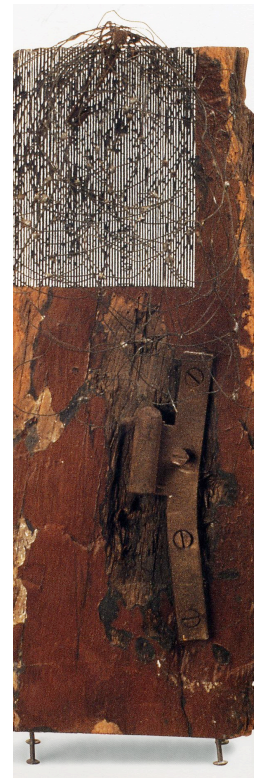


SOTO: ART AND SCIENCE



left. Armonie transformable
1956

right. Leño viejo
1961

By Gregorio Luke

Jesús Rafael Soto is the master of kinetic art, an innovator who used space and movement to create a new form of artistic expression. Soto worked with the spirit of a scientist, eager to make a discovery. He had an unstoppable determination to experiment and innovate rather than simply imitate what others had done. For him, art, like science or technology could not remain static, it had to move forward. Fascinating as his ideas are, his art can also be enjoyed without any explanation. His work is beautiful, exciting and refreshing.

Soto's art inspires wonder and joy.

EARLY YEARS

Jesús Rafael Soto was born in Ciudad Bolívar Venezuela in 1923. During his teens he worked designing posters for the local movie house. From 1942-47 he studied at the Secular de Artes Plásticas in Caracas, where he received a formal artistic education.

Even though his instruction was based on drawing, he quickly abandoned all forms of

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representative art. He was not interested in recreating the human figure or conventional landscape. Soto was fascinated instead by light and its vibrations. He could spend hours watching lakes and rivers, wondering how to capture the flickering reflection of light on water.

Upon seeing a work by Braque he became interested in geometric forms of expression and cubism. A scholarship allowed him to continue his studies in Paris in 1950, where he plunged into the study of artists such as Kandinsky, Malevich, and especially Mondrian. From the beginning his main concern was: How to give dynamism to abstract art.

MOVEMENT

Soto was always concerned with making movement visible. He first explored this idea in his series Repetitions, in which a single abstract element was repeated indefinitely.

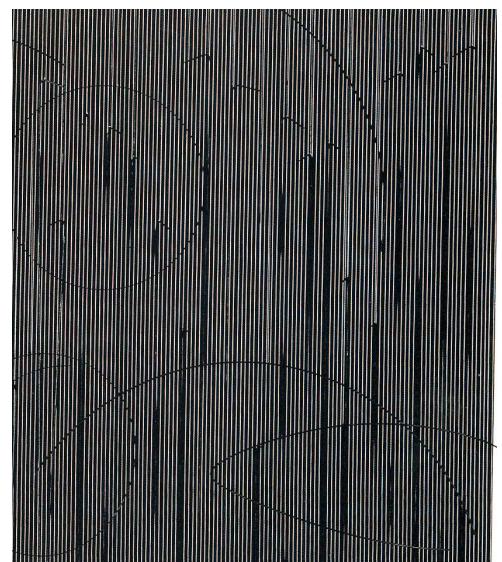
Soto's departure from conventional art was absolute. It was not enough to paint abstract instead of figurative forms, he wanted to find a new way of

working that challenged the traditional notions of composition and balance. To achieve this goal, he adapted to the visual arts, the twelve-tone system of music composition.

In the twelve tone system, the composer arranges the 12 notes of the chromatic scale in a particular order, forming a row of tones. A composition is then built by using each tone of the row in turn beginning again with the first tone each time the end of the row is reached. In a similar way, Soto arranged the colors in series and combined them according to pre-established patterns. To his surprise, the works that resulted had a strong dynamic and visual rhythm.

One day, as he would recall in an interview with Ariel Jimenez, he found in a department store, a radio grill with round holes. He painted it black and set it against a white background, in which he had copied the same dots in a different position. As he superimposed the grill, he observed a certain vibration generated by the displacement. Then he experimented with the superimposition of transparent

**Escritura negra
plana
1976**



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materials such as Plexiglas.

The optical vibration increased as he added volume. An important breakthrough occurred in the works where he superimposed a pattern of dots over a pattern of squares. When the layers were superimposed, a third image appeared. It seemed that the squares had a luminous nuclei.

SPACE

The next discovery occurred when Soto superimposed a transparent surface over an opaque one, but this time leaving a space of several inches in between. The effects were staggering; the two superimposed surfaces produced an optical effect of vibration every time the spectator moved.

The importance of this discovery was twofold:

❑ Space, that in the past had been an empty void, was now visible and perceptible.

❑ From the relationship between the two objects, a single image emerged. This new image existed only in the viewers mind.

A NEW LANGUAGE

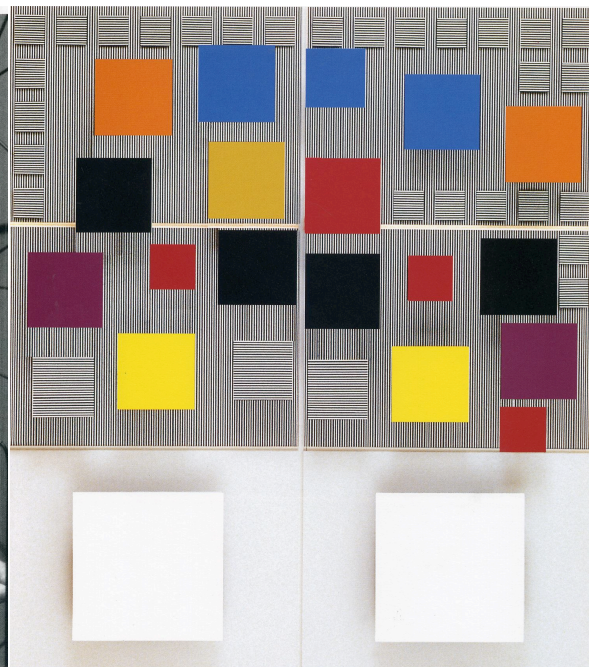
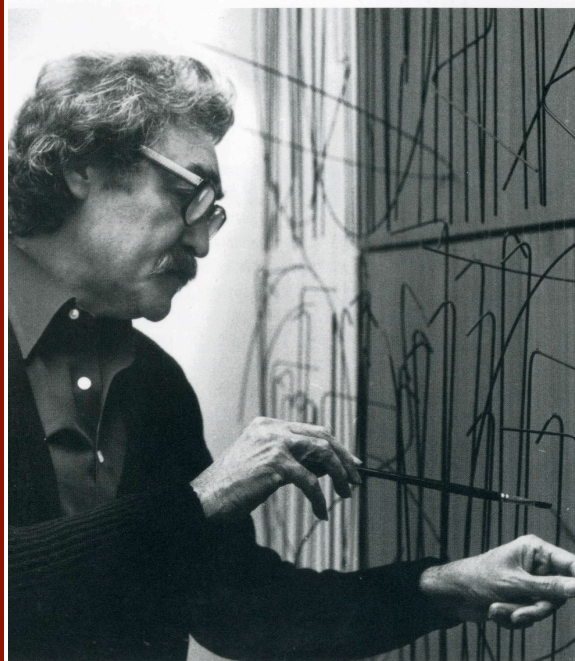
Soto discovered the infinite possibilities offered by the superimposition of optic surfaces. He incorporated suspended objects and experimented with colors and textures. He was fascinated by the phenomenon of displacement of the objects produced by the optical vibrations.

However, he was unsatisfied because he wasn't in full control of all the elements involved. He was using his own words, "too free." To solve this problem he decided to maintain a constant ruled background surface of parallel lines over which he superimposed other elements freely.

In Soto's vocabulary, everything is measured, calculated and thought through. His creation of a new technique to communicate his ideas,

Photo: Atelie Soto

Ambivalence
Ocumare
1989





Soto integrates sculpture and painting into a new art form that cannot be classified in conventional ways.

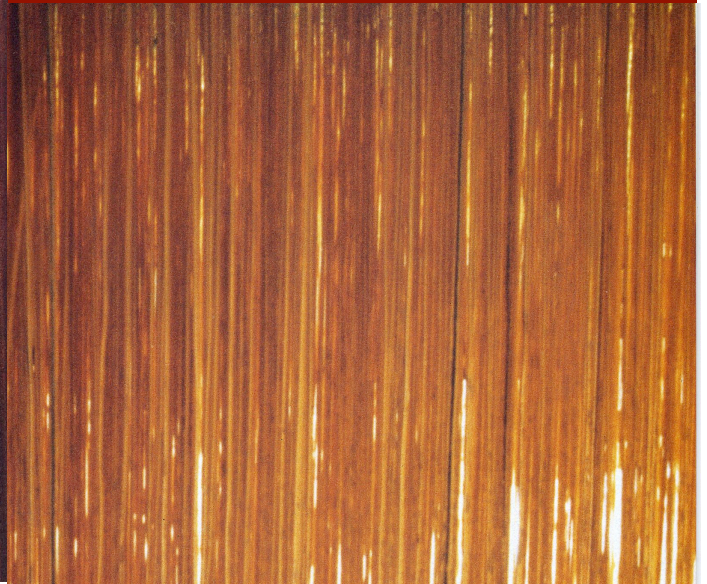


Photo: Yves Forestier

making them visible and even tangible, is remarkable. Soto integrates sculpture and painting into a new art form that cannot be classified in conventional ways.

MONUMENTAL ART

In 1968, Soto would take dramatic step further with his Penetrables. Until then, he had experimented with the space contained within the work of art. Now he wanted to integrate in the same space, art and the viewer.

His solution was perfect in its simplicity. By using thousands of nylon cords suspended from above, he produced an effect comparable to the experience of rain. The spectator could feel and

touch the space around him. Art and the spectator were inextricably joined.

As a logical progression to the Penetrables, Soto's works evolved in size and scope to become entire environments. Soto's creations became integrated into architecture or stood alone as monumental public works of art.

MOVEMENT AND PLAY

What remains constant in Soto's work, whether it is a small laboratory piece or a monumental installation is the demand of an active viewer. Soto's work can only be appreciated if the spectator moves.

The hypnotic seduction of Soto's art as Carlos

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Silva has pointed out, happens because “they are based on something as essential movement and as basic as play. He who observes Soto’s art plays and as Aristotle indicated, ‘Happiness and pleasure are linked to the concept of play’.” iii

A NEW PATH FOR BEAUTY

Soto’s work makes us aware that space is not empty, it has density and elasticity. Soto’s creations make it easy to understand that matter is but another form of energy and that everything is related to each other.

“In other times,” says Soto, “the artist felt as a witness to the external world. Nowadays we feel in the world, like a fish in the water, we are no longer witnesses, we are an integral part of the real. Man is in plenitude and it is that plenitude I would like to capture with my work. The purpose is not to drive people crazy with optical effects, but to make people aware that they are immersed in the trinity of space, time, and matter.” iv

By eliminating the boundaries between space and form, between painting and sculpture and between art and the viewer, Soto’s creations appeal simultaneously to thought and emotion. They are according to Carl J. Weinhardt, “total art.” v

Soto believed in an optimistic art of reinvention, art that offered people the opportunity to believe in themselves. Soto’s art renews our faith in human talent and intelligence, opening new paths towards beauty in the 21st century.

i Soto, Jesús. Art Soto Space Art: Catalogue of Exhibition. Miami: Center for the Fine Arts, 1985.

ii Jiménez, Ariea. “Fragment of an Infinite Reality.” Inverted Utopias. Ed. Olea, Héctor and Ramírez, Mari Carmen. Houston: The Museum of Fine Arts, 2004. 507-512.

iii Silva, Carlos. Jesús Soto: y La Filosofía. Miami, 2001. 45-57.

Soto, Jesús “Jesús Soto Geometric Art: Writings by the Artist.” Art Museum of the Americas. http://www.museum.oas.org/permanent/geometric_art/soto/writings_by.html

v. Weinhardt, Jr., Carl Soto Space Art: Catalogue of Exhibition. Miami: Center for the Fine Arts, 1985.