Takis: The Fourth Dimension is organized by the Menil Collection and curated by Toby Kamps.

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PUBLIC PROGRAMS

Ploughman of Magnetic Fields: Takis and The Menil Collection

Friday, January 23, 6:30 p.m.

Curator Toby Kamps, Menil Mellon Fellow Conservator Erin Stephenson, and Melissa Warak, who teaches art history at the University of Texas at El Paso, explore Takis's work and the generation of the exhibition.

Takis and the Fourth Dimensions and Invisible Energies of Twentieth-Century Art

Friday, February 6, 7:00 p.m.

Drawing on the ideas explored in her book *The Fourth Dimension and Non-Euclidean Geometry in Modern Art*, University of Texas at Austin art history professor Linda Dalrymple Henderson discusses the concept of the fourth dimension as it relates to Takis's art.

Takis: Music and the Fourth Dimension

Saturday, May 9, 3:00 p.m.

Responding to Takis's interest in the fourth dimension, the Da Camera Young Artists perform works that explore the invisible realm of sound energy and the relationship between time and space in music.

All works by Takis @ 2015 Artists Rights Society (ARS), New York/ ADAGP, Paris

Takis, Ballet Magnetique I (Magnetic Ballet I), 1961. Electromagnet, acrylic sheet, cork, and iron, $12\% \times 16\% \times 16\%$ inches (31.8 x 41.9 x 41.9 cm). The Menil Collection, Houston. Photo: Adam Baker

THE MENIL COLLECTION

1533 Sul Ross Street Houston, Texas 77006 713-525-9400 menil.org



The Menil Collection anuary 24–July 16, 2015



Takis, happy ploughman of magnetic fields and signalman on soft railroads.

-Marcel Duchamp, 1962*

Takis explained to me that the stars were all pulled together with myriad thin invisible wires of magnetism radiating from every star to every other star—so we imagined, if you pulled out any one star the whole thrumming mechanism would slip a cosmic inch like a quavering mobile and all twang together into place at once on lines of unseen magnetic tracks, thunk.

—Allen Ginsberg, 1962

You know men see in three dimensions, but there is a fourth. What is the fourth dimension? The solar eclipse, I said. Why? Because when it occurs, men experience the same feeling.

-Takis, 2007



Takis, Espace Intérior (Inner Space), n.d. Bronze, 6% x 7½ x 8 inches (17.5 x 18.4 x 20.3 cm). The Menil Collection, Houston, Gift of the Contemporary Arts Museum Houston. Photo: Paul Hester



Figure, attributed to the Ashmolean Master. Greece, Cycladic Islands, possibly Naxos; Early Cycladic II, Dokathismata variety, 2400–2300 BCE. Marble, 14½ x 4½ x 1½ inches (36.8 x 11.3 x 3.2 cm). The Menil Collection, Houston. Photo: Hickey-Robertson, Houston

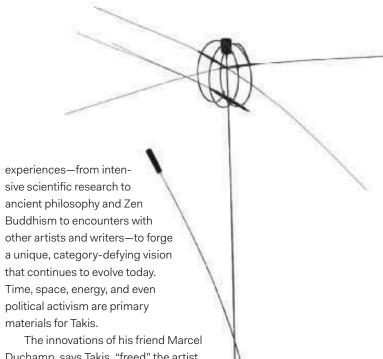


Takis, Standing Woman, 1954. Wrought iron, $19\% \times 5 \times 5$ inches (49.2 × 12.7 × 12.7 cm). The Menil Collection, Houston, Gift of Alexander Iolas. Photo: Paul Hester

BORN PANAGIOTIS VASSILAKIS IN ATHENS IN 1925,

Takis is world renowned for his investigations of the gap between art and science. Since the early 1950s, he has explored new aesthetic territories, creating three-dimensional works of art that incorporate invisible energies as a fourth, active element. Takis, who describes himself as an "instinctive scientist," employs powerful, elemental forces to generate the forms, movements, and musical sounds of both his static and kinetic works. Beginning with its founders, John and Dominique de Menil, the Menil Collection has had a long relationship with the artist, and the museum's twenty-five objects are the largest single group outside of Europe. *Takis: The Fourth Dimension* is the first-ever museum survey of his career in the United States.

Takis's family and early life were shattered by the German occupation during the Second World War and the Greek Civil War that followed it, and he received no formal education in art. Instead, living and working in Paris, New York, and Athens, he synthesized a broad range of ideas and



Duchamp, says Takis, "freed" the artist from the art object. By foregrounding ideas and natural processes, Duchamp, a pioneer of conceptual art. liberated the work from the romantic trappings of style and craftsmanship. To this day, Takis deemphasizes the expressive or handmade in his objects, preferring to see them as vessels or stages for forces independent from their maker. Collection, Houston, Photo: F.W. Seiders

Takis, Signal, 1955. Steel plate and rods, wire, and iron, 461/2 x 323/8 x 231/8 inches (118.1 x 82.2 x 58.7 cm). The Menil

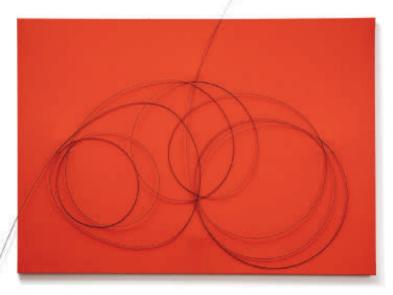
Among the artist's earliest works are small figures in wrought iron inspired by the wedge-like, totemic forms of ancient Cycladic sculptures. Reminiscent of the attenuated male and female forms of another of Takis's friends, the sculptor and painter Alberto Giacometti, these standing and seated figurines suggest archetypes-embodiments of primal states of being. In the late 1950s, the artist also created small, cast-bronze objects resembling hybrids of engine parts and succulent plants, which he called Desert Flowers. His Interior Spaces, ridged, egg-like bronze forms from the same period, reference the expanding energies of respiration and centrifugal force and serve as personally scaled models of the solar systems of outer space

With the Signals series, first exhibited in Paris in 1955, Takis established himself as a pioneer of a new form of art—one tapping into nature's fundamental forces. These spindly works, in which wires topped by a variety of objects and metal shapes sprout from heavy steel bases that allow them to sway in the wind or respond to nearby vibrations, build on experiments with kinetic art begun by Duchamp and other acquaintances, including Alexander Calder and Jean Tinguely. But they also reflect the artist's growing interest in radar (radio detection and ranging) and magnetism in all its forms. Resembling radio or insect antennae, the Signals also hark back to Aeolian harps, ancient Greek instruments strummed by the wind. Whether meant to send or receive, Takis's sculptures became devices for gathering energies outside the visible spectrum.

So inspirational were the Signals and his many works giving form to primordial forces that followed them that the curator and critic Guy Brett and artist David Medalla established a gallery and publication of the same name in London in 1964. With Takis as a leading figure, Signals Gallery became a forum for a new generation of artists and writers who were exploring kinetic, environmental, and time- and performance-based art.

Later works from the 1960s, dubbed Télé-Peintures and Télé-Sculptures by the French critic Alain Jouffroy, referencing the Greek word tele, meaning "at a distance," are paintings and sculptures incorporating magnetism in their designs. For example, the Menil Collection's Magnetic Painting No. 7. 1962, uses strong magnets behind a yellow monochrome canvas to make metal objects restrained by wires defy gravity and hover above its surface. And Ballet Magnetique I (Magnetic Ballet I), 1961, uses an electromagnet switched on and off by a motor to make a sphere and cylindrical form suspended from string orbit above its base.

In the 1960s and 1970s, Takis made numerous works using electricity and magnetism: Signals with flashing electric lights atop their antennae; glowing mercury cathode lamps called Télé-Lumières; interactive electromagnetic sculptures that change shape as viewers manipulate dials or attach metal fragments to them; and walls of dials, lamps, and compasses that flicker and shudder in response to electrical and magnetic impulses. He also made sexually



Takis, Magnetic Wall - M.W. 038, 1999. Painted canvas, wires, and magnets, 4634 x 5534 inches (118.5 x 141.4 cm). The Menil Collection, Houston, Gift of the artist. Photo: Paul Hester

charged bronze sculptures that consider the erotics of magnetic attraction.

In 1968, Takis was invited to become a visiting fellow at the Center for Advanced Visual Studies at the Massachusetts Institute of Technology. At MIT, he deepened his studies of electromagnetism while working in conjunction with scientists and engineers, whom he regarded as kindred spirits—"poets" and "creators." This residency resulted in a patented device for transforming wave energy into electricity that uses a bicycle wheel as a central feature, a homage to Marcel Duchamp and his Bicycle Wheel, 1913.

Two more-recent works donated to the museum by the artist honor the de Menil family, whom he regards as his most important early patrons. Magnetic Wall - M.W. 038, 1999, uses magnets mounted behind a bright red monochrome painting to shape coiled steel wire into an energetic, spiraling drawing. And, continuing a series begun in the 1960s when the artist lived in New York's Chelsea Hotel, Musical - M. 013, 2000, uses a nail, an electromagnet, a stretched wire, an electric guitar pickup, and an audio synthesizer to create simple "naked music," an ingredient he considers essential to each of his exhibitions.

Dating perhaps to his imprisonment as a resistance leader during the Greek Civil War, Takis has regarded the energies of the public sphere as part of his repertoire. Whether in the late 1950s, when he staged ephemeral streetart fireworks displays, or the late 1960s, when he cofounded the Art Workers Coalition, an organization in New York dedicated to giving living artists a voice in museums, he has continually manifested radical and utopian streaks in his work and life.

Most famously, these inclinations found expression in Takis's brief rivalry with the French artist Yves Klein, who also sought to transcend three-dimensional consciousness. Anticipating Soviet cosmonaut Yuri Gagarin's historic flight in April 1961, Takis and Klein engaged in their own "space race." On November 27, 1960, Klein published a photograph entitled Leap into the Void showing him suspended in the air above a Paris street, as if breaking free of gravity. Four days later, Takis briefly suspended poet Sinclair Beiles in a magnetic field at the Iris Clert Gallery, at which both Takis and Klein showed. True to their respective approaches, Klein symbolized his breakthrough (the photograph was doctored) while Takis actualized his—if only for an instant.

Paradoxically, in our current "information age," which is increasingly saturated with different bandwidths of electromagnetic energy (Wi-Fi and cellphone transmissions, for example), we may be aware of a smaller spectrum of the signals pervading our environment than our pretechnological ancestors were. Takis and all of his projects call for greater attunement to unseen forces. "Magnetism is a manifestation of the invisible world which surrounds us," he says. "I point out in my work that this invisible world is a world that exists—that this energy is reality." Today, Takis continues his guest to illuminate the forces binding the universe, from the strong, counterbalanced attractions holding atoms and the orbiting planets together to the faint bioelectromagnetic emissions produced by our own bodies. He runs the Takis K.E.T.E., a research center for the arts and sciences in Athens, and practices Solar Yoga, a form focused on drawing energy from the sun.

—Toby Kamps

Duchamp said, "Par conséquent Takis, gai laboureur des champs" magnetiques et indicateur des chemins de fer doux." Takis interprets "chemins de fer doux," or "soft railroads," to be a poetic reference to the fourth dimension and pathways to the unseen.