerio de Educación, 1959. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



35. *Mene. Revista Cultural de la Mene* Grande Oil Company. Caracas, 1962. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris

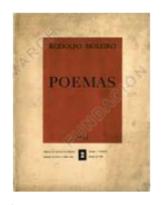


36. El farol. La calidad de la vida. Caracas: Creole Petroleum Corporation, 1974. Art Director: Cruz-Diez. Atelier Cruz-Diez, Paris

Selection of Graphic Works and Magazines (1941-1974)



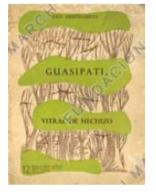
24. Arte Aplicado (Applied Art), 1941. Atelier Cruz-Diez, Paris



25. Rodolfo Moleiro, *Poemas*. Caracas: Ministerio de Educación, 1953. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



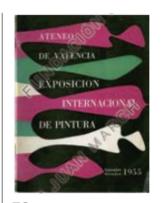
26. Vicente Gerbasi, *Círculos del trueno*. Caracas: Ministerio de Educación, 1953. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



30. Jean Aristeguieta, *Guasipati, Vitral de hechizo*. Caracas: Ministerio de Educación, 1955. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



31. Ramón Sosa-Montes de Oca, *La huella iluminada*. Caracas: Ministerio de Educación, 1955. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



32. *Exposición internacional de pintura*, Ateneo de Valencia, 1955. Illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris



33. Pedro Rafael Gilly, *Ventanal sonoro*. Caracas: Ministerio de Educación, 1956. Cover and illustrations by Cruz-Diez. Atelier Cruz-Diez, Paris

Credits

This catalogue and its Spanish edition are published on the occasion of the exhibition

CARLOS CRUZ-DIEZ: COLOR HAPPENS

Museu d'Art Espanyol Contemporani (Fundación Juan March), Palma February 25 – June 27, 2009 Museo de Arte Abstracto Español (Fundación Juan March), Cuenca July 17 – November 15, 2009

Concept:

Osbel Suárez (guest curator) Department of Exhibitions, Fundación Juan March, Madrid Manuel Fontán del Junco, Exhibitions Director; Aida Capa, Exhibition Coordinator

Organization:

Department of Exhibitions, Fundación Juan March, Madrid Museu d'Art Espanyol Contemporani (Fundación Juan March), Palma Museo de Arte Abstracto Español (Fundación Juan March), Cuenca

Catalogue

- © Fundación Juan March, Madrid, 2009
- © Editorial de Arte y Ciencia, Madrid, 2009
- © All works by Carlos Cruz-Diez: Cruz-Diez Foundation

Texts:

- © Fundación Juan March
- © Osbel Suárez
- © Gloria Carnevali, Carlos Cruz-Diez
- © Carlos Cruz-Diez
- © Atelier Cruz-Diez
- © Ariel Jiménez

Translations:

Spanish/English: Laura A. E. Suffield ("The Truth of Color," "Chronology"); Vanesa Ana Rodríguez Galindo (Foreword, "The Series," Gloria Carnevali interview)

Photos:

O Joaquín Cortés, p. 13
Alfredo Boulton, p. 77
Martínez Pozueta, p. 98
Jorge Cruz Delgado, p. 101
Casa de las Américas, Havana, Cuba, p. 105
Carlos Cruz Delgado

Editing:

Deborah L. Roldán and Department of Exhibitions, Fundación Juan March

Editorial coordination: Jordi Sanguino and Aida Capa, Fundación Juan March

Catalogue design: Guillermo Nagore Typography: Bureau Grotesque (Font Bureau) and Leitura Sans (Dino Santos) Paper: Phoenix Motion Xenon, 150 gr. Prepress and printing: Estudios Gráficos Europeos S.A., Madrid Binding: Ramos S.A., Madrid

English edition: ISBN: 978-84-7075-563-7 ISBN: 978-84-89935-89-1 Editorial de Arte y Ciencia S.A., Madrid

Spanish edition:ISBN: 978-84-7075-562-0ISBN: 978-84-89935-88-4Editorial de Arte y Ciencia S.A., Madrid

Legal Deposit: English edition: M-3668-2009 Spanish edition: M-3316-2009

Cover illustration: Chromosaturation. *Cruz–Diez: From the Participative to the Interactive*, exhibition at the Fundación Corp. Group, Caracas, 2001

Fundación Juan March Castelló, 77 – 28006 Madrid, Spain www.march.es



A BANCA MARCH



EXHIBITIONS CATALOGUES AND OTHER PUBLICATIONS BY THE FUNDACIÓN JUAN MARCH

KEY: Out of print | Available publicactions in March 2009 | 🕑 Exhibition at the Museu d'Art Espanyol Contemporani, Palma | 🕑 Exhibition at the Museo

1966

CATÁLOGO MUSEO DE ARTE ABSTRACTO ESPAÑOL. CUENCA [Guide to the Museo de Arte Abstracto Español] Text by Fernando Zóbel Bilingual ed. (Spanish/English) Published by the Museo de Arte Abstracto Español, Cuenca, 1966

1969

MUSEO DE ARTE ABSTRACTO ESPAÑOL. CUENCA [Guide to the Museo de Arte Abstracto Español] Texts by Gustavo Torner, Gerardo Rueda and Fernando Zóbel Published by the Museo de Arte Abstracto Español, Cuenca, 1969

1973

ARTE'73 Multilingual ed. (Spanish, English, French, Italian and German)

1974

MUSEO DE ARTE ABSTRACTO ESPAÑOL. CUENCA [Guide to the Museo de Arte Abstracto Español] Essays by Gustavo Torner, Gerardo Rueda and Fernando Zóbel Bilingual ed. (Spanish/English) Published by the Museo de Arte

Abstracto Español, Cuenca, 1974 (2nd ed., rev. and exp.)

1975

OSKAR KOKOSCHKA. Óleos y acuarelas. Dibujos, grabados, mosaicos. Obra literaria Texts by Heinz Spielmann

EXPOSICIÓN ANTOLÓGICA DE LA CALCOGRAFÍA NACIONAL Texts by Enrique Lafuente Ferrari and Antonio Gallego I EXPOSICIÓN DE BECARIOS DE ARTES PLÁSTICAS

1976

JEAN DUBUFFET Texts by Jean Dubuffet

ALBERTO GIACOMETTI. Colección de la Fundación Maeght Texts by Jean Genêt, Jean-Paul Sartre, Jacques Dupin and Alberto Giacometti

II EXPOSICIÓN DE BECARIOS DE ARTES PLÁSTICAS

1977

ARTE USA Texts by Harold Rosenberg

ARTE DE NUEVA GUINEA Y PAPÚA. Colección A. Folch y E. Serra Texts by B. A. L. Cranstone and Christian Kaufmann

PICASSO

Texts by Rafael Alberti, Gerardo Diego, Vicente Aleixandre, Eugenio d'Ors, Juan Antonio Gaya Nuño, Ricardo Gullón, José Camón Aznar, Guillermo de Torre and Enrique Lafuente Ferrari

MARC CHAGALL. 18 pinturas y 40 grabados Texts by André Malraux and Louis Aragon (in French)

e

ARTE ESPAÑOL CONTEMPORÁNEO. COLECCIÓN DE LA FUNDACIÓN JUAN MARCH [This catalogue accompanied the exhibition of the same name that traveled to 67 Spanish venues between 1975 and 1996; at many venues, independent catalogues were published.]

III EXPOSICIÓN DE BECARIOS DE ARTES PLÁSTICAS

1978

ARS MEDICA Text by Carl Zigrosser

FRANCIS BACON Text by Antonio Bonet Correa

BAUHAUS

Texts by Hans M. Wingler, Will Grohmann, Jürgen Joedicke, Nikolaus Pevsner, Hans Eckstein, Oskar Schlemmer, László Moholy-Nagy, Otto Stelzer and Heinz Winfried Sabais Published by the Institut für Auslandsbeziehungen, Stuttgart, 1976

KANDINSKY: 1923-1944 Texts by Werner Haftmann, Gaëtan Picon and Wasili Kandinsky

ARTE ESPAÑOL CONTEMPORÁNEO. COLECCIÓN DE LA FUNDACIÓN JUAN MARCH

IV EXPOSICIÓN DE BECARIOS DE ARTES PLÁSTICAS

1979

WILLEM DE KOONING. Obras recientes Texts by Diane Waldman

MAESTROS DEL SIGLO XX. NATURALEZA MUERTA Texts by Reinhold Hohl

GEORGES BRAQUE. Óleos, gouaches, relieves, dibujos y grabados Texts by Jean Paulhan, Jacques Prévert, Christian Zervos, Georges Salles, André Chastel, Pierre Reverdy and Georges Braque

V EXPOSICIÓN DE BECARIOS DE ARTES PLÁSTICAS

GOYA. CAPRICHOS, DESASTRES, TAUROMAQUIA, DISPARATES Texts by Alfonso E. Pérez-Sánchez

1980

JULIO GONZÁLEZ. Esculturas y dibujos Text by Germain Viatte

ROBERT MOTHERWELL Text by Barbaralee Diamonstein and Robert Motherwell

HENRI MATISSE. Óleos, dibujos, gouaches, découpées, esculturas y libros Texts by Henri Matisse

VI EXPOSICIÓN DE BECARIOS DE ARTES PLÁSTICAS

1981

MINIMAL ART Text by Phyllis Tuchman

PAUL KLEE. Óleos, acuarelas, dibujos y grabados Texts by Paul Klee

MIRRORS AND WINDOWS. AMERICAN PHOTOGRAPHY SINCE 1960 Text by John Szarkowski English ed. (Offprint: Spanish translation of text by John Szarkowski) Published by The Museum of Modern Art, New York, 1980

MEDIO SIGLO DE ESCULTURA: 1900-1945 Texts by Jean-Louis Prat

MUSEO DE ARTE ABSTRACTO ESPAÑOL. CUENCA [Guide to the Museo de Arte Abstracto Español] Texts by Gustavo Torner, Gerardo Rueda and Fernando Zóbel

1982

PIET MONDRIAN. Óleos, acuarelas y dibujos Texts by Herbert Henkels and Piet Mondrian

ROBERT Y SONIA DELAUNAY Texts by Juan Manuel Bonet, Jacques Damase, Ramón Gómez de la Serna, Isaac del Vando Villar, Vicente Huidobro and Guillermo de Torre

PINTURA ABSTRACTA ESPAÑOLA: 1960-1970 Text by Rafael Santos Torroella

KURT SCHWITTERS Texts by Werner Schmalenbach, Ernst Schwitters and Kurt Schwitters

VII EXPOSICIÓN DE BECARIOS DE ARTES PLÁSTICAS

1983

ROY LICHTENSTEIN: 1970-1980 Texts by Jack Cowart English ed. Published by Hudson Hill Press, New York, 1981

FERNAND LÉGER Text by Antonio Bonet Correa and Fernand Léger

PIERRE BONNARD Texts by Ángel González García

ALMADA NEGREIROS Texts by Margarida Acciaiuoli, Antonio Espina, Ramón Gómez de la Serna, José Augusto França, Jorge de Sena, Lima de Freitas and Almada Negreiros Published by the Ministério de Cultura de Portugal, Lisboa, 1983

ARTE ABSTRACTO ESPAÑOL EN LA COLECCIÓN DE LA FUNDACIÓN JUAN MARCH [Guide to the Museo de Arte Abstracto Español] Texts by Julián Gállego

GRABADO ABSTRACTO ESPAÑOL. COLECCIÓN DE LA FUNDACIÓN JUAN MARCH Texts by Julián Gállego [This catalogue accompanied the exhibition of the same name that traveled to 44 Spanish venues between 1983 and 1999.]

1984

EL ARTE DEL SIGLO XX EN UN MUSEO HOLANDÉS: EINDHOVEN Texts by Jaap Bremer, Jan Debbaut, R. H. Fuchs, Piet de Jonge and Margriet Suren

JOSEPH CORNELL Texts by Fernando Huici

FERNANDO ZÓBEL Text by Francisco Calvo Serraller Madrid, Cuenca

JULIA MARGARET CAMERON: 1815-1879 Texts by Mike Weaver and Julia Margaret Cameron English ed. (Offprint: Spanish translation of text by Mike Weaver) Published by John Hansard Gallery & The Herbert Press Ltd., Southampton, 1984

JULIUS BISSIER Text by Werner Schmalenbach

1985

ROBERT RAUSCHENBERG Texts by Lawrence Alloway

VANGUARDIA RUSA: 1910-1930. Museo y Colección Ludwig Texts by Evelyn Weiss

DER DEUTSCHE HOLZSCHNITT IM 20 Texts by Gunther Thiem German ed. (Offprint: Spanish translations of texts) Published by the Institut für Auslandsbeziehungen, Stuttgart, 1984

ESTRUCTURAS REPETITIVAS Texts by Simón Marchán Fiz

1986

MAX ERNST Texts by Werner Spies and Max Ernst

ARTE, PAISAJE Y ARQUITECTURA. El arte referido a la arquitectura en la República Federal de Alemania Texts by Dieter Honisch and Manfred Sack German ed. (Offprint: Spanish translation of introductory texts) Published by the Institut für Auslandsbeziehungen, Stuttgart, 1983

ARTE ESPAÑOL EN NUEVA YORK: 1950-1970. Colección Amos Cahan Text by Juan Manuel Bonet

OBRAS MAESTRAS DEL MUSEO DE WUPPERTAL. De Marées a Picasso Texts by Sabine Fehleman and Hans Günter Wachtmann

1987

BEN NICHOLSON Texts by Jeremy Lewison and Ben Nicholson

IRVING PENN Text by John Szarkowski English ed. Published by The Museum of Modern Art, New York, 1984 (reimp. 1986)

MARK ROTHKO Texts by Michael Compton and Mark Rothko

1988

EL PASO DESPUÉS DE EL PASO EN LA COLECCIÓN DE LA FUNDACIÓN JUAN MARCH Text by Juan Manuel Bonet

ZERO, A EUROPEAN MOVEMENT. The Lenz Schönberg Collection Texts by Dieter Honisch and Hannah Weitemeier Bilingual ed. (Spanish/English)

COLECCIÓN LEO CASTELLI Texts by Calvin Tomkins, Judith Goldman, Gabriele Henkel, Leo Castelli, Jim Palette, Barbara Rose and John Cage

1989 rené magritte Texts by Camille Goemans, Martine Jacquet, Catherine de Croës, François Daulte, Paul Lebeer and René Magritte

EDWARD HOPPER Text by Gail Levin

ARTE ESPAÑOL CONTEMPORÁNEO. FONDOS DE LA FUNDACIÓN JUAN MARCH Texts by Miguel Fernández-Cid

1990

ODILON REDON. Colección Ian Woodner Texts by Lawrence Gowing, Odilon Redon and Nuria Rivero

CUBISMO EN PRAGA. Obras de la Galería Nacional Texts by JiĐí Kotalík, Ivan Neumann and JiĐíi Šetlik

ANDY WARHOL. COCHES Texts by Werner Spies, Cristoph Becker and Andy Warhol

COL·LECCIÓ MARCH. ART ESPANYOL CONTEMPORANI. PALMA [Guide to the Museu d'Art Espanyol Contemporani] Texts by Juan Manuel Bonet Multilingual ed. (Spanish, Catalan, English and German)

1991

PICASSO. RETRATOS DE JACQUELINE Texts by Hélène Parmelin, María Teresa Ocaña, Nuria Rivero, Werner Spies and Rosa Vives

VIEIRA DA SILVA Texts by Fernando Pernes, Julián Gállego, M^a João Fernandes, René Char (in French), António Ramos Rosa (in Portuguese) and Joham de Castro

MONET EN GIVERNY. Colección del Museo Marmottan de París Texts by Arnaud d'Hauterives, Gustave Geffroy and Claude Monet

KEY: Out of print | Available publicactions in March 2009 | 🕑 Exhibition at the Museu d'Art Espanyol Contemporani, Palma | 🕲 Exhibition at the Museo

MUSEO DE ARTE ABSTRACTO ESPAÑOL. CUENCA [Guide to the Museo de Arte Abstracto Español] Texts by Juan Manuel Bonet (2nd ed., 1st ed. 1988)

1992

RICHARD DIEBENKORN Text by John Elderfield

ALEXEJ VON JAWLENSKY Text by Angelica Jawlensky

DAVID HOCKNEY Text by Marco Livingstone

1993

MALEVICH. Colección del Museo Estatal Ruso, San Petersburgo Texts by Eugenija N. Petrova, Elena V. Basner and Kasimir Malevich

PICASSO. EL SOMBRERO DE TRES PICOS. Dibujos para los decorados y el vestuario del ballet de Manuel de Falla Texts by Vicente García-Márquez, Brigitte Léal and Laurence Berthon

MUSEO BRÜCKE BERLÍN. ARTE EXPRESIONISTA ALEMÁN Texts by Magdalena M. Moeller

1994

GOYA GRABADOR Texts by Alfonso E. Pérez-Sánchez and Julián Gállego

ISAMU NOGUCHI Texts by Shoji Sadao, Bruce Altshuler and Isamu Noguchi

TESOROS DEL ARTE JAPONÉS. Período Edo: 1615-1868. Colección del Museo Fuji, Tokio Texts by Tatsuo Takakura, Shin-

ichi Miura, Akira Gokita, Seiji Nagata, Yoshiaki Yabe, Hirokazu Arakawa and Yoshihiko Sasama FERNANDO ZÓBEL. RÍO JÚCAR Texts by Fernando Zóbel and Rafael Pérez-Madero

1995

KLIMT, KOKOSCHKA, SCHIELE. UN SUEÑO VIENÉS: 1898-1918 Texts by Gerbert Frodl and Stephan Koja

ROUAULT Texts by Stephan Koja, Jacques Maritain and Marcel Arland

MOTHERWELL. Obra gráfica: 1975-1991. Colección Kenneth Tyler Texts by Robert Motherwell

1996

TOM WESSELMANN Texts by Marco Livingstone, Jo-Anne Birnie Danzker, Tilman Osterwold and Meinrad Maria Grewenig Published by Hatje Cantz, Ostfildern, 1996

TOULOUSE-LAUTREC. De Albi y de otras colecciones Texts by Danièle Devynck and Valeriano Bozal

MILLARES. Pinturas y dibujos sobre papel: 1963-1971 Texts by Manuel Millares

MUSEU D'ART ESPANYOL CONTEMPORANI. FUNDACION JUAN MARCH. PALMA [Guide to the Museu d'Art Espanyol Contemporani] Texts by Juan Manuel Bonet and Javier Maderuelo Bilingual eds. (Spanish/Catalan and English/German)

PICASSO. SUITE VOLLARD Text by Julián Gállego Spanish ed., bilingual ed. (Spanish/German) and trilingual ed. (Spanish/German/English) [This catalogue accompanies the exhibition of the same name that, since 1996, has traveled to five Spanish and foreign venues.]

1997

MAX BECKMANN Texts by Klaus Gallwitz and Max Beckmann

EMIL NOLDE. NATURALEZA Y RELIGIÓN Texts by Manfred Reuther

FRANK STELLA. Obra gráfica: 1982-1996. Colección Tyler Graphics Texts by Sidney Guberman, Dorine Mignot and Frank Stella

EL OBJETO DEL ARTE Text by Javier Maderuelo D G

MUSEO DE ARTE ABSTRACTO ESPAÑOL. FUNDACIÓN JUAN MARCH. CUENCA [Guide to the Museo de Arte Abstracto Español] Texts by Juan Manuel Bonet and Javier Maderuelo Bilingual ed. (Spanish/English)

1998

AMADEO DE SOUZA-CARDOSO Texts by Javier Maderuelo, Antonio Cardoso and Joana Cunha Leal

PAUL DELVAUX Text by Gisèle Ollinger-Zinque

RICHARD LINDNER Text by Werner Spies

1999

MARC CHAGALL. TRADICIONES JUDÍAS Texts by Sylvie Forestier, Benjamín Harshav, Meret Meyer and Marc Chagall

KURT SCHWITTERS Y EL

ESPÍRITU DE LA UTOPÍA. Colección Ernst Schwitters Texts by Javier Maderuelo, Markus Heinzelmann, Lola and Bengt Schwitters

LOVIS CORINTH Texts by Thomas Deecke, Sabine Fehlemann, Jürgen H. Meyer and Antje Birthälmer

MIQUEL BARCELÓ. Ceràmiques: 1995-1998 Text by Enrique Juncosa Bilingual ed. (Spanish/Catalan)

FERNANDO ZÓBEL. Obra gráfica completa Texts by Rafael Pérez-Madero Published by Departamento de Cultura, Diputación Provincial de Cuenca, Cuenca, 1999

2000

VASARELY Texts by Werner Spies and Michèle-Catherine Vasarely

EXPRESIONISMO ABSTRACTO. OBRA SOBRE PAPEL. Colección de The Metropolitan Museum of Art, Nueva York Text by Lisa M. Messinger

SCHMIDT-ROTTLUFF. Colección Brücke-Museum Berlin Text by Magdalena M. Moeller

NOLDE. VISIONES. Acuarelas. Colección de la Fundación Nolde-Seebüll Text by Manfred Reuther P G

LUCIO MUÑOZ. ÍNTIMO Text by Rodrigo Muñoz Avia

EUSEBIO SEMPERE. PAISAJES Text by Pablo Ramírez D G

2001 DE CASPAR DAVID FRIEDRICH A PICASSO. Obras maestras sobre papel del Museo Von der Heydt, de Wuppertal Texts by Sabine Fehlemann

ADOLPH GOTTLIEB Texts by Sanford Hirsch

MATISSE. ESPÍRITU Y SENTIDO. Obra sobre papel Texts by Guillermo Solana, Marie-Thérèse Pulvenis de Séligny and Henri Matisse

RÓDCHENKO. GEOMETRÍAS Texts by Alexandr Lavrentiev and Alexandr Ródchenko

2002

GEORGIA O'KEEFFE. NATURALEZAS ÍNTIMAS Texts by Lisa M. Messinger and Georgia O'Keeffe

TURNER Y EL MAR. Acuarelas de la Tate Texts by José Jiménez, Ian Warrell, Nicola Cole, Nicola Moorby and Sarah Taft

MOMPÓ. Obra sobre papel Texts by Dolores Durán Úcar ©

RIVERA. REFLEJOS Texts by Jaime Brihuega, Marisa Rivera, Elena Rivera, Rafael Alberti and Luis Rosales

SAURA. DAMAS Texts by Francisco Calvo Serraller and Antonio Saura D O

GOYA. CAPRICHOS, DESASTRES, TAUROMAQUIA, DISPARATES Texts by Alfonso E. Pérez-Sánchez

2003

ESPÍRITU DE MODERNIDAD. DE GOYA A GIACOMETTI. Obra sobre papel de la Colección Kornfeld Text by Werner Spies KANDINSKY. ORIGEN DE LA ABSTRACCIÓN Texts by Valeriano Bozal, Marion Ackermann and Wassily Kandinsky

CHILLIDA. ELOGIO DE LA MANO Text by Javier Maderuelo P O

GERARDO RUEDA. CONSTRUCCIONES Text by Barbara Rose

G

ESTEBAN VICENTE. Collages Texts by José María Parreño and Elaine de Kooning

LUCIO MUÑOZ. ÍNTIMO Texts by Rodrigo Muñoz Avia and Lucio Muñoz

MUSEU D'ART ESPANYOL CONTEMPORANI. FUNDACION JUAN MARCH. PALMA

[Guide to the Museu d'Art Espanyol Contemporani] Texts by Juan Manuel Bonet and Javier Maderuelo Bilingual eds. (Catalan/Spanish and English/German)

2004

MAESTROS DE LA INVENCIÓN DE LA COLECCIÓN E. DE ROTHSCHILD DEL MUSEO DEL LOUVRE Texts by Pascal Torres Guardiola, Catherine Loisel, Christel Winling, Geneviève Bresc-Bautier, George A. Wanklyn and Louis Antoine Prat

FIGURAS DE LA FRANCIA MODERNA. De Ingres a Toulouse-Lautrec del Petit Palais de París Texts by Delfín Rodríguez, Isabelle Collet, Amélie Simier, Maryline Assante di Panzillo and José de los Llanos Bilingual ed. (Spanish/French) LIUBOV POPOVA Text by Anna María Guasch

00

ESTEBAN VICENTE. GESTO Y COLOR Text by Guillermo Solana

LUIS GORDILLO. DUPLEX Texts by Miguel Cereceda and Jaime González de Aledo Bilingual ed. (Spanish/English) **P G**

NEW TECHNOLOGIES, NEW ICONOGRAPHY, NEW PHOTOGRAPHY. Photography of the 80's and 90's in the Collection of the Museo Nacional Centro de Arte Reina Sofía

Texts by Catherine Coleman, Pablo Llorca and María Toledo Bilingual ed. (Spanish/English)

KANDINSKY. Acuarelas. Städtische Galerie im Lenbachhaus, Munich Texts by Helmut Friedel and Wassily Kandinsky Bilingual ed. (Spanish/German) ♥♥

2005

CONTEMPORANEA. Kunstmuseum Wolfsburg Texts by Gijs van Tuyl, Rudi Fuchs, Holger Broeker, Alberto Ruiz de Samaniego and Susanne Köhler Bilingual ed. (Spanish/English)

ANTONIO SAURA. DAMAS Texts by Francisco Calvo Serraller and Antonio Saura Bilingual ed. (Spanish/English)

CELEBRATION OF ART: A Half Century of the Fundación Juan March Texts by Juan Manuel Bonet, Juan Pablo Fusi, Antonio Muñoz Molina, Juan Navarro Baldeweg and Javier Fuentes Spanish and English eds.

BECKMANN. Von der Heydt-

Museum, Wuppertal Text by Sabine Fehlemann Bilingual ed. (Spanish/German)

EGON SCHIELE: IN BODY AND SOUL Text by Miguel Sáenz Bilingual ed. (Spanish/English)

PC

LICHTENSTEIN: IN PROCESS Texts by Juan Antonio Ramírez and Clare Bell Bilingual ed. (Spanish/English)

FACES AND MASKS: Photographs from the Ordóñez-Falcón Collection Texts by Francisco Caja Bilingual ed. (Spanish/English) ♥ ♥

2006

OTTO DIX Texts by Ulrike Lorenz Bilingual ed. (Spanish/English)

CREATIVE DESTRUCTION: Gustav Klimt, the Beethoven Frieze and the Controversy about the Freedom of Art Texts by Stephan Koja, Carl E. Schorske, Alice Strobl, Franz A. J. Szabo, Manfred Koller, Verena Perhelfter and Rosa Sala Rose, Hermann Bahr, Ludwig Hevesi and Berta Zuckerkandl Spanish, English and German eds. Published by Prestel, Munich/ Fundación Juan March, Madrid, 2006

Supplementary publication: Hermann Bahr. CONTRA KLIMT Original text by Hermann Bahr (1903), with additional texts by Christian Huemer, Verena Perlhefter, Rosa Sala Rose and

Dietrun Otten

LA CIUDAD ABSTRACTA: 1966. El nacimiento del Museo de Arte Abstracto Español Texts by Santos Juliá, María Bolaños, Ángeles Villalba, Juan Manuel Bonet, Gustavo Torner,

KEY: Out of print | Available publicactions in March 2009 | 🕑 Exhibition at the Museu d'Art Espanyol Contemporani, Palma | 🕲 Exhibition at the Museo

Antonio Lorenzo, Rafael Pérez Madero, Pedro Miguel Ibáñez and Alfonso de la Torre

GARY HILL: IMAGES OF LIGHT. Works from the Collection of the Kunstmuseum Wolfsburg Text by Holger Broeker Bilingual ed. (Spanish/English)

GOYA. CAPRICHOS, DESASTRES, TAUROMAQUIA, DISPARATES Texts by Alfonso E. Pérez-Sánchez (11ª ed., 1ª ed. 1979) [This catalogue accompanied the exhibition of the same name that, since 1979, has traveled to 173 Spanish and foreign venues. The catalogue has been translated into more than seven languages.]

2007

ROY LICHTENSTEIN: BEGINNING TO END Texts by Jack Cowart, Juan Antonio Ramírez, Ruth Fine, Cassandra Lozano, James de Pasquale, Avis Berman and Clare Bell

Spanish, French and English eds.

Supplementary publication: Roy Fox Lichtenstein. PAINTINGS, DRAWINGS AND PASTELS: A THESIS Original text by Roy Fox Lichtenstein (1949), with additional texts by Jack Cowart and Clare Bell

THE ABSTRACTION OF LANDSCAPE: From Northern

Romanticism to Abstract Expressionism Texts by Werner Hofmann, Hein-Th. Schulze Altcappenberg, Barbara Dayer Gallati, Robert Rosenblum, Miguel López-Remiro, Mark Rothko, Cordula Meier, Dietmar Elger, Bernhard Teuber, Olaf Mörke and Víctor Andrés Ferretti Spanish and English eds.

Supplementary publication: Sean Scully. BODIES OF LIGHT Original text by Sean Scully (1998) Bilingual ed. (Spanish/English)

EQUIPO CRÓNICA. CRÓNICAS REALES Texts by Michèle Dalmace, Fernando Marías and Tomàs Llorens Bilingual ed. (Spanish/English) D G

BEFORE AND AFTER MINIMALISM: A Century of Abstract Tendencies in the Daimler Chrysler Collection. Virtual guide: www.march. es/arte/palma/anteriores/ CatalogoMinimal/index.asp Spanish, Catalan, English and German eds.

2008

MAXImin: Maximum Minimization in Contemporary Art

Texts by Renate Wiehager, John M Armleder, Ilya Bolotowsky, Daniel Buren, Hanne Darboven, Adolf Hölzel, Norbert Kricke, Heinz Mack and Friederich Vordemberge-Gildewart Spanish and English eds.

TOTAL ENLIGHTENMENT: Conceptual Art in Moscow 1960-1990

Texts by Boris Groys, Ekaterina Bobrinskaya, Martina Weinhart, Dorothea Zwirner, Manuel Fontán del Junco, Andrei Monastyrski and Ilya Kabakov Bilingual ed. (Spanish/English) Published by Hatje Cantz, Ostfildern/Fundación Juan March, Madrid, 2008

ANDREAS FEININGER: 1906-1999

Texts by Andreas Feininger, Thomas Buchsteiner, Jean-François Chevrier, Juan Manuel Bonet and John Loengard Bilingual ed. (Spanish/English) ₽ ●

JOAN HERNÁNDEZ PIJUAN: THE DISTANCE OF DRAWING Texts by Valentín Roma, Peter Dittmar and Narcís Comadira Bilingual ed. (Spanish/English) **D G**

Supplementary publication: IRIS DE PASCUA. JOAN HERNÁNDEZ PIJUAN Text by Elvira Maluquer Bilingual ed. (Spanish/English)

MUSEO DE ARTE ABSTRACTO ESPAÑOL. FUNDACIÓN JUAN MARCH. CUENCA [Guide to the Museo de Arte Abstracto Español] Texts by Juan Manuel Bonet and Javier Maderuelo Bilingual ed. (Spanish/English) (2nd ed., 1st ed. 2005)

2009

TARSILA DO AMARAL Texts by Aracy Amaral, Juan Manuel Bonet, Jorge Schwartz, Regina Teixeira de Barros, Tarsila do Amaral, Mário de Andrade, Oswald de Andrade, Manuel Bandeira, Haroldo de Campos, Emiliano di Cavalcanti, Ribeiro Couto, Carlos Drummond de Andrade, António Ferro, Jorge de Lima and Sérgio Milliet Spanish and English eds.

Supplementary publications: Oswald de Andrade. PAU BRASIL Semi-facsimile Spanish ed., Spanish translation by Andrés Sánchez Robayna

Blaise Cendrars. HOJAS DE RUTA Semi-facsimile Spanish ed., Spanish translation by José Antonio Millán Alba

For more information: www.march.es

Established in 1955 by the Spanish financier Juan March Ordinas, the Fundación Juan March is a family-run institution that dedicates its resources and activities to the fields of science and the humanities. The Fundación organizes art exhibitions, concerts, lecture series and seminars in its Madrid headquarters, which is also home to the Spanish Library of Contemporary Music and Theater. It directs the Museo de Arte Abstracto Espa-ol in Cuenca, as well as the Museu d'Art Espanyol Contemporani in Palma de Mallorca. Through its Instituto Juan March de Estudios e Investigaciones (Juan March Study and Research Institute) it promotes education and specialized research and cooperation among Spanish and foreign scientists.

