

Arnauld Pierre

1923 Jesús Rafael Soto was born on June 5, 1923 in Ciudad Bolívar, Venezuela, an old colonial town on the edge of the virgin forest on the banks of the Orinoco.

He was the eldest son of Emma Soto and Luis García Parra, a violin player, who were to have four other children. While working to make a contribution to the family's upkeep, he went to primary school and, when he was about twelve, began to learn the guitar. It was also at this time that he began to copy reproductions of paintings he found in magazines, books and almanacs. At the age of sixteen he became a poster painter for the movie theaters in Ciudad Bolívar.

Soto and his cousins. Ciudad Bolívar, Venezuela, 1945 © Archives Soto / All **Rights Reserved**

When I was eleven, I began to make a living doing lettering and other things like store signs [...] Then I got a job painting posters for a movie theater; I could do as many as fifty a day, but at the same time I took the liberty to paint movie characters to advertise the big features.

Soto, quoted by Rafael Pineda, "Jesús Soto, el artista-mecenas de Ciudad Bolívar", Imagen, Caracas, nº 26, 14-21 December 1971, p. 8.

Soto received a scholarship from the Guyana regional authority to study at the Escuela de Artes Plásticas y Artes Aplicadas in Caracas, where he arrived in September 1942. He took classes in "pure art" and the "training course for instructors in art education and history". He took classes in "pure art" and the "training course for instructors in art education and history".

A circle of students of all age trained by Antonio Edmundo Monsanto, the school's liberal and well-respected director. They were Omar Carreño, Carlos Cruz-Diez, Narciso Debourg, Dora Hersen, Mateo Manaure, Luis Guevara, Pascual Navarro, Mercedes Pardo, led by the most advanced among them, Alejandro Otero (1921-1993). Most of the group's members were to meet again in Paris in the late forties. Monsanto ensured that foreign magazines and books came into the school, as well as the many reproductions and engravings which were a major source of information for the students.

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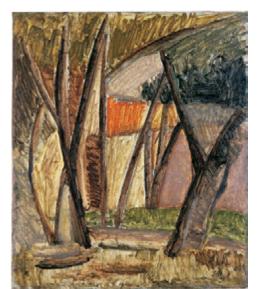
When I entered art school, I was fascinated by one thing: a still life by Braque on an easel by the main entrance. I felt the same interest as when I heard about surrealist poetry in Ciudad Bolívar. I immediately concentrated myself in this direction. Everything started to revolve around this: why was it a work of art? First of all, I went to see Alejandro Otero, who was one of the most brilliant students and who came from my hometown of Ciudad Bolívar. He advised me to take the time I needed to get used to this new form of painting, telling me that it was difficult and that I would learn gradually. From that moment I felt dissatisfied, and I continued searching and collecting information as much as I could.

Soto, Soto, pintura figurativa 1944-1950, exhibition cat., Caracas, Galería de Arte Inciba, Palacio de las Industrias, 1971.

He came into contact with a group of surrealist students who were publishing in the local press and who encouraged him to take up a career as an artist.

1942

1942



Soto. "Paisaje", 1949 70 × 62 cm © Archives Soto / All Rights Reserved

Every year from 1943 to 1949, Soto exhibited works at the Venezuelan Art Salon in Caracas.

At the time his painting was influenced by Cézanne, following the teaching of Monsanto who had students study reproductions of the great painter's work.

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At the end of my first year, I tried to do landscapes or still lives composed in different ways, trying to get into Cubism or to get closer to Cézanne.

I was never interested in producing impressionist work, I was always more concerned with constructive aspects. I didn't paint landscapes like most of my fellow companions: landscapes reminiscent of Sisley or Monet. I saw the Venezuelan landscape in terms of large planes. [...] The five years I spent in Caracas were a learning period for me: or a time, one could say, when I was getting information. Until I arrived in Europe my work was above all investigative: finding new possibilities, getting to grips with what modern painting was about at the time to see if I could add anything to it. The school wasn't an academy, it was like a big workshop with artists, students and teachers you could talk to. [...] For me, Cubism was an exercise in construction, in the ordering of planes, a tool that helped me to translate the tropical light which, as I've said, I couldn't understand from the Impressionists' point of view.

Later, when I arrived in Europe, I was able to understand Impressionism. I never could in Venezuela because the light was so harsh.

Soto, *Soto, pintura figurativa 1944-1950*, exhibition cat., Caracas, Galería de Arte Inciba, Palacio de las Industrias, 1971.

Soto completed his studies and received his teacher's diploma. He was appointed director of the School of Art in the small town of Maracaibo, and also taught at the Baralt high school and at the local teacher training college.

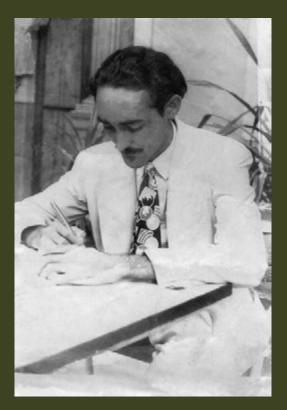
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In Maracaibo I gave myself completely to the Art School as both director and teacher, as well as other commitments outside. I taught those who wanted, and those who didn't, to recognize Picasso. It was a terrible task because the other teachers at the art school and the high school opposed my ideas and destroyed the work I did with the pupils. [...] During this time, it became more and more necessary for me to get out of Maracaibo, to leave Venezuela, to find new information about what was going on in the world in terms of art.

Soto, *Soto, pintura figurativa 1944-1950*, exhibition cat., Caracas, Galería de Arte Inciba, Palacio de las Industrias, 1971.

It was also in Maracaibo that he first heard somebody talk, in disparaging terms, of Malevitch's *Carré blanc sur fond blanc*.

1947



Soto. Caracas, Venezuela, 1950 © Archives Soto / All Rights Reserved

In his first personal exhibition, Soto showed fourteen paintings (landscapes, portraits and still lives) and a few drawings at the Taller Libre de Arte in Caracas, a meeting place for many young artists and intellectuals (in the previous year the works of the Argentinian group Arte Concreto Invención had been shown there, forming what is considered to be the first ever abstract art exhibition in Venezuela).

He exchanged letters with Otero, who encouraged him to come to Paris where he and several former alumni of the Caracas Art School had been living since 1945.

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And it was to Europe, to Paris, that I wanted to go. Many Venezuelan artists went to Chile, Mexico or the United States. For me the ideal destination was France. It was where Impressionism and Cubism had emerged, and it was there that new trends in art were surely to be born.

Some of my friends from the Caracas School of Fine Arts had already been to Paris and had come back with wonderful stories about what was happening there in art. [...] This was my idea: to stay there until I had solved my problem. [...] I was in such a state of despair that one day I just locked up the school and abandoned everything - I left for Paris!

Soto, Soto, pintura figurativa 1944-1950, exhibition cat., Caracas, Galería de Arte Inciba, Palacio de las Industrias, 1971.

On September 16, 1950, with a six-month state scholarship, Soto embarked from the port of La Guaira on an Italian cargo ship bound for Europe, the Olimpia.

On board he got to know the poet Luis E. Armas. After a twoweek crossing, the ship called at Lisbon, then Barcelona, before its passengers disembarked in early October on the French Mediterranean coast. From there, Soto immediately took a train to Paris.

1950

He found a room at the Hôtel de la Paix at 29 quai d'Anjou, a familiar haunt of Venezuelan immigrants: Alejandro Otero and Mercedes Pardo, Ruben Nuñez, Perán Erminy and the poet José Lira Sosa were already living there.

He sought out his former companions who had founded the group and journal Los Disidentes in March 1950 (Carlos González Bogen, Narciso Debourg, Perán Erminy, Dora Hersen, Mateo Manaure, Luis Guevara, Pascual Navarro, Ruben Nuñez and Alejandro Otero).

At the center of this group was Aimée Battistini, a painter from Ciudad Bolívar, who had arrived in Paris in 1928 and who guided the newcomers in their discovery of modern art, also providing them with moral and sometimes material support.

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It was in her company that Soto, shortly following his arrival, attended meetings of the Atelier d'Art abstrait, founded some months earlier by Jean Dewasne and Edgar Pillet. The end-of-year programme announced lectures by Félix Del Marle ("Mondrian and Neoplasticism", November 7), René Massat ("Constructivism", November 21), Léon Degand ("Paradoxes of Decorative Art", December 5) and Auguste Herbin ("Color", December 19).

Cf. Art d'aujourd'hui, Paris, nº 2, November-December 1950.

Soto also met Carmelo Arden Quin and the members of the Madí group, who attracted several Venezuelans (including Luis Guevara, Omar Carreño, Perán Erminy and Ruben Nuñez) to the group's studio in the rue Froidevaux.

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A group of friends had left a little before me, a year before, I wrote to them, they waited for me and were really very kind to me. I immediately absorbed all the information they had. I took all their books, and, with a dictionary, I worked until five in the morning translating them because I didn't know a word of French. Three months later, I'd read almost all of them and I had collected all the information I could.

They also put me in contact with the annual salon of the Réalités Nouvelles and all the artists they knew at that time. This is how I got to know Denise René and the artists connected with her: all those artists who were, in my eyes, researchers. [...] Also, when I arrived here, I saw reproductions of some paintings by Kandinsky that were starting to be published. [...] I also came into contact with the work of Sophie Taeuber, I met Arp, and with this experience I talked at length with other artists. [...] I was rather drawn to paintings in the spirit of the Bauhaus and those paintings by Klee that look for perspective from several different points of view. [...] With considerable difficulty I discovered the work of Albers, because there was hardly anything available here. I found out as much as I could.

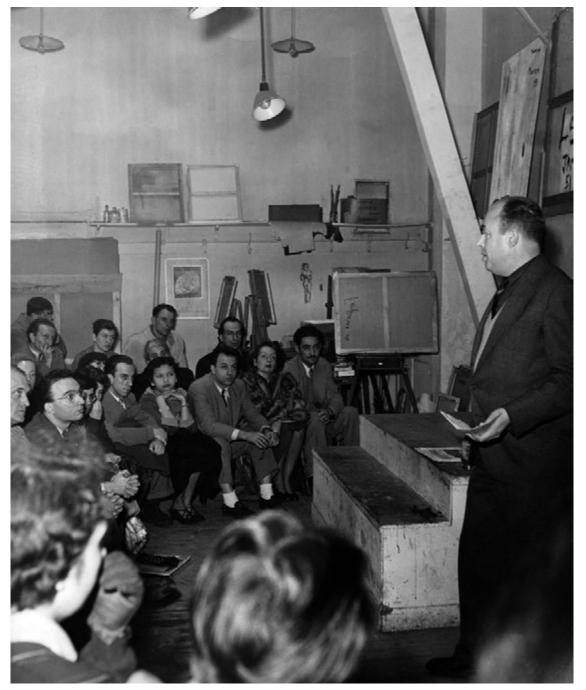
Soto, interview with Claude-Louis Renard, "Excerpts from an interview with Soto", *Soto: A Retrospective Exhibition*, exhibition cat., New York, Solomon R. Guggenheim Museum, 1974, pp. 26-27.



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Soto, Aimée Batistini, Koskas, Victor Valera (in the foreground), José Hernán Briceño, Bitrán, Bitrán's Studio, Cité Universitaire, Paris, France, 1951-1952 © Archives Soto / All Rights Reserved

8



Soto (back right) at the Conference of Léon Degand, Atelier d'Art Abstrait, Paris, France, 1950 © Archives Soto / All Rights Reserved

From February to April, Soto attended certain lectures by Léon Degand entitled "From Figuration to Abstraction" at the Atelier d'Art abstrait, developing a critical stance with respect to the situation of abstract art:

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When I arrived in Paris, all art was made up of forms that reminded me of those I had used to paint portraits or landscapes. This included the Geometricists, whom I did not see as abstract artists. I saw their compositions of lozenges, triangles and polyhedrons as series of elements that had in fact been suggested by figurative reality, and I was convinced that figurative painting used the same system as so-called abstract painting for its internal composition. For me, this was not abstraction but simplified figuration.

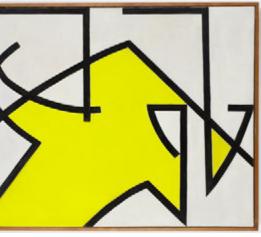
Soto, "Teoría de Jesús Soto", *El Minero*, Caracas, vol. 7, nº 11, September-October 1967, p. 5.

In spring, Soto went to the Netherlands with Ruben Nuñez and Fernando Risquez, a student in psychiatry. They saw the works of Mondrian at the Kröller-Müller Museum in Otterlo and the Stedelijk Museum in Amsterdam. Vermeer's *View of Delft* at the Mauritshuis in The Hague also caught Soto's attention.

In June, Soto showed four *Busquedas Dinámicas* at the sixth Salon des Réalités Nouvelles and a fifth painting entitled Problema which combined the curve with the language of Neoplasticism. On this occasion he met a group of artists, Albert Bitran, Horia Damian, Nicolas Ionesco, Georges Koskas and Charles Maussion, former students of Fernand Léger and André Lhote, represented by the Galerie Arnaud, who were forging many links with South American artists in Paris. Soto also came into contact with the other artists from the Galerie "

1950

1951



Soto. s/t, 1950 73 × 92 × 2 cm Private collection Photo David Bordes © Archives Soto / All Rights Reserved

Arnaud: Jack Youngerman, Ralph Coburn and Ellsworth Kelly, his neighbour on the Île Saint-Louis. When his scholarship ran out, Soto began to play the guitar in bars, with some success.

I had a six-month scholarship from Venezuela. After that I had to earn a living. But how? One evening my friends took me to see some guitar players. It occurred to me that I was much better than them, and I decided to play, to use my guitar to put food on the table. I passed the hat round in cafés and managed to get work in nightclubs. I played from 11 pm to 5 am, slept until 2 pm, then painted until 8 pm. That's how I lived for ten years.

Soto, quoted by Christiane Duparc, "Les Sud-Américains ont pris Paris", *Le Nouvel Adam*, Paris, nº 19, February 1968, p. 49.

Later that year, Soto took part in the exhibition entitled "Espace-Lumière", organized by Carmelo Arden Quin at the Galerie Suzanne Michel, with Guevara, Nuñez, Otero, Pardo and Youngerman. That winter, he produced his first paintings based on repetition and progression:

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To bring abstraction forward, I thought I needed to find a language which owed nothing to the features and plastic resources of figurative art, [...] to find a way of separating abstraction from figuration once and for all while continuing to be a painter. To achieve this, I first needed a specific language, not a borrowed one. So, I began by repeating a simple element, the square, so that it transformed itself into a different reality via the process of repetition. This was my work in 1951, which continued into 1952 with a more pronounced feeling of rhythm. I generally use a single color, in addition to black and white. My fundamental concern has been to destroy form by seeking movement in bidimensionality, even though I have sometimes used relief.

Soto, "Teoría de Jesús Soto", *El Minero*, Caracas, vol. 7, nº 11, September-October 1967, p. 5.

In his efforts to codify plastic language, Soto said that he took inspiration from serial and dodecaphonic music, with which he became acquainted thanks to Pierre Boulez and by reading René Leibowitz's book on Schoenberg and his school.

1952

Alongside Perán Erminy, Georges Koskas, Omar Carreño, Luis Guevara and Guy Lerein, Soto took part in an exhibition at the Galerie Suzanne Michel, from May 20 to June 8. On show was his *Répétition optique N°2* (1951). Shortly afterwards, at the Salon des Realités Nouvelles, he exhibited a Composition later entitled Mur optique whose lines spanned 3.6 meters.

In August, Soto attended the "Primera Muestra Internacional de Arte Abstracto", organized in Caracas by the critic José Hernán Briceño at the Cuatro Muros Gallery founded by Carlos González Bogen and Mateo Manaure. The exhibition brought together the former "Disidentes" (Battistini, Debourg, Bogen, Nuñez, Otero, Pardo, Navarro, Erminy, Hersen, Manaure), members of the Galerie Arnaud group (Koskas, Maussion, Bitran, Ionesco, Youngerman, Kelly...) and certain members of the Madí group (Arden Quin, Guevara...). Soto showed a large black and white relief, no Ionger in existence, which was based on positive/ negative interplay produced by a series of alternating ridges and furrows.

Soto refined the use of systems that replaced traditional modes of composition by predetermining the distribution and chromatism of simple elements (lines, dots).



Soto with the central panel of his work "Mur optique", 1951 © Archives Soto / All Rights Reserved

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I was impressed by the system of twelve notes that musicians organized in advance, independently of any preconceptions about sound. [...]

This is a good way of avoiding all temptation of preconceived plasticity, of any influence of the unconscious. It's also a way of depreciating those aspects of form which carry the artist's reminiscences and "good taste". I said to myself that all harmonies had already been created, all compositions had been attempted, and that to make progress we indeed had to follow a logic that preceded the elaboration of form. I sacrificed my taste for color and the pleasure I had in arranging it. I isolated the three primaries, the three secondaries, as well as black and white. I gave each a particular place and number on a randomly established grid. Then I systematically applied the colors according to the grid, repeating the operation over the entire surface.

Soto, quoted by Jean Clay, "Jesús Rafael Soto", *Visages de l'art moderne*, Lausanne, Éditions Rencontre, 1969, p. 298.

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I wanted to get away from the traditional concept of chromatic harmony, for example the law of color complementation. So, I began to work on a group of paintings in which the dot is the fundamental element and where its distribution is determined by a system similar to serial music.

Soto, "Teoría de Jesús Soto", *El Minero*, Caracas, vol. 7, nº 11, September-October 1967, p. 5.

1953

At the Salon des Réalités Nouvelles, from July 10 to August 9, Soto presented *Relations*, a group of five serial paintings he had done the previous year, including *Progression*, *Étude pour une série*, *Pintura serial* and *Rotation*. Nearby were works by his friends from the Galerie Arnaud: Charles Maussion, Horia Damian, Georges Koskas and the Icelandic artist Gerdur.

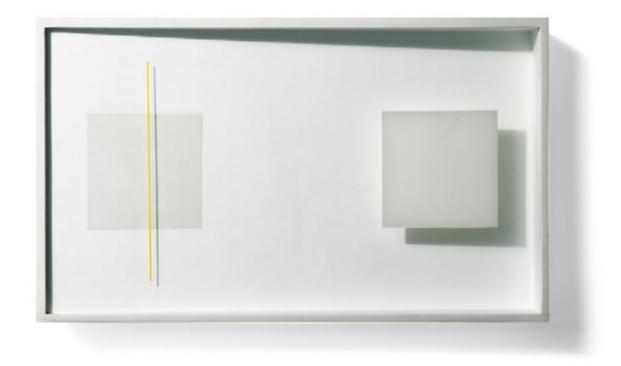
Soto eagerly read Lászlo Moholy-Nagy's book Vision in Motion (published in 1947), a copy of which he found at the Galerie Arnaud bookshop and from which he asked his friend Fernande Métraux to translate selected passages.

It was at this time that Soto began to use Plexiglass to superimpose motifs *(Deux carrés dans l'espace, Évolution)*.

- 11

In 1953, I used superimposition for the first time. It was a very important year for my work, building on the experience of previous stages. I took my serial distributions and applied them to identical superimposed planes, varying the angle of superimposition. For me, as for so many artists working with superimposition at the time, the idea was to produce a dynamic effect.

Soto, "Teoría de Jesús Soto", *El Minero*, Caracas, vol. 7, nº 11, September-October 1967, p. 5.



Soto. s/t (Deux carrés dans l'espace), 1953 35 × 63 × 8 cm © Archives Soto / All Rights Reserved

In the spring, Soto met Jean Tinguely at his exhibition of mechanical reliefs at the Galerie Arnaud.

At the Salon de Mai and then at the Salon des Réalités Nouvelles, he showed pieces which applied the principle of superimposing geometric planes using transparent Plexiglass. One of these Compositions (today entitled Métamorphose, 1954) was reproduced in *Cimaise*, with a short and less than favorable commentary:

1954

The experiments carried out in the continuing spirit of Neo-Plasticism and Constructivism by the group of invited Venezuelan artists, most notably Oramas and Soto, seem a little "out of context" here, especially given the absence of the young Parisian artists who, as we have seen, were the first to move in this direction.

Roger Van Gindertael and Claude Hélène Sibert, "Le Salon de Mai", Cimaise, Paris, nº 7, June 1954, p. 11.

Nevertheless, Denise René and Victor Vasarely noticed Soto's work and soon made their first visit to his studio. Vasarely gave him a work consisting of several superimposed sheets of tracing paper, each bearing an ink motif. Soto had praised Vasarely when he saw it reproduced in the March-April issue of Art d'aujourd'hui.

1955

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At the Salon des Réalites Nouvelles, I had seen Soto's early pieces. Tinguely, who had just arrived in Paris, had shown some of his first Méta Malevitch pieces at the Galerie Arnaud in 1954. Agam had shown his first transformable works at the Galerie Craven. I had just discovered Pol Bury. I had the idea of gathering these artists together to "mark a milestone". This first event wasn't designed to be encyclopedic; it was just to bring these innovative artists together right away. It was a real shock; it was unexpected, youthful, stimulating. It was a turning point at a time when we were struggling against the vogue for abstract expressionism.

Denise René to Gilles Plazy, in Cimaise, Paris, nº 162-163, January-March 1983, p. 14.

The exhibition "Le Mouvement" held at Denise René's gallery from April 6 to 30, with Agam, Bury, Calder, Duchamp, Jacobsen, Soto, Tinguely and Vasarely, featuring the meetings of the previous year. Soto presented several Plexiglass reliefs, including Métamorphose (1954), Déplacement d'un élément lumineux (1954), Cubes suggérés (1955) and Métamorphose d'un cube (1955).

The exhibition was accompanied by a leaflet (known today as the Manifeste jaune, because of the color of the paper) containing "Notes pour un manifeste" by Vasarely, two texts by Roger Bordier ("Cinéma" and "L'œuvre transformable"), as well as a historical note and a text by Pontus Hulten ("Mouvement-temps ou les quatre dimensions de la plastique cinétique").

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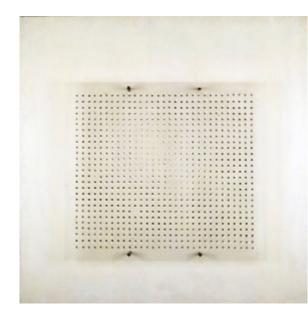




Views of the exhibition "Le mouvement", Denise René Gallery, Paris, France, April 1955. Photo Denise René Gallery

Movement is a spark of life that makes art human and truly realistic. An artwork endowed with never-repetitive kinetic rhythm is one of the freest; a creation, which escaping from all systems, lives on beauty alone. Using movement, the statement we make by creating something is in no danger of posing as a definitive truth.

Pontus Hulten, "Mouvement-temps ou les guatre dimensions de la plastique cinétique", Le Mouvement, leaflet, Paris, Galerie Denise René, 1955.



Soto. "Points blancs sur points noirs", 1954 100 × 100 × 12 cm © Archives Soto / All Rights Reserved

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So here we have transformable artwork. Whether through the mobility of the piece itself, through optical movement, or through the intervention of the viewer, the artwork has actually become, via its very substance and its very nature, constantly and perhaps infinitely re-creatable. Whether painting or sculpture - and here it becomes more and more difficult to categorize the work within either genre -, it has shrugged off its immutability and its utter fixedness, freeing itself from the constraints of definitive composition habitually ascribed to it.

Roger Bordier, "L'œuvre transformable", ibidem.

The younger members of the group (Agam, Bury, Soto and Tinguely) were at various degrees reluctant to embrace the theoretical tutelage of Vasarely, and resented their exclusion from the Manifeste jaune. A certain spirit of solidarity

emerged amongst them, intensified by an awareness of common goals. Soto and Tinguely were henceforth to become particularly close. The exhibition, which had an immediate impact. provoked many reactions in the press. The most negative came from an unexpected guarter: Léon Degand, a defender of abstract art:

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Movement [...] is not new in any of the senses attributed, somewhat over-generously, by those presently promoting it. And it is not a new conception of plasticity. [...] To be a real conception of plasticity, movement should have provided itself with its own language and its own logic, as with figuration and abstraction. But no, it is content with the language and logic of abstraction, far from replacing them with anything. Though it calls itself a movement, it has not brought abstraction a single step forward.

Léon Degand, "Le mouvement, nouvelle conception de la plastique", Aujourd'hui, art et architecture, Paris, nº 3, May-June 1955, p. 14.

After the exhibition, the Venezuelan architect Carlos Raúl bought two reliefs (Points blancs sur points noirs, 1954; Cubes suggérés, 1955) for his personal collection of abstract and constructivist art, one of the largest historical collections of its kind. This marked the beginning of a friendship and a large correspondence, which were to last until the architect's death in 1975.

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I am waiting for two of your paintings to be sent via Lefebvre-Foinet. Your two paintings are to be added to my private collection. [...] Please be so kind as to send me your best work after Denise René's exhibition.

Carlos Raúl Villanueva to Soto, June 3, 1955. Archives Soto, Paris

Soto. "Tres, seis, nueve (cubes suggérés)", 1955 100 × 100 × 8 cm © Archives Soto / All Rights Reserved

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This is a key piece in which Soto resolves three fundamental problems all at once: the integration of real time into his language, since the Spirale can only be perceived over time; the involvement of the viewer, who plays a decisive role in the process of the form's break down; the emphasis of the role of chance in the piece, since the hitherto predetermined part of the artistic message is now totally dictated by the presence and position of the viewer. It is a work that exists only in the present, as a dialogue; it is not a piece of data, it is constantly in the making. Never until Spirale in 1955, had Soto come as close to his goal: the methodical destruction of all stable form, the molecular fragmentation of solids, the dilution of volumes.

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Duchamp's spiral Rotative Demisphère, which hung in Denise René's gallery, inspired Soto's own Spirale, a Plexiglass relief.

In 1955, when I saw Marcel Duchamp's optical machine, [...] I felt a confirmation of my abilities to produce optical movement. I had to do what Duchamp had done, but without the help of the machine, without a motor. This is how Spirale came about, a superimposition of two series of ellipses 25 centimeters apart in which the reality of movement is undeniable.

Soto, "Teoría de Jesús Soto", El Minero, Caracas, vol. 7, nº 11, September-October 1967, pp. 5-6.

Jean Clay said of this essential step:

Jean Clay, "Soto, de l'art optique à l'art cinétique", Soto, exhibition cat., Paris, Galerie Denise René, 1967.

Soto also produced *La Cajita de Villanueva* (Villanueva's Little Box), which prefigured certain later spatial installations such as the Cube à espace ambigu of Amsterdam, in 1969.

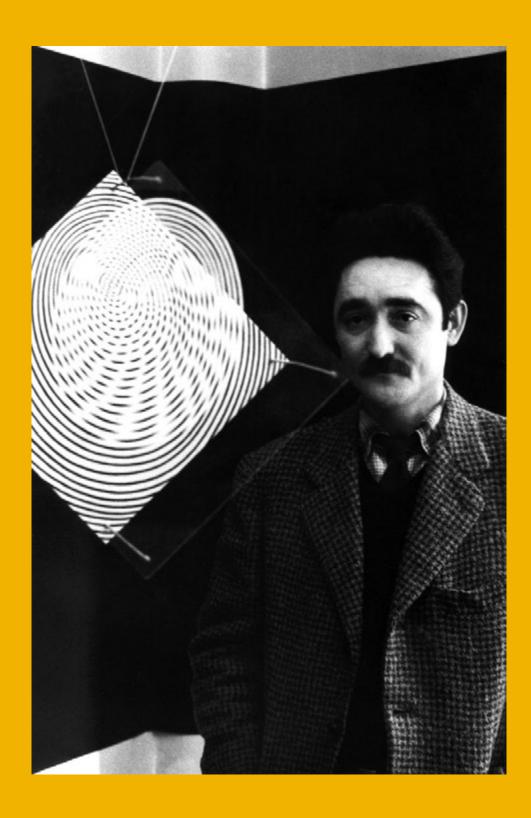
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After this, [...] I understood that movement was determined by the relative dimensions of the line and the background against which it was superimposed.

By proportionally reducing both, I obtained the desired movement with less relief. Building on this, I made La Petite Boîte where I created a kind of virtual volume: three squares each painted on Plexiglass and held 5 cm apart, creating a volume that ceases to exist if the elements are separated. What happens is the reverse of the classical concept, because it's the empty spaces that create the volumes.

Soto, "Teoría de Jesús Soto", *El Minero*, Caracas, vol. 7, nº 11, September-October 1967, pp. 5-6.

> Right: Soto and his work "Spirale", 1955 during the exhibition "Abner, Soto, Agam", Denise René Gallery, Paris, France, March 1956 Photo Jean Lattes © Archives Soto / All Rights Reserved



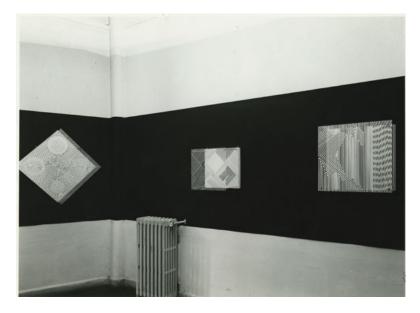
BIOGRAPHY (1923 - 2005)

1955

From March 9 to 31, Soto held his first personal exhibition in Paris at the Denise René Gallery at the same time as Agam and Abner. On a background of black paper (an idea suggested by Mortensen), he presented eleven Structures Cinétiques in Plexiglass.

More compelling are Soto's Plexiglass constructions, made to create optical illusions which upset our visual notions. Two transparent plates are superimposed in such a way that the parallel lines on them slide into each other and seem to extend to infinity. The two planes are slightly mismatched, causing motion in the lines that is accentuated by the viewer's slightest movement, and continuing even when he stays perfectly still. The true master of this refined interplay is the light diffused through these glass cages, imbuing them with subtle grey-white shades.

Wescher, "Abner, Agam, Soto", Cimaise, Paris, nos 7-8, June-August 1956, p. 46.



View of the exhibition "Abner, Soto, Agam", Denise René Gallery, Paris, France, March 1956 © Archives Soto / All Rights Reserved

Soto took part in the Festival of Avant-Garde Art organized by Michel Ragon at Le Corbusier's Unité d'Habitation in Marseille (August 4 to 21). Here he discovered the work of Yves Klein.

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The first time I saw a work by Yves Klein was at the Avant-Garde Festival in Marseille in 1956. At the time people called him "Yves the monochrome". The show was organized by Michel Ragon who had hung a small room with Agam, Tinguely, Klein and myself. [...] The monochrome I saw at that exhibit was very horizontal, about 60 centimeters X 1.5 meters, red-orange in color. I was immediately convinced it was an important proposition, because since my arrival in France it somehow seemed the right time for monochrome art. One might almost say that we were waiting for someone to have the courage to do it. But nobody dared.

Soto, "Yves le monochrome", Art et Création, Paris, n°1, January-February 1968, p. 74.

Towards the end of the year, Villanueva began talking about the possibility of a Soto exhibition in Caracas.

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catalogue, etc.

Carlos Raúl Villanueva to Soto, December 6, 1956. Archives Soto, Paris.

In December, the newspaper Combat presented an assessment of the state of abstract art. Louis-Paul Favre saw the works of Soto, Tinguely, Agam and Schöffer as heralding the arrival of a new experimental path, which he called "Optique artistique", and which went beyond the traditional dichotomy of the two great trends of abstract art (constructive/informal):

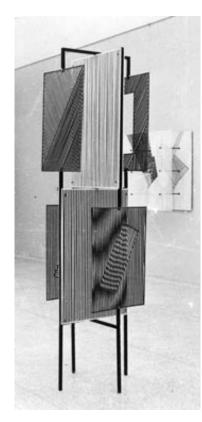
"

down a single color.

Louis-Paul Favre, "L'art abstrait : destinée 56", Combat, Paris, December 31, 1956.

I am thinking of organizing an exhibition of the work of the genius Jesús Soto in Caracas next year. At the Fundación Mendoza gallery or the Museo de Bellas Artes. Tell me when it would be possible [...], the number of paintings, the dates, how to send everything, type of

Experimental art was born of a specifically western confrontation with the resources of vision, of the optical. Rhythm and kinetics suddenly ruined static forms in space, ushering in new dimensions [...]. In Soto we have seen an effort to suspend all static instances of vision. A Plexiglass sheet sets the original painting in motion, not only introducing eternal movement but making it impossible to pin



Views of the exhibition "Soto .estructuras cinéticas", Museum of Fine Arts, Caracas, Venezuela, 1957 © Archives Soto / A. Brandler

From January 26 to February 13, Soto's "Peintures Cinétiques" were shown at the Palais des Beaux-Arts in Brussels.

Soto refused to take part in the Salon des Réalités Nouvelles when he learned that an entirely monochrome abstract painting had been rejected on the grounds that it showed no trace of composition. He had not seen the work itself and was not yet personally acquainted with the artist: Yves Klein.

On June 30, the exhibition "Soto, Estructuras Cinéticas" opened at the Museo de Bellas Artes in Caracas. Thirty-six pieces were presented in an exhibition designed by Alejandro Otero. It was a huge success and there were many articles in the Venezuelan press. passages.

It is at that moment when Soto abandons the plexiglas to build up his first kinetic structures in weld metal.

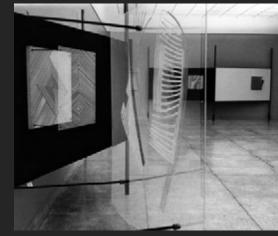
In the leaflet that served as a catalogue, Carlos Raúl Villanueva wrote:

"

Soto, part magician, part geometrist, has managed with Plexiglass elements to set the traditional canvas in motion, boldly stepping forth to conquer countless unknown new dimensions. I had always imagined that in architectonics a new attitude was possible, as in the Baroque period, which would free inner space of static vision and carry the kinetic joy of color into multiple dimensions. Soto's new contribution opens a door onto the marvelous landscape of the art of tomorrow.

Carlos Raúl Villanueva, Soto .estructuras cinéticas, exhibition leaflet, Caracas, Museo de Bellas Artes, 1957.





Views of the exhibition "Soto .estructuras cinéticas". Museum of Fine Arts. Caracas. Venezuela, 1957 © Archives Soto / A. Brandler

viewer:

"

It announced Soto's involvement in several projects with Villanueva. In the fall, the architect installed a Structure cinétique on the campus of Caracas University (in the garden of the School of Architecture) one of a group of three-dimensional constructions made by Soto in Venezuela. The first and simplest of them had been part of the exhibition at the Museo de Bellas Artes, before entering Villanueva's private collection.

These works, which Jean Clay would refer to (around 1965) as "pre-penetrables", are important milestones in Soto's reflection on the environmental and participative dimensions of his art. In the same spirit, Claudio Bozo stated as early as August 2nd, 1957, what was to become one of the major themes of Soto's, the merging of the artwork and the

With Soto, the subjet-cum-spectator involves himself unconsciously and necessarily in the multidimensional world of the paintingcum-architecture, engaging inevitably and indissolubly in an artistic tandem par excellence, acting as its necessary complement, at once present and singular.

Claudio Bozo, August 2, 1957 (un-referenced article). Archives Galerie Denise René Paris

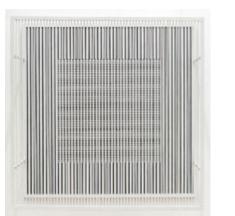
At the beginning of the year, Soto was visited by Gyula Kosice, who was preparing an exhibition of hydro-kinetic works at the Denise René Gallery in Paris, as well as by the Argentinian section of the Madí group.

Through Tinguely, Soto finally met Yves Klein, a few days after the opening of the exhibition entitled "Vide" (Emptiness) at the Galerie Iris Clert on April 28.

11

This empty room was clearly characteristic of "the monochrome Yves" whose work I had admired in Marseille and with which I had subsequently lost touch. I immediately and warmly embraced the idea of emptiness. I found it reassuring that this artist should so logically continue in the precise direction of his thought.

Soto, "Yves le monochrome". Art et Création, Paris, nº 1, January-February 1968, p. 74.



Soto. s/t, 1958, 100 × 100 × 38 cm © Archives Soto / All Rights Reserved

Soto abandoned Plexiglass and began to design pieces composed of metal grids hanging in front of an opaque background covered with thin lines (Carrés concentriques, 1958; Vibración horizontal-vertical, 1958). This type of arrangement prefigured later developments in Soto's work. Jean Clay describes the effect in the following terms:

"

We stand still: an impeccable square appears, superimposed on a larger square - the background panel. Here everything radiates calm, harmony and balance.

It is as serene as a Mondrian. We are within the immutable. Now we move a little: the regular geometric shapes begin to stir and, discreetly, minutely, ever so elegantly, a little movement begins, a kind of uncertainty, like a doubt about the impact of the real on the immutable order of things. This insidiously eroded band, this solid on either side encroached upon by the subtle interplay of the background lines, this delicate questioning of our clearest, most motivated certainties: is this not Mondrian's art revisited, invested from within by the spirit of modern art?

Jean Clay, "Jesús Rafael Soto", Visages de l'art moderne, Lausanne, Éditions Rencontre, 1969, p. 302.



Soto. "Mur de Bruxelles", 1958 200 × 1929 × 115 cm © Archives Soto / All Rights Reserved

Soto used the same principle for his Premier carré vibrant, as well as one of his first works to break with predominant geometry, Cubes ambigus, whose main motif was a construction of wires with blurred outlines.

He now applied the principle of setting a metallic structure against a streaked background on a large scale, designing two monumental Murs cinétiques for the Venezuela Pavilion at the Brussels World Fair (commissioned by Villanueva). The inner mural covered a surface 7 m by 10 m; the outer one took the form of a horizontal band 18 m long bearing slender curved rods, prefiguring the later series called Écritures.



Soto. "Tour de Bruxelles", 1958 © Archives Soto / All Rights Reserved

These works gave rise to various comments:

"

All day long people ask the exhibition staff the same question: "What does that painting represent?" The boldest visitors make suggestions: is it supposed to be wood fibers? Or something to do with electrical energy? In any case, most visitors immediately recognize the dominant element: movement. It is movement that is translated by Soto's esthetic intention. [...] Changing and unpredictable vibrations come into being, and at the s-ame time many virtual surfaces appear between the lines and in the open spaces, where they stand side by side and interpenetrate indefinitely. It is an interplay of light and forms which can only fascinate the viewer, or at the very least capture his attention.

R. Siret, "Kinetic Structure", International Lighting Review, Amsterdam, nos 3-4, 1958, p. 134.

Soto also made a Structure cinétique which indicates the Venezuela Pavilion. Today known as the Tour de Bruxelles, it originated from his 1957 investigations.

In March, Soto took part in an exhibition organized by Bury, Tinguely, Spoerri and Paul Van Hoeydonck at the Hessenhuis in Antwerp with members of the Group Zero (founded in 1957 in Düsseldorf by Otto Piene and Heinz Mack), whose title, "Vision in Motion - Motion in Vision", was directly inspired by the title of Moholy-Nagy's book.

This event was the first concrete sign that several trends in the European avant-garde (optical and kinetic art, monochrome painting and New Realism) were converging at the time.

Shortly afterwards, in July, Soto also participated with the same artists at the exhibition entitled "Dynamo 1", organized at the Galerie Boukes in Wiesbaden by Mack and Piene.

1959



Invitation card of the exhibition "Vision in motion", Hessenhuis-Antwerpen, Antwerp, Belgium, March 21st, 1959



Iris Clert, who met Soto through Tinguely, organized a personal exhibition of him in June. Here he presented a new kind of work for the first time, thin metal constructions of apparent complexity placed in front of uneven backgrounds streaked or covered with materials, sometimes including glued elements, and placed in relationship to empty monochrome surfaces (Vibración azul cobalto, 1959).

Soto received Venezuela's National Painting Award for a white *Vibration* consisting of twisted wire against an unevenly striated background shown at the annual Venezuelan Art Salon.

On this occasion he gave several interviews to the Venezuelan press.

"

I have always tried to make art where given forms, even geometric ones, don't count. My investigations have nothing to do with the objects themselves. My painting tries to represent movement, vibration, light, space, time, things that exist but which do not have a determined form, and the only way I have found to do this is to attempt to represent the relationships between them. Relationships are an entity; they exist and so they can be represented.

Soto, interview with Pedro Espinoza Troconis, "Soto Habla de su Pintura", *La Esfera*, Caracas, March 21, 1960.

"

I see my works as flat paintings, even if one of their components is situated in space. The plastic value of the work comes from the way it fuses with the background and the resulting vibration, and not from the appearance of a third dimension.

I do not consider myself as a sculptor but as a painter, even if I use elements in relief which are necessary to me as I search for my particular language.

Soto, quoted by Oswaldo Vigas, "Jesús Soto, el Pintor Venezolano que ha Logrado Hacerse Vida en Europa", *La Esfera*, Caracas, February 1st, 1960.



Soto. "Première vibration", 1957 50 × 50 × 17 cm Private collection Photo David Bordes © Archives Soto / All Rights Reserved At this time, he first talked with Miguel Arroyo, director of the Museo de Bellas Artes in Caracas, about his wish to create a museum of modern art in Ciudad Bolivar around the private collection he was putting together with the help of friends via purchases, donations or exchanges.

For the Festival of Avant-Garde Art organized at the Porte de Versailles in Paris by Daniel Spoerri and Jacques Polieri, Soto made his first mural made of assembled scrap metal. Spoerri helped him gathering the materials and Tinguely helped him welding them together.

The work appeared in the "Art et Movement" section, next to works by Agam, Pol Bury, Heinz Mack, Frank Malina, Otto Piene and Jean Tinguely. At the same time, the 1955 *Spirale* was reproduced in 30 "multiples" by MAT Editions (Multiplication art transformable), which Spoerri had just founded in Paris.

Soto began work on the series *Leños viejos* (*Vieux bois*, 1960-1962), assemblages made of pieces of wood and scrap metal.

Soto took part in the important international kinetic art exhibition "Bewogen Beweging", organized by Daniel Spoerri at the Stedelijk Museum in Amsterdam, from March 10 to April 17, then later by Pontus Hulten at the Moderna Museet in Stockholm. A dozen of works, presented at the end of the exhibition, offered a complete view of his work and made Soto one of the best represented artists of the 72 who were selected. He also made one of the most spectacular pieces in the show, a large mural consisting of three striated panels bearing a variety of disparate objects. This installation was praised by Carlos Cruz-Diez who took part in the exhibition and wrote in *El Nacional*:

"

With this exhibition, [Soto] is back in the avant-garde and surprises us by incorporating the "objet trouvé" into three large murals. Tree branches, roots, ropes and nets against his traditional lines produce a marked impression of motion which show that he is the strongest artist of the new generation of "movement".

Carlos Cruz-Diez, "Tres Venezolanos en el Stedelijk de Amsterdam", *El Nacional*, Caracas, April 1961.

Some years later, Soto said about this work:

"

The destruction of form imposed by the Informalists was of great interest to me, in a way, but I realized that what they were proposing was the destruction of form as a solid body, by liquefying it. I, on the other hand, was attempting to destroy matter in order to transform it into energy. I did not wish to extol natural elements like branches, or nets and ropes, but to prove that their matter could be transformed into energy. Energy not in the scientific sense, but as I conceived it: a state of sensibility.

Soto, interview with Ivan González, "Soto: liberar el material hasta que se vuelva tan libre como la música", *Imagen*, Caracas, nº 32, September 1-15, 1968, p. 10.

Soto took part in several of the events organized in relation to the Group Zero, extended to include French, Italian and Dutch participants among others. These included "MAT", an exhibition of multiples produced by Daniel Spoerri since 1959 at the Krefeld museum; "Zero-Edition, Exposition, Demonstration" at the Schmela Gallery in Dusseldorf; and "Zero" at Gallery A in Arnheim. He also featured in the third and last issue of Zero, the most elaborate of all, which presented an anthology of the group and those associated with it.

The Museo de Bellas Artes in Caracas organized a second Soto exhibition from April through May, showing a group of seventeen Vibrations. The Venezuelan public was thus able to see the artist's most recent work for the first time, prompting Guillermo Meneses, who had been following Soto's work since the mid-fifties, to write:

"

Today Soto has taken another step forward. In some cases, rich materials have replaced the background stripes. [...] Soto's serene awareness does not stop at the chance possibilities offered by particular objects. On the contrary he turns these encounters with objects to his advantage and incorporates them into the work, just as he carries out extraordinary research into materials and textures in the same vein as the "Informalists".

G. M. [Guillermo Meneses], "La Exposición de Jesús Soto", Visual, Caracas, vol. 2, nos 13-14, January-November 1961.

The press once again gave extensive coverage to Soto, publishing many articles and interviews with the artist in which he explained the new directions his art was taking:

"

At first, I made structured things using geometrical elements. I then tried to make this geometry evolve towards a freer form of expression [...]. Before, I used to make a painting as something predictable, preconceived. Later, however, I came to attach greater value to chance encounters and randomness as I produced my work. I never make models or sketches. I work directly on the piece, and it provides me with the elements I choose to focus on. [...] For me, chance is the living factor that supplies me with a kind of amazement.

Soto, interview, "El Azar es Para mí el Elemento Viviente", *El Nacional*, Caracas, April 12, 1961.

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BIOGRAPHY (1923 - 2005)



Soto. "ZERO – Edition Exposition Demonstration" exhibition, Schmela Gallery Dusseldörf, Germany, 1961 Photo Heinz Mack © Archives Soto / All Rights Reserved

1961



Soto Exhibition, Edouard Loeb Gallery, Paris, France, 1962 Photo Carlos Cruz-Diez

At his first personal exhibition at the Galerie Édouard Loeb in Paris, in June, Soto presented a large series of Matiériste works, in the same vein as the research started in 1958-1959.

The show came to the attention of David Medalla and Paul Keeler, who were later to set up the Signals Gallery in London.

During the night of June 5-6th, while celebrating the opening, Soto heard about Yves Klein's death.

"

For me, Yves was never far away. He was a very good friend. He always let me in on his new projects, his new inventions. Even today, I still haven't quite accepted his death. [...] The great Yves, for me, is the "monochrome Yves", the painter of the blue, orange, and monogold canvases. His awareness was so important that in this respect I compare that Yves to Malevitch and Mondrian.

Soto, "Yves le monochrome", Art et Création, Paris, nº 1, January-February 1968, p. 74.

1962

Soto took part in the exhibition entitled "Zero" at the Ad Libitum Gallery in Antwerp where an exhibition of his work had been held in February and March.

Angel Hurtado made a film about Soto with the critic Clara Diament de Sujo, describing all the stages involved in making a mural with scrap materials. Stills from this film and the transcription of the commentary were published in CAL (Crítica, Arte, Literatura), the magazine published by Guillermo Meneses:

"

The artist begins by randomly collecting scrap / thrown out as rubbish / useless / that must be used to make a mural. There is no preconceived plan. No predetermined form / things will develop under their own impetus and dictate their demands. [...] The first panel is finished and left aside. [Soto] now begins to compose a mesh of wires / a sort of tangle of knots and sharp points. He uses a factory as his workshop, and if he does not use brushes or pencils it is because it is more appropriate to use a power saw / a mallet / a file / a drill / a hammer / pliers / a welder and even an electric one / if not an anvil and a crucible. Flames / sparks / fire begin to attack the wire so that it can be twisted / broken and joined until it forms a whole in accordance with the secret plan

Now is the time to submit the first panel to the equalizing force of black, spray-painted over the entire surface. Then Soto hoists the huge unifying metal trellis that will join all the different

scarcely formed in Soto's imagination [...]

35

parts together and link the whole thing with the light and space that traverse it / and relish the vibrations thus created. Now he applies himself to painting lines on two panels, which are to be used as the background. A slow process, painting lines, always more identical lines / furrows of white paint. [...] All the different parts are starting to come together / the work begins to assume its final unity. The whole thing is imbued with vibration, and the drama of forces in motion can begin.

Angel Hurtado and Clara Diamant de Sujo, "Así nace un mural con Jesús Soto", CAL, Caracas, nº 3, 19 mai 1962.

At the invitation of Edgar Pillet, Soto and his family spent the summer in Carboneras, a small Andalusian village where they were to return regularly and where a community of artists and intellectuals was gradually growing. Early arrivals included Dominique Aubier, Alfred Tomatis, Hans Hartung and Pillet, later to be joined by Soto, Julio Le Parc, Francisco Sobrino, Antonio Asfs, Takis and the critics Jean Clay and Christiane Duparc.

In Paris in November, Soto took part in meetings organized by Nouvelle Tendance, a group formed by members of Group Zero, the Italian groups N and T, GRAV (Groupe de Recherche d'Art Visuel) and their Zagreb counterparts, who had met the year before. Soto was only to be involved in one of their exhibitions, in 1973.

The Matiérisme of Soto's work gradually began to give way to an elementary geometric language.

"

Ultimately, in 1962, with all the experience I had improved over the previous years, I came back once again to the organization and rigorous distribution of plastic elements. I retained the system of superimposition and the metallic structures, but only as the basis for a single preoccupation: the quest for pure vibration, the transformation of material elements into light, the breaking down of rigid matter into elastic matter [...] Pure vibration appeared as a relationship between thousands of other unknowns.

Soto, "Teoría de Jesús Soto", *El Minero*, Caracas, vol. 7, nº 11, September-October 1967, p. 6

1963

Soto took part in the exhibition entitled "Zero-der neue Idealismus" at the Diogenes Gallery in Berlin.

He gave an important interview to the Venezuelan daily newspaper *El Nacional*. He described his relationship with the different European avantgardes and discussed certain founding principles in his work:

"

I have always been an eager partisan of New Realism. I was involved in the beginnings of New Realism, not so much because I made artworks in this style, but out of enthusiasm for the movement. My world involves a different language, but I have a lot of admiration for them, and I have shown my work a little alongside theirs, especially in the Dutch and Belgian biennials, where the New Realists and Group Zero, searching for "pure visual art", like myself, were brought together. The first major exhibition we did was in Antwerp in 1958 [sic: it was 1959]. [...] Actually, the idea of "pure visual art" occurred to me at that time so that I could differentiate myself from New Realism, which is a visual art form with expressionistic needs. [...] The New Neo-Realist is an artist who is very receptive to the outside world: he uses, for example, a shoe or a doll; it's like an accusation or a judgment by the artist on the world around him. [...] [What we have in common] is the search for a new form of expression, a new way of saying things that will supplant the traditional means of painting. [...] For instance, in what I call "pure visual" research, form as a primary element, composition, and harmony of line and color, are rejected, and we move

towards pure structure, for example vibration, movement, far from anything descriptive. [...] Or instead of structure we should say relationships; a study of pure relationships and not of elements; relationships independent of elements [...] Movement is only one of the elements I use. There are other equally important preoccupations, like vibration in its purest state and the transformation of matter.

Soto, interview with Ludovico Silva, "Jesús Soto o la Viusalidad Pura", El Nacional, Caracas, 1963.

In April and May, the Galerie Diderot, in Paris, confronted works by Soto, Bury and Takis in an exhibition entitled "Structures vivantes" ("Living Structures").

In November, "Soto, Kinetische Bilder", an exhibition organized by Paul Wember, opened at the Museum Haus Lange in Krefeld, where works by Klein and Tinguely had already been shown. Beginning with a few historical reference pieces, the exhibition moved on into a large series of some thirty recent works, including the first *Écritures*, made up of slender curved wires (Écriture d'Italie, 1963). In the catalogue appears what might be considered a "multiple": a transparent sheet of plastic with an intersecting lines motif, which can be moved in front of two other sheets bearing different arrangements of lines.

Paul Wember wrote:

"

The viewer activates these structures in a way that reflects his own activity, freely and with no perceptible adherence to laws. The structures at rest are arranged so that they contain a tension that develops at the precise moment when the viewer engages with the image, via a most tenuous link: that of the eye. The movement of these images is that of the viewer, who, thanks

to the interplay between the structure and the movement of the body, becomes aware of his own movement. At the same time, he becomes aware of the fact that the structures at rest, like all things at rest, mean nothing in themselves. The thing at rest immediately renounces the validity of its existence, which is linked to the instant. The local "resting state" is transformed by the viewer's activity into movement in space and time. The balance of all living things can only exist in a state of permanent change.

Paul Wember, [no title], Soto, Kinetische Bilder / Tableaux cinétiques, exhibition cat. Krefeld, Museum Haus Lange, 1963. Original translation edited.



View of the exhibition. XXXIInd Biennale Internazionale D'Arte di Venezia, Venezuela Pavilion, Venice, Italy, 1964 Photo André Morain © Archives Soto / All Rights Reserved

1964

Soto took part in the

Venice Biennial with

nineteen recent works.

"

An article on Op Art in *Time*, where Soto was presented as a follower of Vasarely, drew from him the following response:

"

Sir: Your article on "Op Art" is not only opportunistic, but disappointing. Sir: Replace disappointing by dishonest.

Soto, [no title, letter to the editor], Time, New York, vol. 84, n° 18, 30 October 1964, p. 10.

In parallel, a polemic with William Seitz on Soto's role in the exhibition "The Responsive Eye", due to open at the Museum of Modern Art in New York the following year, led him to withdraw. He explained to a collector friend:

"

I just wanted to react against the self-interested tendency in certain quarters to refer to me as a pupil of Vasarely - a tendency also reflected in the article in Time presenting the show -, and I had asked Mr. Seitz that I, as well as Agam, be represented on an equal footing with Vasarely.

Soto to Arnold H. Maremont, February 7, 1965 (Archives Soto, Paris)

A little later, he further explained:

In the exhibition organized at the Museum of Modern Art in New York, they wanted to show optical art as avant-garde, whereas it had already given way to kinetic art, which had been in existence for ten years. I wasn't very well known at the time and they wanted to include me among the young optical artists. I protested, and gave them dates and facts that showed my evolution towards kinetic art. I could not accept that those who were still "floundering" in optical art were being referred to as masters of something they had never actually come to terms with ..

Soto, interview with Ivan González, "Soto : liberar el material hasta que se vuelva tan libre como la música", Imagen, Caracas, n° 32, September 1-15, 1968, pp. 9-10.

Events including Group Zero and its European affiliates in which Soto was involved were particularly abundant in 1964: "Zero", New Vision Centre, London; "Mikro Zero / Nul", Galerie Amstel 47, Amsterdam; "Nul = 0" and "Zero = 0 = Nul", Galerie Delta, Antwerp, and Rhedens Lyceum, Velp; "Group Zero", Institute of Contemporary Art, University of Pennsylvania, Philadelphia.

Soto also joined many other artists taking part in the exhibition entitled "Movement 2" at the Denise René Gallery in Paris, December 15, 1964 - February 28, 1965.

Organized by the Kootz Gallery in New York, Soto's first one-man exhibition in the USA took place from March 9 – 27, 1965.

Soto went to New York and saw Malevitch's White Square on White Background for the first time at the Museum of Modern Art; he observed that the painting was perfectly consistent with the mental image he had of it.

"

There is no need to see White Square on White Background to appreciate it. It is enough to know the proposition. I saw this painting recently in New York. I was no more moved than by the idea I had already formed of it. I had known of its existence since 1949. "Wonderful!" I said then. That sums it up. By painting white on white, Malevitch was saying: let's paint light as light. Let's lay it directly on the canvas. No need for the objects we normally use to capture it.

Soto, quoted by Jean Clay, "Jesús Rafael Soto", Visages de l'art moderne, Lausanne, Éditions Rencontre, 1969, p. 312

That same year, Soto started a new cycle of works: Carrés vibrants - made up of rows of squares almost completely covering striated backgrounds, sometimes divided into two parts: Vibrations horizontales, cascades of lines suspended from nylon threads; and, deriving from the latter, Colonnes vibrantes.

Soto took part in the exhibition "Licht und Bewegung", organized by Harald Szeemann at the Kunsthalle in Bern from July 3 - September 5, and then in Brussels, Baden-Baden and Düsseldorf. Soto was one of the most strongly represented artists, with twenty-four pieces from all periods of his career.

The Brussels show ("Lumière, mouvement et optique") extended Harald Szeemann's selection to include Op Art. Although the preface to the catalogue, written by Jean Clay, seeks to clearly distinguish Op Art from Kinetic art, the juxtaposition gave rise to protests from several artists. Before the show was taken up by the Staatliche

Kunsthalle in Baden-Baden, Soto, Agam, Bury, Tinguely and Takis sent its director, Dietrich Malhow, a letter warning against the dangers of confusing their work with the "OP" tendency in kineticism:

"

Eager to avoid all confusion between our work and the very different work of the so-called "optical" school, we are particularly concerned that the Bern selection be respected - a selection exclusively founded, as its title suggests, on the idea of real movement. It was indeed contrary to our agreement that a large number of socalled "optical" works were added to the kinetic selection we were presenting with our friends at the Brussels exhibition. We are determined henceforth to prevent this kind of confusion as it can only hinder understanding of our work, and we thus insist. should you show "optical" works in Baden-Baden, to not show them in the same exhibition as ours: Otherwise - to avoid confusion which is seriously harmful to us - we would be obliged to withdraw our works.

Letter from November 2nd, 1965 (Archives Soto, Paris)

Eight days later, the answer from the Kunsthalle proves the signatories of the letter right:

"

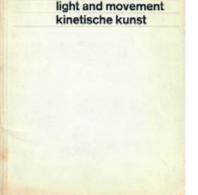
The exhibition will be in the spirit you want with you friends: no **OPTICAL in Baden-Baden!**

Letter from November 10, 1965 (Archives Soto, Paris)

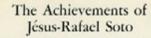
Paul Keeler organized a large publicity campaign for the extensive Soto retrospective (over fifty works) presented at the Signals Gallery in London, from October to December. The exhibition "The Achievements of Jesús Rafael Soto, 15 Years of Vibrations" coincided with the first anniversary of the gallery, whose name had been chosen with reference to the works of Takis. The gallery devoted itself to the promotion of kinetic and participative art, with group shows and personal exhibitions by Takis, Sergio de Camargo, Lygia Clark and Carlos Cruz-Diez.

For the occasion, Soto made two large murals composed, according to the principle of Vibrations horizontales, of bouquets of thin curved

licht und bewegung lumière et mouvement luce e movimento light and movement kinetische kunst



Catalog of the exhibition "Licht und bewegung – Kinetiche kunst", Kunsthalle Bern, Bern, Germany, September 1965.



1950-1965: 15 years of vibrations a retrospective exhibition organised by Paul Keeler October 28 to December 24, 1965

Mr Paul Keeler confully invites you to a reception at the show-rooms of SIGNALS LONDON, 19 Wigmore Street, W1, on Thursday, October 28th; at nine pet, to meet Me & Mr Sims-Ratuel Sotte, RSVP: Miss Patricia Rogers, secretary, SIGNALS LONDON



Catalog of the exhibition "The Achievements of Jesús Rafael Soto: 1950-1965: 15 years of vibrations", Signals London Gallery, London, 1965 Invitation to the reception on October 28th, 1965, announcement of the Signals review.

JESÚS RAFAEL SOTO

rods suspended against a striated background (one of them, Vibrante Signals, the artist gave to the Museo de Arte Contemporáneo in Caracas in 1974).

Together with the exhibition, a special issue of the Signals Newsbulletin, edited by the artist David Medalla and entirely devoted to Soto, came out. It included a short text by Soto, much quoted then:

"

We observe the existence of relationships in every lucid moment of our behavior.

We wonder at the laws of chance, without realizing that we are merely becoming aware of realities we had not previously thought about. Elements plunge into the work like a fish into water; all these directions, speeds, accidents and positions are ordered according to an all-encompassing whole upon which they depend, and which determines their variations. Their force is measured according to the number of their manifestations. This conscious or unconscious state of the contemporary artist has given the art of our time this astonishing range of possibilities.

Soto, [no title], *Signals Newsbulletin*, London, vol. 1, n° 10, November-December 1965, p. 1.

Soto took part once again in many events involving Group Zero, among others in Washington ("Zero: An Exhibition of European Experimental Art", The Washington Gallery of Modern Art) and most notably at the Stedelijk Museum in Amsterdam ("Nul 1965").

During this year, Soto and his friends intensified their negotiations with the Guyana regional authorities for the creation of a museum in Ciudad Bolívar to house Soto's personal collection begun in the late 50s.



1966

At the XXXIIIrd Venice Biennial, where Julio Le Parc received the Grand Prize for Painting, Soto totally shrouded the walls of the Venezuela Pavilion with a suspended curtain of fine wire rods. This *Mur panormaique vibrant* was a decisive step towards the invention of the penetrable.

BIOGRAPHY (1923 - 2005)

View of the exhibition, XXXIIIrd Biennale Internazionale D'Arte di Venezia, Venezuela Pavilion, Venice, Italy, 1966 Photo André Morain © Archives Soto / All Rights Reserved

In the interviews he gave at the time, Soto talked about several essential aspects of his approach:

"

For a motor, I have never used anything but the eye. I have never tried to use electric motors or mechanics. I wanted to use the viewer as a mechanism [...] I always seek to differentiate optical art and kinetic art. Optical art is what I found in Mondrian when I arrived [in France].

Two-dimensional art, where time was not integrated. So I set out in search for it. What interests me is to guide the artwork towards movement. And by becoming temporal, painting becomes kinetic; it involves movement [...] Vasarely is an optical painter, who worked in the spirit of the Bauhaus, but who remains a two-dimensional painter. I, on the other hand, I consider myself a kinetic painter. My work is in motion, and that makes all the difference. [...] What interests me is the transformation of matter. Taking an element, a line, a bit of wood or metal, and transforming it into pure light...transforming it into vibrations. Making a solid material into something ethereal: this is my present concern. So, there is not only the question of movement, but also the question of the transformation of elements.

Soto, interview with Carlos Diaz Sosa, "La Gran Pintura es Cosa de Progreso Histórico", El Nacional, Caracas, August 1st, 1966.

Soto was represented at various exhibitions of the extended Group Zero, in Amsterdam, Brescia and Rome.

1967

Soto designed the cover for the February 1967 issue of *Studio* International devoted to kinetic art.

He also published a short theoretical text, which reaffirmed the primacy of *relationships* over the artwork's component parts.

"

A piece of wire disintegrates in front of a moiré background. Its form is "dematerialized". It undergoes a transformation, a metamorphosis. You can't tell where the wire ends and where the background begins. I hang yellow rods in front of the same background and black dots appear in the yellow. Where did the color come from? [...] I am not interested in the connections between things, only in their relationships. I am not interested in how colors or lines are connected. Relationships are worth more than connections. [...] My work is essentially relationship. Not between two elements of the work itself, but between the principle that governs the work - for instance, dematerialization - and a general law of the universe that determines everything.

These relationships might be seen as the product of chance: they cannot be foreseen. They come by chance, following the laws of chance. It might seem strange to talk about the laws of chance, but chance events do not happen independently of laws. It's just that these laws are difficult to discover. This is why we call them the laws of chance. It is my goal to discover these laws.

Soto, [no title], Studio International, London, vol. 173, nº 886, February 1967, p. 60.

45

1967



"Soto - de l'art optique à l'art cinétique" exhibition, Denise René Gallery, rive gauche, Paris, France, 1967 Photo André Morain © Archives Soto / All Rights Reserved For his one-man exhibition in Paris, at the Denise René Gallery in May, Soto unified the gallery space by covering a part of the ceiling with short vertical rods hanging at close intervals following a principle which was to give rise to his extensions and progressions.

Besides a new vibrating wall, in the spirit of the one designed in Venice the previous year, he made his first real *penetrable* using thin plastic tubes hanging from the ceiling to the floor of the gallery.

This was quickly considered one of his major inventions:

"

The penetrable makes concrete an idea that has nourished my thoughts, on a state of total plenitude of a universe filled with relationships. It is the revelation of sensible space, eternally filled by the purest structural values, such as energy, time and movement. The experience of the viewer who takes part by entering a penetrable, thus entering a different space-time continuum, will be clearer for him when he is able to move freely in an environment where gravity does not exist.

Soto, quoted by Marcel Joray, Soto, Neuchâtel, Éditions du Griffon, 1984, p. 174.

"

In the catalogue published for the occasion, Jean Clay wrote:

On these walls we will see the unwavering logic with which, from 1957 until today, he has been exploring to the full the visual problem he has chosen to treat. To begin with, he turned his attention to simple geometric figures: disintegrating squares and rods. Soon after, with the "écritures", he took thin metal wires which he literally caused to evaporate before our eyes, and then in 1965 he offered us pure "immaterial vibrations" in which all trace of form had disappeared, where the very notion of plasticity no longer held true and was surpassed for good. What is being atomized, in fact, at the same time as these intangible rods gently moving at the end of their nylon threads, is not only our oldest visual habits with regard to the long-standing concrete nature of painting, but our very idea of esthetics. This idea has been rooted for centuries on the relationships of balance or contrast between forms and colors inside the painting - a concept that we would be hard pressed to apply to Soto's latest work. So Malevitch's 1919 prophecy has come true: "He who makes abstract constructions, and who still bases his work on the interrelationships between colors within the painting, is still a prisoner of the world of esthetics, instead of bathing in philosophy." But now Soto has arrived at a new concept: the invisible.

A rod that once existed before our eyes has suddenly totally disappeared. All matter disappears, vanishing into the lined background of the painting. A nod of the head and an entire portion of reality collapses - to be reborn immediately, an accelerated image of the fleetingness of the world.

Jean Clay, "Soto, de l'art optique à l'art cinétique", Soto, exhibition cat. Paris, Galerie Denise René, 1967.

About the environmental dimension of Soto's work, he adds:

"

It is now in our own space, the very space in which we move, in which we live, that he inserts his arachnidan traps where the eye panics and gets lost.

The work is now no longer beyond the real, it is no longer a window on the world of imagination, a porthole through which the eye, comfortably ensconced in familiar surroundings, can savor for a moment the thrills once experienced by the artist. Quite the contrary: it hits into the real, it encroaches on our feeling of space, it questions our idiosyncrasy. [...] Soto's infernal machine threatens the whole space we move around in – the space where we once felt so confident in. Fiction encroaches on the real; they become indiscernible. We topple into the dizzy void. By the same token all space – my whole vital space – which, looking at it that way, might undergo just such a strange metamorphosis.

Jean Clay, "Soto, de l'art optique à l'art cinétique", *Soto*, exhibition cat., Paris, Galerie Denise René, 1967.



Soto. "Sotomagie", 1967 Editions Galerie Denise René, Paris, France 1967.

At the same time the Denise René Gallery edited Soto's *"biographie en valise"* (*"biography in a suitcase"*), a box entitled *Sotomagie* containing eleven reproductions of his work from 1951 - 1965 covering his whole career.

From May to August Soto took part in "Lumière et Mouvement", an ambitious group exhibition organized by Frank Popper at the Musée d'Art moderne de la Ville de Paris. He made a *Grand mur vibrant (Large vibrating wall)* almost 9 meters long, in the same spirit as the Venice environmental piece of 1966, but also integrating moving artificial light. Jacques Michel found it "one of the most beautiful moments in the exhibition". In the introduction to the catalogue, Frank Popper wrote:

"

Soto's subtle, musical and mathematical art has always focused on "capturing" light. The introducing of moving artificial light in this proposition indicates not only constantly evolving artistic thinking, but also a practical spirit adaptable to a process of architectural transformation. Architecture thus becomes more and more immaterial, and the sensation of solidity can be replaced by a feeling of luminous vibration.

Frank Popper, introduction to the *Lumière et Mouvement* catalog, Paris, Musée d'Art Moderne de la Ville de Paris, 1967.

The show was criticized by Jean Clay for being excessive and for putting everything on the same level, as well as for its tendency to playfulness:

"

Fundamental concepts like fugacity, dematerialization, instability, the invisible, the environment, permutation, undulation, ubiquity and randomness lost all clarity in the general euphoria created by the gadgets, and rooms with examples of some of the most decisive steps in modern esthetic thought were turned into showcases for gadgetry.

Jean Clay, "La peinture est finie", *Robho*, Paris, nº 1, June 1967.

Jean Clay, "Le cinétisme est-il un académisme ?", *Robho*, Paris, n° 2, November-December 1967.

Julio Le Parc and Soto, "a considerable man", shared the cover of the first issue of *Robho*, a magazine created by Julien Blaine, Jean Clay and Christiane Duparc – one of the most innovative publications of its time, both in terms of form (it was designed by Cruz-Diez) and content.

In an article entitled "La peinture est finie" ("Painting is finished"), Jean Clay wrote:

"

Kineticism is not "what moves", it is an awareness of the instability of the real. [...] What makes this new art original is that the support in turn becomes unstable. The metamorphosis now takes place at the very heart of the matter that constitutes the work. The latter is no longer the static rendering of a movement previously perceived by the artist, described after the fact via forms and colors evoking and attempting to reconstitute the emotional shock he received. Quite the contrary: here the esthetic phenomenon takes place directly before our eyes, the work is born, moves, vibrates, consumes energy, dies and is reborn. It is the place where a real and present natural phenomenon unfolds, channeled by the action of the artist – a phenomenon that both constitutes and creates the work of art. [...] A kinetic artwork only exists via the

unfolding of a physical event before our eyes in the here and now: the forces of nature - shadow, light, driving force - are invoked to carry out before us the great work they accomplish everywhere in the universe. Kineticism is not realistic art; it is an art of the real. Talking about Soto, he adds:

"

Soto's "vibrations", which over the years he has managed to make more and more ethereal, more and more immaterial, are surely one of the most successful attempts so far to totally annihilate form. Every day we see, in Europe as well as in the United States, that few works have had such an influence on the development of kinetic art.

Jean Clay, "La peinture est finie", Robho, Paris, nº 1, June 1967.

Meanwhile, at the request of Carlos Raúl Villanueva, Soto installed his first *Volume suspendu* (*Suspended volume*) in the Venezuela Pavilion at the Montreal World Fair.

"

The spatial world I am interested in is independent of all measurement. I believe that relationships exist before elements, and that the only function of the latter is to reveal these relationships. To reveal the existence of these relationships, any surrounding space is appropriate. When the architect Villanueva gave me a space limit of 13 cubic meters at the Venezuela Pavilion in Montreal, with no inner elements, I strove to demonstrate as intensely as possible the plenitude of the relationships born from these proportions. My work is nothing other than a detector of the infinite vibrations that Villanueva's cube delimits in the world.

Soto, [no title], Opus International, Paris, n° 2, July 1967, p. 97.





Soto. "Volume suspendu", 1967 1200 × 400 × 400 cm Universal Exhibition – Expo 67 Villanueva Soto, Venezuela Pavilion, Montreal, Canada, 1967

In the spring, *Robho* published a fundamental study on penetrables by Jean Clay, encompassing notions of environment, viewer participation and his fusion with the artwork. Quoting Clay: "some of the richest and most successful propositions in art today" and which "stand at the crossroads of the principal concerns of the moment":

"

In Soto's work the environment is radical. Its first function is to bring down the walls around us. They are optically pulverized. The room invaded by the penetrable no longer has describable proportions. Its volume is elastic, fluid. One minute the eye wanders through an unlimited forest, the next minute it notices a vibration an inch from the retina. The very basis of our vision - and even our mental habits - lose themselves in this world in perpetual metamorphosis, a world in which all possible systems of perspective are ensnared. We no longer know where to look to recreate the habitual dimensions of the space we are used to living in. As we grapple with signs that constantly meld and unmeld, ceaselessly forming and unforming before our eyes, we have the experience of a world without proportions "whose center is everywhere and whose circumference is nowhere".

Jean Clay, "Les Pénétrables de Soto", *Robho*, Paris, n° 3, Spring 1968, pp. 22-23.



Soto and his daughter Isabelle in his work "Volume suspendu", 1968, 200 × 100 × 50 cm Photo André Morain © Archives Soto / All Rights Reserved

Jean Clay also reproduces a statement by Soto that has often been quoted and that was to become a kind of credo:

"

Before, the viewer was like an outside witness to reality. Today we know that man is not on one side and the world on the other. We are not observers but integral parts of a reality which we know to be teeming with living forces, many of them invisible. We are in this world like fish in water: we are not distanced from matter-energy, we are WITHIN it and not FACING it: there are no more viewers, there are only participants.

Soto quoted by Jean Clay, "Les Pénétrables de Soto", *Robho*, Paris, n° 3, Spring 1968, pp. 22-23. On May 21st, the Kunsthalle in Bern opened the largest retrospective of Soto's work since the one in Caracas in 1957. Initially organized by Harald Szeemann, the exhibition traveled widely, going to Hanover (Kestner-Gesellschaft), Düsseldorf (Kunstverein), then, in 1969, to Amsterdam (Stedelijk Museum), Brussels (Palais des Beaux-Arts), and finally Paris (Musée d'art moderne de la Ville).

Each show experimented a new display, especially for the environmental pieces: penetrables, kinetic walls and suspended volumes.

In Bern, the mural designed by Soto reached a length of 24 m. In the Hanover catalogue, Heinz Hack paid a "vibrant" tribute to Soto :

"

No other artist has given lines this optical movement which Soto calls "vibration". Vibration is nothing more than a synonym of Soto. The line within the plane, the plane made of lines, the line in space, space made of lines, lines between lines, space between lines, a thousand lines, one line, the viewer facing the line, the viewer within the space of the lines...all this is vibration. Virtual movement in artificial space is an artistic issue which, like other artists, has fascinated me for years, but no other artist has confronted his duty as determinedly or unconditionally or irrevocably as Soto. He has done this quietly and consistently. He has not given in to the lure of his own means, nor to other temptations. His morality reflects his means: he is alone with himself; he is perfectly free.

Heinz Mack, "Mack über Soto", *Soto*, exhibition cat., Hanover, Kestner-Gesellschaft, 1968.



Soto. "Mur cinétique", 1968 460 × 2400 × 180 cm © Archives Soto / All Rights Reserved

The catalogue for Amsterdam and Paris included a text by Jean Clay and devoted much space to statements by Soto:

"

The immaterial is the sensible reality of the universe. Art is the sensible knowledge of the immaterial. Becoming aware of the immaterial at the state of pure structure is to make the final step towards the absolute.

Soto, Soto, exhibition cat., Amsterdam, Stedlijk Museum, 1969.

In July, Soto donated a work for a public sale organized by the "Committee for the material support of the May movements". Later, when asked about the events of May 68, he said:

"

It did not represent anything decisive for my work because, like others, I had been toying for some time with the idea of taking my art into the street, of making it more popular. It was the idea behind the multiples, but they did not come to much: the multiple remains guite a private thing. [...] One of the things the May 68 movement wanted was to bring culture into the street. In this respect I don't think it gave me any new ideas. [...] The movement became too political. It focused too much on politics. It was general in the beginning: culture, politics, changing the universities, and then little by little it became political, and art got sidelined as usual.

Soto, quoted by Miyó Vestrini, "Jesús Soto : Venezuela es Uno de los Raros Paises de America Latina Donde Existe la Necesidad de Crear un Arte Nuevo", El Nacional, Caracas, July 24, 1971, p. 8.

In an interview he gave to the cultural magazine Imagen in September, Soto considerably clarified the illusionistic nature of his art and the relationship with reality in which it is rooted:

"

Painting has always had something to do with illusion, to suggest movement and space within the boundaries of a canvas. The kind of illusions I make are totally inseparable from the movement and space that I wish to reveal and which, I think, can characterize our experience of the world.

Soto, interview with Ivan González, "Soto : liberar el material hasta que se vuelva tan libre como la música", Imagen, Caracas, nº 32, September 1-15, 1968, p. 10.

"

Art is a mean of knowing the universe, which is not necessary to demonstrate because it is not about deducing laws but about offering a subjective, intuitive form of knowledge. [...] I do my utmost to deny my personal self in my work so that I can reveal the sensible universe. [...] For me, all fixed form is a utopia, all static space is a lie; I believe that any living apprehension of the real must encompass notions such as space-time, the permanent transformation of things, the fluidity and ductility of natural phenomena, and the corpuscular and undulatory nature of matter-energy. Everything else is pure romanticism or metaphysics.

Soto, interview with Ivan González, "Soto : liberar el material hasta que se vuelva tan libre como la música". Imagen. Caracas, n° 32, September 1-15, 1968, p. 10.

To these words should be added those translated by Jean Clay the following year:

"

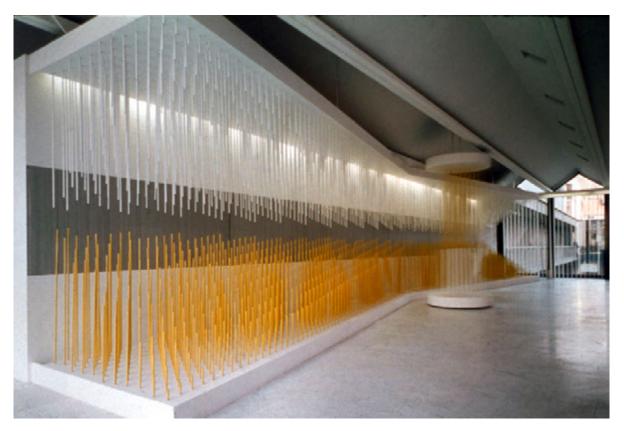
My work is totally abstract. It arises from a reflection on painting, on the "propositions" of those that came before us. I do not copy nature; I isolate fundamental properties of the real. My works are above all signs, not materials... I demonstrate concepts. It would be a mistake to see in the work you see in front of you the object of my art; it is a witness, a sign of something else.

Soto, quoted by Jean Clay, "Jesús Rafael Soto", Visages de l'art moderne, Lausanne, Éditions Rencontre, 1969, p. 310.

On the request of the Paris city council, to coincide with the Christmas illuminations, Soto produced an installation for the Place Furstenberg. It included a carpet of vertical rods, four columns of mobile rods and electric lighting - in an arrangement which would reappear the following year in Amsterdam. This work, which the viewer could move around in, caused an immediate controversy between the partisans of modernity and the defenders of the picturesque charm of "old Paris", making it a scandalous yet nonetheless successful piece.



Soto. s/t, 1968 Furstenberg square, Paris, France,



Soto. "Mural jaune et blanc", 1969 238 × 160 cm UNESCO, Paris, France © Archives Soto / All Rights Reserved

1969

To coincide with his retrospective in Amsterdam, Soto created a *Saturation mouvante*, with motors and electric lighting. It was inspired by the installation in the Place Furstenberg, as well as the *Cube* à espace ambigu, which applied on a large scale (each side 2,50 m) the principle of La petite boîte of 1955. The exhibition also showed for the first time a new kind of work: a progression (*Progression jaune*, 1968) and an extension (*Extension verte*, 1969), a field of vertical rods extendable at will, like floor-level all-overs. The possibilities of integration into the environment offered by these structures were soon used to the full: in 1969 Soto installed a *Mur cinétique* at the UNESCO headquarters in Paris, as well as a Progression, a *Mur vibrant* and a *Volume cinétique* in front of the Centro Capriles in Caracas.

On June 10th, the Soto retrospective opened at the Musée d'art moderne de la Ville de Paris. With some one hundred works, twice more than in Amsterdam, it was the largest version of the exhibition. A penetrable measuring 400 square meters, completely covering the courtyard in front of the Palais de Tokyo, greatly contributed to its success, and the show received from most part enthusiastic reviews in the press. Christiane Duparc, for instance, said that it was "without doubt the most important contemporary artwork we have seen this year in Paris":

"

Soto thinks on a scale in accordance with the times, he sees things on a grand scale, he does not allow himself to be imprisoned in the object like so many modern artists. [...] Soto's giant works – the Penetrable, but also the Extension verte which is 12 m long, or the Environnement bleu (16 m) should give Paris exhibition organizers matter for thought. All over the world, recent art aspires to release itself from the limitations imposed by the habits of bourgeois collections. It focuses on the relationships between proportions which link the work to the viewer. [...] What is also striking about the Penetrable is its transient nature [...] Soto is proud of this: for him, the importance of a proposition is not linked to how long it lasts but to how meaningful it is to the participating viewer.

[...] The open-air Penetrable at the Musée d'art moderne is one of the happiest places in Paris. I've seen elderly men doing cartwheels in it, children chasing each other around in it on rollerskates, blushing young couples holding hands in it, two critics making up after a squabble in it, a jealous man looking for his wife in it. [...] Art as a relay race where the Seated Scribe stands up to pass the baton to the Sourire of Reims, who passes it to Rembrandt who passes it to Goya who passes it to Cézanne, as an "ardent sob which rolls from age to age", "the song of constellations torn from the irony of the Nebulae" (Malraux), in short, art-as-religion has no appeal to men like Soto. They see art as a practical way to read reality, a way to decipher the continuum that surrounds us, a visual and sensorial means of showing the physical and psychological structures of the world around us. Soto is a lay person, and one day we will realize that this transition from art as a sob, a consolatory art to art as a reading of the real is of no mean significance.

Christiane Duparc, "Le Descartes du cinétisme", *Le Nouvel Observateur*, Paris, n° 244, July 14, 1969, p. 36.

1969



Gilbert Lascault wrote:

"

As each visitor moves around among the wires and rods, he gains a heightened sense of his own body. [...] The color and density of the hanging verticals and the sound they make force us to recognize the body's potential, which our alltoo-often puritanical moral outlook tries to make us forget. [...] This flexible adaptability imposed on the viewer's body makes him a true work of art for the others: whatever his physical state, movement metamorphoses him.

Gilbert Lascault, "Une grande exposition Soto", Paris-Normandie, Rouen, June 13, 1969.

"Soto" Exhibition, Museum of Modern Art, Paris, France. Soto. "Penetrable s/t", 1969 500 × 2919 × 2442 cm Photo Alain Vialleton

JESÚS RAFAEL SOTO

On June 17th, shortly before the opening of the group exhibition entitled "Exposition-position" at the Denise René Gallery, Soto reacted in the following telegram to the presence of works by Julio Le Parc and Armando Durante which included slogans and ideological texts.

"

Let us not mistake the sacrifice of Guevara who died for his credo in the Bolivian maquis with the comfortable Paris pamphleteers. With a little talent and clear convictions, we can be artists and revolutionaries at the same time. Please exhibit my telegram. Soto.

Archives Soto, Paris.

In fact, neither the telegram nor the works in question were shown in the exhibition.

In October, TV producer Michèle Arnaud inaugurated her variety show "Les Quatre Temps" with sets designed by Soto serving as a backdrop for Serge Gainsbourg. This experiment with a new type of T.V. studio set was later repeated with works or patterns borrowed from Sonia Delaunay, Victor Vasarely, Giuseppe Capogrossi, Vassily Kandinsky and Hans Richter...

On October 25th Soto's third one-man show in the USA opened at the Marlborough-Gerson Gallery in New York, with 75 pieces including three penetrables. Once again it was a main attraction:

"

Commenting on the penetrables, [Soto] said that the inspiration came some years ago during an exhibition in Brussels. "The people who commissioned the show were tempted to touch my works to verify physically the relationships between space, movement and matter, as if they couldn't believe what they were seeing. They even completely entered some of the larger works. So I decided to create things which would deliberately invite the viewer to participate".

On October 27th, an official regional decree was issued for the creation of the Museo de Arte Moderno Jesús Soto in Ciudad Bolívar, which would finally open in 1973. Carlos Raúl Villanueva was put in charge as architect.

BIOGRAPHY (1923 - 2005)

Anonymous, "Soto's Penetrables in New York Gallery – One-Man Show Well Received", *The Daily Journal*, New York, November 9, 1969, p. 17.

While an exhibition of his work opened at Galerie Bonnier in Geneva. Soto talked to Jean-Luc Daval about his idea of art-as-science as a means to decipher the world, in one of his most searching interviews ever:

"

For me, art is a science, a way of knowing the universe. [...] Rather than denying space, I have decided to use it. Along with the question of space goes the matter of time, of the fourth dimension. This is where our generation has made a great step forward; we have really used the fourth dimension as a plastic element. [...] I began with the idea of the repetition of a single element, which is the only way to abolish both form as a plastic element and the surface of the work. By repeating a small element ad infinitum, we move imperceptibly into the universal. I have always thought that the artist should demonstrate a universal principle on a small scale. Freed from the figurative world by the negation of form offered to me by repetition, I understood that this automatically brought us closer to a new universal idea of plasticity. I did not know yet what this idea was, but I gradually realized that modern Man could no longer look at an artwork at a single glance, as for the Mona Lisa in the Renaissance. There was a physical problem of perception that forced him to decipher, to look at the work as unfolded, like a film, no longer considering it as a work of art.

This is when I understood the need to integrate time into art. Since then, it has only been very slow work to decide what to do and how. [...] And I am still there, attempting to decipher the universe via this new possibility which time represents. [...] I concentrated on finding a language where Man could be the motor. Meanwhile, I was aware that the viewer was becoming an integral part of the work. So I started to work on developing a kind of symbiosis, Man - work of art communion. For me the work of art does not exist independently of the viewer. If you take a photo of my work, it remains a traditional image. My works only find their true dimension when faced with a viewer and his movement.

With penetrables, my most recent creations, this participation becomes tactile, even often auditory. Man interacts with his surroundings. Matter, time and space form a true trinity, and

movement is the force which demonstrates the trinity.

[...] I believe that Man is not facing the universe, but that he is inside the universe. And that is why I no longer believe in painting. The one who continues to see the universe as something outside himself lives his life as a spectator. But we are not spectators, we are participants! [...] The penetrable is the demonstration of the idea that I have of the universe. We are the decipherers of the sensitive states of the universe; in parallel, the scientist deciphers states that can be demonstrated. [...]

It is esthetics that distinguishes us from scientists. I am not afraid of this word, even if today it is debased. We must offer an esthetic, and thus a qualitative deciphering of the universe. Modern art cannot be figurative – not because we refuse figuration, but because it was relevant when Man thought he was in the center of the world, when he saw himself as a witness to the phenomena of the universe. Now that we who know that we are only an infinite part of the universe we can no longer conceive figuration; we can no longer be contemplative beings.

Soto, interview with Jean-Luc Daval, "Soto : 'Je ne crois plus à la peinture' ", Journal de Genève, Geneva, January 24-25, 1970, p. 19.

Heinz Mack gave the opening speech for the Soto exhibition at the Kunstverein in Mannheim on April 24th. The show then travelled to Kaiserslautern (Pfalzgalerie des Bezirksverbandes) and Ulm (Ulmer Museum).

The Soto exhibition at the Denise René Gallery (June-July) took plenitude (le plein) as its theme. Soto worked animated the walls and ceilings of the gallery and made his first sound penetrable, made of slender metal tubes which clanged together when the viewerparticipant walked through them. Jean Clay spoke of the "body music" they created:

"

As you walk through the work, a wave of sound surrounds you. Sound pours onto your shoulders. You push your way through the verticality of an immaterial cathedral; sounds respond to each other and multiply to infinity like as many echoes. Random music where each participant, via his movements, plays his own score in a collective concert.

Jean Clay, "Pourquoi les artistes tournent le dos à l'art", *Réalités*, Paris, May 1972, p. 101.

Soto carried out several commissions for environmental pieces: installations for the lobby of the Deutsche Bundesbank in Frankfurt, the entrance hall of the faculty of medicine and pharmacy in Rennes, and an *Extension* and a *Progression* for a high school in Rethel in the Ardennes.

He also produced an *Environnement* spanning 18 meters for the French Pavilion at the Osaka World Fair in Japan.



Soto. s/t, 1970 Universal exhibition, Osaka, Japan, 1970 © Archives Soto / All Rights Reserved

In a feature article devoted to corporal and polysensorial experiences in the work of art – in which the works of Lygia Clark, Hélio Oiticica, Franz-Erhart Walther and James Lee Byars were also discussed...–, the magazine *Robho*, in its final issue, came back again on the penetrables:

"

In Soto's penetrables, the viewer's perception is not only visual. The work is apprehended with the whole body. It can even be experienced with closed eyes. It often triggers playful attitudes: running, dancing, etc. Or on the contrary more withdrawn, meditative behavior. A large penetrable adds a note of complicity and singularity to the interpersonal encounters produced. The feeling of being immersed in a situation, in a common substance, in an unusual space without precise limits, plays a part in disarming our self-defense reflexes.

Anonymous, "Unité du champ perceptif", Robho, Paris, nos 5-6, Spring 1971, p. 14.

The magazine also published three unfinished projects for penetrables: one aquatic, another involving steam, and third adapted to a theatre in which it would unify the stage and the auditorium.

Soto made a monumental outdoor piece for the Instituto de Investigaciones Científicas de Caracas (*Vibration jaune*) and a large penetrable, outdoors as well, for a Venezuelan collector (*Pampatar Pénétrable*). He also designed the stage sets and costumes for the ballet Violostries, in Amiens.

> Soto. "Pénétrable de Pampatar", 1971 300 × 1000 × 400 cm © Archives Soto / All Rights Reserved



JESÚS RAFAEL SOTO

During a large retrospective at the Museo de Bellas Artes in Caracas, Soto gave another interview to the daily newspaper *El Nacional*:

"

Everything in this exhibition comes from painting, more than from sculpture. In other words, the feeling of space-time has always been a major concern of the painter more than the sculptor. [...] Painting has always been closer to shifting and metamorphosis.

Soto, quoted by Miyó Vestrini, "Jesús Soto : Venezuela es Uno de los Raros Paises de America Latina Donde Existe la Necesidad de Crear un Arte Nuevo", *El Nacional*, Caracas, July 24, 1971, p. 8.

One of the first works in the series entitled "T" (*T jaune*, 1971) was exhibited in Caracas. This series, in which grids of small bars are projected against the habitual striated backgrounds, pushed the effects of optical vibration to a new level of intensity. It would provide the basis for many later developments.

1972

The Soto retrospective went from Caracas to Bogotá in February and was inaugurated by the President of Colombia.

The exhibition entitled "Douze Ans d'art contemporain en France" opened in May at the Grand Palais in Paris, amid considerable commotion.



Soto. "Penetrable sonoro", 1970 300 × 300 × 300 cm "Douze ans d'Art Contemporain en France" exhibition, Grand Palais National Gallery, Paris, France, 1972 Photo André Morain © Archives Soto / All Rights Reserved Soto installed a new penetrable. Serge Lemoine noted in the catalogue:

"

Since 1971, lumino-kinetic art seems to have paused for breath. Not much new since the GRAV propositions, Soto's penetrables, Morellet's programmed neon lights and Agam's sculptures.

Serge Lemoine, "L'art géométrique ou les vicissitudes de la vertu", *Douze Ans d'art contemporain en France*, exhibition cat., Paris, Grand Palais, 1972, p. 50.

72

Soto made an environmental piece for the foyer of the Sandoz Laboratories in Basel.

1973

In an interview for a Venezuelan periodical, Soto came back on the origins of his approach:

"

My first influence was Cézanne, at the Escuela de Artes Plásticas y Artes Aplicadas. Then, almost immediately afterwards, Cubism. I left school, one might say, dominated by the presence of Cubism. At that time, I saw no way out for painting and that is why I went to Europe, and there was the peak. I asked what the most advanced form of painting was, and for everybody it was Mondrian's. In practical terms, I began with Mondrian. Immediately afterwards I became acquainted with the work of Malevitch, who in a very short time, with utter logic, had managed to make form disappear, to irradiate and saturate any preconceived geometric surface with light. [...] Let's say my work is anchored in Neo-Plasticism and Constructivism.

Soto, interview with Alfredo Barnechea, "Las confesiones de Jesús Soto", *Oiga*, Lima, nº 512, February 16, 1973, pp. 31-32.

Soto Jesi In Ju the e

"

Talking about his favorite themes, he added:

I think we are all aware [...] that matter is not fixed, that it can be modified, that it is transformable. My work attempts to explain matter not in an immediately figurative form, but as a universal reality; this means it cannot be presented figuratively. If you like, it involves demonstrating the energy of matter rather than the present form of a tree or a human body, it involves something deeper and more universal. [...]

That is what it is all about: the philosophical principle.

Of course this is not something limited to painting or art, it concerns the whole of contemporary thought.

Soto, interview with Alfredo Barnechea, "Las confesiones de Jesús Soto", *Oiga*, Lima, nº 512, February 16, 1973, p. 32.

In June, Soto installed his penetrable with sound at the exhibition entitled "Le Mouvement" organized by Serge Lemoine at the Salle Devosge in Dijon.

The first section of the Museo de Arte Moderno Jesús Soto was opened in Ciudad Bolivar, Soto's hometown, on 25th August 1973 by Venezuelan President Rafael Caldera.

The inaugural exhibition included works by Arp, Colombo, Sonia Delaunay, Dewasne, Kubicek, Le Parc, Morellet, Sobrino, Soto and Uecker. The collection was designed to be representative of historical constructive, Op and kinetic art, as well as New Realism. Villanueva's architecture of simple autonomous volumes and spaces arranged around a sculpture garden, was designed to allow the future growth of the museum and its collections, following an idea of Le Corbusier's.

Taking his inspiration from the experience of *Violostries*, Soto designed new sets and costumes for a ballet produced by the Sarre regional broadcasting company.

He also produced further monumental installations, completing a large *Writing* for the Venezuela Central Bank in Caracas, and an *Extension* and a *Progression* on a lake at Paseo Ciencias in Maracaibo.





Soto. "Extensión y progresión en el agua", 1973 600 × 6600 × 1800 cm Paseo Ciencias, Maracaibo, Venezuela © Archives Soto / All Rights Reserved



Soto Museum of Modern Art, Ciudad Bolivar, Venezuela © Archives Soto / All Rights Reserved

For the opening of the Museo de Arte Contemporáneo in Caracas, Soto made several permanent architectural integrations (*Progression Caracas 1 & 2*; *Mural B.I. V.*) and donated two older murals (*Mural Amsterdam*, 1964; *Vibrante Signals*, 1965).

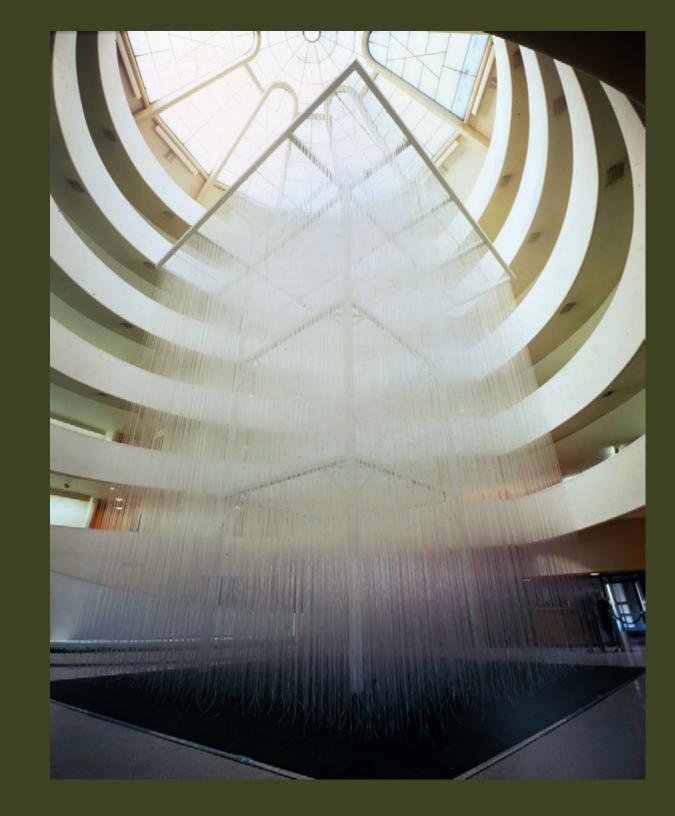
Soto received a major commission from Claude Renard, who was responsible for "Research, Art and Industry" at the Renault car firm, for its company headquarters.

In New York, the Solomon R. Guggenheim Museum mounted a sweeping retrospective of Soto's work – the first and last to be held in a US institution of this importance -, which opened on 7th November.

A selection of 80 works representing all the steps of the artist's career were displayed all the way up the famous spiral of the gallery. In the center was a penetrable over 12 metres tall. A *Large Pink Mural* over 10 meters long was displayed at ground floor level.

Almost at the same time (the following day, in fact) Denise René opened an exhibition of Soto's recent work in her New York gallery. The opening party continued in the studio of Robert Indiana, one of the gallery's artists at that time.

> Soto. "Guggenheim Penetrable", 1974 1100 × 800 × 800 cm "Soto: A retrospective Exhibition" exhibition, The Solomon R. Guggenheim Museum, New York, USA, 1974 © Archives Soto / All Rights Reserved



The American press reported these events somewhat circumspectly. David Bourdon remarked, in The Village Voice, that "Op and kinetic art, those much-publicized phenomena of last year, flourished more in Europe and South America than in this country". He perceived none of the larger issues underlying these movements, seeing them as mere opportunities for highly successful visual games:

"

Soto is at his best when he pursues a uniform allover image, as in his "T" series, in which evenly spaced rows of T-shaped wires project from the striped background and create a flurry of vibrations. Much of Soto's art will strike sophisticated viewers as somewhat naive in its overwhelming reliance on simple perceptual effects. Purists may object that it is little more than a footnote to the art of Mondrian, Malevich, Moholy-Nagy and company, that it is less an advance than a diverting sidestep. And some critics will grump that Soto's art is fatally theatrical, as if art that endeavors to entertain is somehow immoral. But whatever Soto's ultimate achievement may be, it is clear that he knows exactly what he is doing and does it superbly. His art is in no way "difficult". In fact, you don't have to know anything at all about art to enjoy Soto's work. During my visit, museum-goers were obviously having a grand time, getting their perceptual kicks. Criticism seems somehow beside the point when an artist's work so clearly has great popular appeal.

David Bourdon, "Good Vibrations", The Village Voice, New York, November 21, 1974, p. 116

A British critic attributed this lukewarm American reception to a form of prejudiced condescension:

"

American imperialism may have received a nasty shock in Vietnam, but on the cultural front an imperialistic attitude still prevails. When the Guggenheim Museum organized its recently opened retrospective of the works of Jesús Rafael Soto, it published a pamphlet on the show which although admitting that all the important developments in art over the past 25 years have taken place in the United States, went on, almost apologetically, to suggest that there may have been one or two foreign artists who perhaps contributed something. Namely, Vasarely and Soto. I have always liked his work but now, on the basis of this stunning retrospective, it seems even more important. It's a shame that the term Op Art was ever invented because it diminishes the school by relating it, if only linguistically and journalistically, to Pop Art. But Op existed long before Pop; it has its letters de noblesse, even if there are those who reject it because it's not painterly enough (you can't see the brushstrokes) or because it is both painting and sculpture, architecture and music. And it has nothing to do with retinal or optical effects. Soto has achieved a kind of classic purity, a vision of an ideal world. Mondrian had already achieved that by an abstraction of the visible universe. But Soto has achieved the same beauty of form, without rejecting movement, through the rendering perceptible of Time, by actively involving the spectator in the creation of the work of art: it is his movements which create the vibrations, and the breeze that he or she sets up causes the rods to move, the light to shimmer.

Richard Roud, "Penetrable Bloom", The Guardian, London, December 30, 1974.

Not surprisingly, it was the Venezuelan press that hailed Soto most enthusiastically. The magazine Resumen devoted a long article to him, with texts by Rafael Pineda, Clara Diament de Sujo and Sofia Imber; Soto's mother in Ciudad Bolivar was even interviewed.

The retrospective then moved on during 1975 to Boymans-van Beuningen Museum in Rotterdam, then to the Hirshhorn Museum and Sculpture Garden in Washington.

Soto made a new monumental Kinetic Wall for the International Labour Office in Geneva.

Early in the year, Soto completed the installation of environments in the foyer and in the entrance to the company canteen at the Renault car factory in Boulogne-Billancourt, projects he had been working on for over a year. These architectural integrations involved grids of vibrating squares covering pillars and a *Writing* 30 meters long, while the ceiling was covered with 250 000 hanging stalks set close together. Soto also chose the furniture and the colors for the paintwork.

On 2 January, a presidential decree announced the creation of the Monument to Iron cultural complex in Ciudad Guayana to commemorate the nationalization of iron ore production in Venezuela; the decree stated that the monument was to be designed by Soto and made under the aegis of the Guyana regional authority.





Lobby of Renault's head office, Boulogne Billancourt, France, 1975 © Archives Soto / All Rights Reserved

1976

Pierre Restany and Claude Parent asked Soto to take part in preliminary discussions for the "Operazione Arcevia", whose goal was to found a 600-strong community in an "ideal city" to be founded near Ancona, Italy. Many artists and intellectuals were involved in thus utopian project, strongly influenced by the ideas of Yves Klein, though it was never realized.

The Museo de Arte Moderno Jesús Soto in Ciudad Bolivar opened seven new rooms. The collection now included 350 works by 130 artists of all nationalities.



Soto. "Volume virtuel suspendu", 1977 3000 × 2000 × 1800 cm Royal Bank of Canada, Toronto, Canada © Archives Soto / All Rights Reserved

1977

penetrable and three public squares. The project never came to fruition.

"

The Suspended Virtual Volume at the Royal Bank of Canada in Toronto marked a new stage in Soto's environmental art. The work was to provide the inspiration for several later pieces, for instance in 1979 at the Centro Banaven in Caracas and the Centre Georges Pompidou in Paris.

"

It is my belief that an art that is investigating pure structure should avoid as much as possible unprogrammable variations of color. Some variations can be programmed; others can only be dealt with by intuition or simply according to taste. When working on a monumental scale I think you have to avoid gratuitous preferences. You look for relationships with the elements. I could have put many colors in the structure at the bank and it would have worked, but it would be betraying a colorless space. It would mean using the space as a frame instead of integrating with it, which I didn¹t want. I wanted to respect the given space and to revalue it. This is why I chose the simplest colors: white, and yellow which is a close variant of white, and the nylon cable which becomes gray. I think when less color is used, especially in a large work, the environment, the relationships of space, light and time, give it many more shades than one could ever in the world of Jesús Soto.

Artscanada, Toronto, nos 218-219, February-March 1978, p. 5.

Soto publicly announced his project for the Monument to Iron, which would have involved a 25-metre-high pyramid containing an auditorium, a 15-metre stainless steel cube set on water, a museum of iron, two swimming pools, an aquatic

82

Above all Soto wanted this symbolic monument to be a place for the public to use. True to his ideas about the active participation of the viewer in the artwork, he not only wanted it to be integrated into the environment, but he also intended it to be a piece of architecture.

Catherine Millet, "Soto, Galerie Denise René", *Art Press*, Paris, n° 44, January 1981, p. 40.

Soto designed the costumes and sets for Alicia Alonso's ballet Genesis in Toronto, with music by Luigi Nono.

"

The stage was full of hanging plastic ropes. The dancers wore tights and danced on the floor of this forest of silver vines. The light ran up and down them like mercury. The cube swayed and flickered. Shapes in the depths were rushing white dots and dashes. Horizontal bands of light

projected into this vertical world cut into strata. They danced in dim levels beneath brilliant ones and bright basements under dark ceilings. Colored lighting made the colored coat. They danced in red under green, in green under blue. The movements generated silver and colors. One arm flung out was like deflecting a school of tropical fish. The eyes were drawn into the detail of the crossing lines, into mesmerizing glimpses of the intricate internal weaving of lines. [...] The swimming of the dancers in the flexible sculpture designed by Jesús Soto for this ballet is like the swimming of the eyes with his permanent sculptures. Your least movement brings change flickering, through the forests of relationships. There are endless patterns of the flickering, endless apparitions of color to be released.

Nick Johnson, "Jesús Soto", Artscanada, Toronto, nos 222-223, October-November 1978, p. 59.

84

Soto. Penetrable, scenography for the "Genesis" ballet, 1978. Toronto, Canada © Archives Soto / All Rights Reserved

85

Soto's exhibition at the Louisiana Museum near Copenhagen was an opportunity to show large series of Writings, Vibrations and Vibrating Squares with more and more densely meshed structures.

The second stage of work at the Museo de Arte Moderno Jesús Soto in Ciudad Bolivar began in late summer, under the direction of architects Jose Carlos Villanueva, son of Carlos Raúl Villanueva who had died in 1975, and Edgar Parra. Because of a series of financial and legal problems which slowed down all the museum's activities, this part of the building would only finally open almost ten years later.

In February, Soto gave a two-part interview to *El Nacional*:

"

My art is Realist insofar as it proposes to demonstrate the sensible phenomena of the universe. The only thing is that today the concept of reality has changed thanks to science. [...] I do not have the necessary training to understand fully the modern scientific idea of the universe. But after much careful thought, after asking scientists to "come down to my level" and explain certain things, I have been very impressed with the idea of the unity of space, time and matter. Concepts such as matter forming when vibration slows down can lead to the idea that vibration is at the origin of form. And this can be translated into plastic language in order to build a world of pure vibration, just as the Impressionists studied pure light. We must interpret the values that, thanks to science, completely change our idea of the universe, and we must propose them in our turn through art. [...] It is exciting for me to think of vibration as a relationship in itself. It is relationships, and not elements as they are made to relate to each other, that interest me. [...] A bit of wire, a metal square, a plastic thread are ordinary things you can find in any supermarket. I try and work with the most banal things so as not to give them too much importance as things. But when you use these things to discover and demonstrate relationships, that's when the miracle of transformation happens. This metamorphosis is what really interests me.

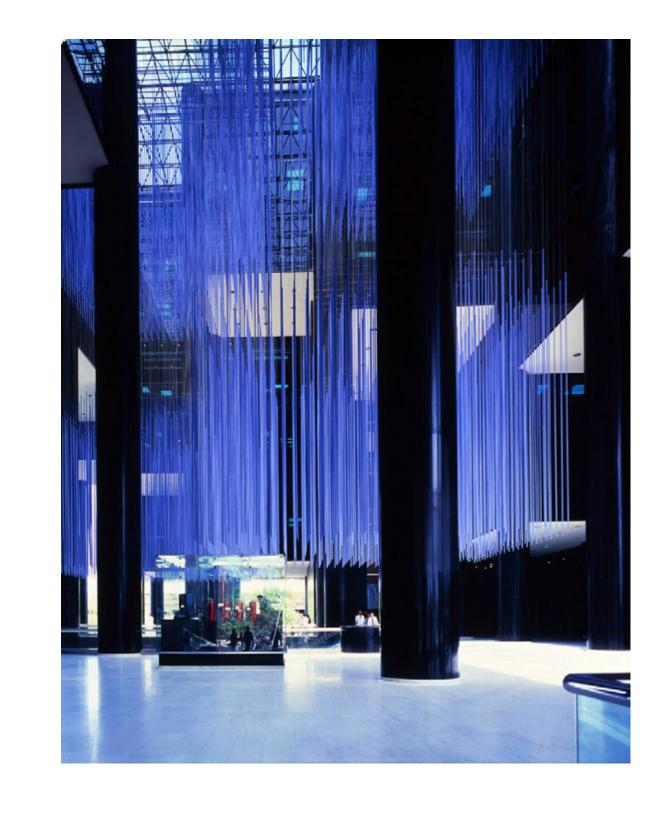
Soto, interview with Ernesto González Bermejo, "Jesús Soto con El Nacional (1) : "Hago un Arte Realista", *El Nacional*, Caracas, February 27, 1979. Soto presented his most recent work at the Centre Georges Pompidou in Paris: series of *Writings*, of "Ts", of *Immaterial Curves*, and his first Large Squares and *Orthogonals*, in which the mesh of squares almost completely obscures the background to which it is attached. He also made a suspended volume temporarily hung in the foyer of the Centre. Otto Hahn wrote in *L'Express*:

"

The immaterial remains the focus of his investigation. This idea, which appeared in the mid-fifties, played an important role among Soto's friends Yves Klein "le monochrome" and Tinguely, whose moving machines are devoid of any sense of heaviness. In the same way, the 6,000 yellow and white stalks hanging from the ceiling in the foyer of the Centre Georges Pompidou stop being a lot of ironmongery and become an indefinable shimmering mass which explodes space. The same can be said of Soto's paintings. Against a background of black and white lines, stalks sway on nylon threads, either standing out from the background or blending into its criss-cross lines. All is vibration, instability, and evanescence.

Otto Hahn, "La poésie optique de Soto", *L'Express*, Paris, May 26-June 1st, 1979.

Soto. "Volumen virtual suspendido", 1979 2400 × 1060 × 1060 cm Centro Banaven, Caracas, Venezuela © Archives Soto / All Rights Reserved



JESÚS RAFAEL SOTO

Soto made further architecturally integrated pieces, in Caracas (Banco de Venezuela, Centro Banaven, Cars-Motors) aWwnd Dortmund (West Deutsche Landesbank). Early the following year he said to Clara Porro in Geomundo:

"

At the moment I am working a lot on integration with architecture. It seems to me a coherent position in art, which was unfortunately broken when the romantic attitude appeared, when the artist turned towards the intimate. We have lost the wonderful idea perpetuated by the Greeks, by Medieval and Renaissance artists, of an art of participation, of monumental art. To make a monumental piece, no artist can work alone. It is necessary to think in terms of collective art, and at the moment I am lucky enough to have found a way of working on a large scale - on a monumental scale - with architects. It's something I want to take further because I think that if we work in this way, we can achieve the same level of greatness as the Renaissance. It is really a collective enterprise, an art of participation.

But it's hard. Architects themselves have lost this connection. and we see artists like Niemeyer, who is an artist with a totally pure plastic language, opting for allegorical, descriptive painting. Fortunately for us, Villanueva was able to make people understand that architecture should be something abstract, invented thanks to new materials like glass and aluminum..., that it should get rid of walls to create an open space. He created the Caracas University campus and invited artists to go in the same direction, and the idea of the integration of the arts started to take hold. In Venezuela. this lesson has allowed the architects who came after Villanueva to remain open to this kind of symbiosis.

This has been one of my main concerns, and today I have found a foothold in the world of architects.

Soto, quoted by Clara Porro, "Jesús Soto y la Integración del Espectador a la Obra", Geomundo, Panama, vol. 4, nº 2, February 1980, p. 214.

Soto. st/t, 1981 157 × 157 × 17 cm © Archives Soto / All Rights Reserved

1979

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1980

In the personal exhibition that opened at the Denise René Gallery in Paris on 16 October, Soto showed works in which grids of Ts and squares were used in the same composition. Some of them show a return to the simultaneous use of primary colors.

Later in the year he produced works of a new type, in which brightly colored squares of different sizes were placed against lined backgrounds whose grids were no longer arranged in the habitual way (Open Spaces, 1980). This particular aspect was something Soto was to explore further in the following decade in his series of Ambivalences.



View of the exhibition "Paris-Paris", National Museum of Modern Art, Centre Georges Pompidou, 1981 Photo Centre Georges Pompidou

1981

Soto was represented by three works (*Metamorphosis*, 1954; Suggested Cubes, 1955; Spiral, 1955) in the famous exhibition "Paris-Paris / Créations en France: 1937-1957" at the Centre Georges Pompidou (28 May - 2 November).

At this time, he gave an interview to Anne Dagbert:

"

When I look at these works now, I realize that they foreshadowed my present work and that I was just more forcefully developing ideas I'd had right at the beginning, i.e., new propositions in space and time. [...] Programming was the only way I could escape from classical figurative structures. [...]

What I call 'programming' involved finding plastic propositions that were quite different from what abstraction [...] offered at the time. To begin with, at Denise René's gallery, we were mostly concerned with form and color. For me, the word 'form' is closely linked to figuration, and it occurred to me that if we wanted to be abstract, we had to move towards non-form. [...] Space, energy, time and movement are universal entities that affect us all. My notions of relationships are determined by the behavior of these inseparable entities. This idea has always influenced my work. In a nutshell, a relationship is a force, a universal behavior; it's a kind of infinite elasticity which gives rise to all transformable values - including light.

As for space, for me it is essentially ambiguous. We can only grasp instances of spatial ambiguity, and this destroys our traditional ideas of three-dimensionality.

The way it constitutes a plenum, its elasticity, its modulability and its perpetual transformation make it impossible to grasp.

Soto, interview with Anne Dagbert, "Jesús Rafael Soto, la pénétration fluide de l'espace", Art Press, Paris, nº 49, June 1981, p. 13.

BIOGRAPHY (1923 - 2005)



View of the exhibition "Soto", Palacio de Velázquez, Madrid, Spain, 1982 Photo Angel Hurtado © Archives Soto / All Rights Reserved During a retrospective of more than 150 of his works at the Palacio de Velázquez in Madrid, Soto told a journalist:

"

"Kineticism" is a very poor term: I prefer to talk about kinetic art, which I am very happy to belong to. The creators of kinetic art did not get together to found an "ism", and each of us has a different style. [...] I don't think a penetrable is a kinetic work because its function is not to show movement but to show that we live in a space entirely filled with relationships, and that these relationships also necessarily imply movement. Movement cannot be considered as separate from space and time.

Soto, interview with Mara Comerlati, "La palabra cinetismo es muy fea", article of unknown provenance, March 27, 1982. Archives Soto, Paris.

The exhibition showed some fifteen of Soto's latest Ambivalences (Ambivalencia en el espacio color, 1981). The syncopated rhythm of these random compositions, the ever more marked use of primary colors and the use of certain formats (Ambivalence in the Lozenge, 1981) can be seen relating to Mondrian's later work. Soto's use of colors produces 'forward and reverse' effects which prevents the viewer from precisely situating the forms that carry the colors in space. Soto commented on this:

"

Through color I want to create spatial ambiguity. Elements brought together on the same plane give the feeling of being situated on different planes, and of being in constant motion.

Soto, "Jesús Soto : reflexiones", *Soto en el mundo*, exhibition cat., Mérida, Casa de la Cultura Juan Félix Sanchez, 1994, p. 21.

"

I have worked a lot with color, using it to create ambiguity within the notion of space. I want to use color to demonstrate relationships which are not part of our usual way of seeing, and to prove that we have more than one way of apprehending space, which is a cultural idea: the idea of perspective and so forth. In this context color is not treated as a harmony but as a post-temporal phenomenon.

Soto, interview with Lou Lamarque Mouzon, "Soto ou l'espace d'une vibration", Art Thèmes, Paris, April-May 1990.

This same phenomenon was formulated by Daniel Abadie, a major theorist of color interaction:

"

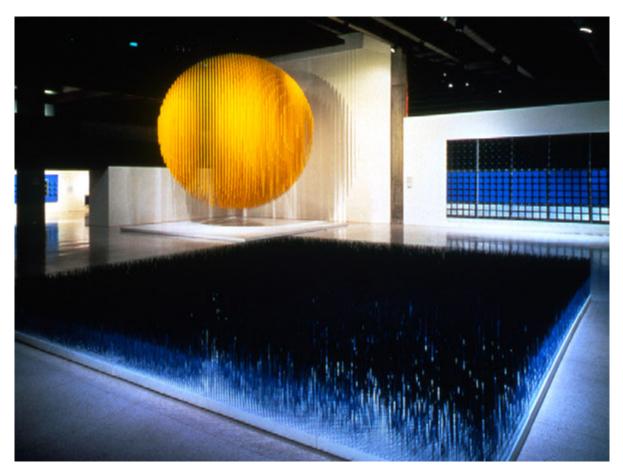
This complex treatment of color [...] shows liberties being taken with respect to the thinking on Mondrian, just as the materialization of colored planes in space seems to be an ironic response to the idea of push and pull which is the basis of Hans Hoffmann's work and, via the latter, of most American abstract art.

Daniel Abadie, "Soto, le temps du regard", *Soto Rétrospective*, exhibition cat., Meymac, Abbaye Saint-André, Centre d'Art contemporain, 1992, p. 22.

Soto installed a monumental yellow and white suspended *Progression* in Puerto La Cruz, Venezuela.



Soto. "Progresión suspendida amarilla y blanc", 1982 300 × 300 cm Anzoátegui Building, Puerto La Cruz, Venezuela



View of the "Soto – Cuarenta años de creación 1943-1983" exhibition, Museum of Contemporary Arts, Caracas, Venezuela, 1983 © Archives Soto / All Rights Reserved In *Cimaise*, Gilles Plazy talked about recent changes in Soto's work:

"

In his most recent work Soto pays a sparkling tribute to Boogie-Woogie. After thirty years of tortuous artistic investigations, he comes back to the fundamental starting point of late Mondrian. And now he can answer the question Mondrian asked. He reinterprets Mondrian, he engages in a dialogue with him, he sends back his own Boogie-Woogies as echoes informed by thirty years of kineticism.

Gilles Plazy, "Soto", *Cimaise*, Paris, nos 162-163, January-March 1983, p. 56.

The retrospective "Soto, Cuarenta Años de Creación" opened in June at the Museo de Arte Contemporaneo in Caracas, with 136 works from all periods, including the early figurative period. One of the attractions of the exhibition was an imposing suspended *Yellow Virtual Sphere* which seemed to float in the air. Deriving from previous suspended volumes, this work was to be shown again in 1988 in Seoul and in spring 1996 in Paris for the exhibition "Les Champs de la sculpture".

Several extensions and progressions, as well as two penetrables (one with sound) also featured in the monumental section of the Caracas exhibition.

Soto made two integrations (*Yellow Progression* and *Blue and Black Virtual Cube*) for Chacaito station on the Caracas subway.

BIOGRAPHY (1923 - 2005)



Soto. "Cubo virtual azul y negro", 1983 1015 × 1015 × 1015 cm Brion Square, Chacaito, Caracas, Venezuela © Archives Soto / All Rights Reserved The magazine of the Universidad National Abierta, Una Documenta, published what is undoubtedly the most detailed and far-reaching interview with Soto, in which he provided the best ever overview of his ideas:

"

Energy is a relationship whose reality is demonstrable via physical elements. I believe that the universe is totally filled with an energy whose potential exceeds that of light. Light appears when there is a loss of speed within this initial energy, in the same way as mass appears when light cools down and loses velocity. This process may be reversible in the right conditions. [...] Space is a relationship that is inseparable from energy because its existence is conditioned by the potential of the energy that modulates it. [...] It is absolutely uniform; its structure is full [...]. When I talk about space, I am not referring for example to 3-dimensional space but to multidimensional, infinite space. The idea of multiple points of view was introduced at the beginning of this century, and for the plastic artist the problem does not only involve showing that space contains this multiplicity, but also showing that all the different points of view are equally valid and that one of them cannot be used to validate all the rest. One of the great revolutions in modern art is to have stopped presenting space as a reality created by the eye, like the Renaissance artist watching reality go by through his window without paying attention to what was around him.

One of the problems facing me was to demonstrate and bring to light what is around us, to give the same importance to what is behind, above, underneath, because all of that is an integral part of the whole.

Scientists have shown with extraordinary precision that Man is an infinitesimal particle in the universe, and this loss of geocentrism and egocentrism necessarily leads us to reflect on the importance of anthropomorphism. [...] The individual considered from a universal standpoint has no importance, he is just a tiny particle in an environment that is insignificant from the point of view of the universe. But this does not mean that to be an integral part of the universe, Man has to be infinite himself. The human condition is only one state in an endless series of transformations through which matter passes. One of these may be Man, who has a value identical to that of all animal, mineral or vegetable forms.

I think just being human doesn't give us the right to consider ourselves to be the culmination of this entire evolutionary chain.

Soto, interview with Gloria Carnevalli, "Una Entrevista a Soto", *Una Documenta*, Caracas, vol. 2, nº 1, January-July 1983, pp. 53 and 64.

Soto wrote a piece entitled "La Maquina Optica" (The Optical Machine) for a journal in Buenos Aires. In it he wrote:

"

We must get accustom the eye to perceiving relationships as quantitatively superior to objects themselves, and to using objects to demonstrate the existence of these relationships. If we go deep enough into this, we will force the optical machine to become sensitive to the values of relationships, which are essential values. When this happens, the world will realize that our propositions cannot be reduced to mere optical games, but that they constitute a fervent appeal for a broader form of knowledge.

Soto, "La Maquina Óptica", Arte informa, Buenos Aires, nos 40-41, May-June 1983, p. 16.

BIOGRAPHY (1923 - 2005)

1983

Soto pursued the series of Ambivalences with a set of works entitled, as a tribute to Mondrian, Ambivalences New York. They would appear the following year in several personal exhibitions. He also made Nylon Cube, the latest of his "suspended volumes".

The monograph by Marcel Joray, published by Éditions du Griffon, brought together a number of Soto's aphorisms and statements:

"

The work of art should arouse the emotion of the viewer, but that does not mean it has to arise from an emotional situation. If the artwork has an origin, it is in rigorous thought, in the logic of an artistic investigation. Art is not expression, but knowledge. [...]

The more a plastic artefact seeks to move closer to being a kinetic proposition, the more it must renounce the notion of mass in favor of that of energy. [...]

In all my investigations, a single question has never left my mind: how can I be sure that matter returns to its essential value, that is to say energy? Or, put in a more concrete way: how can I ensure that the elements from which I build my work can be absorbed in a space-time continuum where they will lose their solidity and be replaced by a random state of vibrations? [...] In my view Impressionism is the first artistic movement to have unequivocally offered structure as an essential value. It is,

fundamentally, an art-science. Art-science tends towards codification, to the creation of structures.

Impressionism is an art-science insofar as it divests itself of anecdote and symbolism in



Soto. "Ambivalencia New York J", 1984 159 x 159 x 15 cm © Archives Soto / All Rights Reserved

order to concentrate on the vibrations of light. Focusing one's investigations on luminous phenomena implicitly entails abandoning representation, and involves an intention to go beyond outside appearances, aiming at what is absolutely essential, in other words: light. [...] If art is to reflect its time it must be at the very forefront of its own concerns, it must reflect avant-garde thought and not limit itself to bearing immediate witness to everyday things.

Soto, in Marcel Joray, Soto, Neuchâtel, Éditions du Griffon, 1984, pp. 52, 96, 125 and 155.

In September, Hélène Lassalle produced a psychoanalytical interpretation of the penetrables and examined the importance of touch and of the archaic sensations they arouse:

"

Our urban, clinical, mechanized society has numbed those senses which were always on the alert in primitive Man: touch, hearing and smell. Art is there to recall this world of lost knowledge. [...] Entering the penetrable, the viewer is invited to take a journey of two-fold. First of all, it involves leaving habitual perceptions in order to rediscover the traces of old states of being that have been confused and covered over. We can then reinvent our journey in reverse, so to speak, a journey similar to the one the child makes, and which leads him, as Winnicott says, from pure subjectivity to objectivity, from internal objects to external objects, from primal creativity to perception.

From this point of view the penetrable can be considered as a particular experiential arena. a "transitional space" where the perception of external objects - bands, fibers, hanging rods reactivates and reactualises an internal object. [...] the substitutive equivalent of the lost object, the mother's body from which we are irretrievably separated. It is from this reactualization this reconstitution of primal symbiosis - that esthetic pleasure arises. The artwork is a new setting where we can attempt to "overcome our separation from lost original unity". Touch is, for the viewer, the best way of achieving this. The skin receives stimuli from all directions. experiencing a new feeling of well-being, remote and yet accessible, that is related to primal narcissism. [...] Through tactile experience, the self thus relives the stages of its own selfbuilding.

It is significant that Didier Anzieu chose the term "moi-peau" ("self-skin") [...] to refer to the essential dimension that constitutes being. structuring it and enveloping it. The "moi-peau"

always has to be reconstituted, re-woven. It must constantly repair itself where it has been torn, a victim of conflicts from within and attacks from without. By relearning the sense of touch inside the penetrable, it is not only the physical self that is involved, nor even the affective self [...]. It is all aspects of the psyche, including intellectual activity.

Hélène Lassalle. "Les pénétrables de Jesús Rafael Soto ou le recours à l'archaïque", Revista cultural de la Liga de Arte de San Juan, vol. 1, September 1984, pp. 74-75.



A retrospective of almost 150 works from 1950 to 1985 opened at the Center for the Fine Arts in Miami on 4 October.

In the catalogue, Alfredo Boulton talked about the Nylon Cube (1984):

"

It concentrates his investigation into matter dematerializing in space. It looks like an airborne object which mutates into a column. It seems immaterial, without substance, transparent. It is formless, translucid and incorporeal. It is ethereal, abstract, and yet solid. It is one of the most interesting achievements in the artist's work. It is the substance of emptiness made plastic and tactile. One might wonder if by chance it has any relationship at all with our classic sense of what painting is. The answer is probably "yes", but it engages with what Man and science have done with today's world. This is a decisive step in the long history of art and of Man's desire to be ahead of his time like the great visionary that he is, without ever looking behind him [...] Impression, Soleil Levant is now as classical as a Doric column. A century ago, only birds and kites could fly, and space was empty. Now it is a living substance. The void was empty until Soto filled it.

Alfredo Boulton, [no title], Soto, *Space Art*, exhibition cat., Miami, Center for the Fine Arts, 1985, pp. 34-35.

Soto installed a new *Virtual Sphere* at the headquarters of the Japanese bank Lara, in Caracas.

Soto. "Esfera de Japón", 1985 450 × 450 × 450 cm Mapfre la Seguridad, Caracas, Venezuela © Archives Soto / All Rights Reserved

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Soto. "Volume virtuel", 1987 570 × 2150 × 1440 cm National Museum of Modern Art, Centre Georges Pompidou, Paris, France © Archives Soto / All Rights Reserved

1986

The Contemporary Sculpture Center in Tokyo organised Soto's first ever one-man exhibition in Japan, with a selection of recent works.

The Société des Amis du Musée National d'Art Moderne commissioned a monumental sculpture, *Virtual Volume*, for the 10th anniversary of the Centre Georges Pompidou. It was permanently installed early the following year in the entrance hall.

1987

On 26 September, the Gilbert Brownstone gallery in Paris opened its new exhibition space designed by Jean-Michel Wilmotte, with a one-man exhibition of Soto's work.

In Rome in September and October he took part in a conference on "The scientific dimension in cultural development" with a much-quoted text on "The role of scientific concepts in art":

"

Art is not an illustration of scientific ideas; its relationship with science is not one of cause and effect; art and science form a common front as they strive to answer universal questions. [...] I think it is dangerous for an artist to engage in a systematic study of whatever science. It is not dangerous for him personally, but for his artistic activity, because there is no doubt that the world of scientific knowledge, which is as deep as art, can absorb him into its complexity and prevent him from coming back to plasticity. In my opinion, another path should be followed: we should study the philosophy of science, seeking out the fundamental principles which have led scientists to consider phenomena in a particular way and seeing what other possibilities can be used by artistic investigations. [...] To me, metaphysics is physics that is waiting to be demonstrated.

Soto, "Le rôle des concepts scientifiques dans l'art" in proceedings of the symposium *La Dimensione Scientifica dello Sviluppo Culturale*, Rome, Accademia Nazionale dei Lincei, 1990, pp. 81, 84 and 86.

On November 22nd, a new section of the Museo de Arte Moderno Jesús Soto opened in Ciudad Bolivar.



Max Bill and Soto. UNESCO Symposium, Praha, Czech Republic, 1987 Photo Vaclav Chochola © Archives Soto / All Rights Reserved



Soto. "Ovoide Polar", 1988 505 × 500 × 300 cm Polar Foundation, Caracas, Venezuela © Archives Soto / All Rights Reserved

1988

Soto installed several monumental works in Caracas (Ovoïde Polar, Fundación Polar; Cubo Provincial, Torre Banco Provincial; Media Esfera Roja, Seguros La Seguridad) and in Paris at the headquarters of the CFDT trade union (Writing and Polychrome Wall). He also made a Large Sphere for the Olympic Park in Seoul, South Korea.

On August 14th, the Museo de Arte Moderno Jesús Soto in Ciudad Bolivar opened a permanent exhibition space devoted to luminokinetic art, with works by Antonio Asis, Gianni Colombo, Karl Gerstner, Julio Le Parc, Jean Tinguely, Ludwig Wilding and others.

In the combined catalogue for the two exhibitions from August onwards at the Elisabeth Franck Gallery in Knokke-Le Zoute (Belgium) and the Gilbert Brownstone Gallery in Paris, Jacques Leenhardt wrote:

"

Soto has always upheld the idea that what constitutes the value of the artistic gesture has to do with knowledge. Art is thus related to research; it is a quest for new norms in the relationship between the eye and the world. [...] Indisputable though it may be in my opinion, it is worth reflecting on this proposition and highlighting a very profound difference that exists in the order of cognition. Soto's work, developed with such consistent logic for over 35 years, shows the huge distance that separates sensible forms of knowledge, all tending towards the elaboration of new cognitive relationships, from fixed forms of knowledge, which merely represent a mastery of the socialized codes of visual language, and which are consensual, established, unquestionable, and ultimately scientifically and artistically dead. [...] Soto the artist plays along with norms and codes, and at the same time he makes them fragile. The approach has the rigor of a protocol and the determination of the researcher hunched over the concrete reality of his experiment. But this research is not confined within the closed space of an object or a painting. It can only exist - and this is his discovery - when it has been placed in the hands of a viewer, or rather when it has been offered up to the eyes and other senses involved in ambient perception.

The artist and the viewer are thus linked by a new definition of the world, which stops being a pure objectual substance given up for contemplation and becomes a stimulating event at the heart of a network of interactions.

The world thus becomes an active immateriality, [...] but what defines it is the way it offers the painter, the scientist or the viewer a range of possibilities to which only immediate esthetic experience can give form.

Jacques Leenhardt, "Soto", Soto, exhibition cat., Knokke-Le Zoute, Elisabeth Franck Gallery / Paris, Galerie Gilbert Brownstone, 1988, pp. 5-6.

A penetrable was installed at the ELAC, for the exhibition "La couleur seule, l'expérience du monochrome" (Color Alone, the Experience of Monochrome), which was held at various venues in Lyon.

In October, the Hyundai Gallery in Seoul opened Soto's first one-man exhibition in Korea. It presented a selection of works from the past ten years, representing all the different series created by the artist.

1988

Soto was represented at the inaugural exhibition at the Foundation for Concrete Art in Reutlingen.

Between 1989 and 1990 he produced a major series of works in which he used only black and white in stark contrast.



Soto. "Cuadrados ambiguos", 1990 153 × 153 × 17 cm © Archives Soto / All Rights Reserved

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Soto. "Ovoïde Polar", 1990 300 × 600 × 300 cm Exhibition at the Josef Albers Museum, Bottrop, Germany, 1990 © Archives Soto / All Rights Reserved

1990

A number of one-man exhibitions were held in Nice (Sapone Gallery), in Madrid, and in Barcelona (Galeria Theo). The largest took place at the Josef Albers Museum in Bottrop and got enthusiastic and extensive coverage in the press.

A retrospective was also travelling to different museums in Japan. In the catalogue, Homma Masayoshi proposed a parallel between Soto's work and the naturalism of Japanese art:

In contemplating this work's sense of immediacy, which is a feature of the Japanese aesthetic, we come to see intense realism. But, when sublimated in the form of artistic expression, this is no longer realism in the Occidental manner: it is characterized on the contrary by a totally inverted mode of decorative expression. Soto evokes a sense of reality also through the use of physically explicit materials. But, at the same time, the objects he creates are imbued with a subtle expressive force which reflects neither the mundane world nor the world of thought.

Homma Masayoshi, "A Japanese Perspective on the Art of Soto", Jesús Rafael Soto, exhibition cat., Kamakura, Museum of Modern Art, 1990, pp. 18-19.

In October, Soto was the fifth personality, after Octavio Paz, Ingmar Bergman, Jorge Amado and Yehudi Menuhin, and the first ever artist, to receive the Picasso medal from UNESCO, awarded for work symbolizing improved relationships between different countries.

In an article in which he reflects on the disaffection of kinetic art since the 1970s, Guy Brett wrote:

"

However we define it, the phenomenon of "kinetic art" continues to pose many questions about the way art history can be conceived and written [...] It is possible, in 1991, to write about kinetic art whilst being aware that it is either a forgotten episode or a phenomenon confined to a subcategory with a purely "local" history that has had no effect whatsoever on the dominant trends of art. Far from being accidental, this process is, it seems to me, due to the fact that these dominant trends depend on the perpetuation of the boundaries of certain traditional categories, especially those of painting and sculpture, in which so much has been invested in the professional, academic and financial domains. [...] There is another issue relating to kinetic art that has not yet been mentioned: the fact that many of the instigators of this movement came from the outer limits of the Western world, from what we call the Third World. It is not immediately obvious how we should deal with this fact. Here again, the systems of reference offered by art history are inappropriate, partly because they reflect the homogenizing effects of the art market, of Eurocentrism and of national prejudice. [...] Few people have ever attempted a multicultural and diverse reading of the avantgarde.

Little has been done to analyze the tensions that exist between "universal" themes of investigation and regional history and culture, which is obviously not just a problem for "others". At the same time, and conversely, some Americans have been placed on the lofty summit of the artistic Olympus, beyond comparison with inferior races who can only be imitators, copiers, or representatives of out-of-date local traditions. [...]

Kinetic art was, in many ways, in its time, the very archetype of a multidimensional artistic movement. It did not follow the model of a central explosion spreading outwards in gradually weakening waves: innovations occurred on the periphery and spread inwards towards the center. [...] Soto, among other Latin Americans, came to Europe in the 50s looking for art from the Constructivist and Dada avant-garde of the pre-war years. The works of Mondrian, Malevitch, Vantongerloo, Moholy-Nagy and Duchamp who were just about to be forgotten. It happened at a time when "modern art" was still a force of dissidence and emancipation. It wasn't yet requisitioned as an official part of Western culture, or as the means to create a national image in countries that have cosmopolitan art centers.

Soto has described the wonderful aspirations of certain Latin Americans who wanted to jump on the train of modernity and outstrip the discoveries made by Europeans.

Guy Brett, "Le cinétisme et la tradition en peinture et sculpture", *Artstudio*, Paris, n° 22, Autumn 1991, pp. 84 and 88-89.

In November, the Humphrey Gallery in New York devoted an exhibition to Soto which included his *Red Virtual Sphere*. George Melrod wrote in *ARTnews*:

"

Soto has become such an institution that he only uses his surname, like Christo. Nevertheless, with his penchant for grids and bright colors, he is much more than just a bridge between Sol LeWitt and Vasarely.

George Melrod, "Jesús Rafael Soto", *ARTnews*, New York, vol. 91, n° 1, January 1992.

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From left to right: Carlos Cruz-Diez, Soto, Joël Stein, Julio Le Parc, Adrien Maeght, Paul Bury, Martha Boto, Gregorio Vardanega, Jean-Louis Prat, Horacio Garcia Rossi, Denise René, Hugo Demarco, Agam and Velma Bury, in front of Soto's work "Cube de Provence". "L'art en mouvement" exhibition, Fondation Maeght, Saint-Paul-de-Vence, France, 1992 © Archives Soto / All Rights Reserved

1992

The exhibition "L'art en mouvement" ("Art in Motion") opened on 4th July at the Fondation Maeght in Saint-Paul-de-Vence: the monumental *Cube de Provence* and a yellow nylon penetrable were installed in the gardens.

In July, the Centre d'Art Contemporain in Meymac presented a retrospective which travelled to several other towns in France.

Soto represented Venezuela at the Seville Expo, with Yellow and Green Demi-Sphere which became one of the highlights of the event.

He also took part in the exhibition "Latin American Art, 1911-1968" (12 November 1992-11 January 1993) at the Centre Georges Pompidou in Paris.

press.

1993

The 20th anniversary of the Museo de Arte Moderno Jesús Soto in Ciudad Bolivar was celebrated on 25th August by a group of Venezuelan and French personalities including the President of Venezuela Ramon J. Velázquez, and the director of the Musées de France, Jacques Sallois. On this occasion Soto was endowed with the title of Commandeur de l'ordre des Arts et Lettres. The event was covered in many articles, reports and special features in the Venezuelan



Soto. "Penetrable sonoro", 1970 300 × 300 × 300 cm Le Cyclop, Milly-la-Forêt, France Photo Elena Carvajal © Archives Soto / All **Rights Reserved**

1994

Soto installed a penetrable with sound in the Cyclop at Milly-la-Forêt.

This collective work, a project begun by Tinguely in 1970, brought together a number of artists who had close ties in the sixties (including Soto, Tinguely, Spoerri and others).

The exhibition "Otero, Soto, Cruz-Diez: Tres maestros del abstraccionismo en Venezuela y su proyeccion internacional" brought together another group of artists that included Soto; it opened on 16th October at the Galeria de Arte Nacional in Caracas.

Soto installed Cube de France, a work he started the previous year, in the foyer of the French Embassy in Caracas.



Soto. "Welcoming flag", 1995 Dowa Fire & Marine Insurance Company Phoenix Tower, Osaka © Archives Soto / All Rights Reserved

On 14th December Soto was awarded the Grand Prix national de Sculpture by French Arts Minister Philippe Douste-Blazy in a ceremony at the Théâtre du Rond-Point in Paris.

1995

Welcoming Flag is one of Soto's most spectacular architectural integrations. Installed on the walls of the Phoenix Tower which indicates one of the entrances to the city of Osaka, it transposes the principle of the "T" series to the scale of a skyscraper. Preliminary studies for the project began in 1991, in close collaboration with the architect Kimiaki Minai.

Volume virtuel Air France was installed at the headquarters of the airline at Roissy-Charles de Gaulle Airport. It was the climax of a project initiated in the late eighties.



Soto. "Volume virtuel Air France", 1989 360 × 800 × 250 cm Air France headquarters, Roissy, France © Archives Soto / All Rights Reserved

1996

During the outdoor sculpture exhibition "Les Champs de la sculpture", Soto's monumental work entitled Sphère Lutétia is temporarily installed at the Champs-Elysées in Paris.

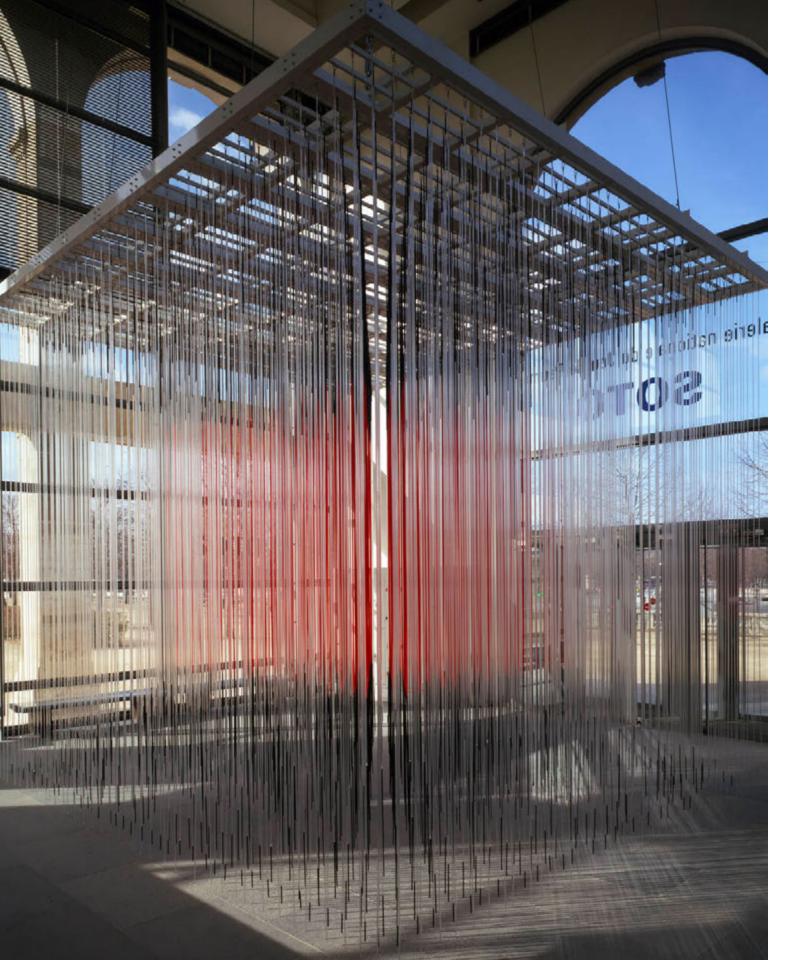
A penetrable of green tubes was temporarily installed to mark the opening of the new Comme des Garçons store in Tokyo.

Soto represented Venezuela at the 23rd Biennale of contemporary art in Sao Paulo. He showed several recent works, including a spectacular 3-metre Sphere (1994) of nylon threads, and a related work, Cube de Séoul (1994). Several commentators remarked how close these works are to the perceptivist approach manifest in the recent work of the British sculptor Anish Kapoor, another attraction of the biennale.

Angela Pimenta, "Ginástica visual", Veja, São Paulo, nº 1467, October 23, 1996, pp. 150-151.



Soto. "Sphère Lutétia", 1996 600 × 600 × 600 cm "Les Champs-Elysées de la Sculpture" exhibition, Champs-Elysées, Paris, France, 1996 © Archives Soto / All Rights Reserved





Caracas.

1998.

Soto installed a series of Virtual Ellipsoids, superimposed in a cascade almost 22 meters high, at the headquarters of the Dresdner Bank in Berlin. This architectural integration inaugurated a new cycle of colored virtual oval volumes. A new Penetrable was installed in the Tongyoung Nammang Open Air Sculpture Park, South Korea, and a Penetrable with Sound was permanently installed outside Daniel Spoerri's Fondazione II Giardino in Seggiano, Italy. Along with the one in Milly-la-Forêt, dedicated to Tinguely, it recalled the links forged by Soto in the early 1960s with some protagonists of New Realism.

Soto. "Cube Pénétrable", 1996 450 × 500 × 400 cm "Soto" exhibition, Jeu de Paume National Gallery, Paris, France, 1997 © Archives Soto / All Rights Reserved

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1997

In January the first large Soto retrospective to be organized in Paris since 1969 opened at the Galerie Nationale du Jeu de Paume.

Jesús Rafael Soto, exhibition cat., Paris, Galerie nationale du Jeu de Paume, 1997. Texts by: Michel Butor, Arnauld Pierre, Marc Collet.

It travelled through the world for several years, opening in Reutlingen (Stiftung für konkrete Kunst, 1997), Brussels (Banque Bruxelles Lambert, 1999), Taïwan (Kaohsiung Museum of Fine Arts, 2000), Bogota (Museo de Arte Moderno, 2001), Caracas (Museo de Arte Contemporáneo, 2003) and Quito (Centro Cultural Metropolitano, 2003).

The series of suspended Virtual Cubes, one of which opened the Paris exhibition, continued with a Polychrome Cube presented the following year in

Soto. "Homenaje al Maestro Jesús Soto", Caracas, Edificio PDV,

JESÚS RAFAEL SOTO

In the exhibition catalogue at the Durban-Segnini Gallery (Caracas and Miami), the poet and critic Ricardo Pau-Llosa explored the prearticulate gestural language of Soto's Writings, and extended to the Penetrables an analysis of Soto's work as a reflection on "the nature of the self in the physical world":

"

The Escrituras (Writings) obtain an even greater significance because they fuse the intimate, human, social infinite of language here reduced to a pre-semantic desire for meaning, a pre-syntactic arc of gesture that hopes for shared thought - with the linear infinite sequence, boundless and impersonal as the void between stars or subatomic particles. In manifesting that fusion, the Escrituras point to habitational sense of geometry as the self's imprint on space. Being is geometric because it is centered. Furthermore, it is geometric because it cannot be reflected upon essentially in any other way. Long before the Penetrables, Soto's Escrituras pointed towards this realization. Their poetic and exquisite limitation lies precisely in their conjuring of language as the emblem of the self. The Penetrables would transcend this emblem by actually locating the language-making, order-forging subjective center in the ultimate centerless arena. The Penetrable is the blind mirror where proprioperception, touch, standing and walking lead to an ineluctable reflection on the nature of self in the physical world. The Penetrable bifurcates the self into two immediacies: the physicality of cords that lap on the shore of the body; and the fact that we model our thoughts, reflections and feelings on the essences of the material world. The link between these two immediacies is centrality of the self in the world. This is the kernel from which our geometry, logic and other orderings of life and world spring. What the memory theater was for recollection, the Penetrable is for obtaining an essential sense of self.

Ricardo Pau-Llosa, "Soto y el ser", Soto virtual, exhibition cat., Durban Segnini Gallery, Caracas and Miami, 1997, pp. 4-5.

1998

A large selection of works from 1980 and 1990, dominated by a large red Penetrable, was exhibited in Madrid under the auspices of the municipal authority at the Centro Cultural del Conde Duque.

Jesús Soto, exhibition cat., Madrid, Centro Cultural del Conde Duque, 1998. Texts by José María Losada Aranguren, Robert Guevara, Jacques Leenhardt, Antonio Bonet Correa.

A smaller selection entitled "Jesús Soto. Universe of Change" was shown at the Riva Yares Gallery in Scottsdale, Arizona and Santa Fe (New Mexico). Edward Lucie-Smith reconsidered the position of the artist with respect to contemporary developments in kinetic art:

"

Kinetic Art, however, did not prove to be as durable as either Abstract Expressionism or Pop itself, and a large number of minor artists, never spoken of today, went down with the wreck of the movement. Soto was one of the few survivors - which was equitable enough, since he had found his direction long before Kinetic Art began to be publicized. In some respects, he fitted as well into the Conceptual and Minimal Art which succeeded Pop as he had into any previous artistic movement. In his use of simple elements, he anticipated artists like Carl Andre and Sol LeWitt.

Edward Lucie-Smith, "Jesús Soto", Jesús Soto. Universe of Change, exhibition cat., Santa Fe and Scottsdale, Riva Yares Gallery, 1998, p. 8.



Soto. "Penetrable del Conde Dugue", 1998 460 × 700 cm

"Jesús Soto" exhibition, Conde Duque Cultural Center, Madrid, Spain, 1998 © Archives Soto / All Rights Reserved

Two penetrables 4 metres long, one yellow and the other blue, were temporarily installed in the reception area at the Banque Bruxelles Lambert in Brussels. *Yellow Penetrable* (1999) entered the collections of the Fonds Départemental d'Art Contemporain du Val-de-Marne, and *Blue Penetrable* was reinstalled at the Centro Cultural Metropolitano in Quito (Ecuador) in 2003.

In a long interview with Daniel Abadie, Soto discussed, among other things, the importance of the Impressionist legacy in his work.



Soto. "Pénétrable BBL jaune", 1999 365 × 450 × 1400 cm © Archives Soto / All Rights Reserved



Soto. "Pénétrable BBL bleu", 1999 365 × 450 × 1400 cm © Archives Soto / All Rights Reserved

"

What is a "penetrable"? It's the idea of swallowing up the viewer in the artwork. It's the idea I came across later in the Monet's "Waterlilies" which literally surround the visitor. Jean Clay told me to go and see that painting, which I only knew through photos. When I found myself at its center, I thought to myself that it was a kind of penetrable, that it was filling the space, surrounding the viewer, and that the spectator was someone inside the work. [...] I feel that I am a legitimate heir of the Impressionists. I think they are at the root of modern art.

Soto, interviewed by Daniel Abadie, "Éloge de la vibration", *Jesús Rafael Soto*, exhibition cat., Brussels, Banque Bruxelles Lambert, 1999, pp. 14 and 18.

On 20th March, Soto was made *Docteur honoris causa* of Carabobo University in Venezuela.

"The Poetics of Energy", a retrospective exhibition, took place during the summer at the Fundación Telefónica in Santiago de Chile.

During an exhibition of recent works at the Galerie am Lindenplatz in Vaduz (Liechtenstein), Soto and Heinz Mack resumed a dialogue that had never really ceased since the Zero Group years. Talking about the *Spatial Ambivalences* series, Mack declared:

"

In your Ambivalencia en el espacio, you have given a completely new spatial and rhythmic meaning to monochrome rectangles; at the same time, 'random' fortuitous constellations are actually intentional. Here, correlations between chromatic fields form a kind of concert-like polyphony. Whereas Mondrian's colors were enclosed within a system of linear bands and tended towards the harmonic equilibrium of all the elements that form the balance of the painting, you have given the linear system an independent meaning and freed the colors from the containment of the grid. [...] You discovered this structure and this system very early, long before I did, and you visualized it with almost mathematical precision: a linear system seen as the energy field of the painting, as a "vibration" of the painting's constituent parts.

"Exchange of thoughts between Heinz Mack and Jesús Rafael Soto", *Soto. Die Poesie der Energie*, exhibition cat., Vaduz, Galerie am Lindenplatz, 1999.

2000

For the stimulating exhibition "Force Fields. Phases of the Kinetic" at the MACBA in Barcelona and the Hayward Gallery in London, Guy Brett brought together mainly kinetic works which reflected artists' receptiveness to the results of contemporary scientific and cosmological speculations. Soto was represented by several *Vibrations* and a *Penetrable* of white tubes.

As confirmation of this historiographical renewal which now recognized the importance of South American artists in 20th century art and their significant contribution to habitually undervalued movements such as kinetic art, the Museo Nacional Centro de Arte Reina Sofía in Madrid held a large exhibition intitled "Heterotopías". Soto was represented by several historical works in the "Kinetic" and "Optic-haptic" sections, as were Lucio Fontana, Sérgio Camargo, Mira Schendel, Gego, Hélio Oiticica, Lygia Clark, Lygia Pape, Carlos Cruz-Diez, Gyula Kosice and others.

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2000



Interactivo Mirador Museum, Santiago, Chile © Archives Soto / All Rights Reserved

While the Virtual Volume that hung there since 1987 disappeared from the newly refurbished interior of the Centre Georges Pompidou in Paris, Soto continued to inaugurate new architectural integrations, such as the Large Oval for the Chinese Petroleum Corporation on 19th December. During the same period, four giant penetrables were installed in the open air at the "Parque de Imaginaciónes" in Santiago de Chile. Their colors, ranging from blue to yellow via green and pink, made up an artificial rainbow.

In the same year the historiography of Soto's work was added to by the publication of a series of interviews with Ariel Jiménez (Ariel Jiménez, *Conversaciones con Jesús Soto*, Caracas, Fundación Cisneros, 2001.) Also, a small theoretical book by Carlos Silva founded his work on the Aristotelianism for its relationship with technology and play, and its predilection for cognitive and communicative mechanisms. His commentary referred to representatives of medieval Aristotelianism, referring to studies written by Robert Grossetête (1175-1253) on the properties of light:

"

Color and splendor, like proportion and outline, are deduced from a single principle: that of light. Everything derives from the movement of luminous energy which obeys fundamental proportions. 'All beauty is the expression of an energy which proceeds according to mathematically measurable rules. [...] According to the Bishop of Lincoln, all movement is related to light; and it is from movements and lines of force that figures and volumes, sounds and colors spring anew. [...] All volumes are considered as 'force fields' which arise from an energy, a fundamental movement which spreads, diffusing itself everywhere with consummate ease, whereas in other places it mostly condenses. This means that 'the Universe appears as an immense assembly of spheres and cones, lines and planes, curves and angles which arise, in the final analysis, from the movement that irradiates from light. [...] All movements are in essence luminous. All are governed by simple mathematical laws. All engender figures, either successive or simultaneous, dominated by free proportions.

Carlos Silva, *Jesús Soto y la filosofía*, Ponce de León (Floride), Durban Segnini Gallery, pp. 54-55.

Soto took part in the 4th International Biennale in Santa Fe organized by the art critic Dave Hickey, with a *Large Black Writing* dating from 1979.

The *Red Penetrable* presented for the first time in Madrid in 1998 was reassembled for the exhibition "Paris: Capital of the Arts 1900-1968" at the Royal Academy of Arts in London, where it led from one room to another, obliging visitors to walk through it. It has since been acquired by the Madrid municipal authority.

In the catalogue for the one-man exhibition at the Dan Galeria in Sao Paulo, Maria Alice Millet analyzed Soto's work in relationship to that of the Brazilian artists Lygia Clark and Hélio Oiticica:

"

The work of both Clark and Soto began at the point where the possibilities of the painting were completely exhausted. This is the case for all artists who had reached the bottom of the questions raised by neoplasticism and Russian constructivism. Clark, Soto and Oiticica, each in a particular way, took up the challenge of going beyond the plane, breaking away from the subject-object duality in the creation of an experimental space. It is worthwhile here to briefly compare Soto's Penetrables with Oiticica's, outlining their similarities and differences. Soto's obey a predetermined geometric structure, since the wires are hung from a right-angled reticulum; even so, when one penetrates into them, the feeling they evoke is one of confusion, not order. On the other hand, those by Oiticica, such as Tropicália (1967), an environment made up of several penetrables, present a diversity of references ranging from the primitive (sand, plants, macaws, etc.) to the technological (TV), and point at a possible dissolution of these structures. Both artists

invite the public to interact, Soto at the physical/ sensorial level, while Oiticica adds a cultural factor to the sensorial perception.

Maria Alice Millet, "Jesús Soto : Visual Resonances", *Jesús Soto*, exhibition cat., São Paulo, Dan Galeria, 2002, pp. 35 and 36.

The French Post Office published a stamp paying tribute to Soto, depicting his *Sphère Concorde*.

At the end of the year, an exhibition in Caracas (Galería de Arte Ascaso) brought together the work of Soto's and Alirio Palacios. It showed the very different ways in which their art relates to their native land, the Orinoco. From October 2002 to February 2003, the Centro de Arte in Maracaibo, a town in the Guajira region where Soto was director of the art school in the late forties, held a retrospective of 63 works. Soto recalled the context of the period and particularly his ties with Rafael et Lía Bermúdez, Hesnor Rivera and Víctor Valera:

"

We would translate French and English art books that arrived with difficulty in Maracaibo in the post-war years. I think we were the first group to begin to analyze modern art from the starting point of Cubism, because Hesnor Rivera and his friend Rincón the poet had emptied all the bookshops of everything to do with international contemporary literature. They began to study modern painting and ploughing through books on Cubism, which immediately led us to bring together this intellectual fringe.

Olier, Janett et al : "Testimonio" in *Jesús Soto en Maracaibo*, J&M Editores, p. 61. Maracaibo 2003. Published after the exhibition "Soto en Maracaibo" at Centro de Arte Lía Bermúdez, 2002.



Soto during the opening of the exhibition "Jesús Soto en Maracaibo", Lía Bermúdez, Art Center Maracaibo, Venezuela, October 2002 © Archives Soto / All Rights Reserved

2002



View of the exhibition "Soto. Le mouvement dans l'art", Denise René Gallery, Paris, France, October 2003 © Archives Soto / All Rights Reserved

2003

Between March and June, the Caracas Contemporary Art Museum Sofía Imber presents an important retrospective: "Soto a gran escala", with a selection of more than 105 works curated by Daniel Abadie.

From October to November, the Denise René Gallery presented a selection of Soto's recent works. In the catalogue, Arnauld Pierre analyzed the perception of Soto's work as a total visuo-motor act which can provide the foundation for more complete self-awareness, being more effectively anchored in reunified sense-motor awareness. The work/viewer tandem is compared to a coupling, in the mechanical sense of the term:

"

The relationship Soto sets up between visual forms and the viewer resembles a set of mechanical organs working together to increase force. "At no time have I tried to use electric or mechanical motors. I wanted to involve the viewer as a mechanism", warns Soto. But if the viewer is the motor, then the artwork is a kind of dynamo which transforms the motive energy of the viewer into luminous, vibrating energy. It does this with supreme efficiency: one of the most direct immediate experiences one can have with a piece by Soto is that of the acceleration of visual sensation, brought on not only as a result of walking along, but by every single tiny change in posture, such as shifting one's weight from one leg to the other, or even a slight movement of the head. In other words, the tiniest expense of motor energy is rewarded by a maximum yield of visual sensation. The resulting pleasure might be compared to what we feel when we manage to lift

Silva.

Recalling the brief association of Soto with the Madí group in the early 1950s in Paris, the exhibition "9 Venezuelan Modern Masters", organized by Volf Roitman, was held at the Madi Museum and Gallery in Carlisle (Texas) from 19th November. Soto was represented alongside William Barbosa, Omar Carreno, Saverio Cecere, Carlos Cruz-Diez, Luis Guevara, Octavio Herrera, Ruben Nunez and Inés

a heavy weight with little effort, thanks to a lever or coupled pulleys: it is the pleasure of purely physical, muscular comfort, and results from a feeling that we are in full possession of our vital strength and that we can fully rely on our energy potential. Via the movement of the viewer, Soto's work thus converts visual sensations into almost muscular sensations, tempering the potential aggressivity of optical vibration with the flexibility and elasticity of the proprioceptive perceptions that it simultaneously procures.

Arnauld Pierre, "Dynamo Soto", Soto, le mouvement dans l'art, exhibition cat., Galerie Denise René, Paris, 2003, p. 5.

The major exhibition "Inverted Utopias. Avant-Garde Art in Latin America", held over the summer at the Houston Museum of Fine Arts, reflects the significant re-evaluation of Latin-American art, and what it brings to the art of the avant-garde.

Soto is included, along with Gego, Otero and Cruz-Diez, in Vibrational and Stationary with a group of Kinetic Structures, and also in "Touch and Gaze" in which the Vibrations matiéristes from the 1960s are exhibited alongside the works of Reverón, Barsotti, Schendel, Camargo, Clark, Kosice, Oiticica, Palatik. The exhibition receives an attentive response from the American Press as a whole, both general and specialist, from the New York Times to Art in America and Artnews. In Art forum, Guy Brett suggests that "Inverted Utopias" represents perhaps the most intellectually ambitious project ever undertaken on the subject:

"

The result is not the establishment of 'another', alternative, exotic modernism, but rather the widening of our comprehension of the utopian and dystopian aspects of avant-garde experimentation, where cultural differences are not to be considered as barriers but as challenges and stimuli. This pushes us to see in this art a flux of ideas between cultures and generations, as precarious as they are strong.

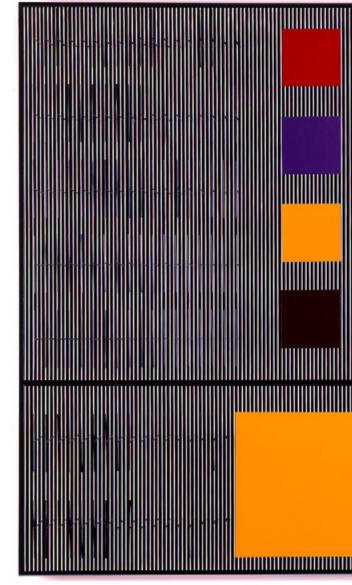
Guy Brett, "Inverted Utopias", Artforum, November 2004, p. 21.

This event overshadows another exhibition shown from March to July at New York's Museo del Barrio entitled "Latin American and Caribbean Art", presenting MoMA's collection of Latin American Art, including Soto's *Olivia y negro* (1966). At the same time, the Los Angeles County Museum of Art responds with an exhibition "Beyond Geometry. Experiments in Form, 1940s-70s", on the introduction of new notions (repetition and seriality, light and movement) in the geometric abstraction of the post-war period, where we find Soto's *Structures cinétiques* from the 1950's.

In May, Universal Jazz produces a limited-edition CD, with the title *fue Ayer*, reuniting Soto and Paco Ibanez, who had met up the previous year to record boleros, bambucos and zambas, vidallas, pasillos and walzes that they used to sing in the Saint-Germain of the 1950s. The CD case, in thick and slippery plexiglass, is an original screen print designed by Soto.

The exhibition "Soto, la couleur en suspens" opens at the Denise René Gallery on the 2nd of December, presenting new variations on the theme of Tes. Daniel Abadie describes this resurgence as one of the most effective techniques ever to be employed by Soto, and finds his new works "animated, more than ever before, by a constant mobility, refracting, like leaves from a poplar in the breeze, or a river in the sunlight, even more inexplicable than each of the Ts, of which they are made up, whose focal point seems to have definitively fixed all the movements of the light".

Daniel Abadie, in "Soto, la couleur en suspens", leaflet edited by the Denise René Gallery, Paris, 2004.

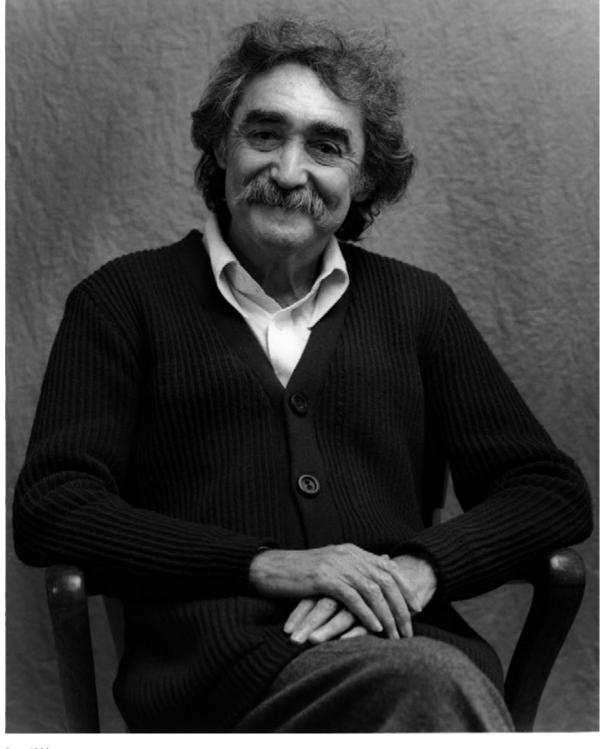


Soto. "Cuadrado amarillo con tes", 2004 103 × 102 × 17 cm © Archives Soto / All Rights Reserved

The announcement of Soto's death, in Paris on the 14th of January, provokes strong emotions in the art world, and this sentiment is expressed in the official reactions of the French and Venezuelan governments, echoed in numerous articles in the national and international press. All honor the death of one of the main founders of kinetic art and the creator of a work listed in the World Art Heritage. The Denise René Gallery extends and enlarges its exhibition to transform it into a posthumous homage. There are considerable repercussions in the press and audio-visual media of Soto's country of birth. The event speeds up the decision to restore La Esfera Caracas, vandalized three years earlier, amidst controversies about the damage done to the monumental kinetic works installed in the Venezuelan capital.

Ten days after the death of the artist the exhibition "Soto. A Construção da Immaterialidade" opens at the Centro Cultural Banco do Brasil de Rio de Janeiro. As the first retrospective organized in Brazil, the exhibition looks at the relationships between Soto's work and that of Brazilian artists such as Alfredo Volpi, Amilcar de Castro, Franz Weissmann, Hélio Oiticica, Lygia Clark, Lygia Pape, Sergio Carmargo, Wyllis de Castro...

The vast thematic exhibition on optic and kinetic art (1950-1975) that opens on the 12th of May at the Museum of Modern and Contemporary Art in Strasbourg, consciously situates itself in homage to and in reference to one of the central notions of Soto's work and thought: "L'Œil moteur".



Soto, 1988 Photo André Morain © Archives Soto / All Rights Reserved

Biography of Jesús Rafael Soto

The present biography was commissioned by Atelier Soto / AVILA for the artist's official website (www.jesus-soto.com)

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