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

—Marcel Duchamp, 1916*

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 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 scientific concepts into a unified aesthetic program.

BOURN PANAGIOTIS VASSILIKIS IN ATHENS IN 1925

BORN PANAGIOTIS VASSILIKIS 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 scientific concepts into a unified aesthetic program.
energies—from intense scientific research to ancient philosophy and Zen Buddhism—to encounter ideas from other artists and writers— to forge a unique, category-defining vision that continues to evolve today.

Time, space, energy, and even political actions are primary materials for Takis. The innovations of his friend Marcel 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 trappings of style and craftsmanship. To this day, Takis emphasizes the expressive or handmade in his objects, preferring to see them as vessels or stages for forces independent from their maker.

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 alternating male and female forms of another of Taki’s totemic forms of ancient Cycladic sculptures. Reminiscent of the alternating male and female forms of another of Taki’s sculptures that change shape as viewers manipulate dials, 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 contemporaries, including Alexander Calder and Jean Tinguely. But they also reflect the artist’s growing interest in radio (radio detection and ranging) and magnetism in all its forms. Each emitting 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 become devices for gathering energies outside the visible spectrum.

So inspirational were the Signals and his many works going to primordial states of being. In the late 1950s, the artist, the curator and critic Guy Brett and artist David Medalla established a gallery and publication of the same name in London. 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 tēle, meaning “at a distance,” are paintings and sculptures incorporating magnetism in their designs. For example, the Merli Collection’s Magnetic Painting No. 3, 1962, uses strong magnets behind a yellow monochrome canvas to make metal objects restrained by wires defly gravity and hover above its surface. And, in the series Magnetic Sculpture, Takis uses an electromagnet switched on and off by a motor to make a sphere and cylindrical form suspended from string or 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 painting to shape coiled steel wire into an energetic, spiraling sculpture; Bicycle Wheel; and sculptures incorporating magnetism in their designs. 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—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 to each of his exhibitions.

Duchamp said, “The consequent Takis, galbuleur 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. —Toby Kamps