Passages of Light and Time

George Rickey's Life in Motion

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George Rickey's Life in Motion

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Snite Museum of Art University of Notre Dame





— George Rickey, July 4, 1996













I tried to keep my mind on movement itself, pushing gently on to try to find what was possible and discovering, with each new idea, how near the beginning I still was.

- George Rickey

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ACKNOWLEDGMENTS

The Snite Museum of Art takes great pleasure in publishing its George Rickey Sculpture Archive on the occasion of two 2009 events: the opening of the Innovations: George Rickey Kinetic Sculpture exhibitions in nearby South Bend and the concurrent Abstraction in the Public Sphere: *New Approaches* symposium at the University of Notre Dame, organized to celebrate Rickey's artistic legacy.

Innovations features five outdoor Rickey sculptures installed on downtown South Bend sidewalks and plazas, and indoor and outdoor exhibitions at the South Bend Museum of Art. The exhibitions are the result of model collaboration between Philip Rickey, president, George Rickey Foundation; Rose Meissner, president, Community Foundation of St. Joseph County; Susan Visser, director, South Bend Museum of Art; the Snite Museum of Art, and 1st Source Bank. Philip Rickey generously devoted his time and the resources of the George Rickey Workshop to make these exhibitions in George Rickey's birthplace possible. As is typical of him, Philip was enthusiastic, gracious, and involved in many aspects, large and small, of the exhibitions and symposium. Similarly, Meissner and Visser labored tirelessly and in good humor to make the South Bend exhibitions possible. This project is just the most recent example of their profound dedication to the arts in our community-which would be sorely impoverished without them.

Similarly, Notre Dame faculty members Erika Doss, chair, American Studies, and Elyse Speaks, art history, cheerfully shared expertise and energy in organizing the Rickey symposium, as did the indefatigable Harriet Baldwin, associate professional specialist, College of Arts and Letters.

The South Bend exhibitions complement the Snite Museum's permanent exhibition of its George Rickey Sculpture Archive, which includes one outdoor sculpture and nineteen indoor sculptures that are promised gifts of the George Rickey Foundation. The Foundation will also one day place Rickey's professional and scholarly papers at the University of Notre Dame Archives. Rickey archive material includes business correspondence with clients, museums and galleries; engineering drawings and specifications; photographs, videos and films of Rickey's sculptures; as well as a computer database of sculptures created by Rickey. Published works include essays written by George Rickey on various topics, including the manuscript for his, *Constructivism:* Origins and Evolution, and essays written on George Rickey by other authors.

This catalog features a fine essay by Shannon Kephart, researched and written when she was a Notre Dame graduate intern. Kephart was an ideal curatorial assistant; she was self-directed, energetic, open to suggestions, and her essay adds new insights into Rickey. Sarah Tremblay Gauley masterfully edited the essays; Museum photographer and digital archivist Eric Nisly prepared many of the images; and Michael Swoboda imaginatively designed the catalog, as well as provided handsome photographs. The Humana Foundation Endowment for American Art funded printing costs.

limits of their motion.

They are, indeed, poetry in motion: once elegiac totems to the passage of time; now also markers of the time their maker passed in our midst.

In closing, I reflect on one of the greatest rewards of my work: the opportunity to meet some of our nation's finest artists. I had the pleasure of working with George Rickey on several projects during the last decade of his life, when he was always a gracious host, and a natural teacher, at the George Rickey Workshop. I will never forget the visual delight of approaching the Workshop by road. Visitors were treated to rolling, forested hills populated by George's kinetic sculptures that moved slowly and silently, occasionally flashing reflected sunlight. While these works once seen in upstate New York are no longer there, Rickey's unique artistic legacy is his kinetic sculptures that remain constantly in motion around the world, activated by indoor air currents or outdoors by the whims of the wind. In their graceful trajectories, these hypnotic sculptures reveal the play of natural forces and light upon artworks that utilize physics to control the time and

— Charles R. Loving Director and Curator, George Rickey Sculpture Archive

BEGINNING THE JOURNEY

On a calm day or inside a gallery, a viewer unfamiliar with the work of George Rickey may at first pass one of his sculptures without detecting its kinetic potential. However, at the slightest shift of wind or air current, witnessing its subtle movement is as captivating for the novice as it remains for the veteran. This motion displays Rickey's refined sleight of hand and intricate construction techniques, and holds the key to the magnificence of his works.

Throughout his life, Rickey traveled extensively between Europe and America. His itinerant lifestyle exemplified a career that continuously investigated and discovered different ways to exhibit motion. Rickey ventured from place to place just as he worked to perfect his aesthetic language of motion. These exploratory journeys—both his physical travels and his artistic investigations of movement—paralleled the many roles that Rickey would play throughout his lifetime, as an artist, teacher, father, critic, historian, mentor, and innovator.

In "The Morphology of Movement: A Study of Kinetic Art," an article that Rickey wrote in 1963 for *Art Journal*, he outlines the sources, principles, trends, and difficulties of kinetic art—that is, art with mechanical parts that can be set in motion. Alongside this genealogy, he hints at his own pursuits and inspirations within the nascent field of kinetic art.¹ The article includes a line drawing of a sailboat demonstrating several classic ship movements: pitch, roll, fall, rise, yaw, and sheer *(illustration at right)*. Summarily outlining the sails, mast, and hull in a view of each movement, Rickey reduces the ship to its fundamental parts. A carefully placed horizon line marks the sailboat's pitch and roll in the wind and its rise and fall on the waves. Two movements, "yaw" and "sheer," are shown from above, with a dotted outline suggesting the diagonal shift of the hull. This study of a sailboat's actions on water proposes nature as a source for movement and traces the artist's quest to formalize a language of motion back to his childhood, when he often set sail on the family's cutter along the river Clyde and up the west coast of Scotland.²

Rickey's drawing recalls the experience of viewing a sailboat from a distance, watching its forceful movements lulled to a calm as the crashing waves are hushed. The artist freezes the fluid, continual rocking of the boat into distinct moments and simplifies its dramatic sway into a few lean words. Turbulent movements become subtle and controlled. Designed with apparatus such as keels, rudders, and rigging, sailboats utilize the forces of nature for movement but resist being overcome by them. Similarly, Rickey engineers artworks that employ these same forces for movement but are equipped with controls to counter their potential violence. This conciliation

between the unpredictable power of nature and control over the movement it generates defines Rickey's sculptures. In his 1963 article, he discusses this relationship with nature, which became the driving force of his artworks: "For the kinetic artist . . . nature is omnipresent and is always nudging his elbow. For him, it is source book, example, competitor, analogy, tyrant, seducer, and also inexorable adversary."³

The typology of motion based on the model of a sailboat helped Rickey build an understanding of movement and provided a small reserve that offered unending opportunity for re-creation in his work. He describes the possibilities that just a few movements provide in his statement, "Few though they [basic movements] be, they offer themselves, just as visible colors do, for an almost infinite range of variation, permutation, and combination."⁴ The desire to discover and display movement mapped George Rickey's life, both through his travels and in his artistic pursuits, captivating his mind and illuminating his sculptures.

Rickey's artistic method of capturing motion interlaced engineering with nature, combining influences that can be traced back to his early years as the son of an MIT-educated engineer and the grandson of a clockmaker, living in Scotland in close proximity to the constant waves, currents, and tides of the ocean. All of George's grandparents grew up in New England and descended from a line of Yankees who came from England in the seventeenth century. His maternal grandfather was a lawyer and then a judge for the New York State Supreme Court. His maternal grandmother taught drawing at a girls' school in Schenectady, New York, for many years. His mother, Grace Rickey, graduated from Smith College and instilled in George and his siblings a passion for reading, writing, and the arts. Walter Rickey, George's father, worked as a mechanical engineer for Singer Sewing Corporation in Schenectady and, in 1904, was transferred to South Bend, Indiana.⁵ There, George was born on June 6, 1907, the third of six children and the only son. When he was five years old, his father accepted another transfer within the company that took the family from the Midwest to Helensburgh, Scotland, a coastal town where many industrial workers from Glasgow lived and where George Rickey would spend his formative years. On the way to Scotland, George spent a few months in Athol, Massachusetts, with his paternal grandfather, a clockmaker who later lived with the family at their home in Scotland. Fascinated by the mechanical parts of these intricate clocks, young George would spend hours taking them apart and trying to put them back together.⁶

This initial transatlantic trip, from Indiana to Scotland, presaged a journey that George Rickey would take many times. Both shortly before and during college he sailed across the Atlantic, and throughout his career he frequently traveled between the United States and Europe, with considerable stays in Paris and many summers in Berlin. With each new voyage, the memory of his encounter with the wind on the river Clyde resonated. He once described how captivating a force the wind can be to an artist: "The artist finds waiting for him, as subject, not the trees, not the flowers, not the landscape, but the waving of branches and the trembling of stems, the piling up or scudding of clouds, the rising and setting and waxing and waning of heavenly bodies."⁷ His own desire to display motion and "make the wind visible" encouraged Rickey to discover a different form of movement with each trip and to uncover a fresh aspect of nature with each new place. Absorbed in the natural sway of a ship in the wind, but fascinated by an engineer's desire to understand how things work, he cultivated a relationship between nature and engineering that would become the source material for his art.

Figure 1, The Ship, 1954

Rickey's preoccupation with ships is seen in his early experimentation with sculpture. In the mid-fifties he constructed a series of eleven increasingly complex ships. Each sits on a base, with the sails, mast, and hull isolated above, and varies in height from eight inches to four feet.⁸ These works represent the artist's first use of a gimbal, a device used aboard ships to allow navigation tools and kitchen equipment to remain upright as the ship pitches and rolls. In Rickey's sculptures, this technology is reversed: a stable base allows the ship to rock freely back and forth.⁹ Flat planes of imperfectly finished brass or stainless steel cut into geometric shapes—sometimes lightly and crisply scored—form segmented sails, whose flutter suggests wind-driven movement. In these and other early sculptural works, Rickey experimented with brass for its soft malleability and rich color. This allowed him to achieve exact effects in a soft metal before moving to the harder and less pliable material of stainless steel.

In the first sculpture of this series, *Ship I* (fig. 1), from 1954, the central sail is divided vertically into three segments. A thin steel frame outlines each one and continues into the hull, where the counterweight and gimbal are located. A forceful breeze can activate the pitch and roll of the ship, and with this shift of the hull the sails also turn. In Rickey's later ships, the weight and gimbal are separated; the gimbal still forms part of the hull but the counterweight sits below or beside the hull. These works are among the earliest examples of the artist's practice of combining engineering techniques with natural forces to achieve his signature delicate movement.

re 2, Three Vertical Two Horizontal Lines (Pivoting), 1966

Following in his father and grandfather's footsteps, Rickey had initially received training in math and science to become an engineer. He was therefore familiar with mechanical apparatus and understood the relationship between form, movement, and function: a machine's form is built to execute a specific motion, and this motion conducts its function. In 1964 he described, "My technique is borrowed from crafts and industry. It has more in common with clocks than sculpture."¹⁰ His description of ship movements in "The Morphology of Movement" precedes a listing of mechanical parts such as the wheel, pendulum, and piston and their use in various machines. However, the article goes on to criticize the predictable, stagnant motion of these apparatus. For Rickey, the repetitive movement that results from the execution of a mechanical function distinguishes practical machines from his kinetic artworks. Activated by natural forces, Rickey's works remain subject to chance—an element that is vital to his art. Although he recognized the essential relationship that allows a form to produce a desired type of motion, he left function out of the formula. Thus his sculptures remove the function from, for example, his father's sewing needle or his grandfather's clock pendulum and allow these same slender forms to work toward other means. Experimenting with weights and bearings, Rickey created objects that move as subtly as the tick of a clock but with the grace of swaying branches and falling leaves—an organic type of movement that he sought from the beginning of their design.

In *Three Vertical Two Horizontal Lines (Pivoting)* (fig. 2), from 1966, five thin lines made of stainless steel, slightly thicker at one end than the other, resemble sewing needles. Attached to the base at each needle's eye, they rotate around a central joint. Limitations placed on their movement ensure that, at any moment, three blades remain pointing vertically and two roughly horizontally. The thin structure of the base echoes the circling parts and lifts the needles into the air, where they remain free to drift and follow the slightest breeze. In a later work, *Two Vertical Two Horizontal Lines* (fig. 3), from 1974, Rickey continued to play with limited movement within the vertical and horizontal directions. Four blades are posted at the corners of a flat, square plane that is tilted to hang as a diamond. Each of these pendulums points toward opposite corners of the base, tracing its form with their paths of gentle motion as the air currents shift. The lines pass over the center at an intricate crossing that changes uniquely with every slight movement; intervals of chance turn this clock's hands. In both works, lines weave in and out of one another and joints sew a secure link that enables the delicate motion of the sculptures' parts—motion in which no sequence repeats over the life of the sculpture.

EARLY EXPLORATION AND DISCOVERY

In 1926 Rickey left Helensburgh for Balliol College in Oxford, England. He decided on a history major and attended classes at the nearby Ruskin School of Drawing in the Ashmolean Museum of Art and Archaeology. His liberal arts education later complemented his artistic career when he became an active art critic and historian, composing a history of Constructivism and contributing cultural essays and art criticism to numerous publications. Rickey would also go on to teach art history courses at several colleges, and his own education influenced his teaching style, leading him to recognize the critical role of art history in preparing studio art and design courses.¹¹

After graduating from Balliol in 1929, Rickey spent a year in Paris pursuing a career as an artist, while supporting himself by teaching English at the Gardiner School. Within this short time, an encounter with Stanley William Hayter, studies under André Lhote at the Académie Lhote, and painting courses with Fernand Léger and Amédée Ozenfant at the Académie Moderne laid a foundation for both his later kinetic sculpture and the importance of writing to his career. First, his conceptions of spatial convention in painting were broken open when, upon arriving, he was introduced to the British painter and printmaker Stanley William Hayter. In Hayter's Surrealist artwork, Rickey saw "a revelation . . . a painting did not have to be vertical and have a top and a bottom and a left and a right." ¹² This new way of thinking introduced the necessity of going outside the flat canvas to express some subjects. For Rickey, conveying movement would require four dimensions, or working in kinetic sculpture.

At the Académie Lhote, Rickey met the prominent French painter and sculptor André Lhote, who was also an art critic in early twentieth-century Paris. Lhote revered the so-called traditional subjects of nature, landscape, and the nude, but to them he applied the new geometric aesthetic of Cubism to achieve compositions that suggested motion. Studying painting under Lhote, Rickey learned this "grammar of cubism" that was, at the time, prevalent in artistic circles all over Western Europe.¹³ It provided him with an avenue to combine his interests in drawing and the subtleties of nature with a machine aesthetic that recalled his adolescent exposure to engineering. Further, Lhote's emphasis on theory encouraged Rickey's interest in history. After the Académie Lhote, Rickey briefly enrolled in painting courses at the Académie Moderne, where Fernand Léger implored him to begin by drawing from nature and not to practice only the prevailing contemporary aesthetic. Thus, in Paris, a challenge to artistic boundaries was complemented by exposure to a method rich in writing and history. Rickey developed the beginnings of an aesthetic and critical theory that twenty years later would dominate his artistic career and teaching philosophy.

In 1930 Rickey left Paris and returned to the United States to accept a position teaching English and European history at the Groton School, a boarding school west of Boston, where he continued to paint, often portraits. He traveled briefly to Heidelberg, Germany, and then to England, where he met his first wife, Susan Luhrs. In 1933 Rickey left the Groton School and moved to New York City, where he and Luhrs were married. He then returned shortly to Paris and traveled through France and Spain. On this stay in France, he investigated the soft fragmentation of Cézanne's floating landscapes. Cézanne's lightening of the Cubists' hard lines and heavy geometry would later be reflected in the subtle motion of Rickey's kinetic sculptures.

In 1934 the artist returned to New York City, where he maintained a studio for several years and worked briefly as a copy editor for *Newsweek*. He continued painting, completing portraits, still lifes, and landscapes in the manner of Cézanne. In 1937 he accepted the first of several artist-in-residence positions that would take him throughout the Midwest. He traveled from Olivet College in Olivet, Michigan, to the Kalamazoo Institute of Art in Kalamazoo, Michigan, and then to Knox College in Galesburg, Illinois. During this time, he completed several mural paintings at these colleges and other locations, including his Susquehanna Countryside, from 1938, in the post office in Selinsgrove, Pennsylvania.¹⁴ Rendered in the style of Social Realism, these murals sought to portray the harsh realities of working-class living and working conditions, as well as the impact of factory work and industry on the urban environment. They were inspired in part by the farm subjects of Grant Wood and John Steuart Curry and the paintings of the Mexican muralists. Several trips to Mexico, where mural painting had become an instigator of political change, fostered Rickey's interest in this art form.¹⁵ After a divorce from Susan Luhrs in 1939, Rickey spent the winter absorbed in the writings of Frank Lloyd Wright on the shores of Lake Michigan. During these few years in the Midwest, his experience in mural painting encouraged him to experiment with large compositions, while the vernacular character of Social Realism, the farm subjects of Wood and Curry, and the writings of Wright furthered his interest in nature.

In 1941 Rickey received his Master of Arts degree in modern history from Balliol College. That same year, he accepted a position to set up an art and art history department at Muhlenberg College in Allentown, Pennsylvania. At Muhlenberg, an interest in Bauhaus teaching methods prompted him to organize an exhibition on the art of Josef Albers, who was then teaching at Black Mountain College in North Carolina.¹⁶ The Bauhaus school, founded in 1919 by the architect Walter Gropius in Weimar, Germany, sought the merging of art and design and, likewise, the convergence of "high" art and the functional craft of "applied" arts. Its methodology promoted a new form of art—industrial design—that would use technology as an expression of modern times. Delicate use of mechanistic materials in art embraced the pervasive realities of industry and mass production, and achieved the Bauhaus goals of truth to materials and high-quality products. These theories and their resultant attention to design and building technique would later inform Rickey's own sculptures.

Figure 4, Diptych: The Seasons, 1956

Josef Albers investigated color relationships through paintings that placed different colored squares next to and within one another. These arrangements demonstrated the relativity of colors and the ability of a color's surroundings to alter its appearance, building complex relationships through straightforward juxtapositions. The hard lines and exact forms that Albers used bespoke a strict discipline of construction, and his color strategy introduced Rickey to a method that resonated with his developing theory on movement. In a later interview, Rickey described the correspondence he saw between color and movement:

Motion, which we are all sensitive to, which we are all capable of observing without having to be taught, is a sensation that appeals to the senses just as color does. It has an equivalent of the spectrum, different kinds of types of motion. I think that one can, to a very considerable extent, isolate motion as a visual component and design with that.¹⁷

Albers's influence can be seen in Rickey's works from the late 1950s. In 1956 the sculptor completed *Diptych: The Seasons* (fig. 4), one of several works made up of an accumulation of rectangular shapes whose surfaces were delineated with flat fields of color. The color schemes represent the seasons, with yellows, for example, as spring and blues as winter. The structure hangs from the ceiling in an elegant horizontal poise and is meant to be viewed from two vantage points—one showing spring and summer, and the other, fall and winter. This contrast heightens the dynamic experience of viewing the work.

In later sculptures Albers's influence became more prominent, as Rickey focused on the abstract quality of the shapes and color relationships within his three-dimensional compositions, rather than tying them to subject matter such as the seasons. *Abstraction in 4D* (fig. 5), from 1959, consists of an asymmetrically balanced accumulation of rectilinear shapes partially painted with fields of color. Small cutouts within each shape break up the surface area; folded in the reverse

direction, they open the plane and present further geometric abstraction. The relationships of the planes of colors within the shapes are revealed as the viewer walks around the sculpture. During this period color remained an important element in Rickey's work, but in *Abstraction* he left many planes unpainted, featuring the silver of the metal. This choice foreshadows his later works that solely use a polished, stainless steel finish.

In 1942 Rickey was drafted into the World War II army, where his service as a teacher and aircraft mechanic recalled his early training in engineering. These appointments took him to Miami, Denver, Brooklyn, and finally to Laredo, Texas, in 1945. In Laredo he set up a studio and began constructing sculptures with the supply of scrap metal available at the base, while also continuing to paint portraits. He was released from service the same year and briefly attended graduate courses in the art history department at New York University under the GI Bill. While in New York this time, he met the French philosopher Jean-Paul Sartre, who was putting together an issue of his magazine *Les Temps Modernes* focusing on the United States. Rickey contributed an essay entitled "The Mobility of Americans" that discussed the cultural manifestations of Americans' fascination with movement, especially cars and travel.¹⁸

Rickey then returned to Muhlenberg College as the chairman of its art department. In 1947 he married Edith Leighton (Edie) at Christ's Church in New York City. The next year, he left Muhlenberg College and taught briefly at the University of Washington at Seattle. In 1948 his continued interest in the pedagogy of the Bauhaus led him to the Institute of Design in Chicago, a school established in 1937 by László Moholy-Nagy as the New Bauhaus to promote Bauhaus principles in the United States. Rickey took design courses at the Institute for one year, becoming familiar with the work of Naum Gabo, a leading artist of Constructivism who he heard lecture at the Institute.¹⁹

In 1949, after a long summer in Europe, Rickey began a professorship at Indiana University at Bloomington, where he would remain for several years. After experimenting with metal in the army, it was here, at the age of forty-two, that he began to dedicate his efforts to sculpture. Throughout this early experimentation, many of his works explored subjects of nature, including *Fish, Waves, Trees, Sedge Themes, Seasons, Water Plants, Nuages* (Clouds), *Tidals*, and *Landscapes*.²⁰ In each case, the artist abstracted his subjects by reducing them to their component parts. He first investigated motion by constructing hanging mobiles, and then created intricate standing structures that connected colored shapes with wires and pivots that allowed them to move. Rickey's earlier engagement with the geometric language of the Cubists, whose flat compositions of broken shapes were filled with implied movement, developed naturally into a study of threedimensional motion in his sculptural works.

It was in the work of Alexander Calder, the inventor of the mobile, that Rickey found a more delicate approach to displaying subtle movement. Calder's brand of motion, which recalled the rocking action of the sea, was befitting to Rickey's nature subjects of the early 1950s, especially in series such as *Fish and Waves*. Rickey began creating mobiles first in glass and then in metal, which he often painted. He mastered catenary systems to achieve form by balancing weights on hanging wires. This method required a precise equilibrium of elements within the sculpture to achieve and maintain the shape of the subject. Often in these works, he radiated wire lines from a core wire and capped the lines with flat planes of color that alluded to the full shape. A long wire would outline and complete the form. Several of these mobiles consisted of a pair of fish that were counterbalanced structurally and formally, as in *Fish* (fig. 6), from 1951. In this pair, a length of wire outlines the shape of one fish, while the other consists of an accumulation of flat planes hanging from a main wire.

Some of Rickey's mobiles hang from the ceiling; others are grounded by three-legged, indeterminate forms. In many of them, thin intertwined wires branch out from a central spine, terminating in assorted shapes that serve as counterweights. These constructions clearly evidence the influence of Calder. In *Four Last Leaves* (fig. 7), completed in 1952, a slightly curved inner axis forms a thin line that is interrupted at various intervals by the twist of a joint where other wires attach. Minute flat circles attached to four of the elongated legs serve as delicately engineered balance points, lightly anchoring the structure and allowing the slightest air current to send the work crawling through the air.

Figure 6, Fish, 1951

In 1951 Rickey completed his most dramatic sculpture to date, *Silver Plume I* (fig. 8), a work that he would alter in 1961 (fig. 9). This piece is often cited as a turning point in his career, because of its scale and mastery of balance.²¹ Ten feet above the sculpture's tripod support, one twelve-foot-long arm reaches out horizontally. In the first version, a series of shorter and shorter wires hang from this arm. Attached to the end of each wire is a small triangular plane. In the later modification, a horizontal steel bar hangs from the main arm; underneath this first bar, two more horizontal bars are suspended by short wires in descending steps. In both versions, the asymmetrical balance indicates Rickey's structural mastery of weights even in large-scale works. This experimentation indicated that he was moving in his own sculptural direction, purposely departing from earlier influences. In regard to motion, he had begun to wonder "whether Alexander Calder had said it all; when I found he had not, I had to choose from the many doors I then found open." ²² Although *Silver Plume II* was made of stainless steel, Rickey did not use welding to develop its framework. He would soon, however, adopt this technique, which became essential to investigating these open doors in other stainless steel works.²³

Figure 7, Four Last Leaves, 1952

Figure 8, Silver Plume I, 1951

Figure 9, Silver Plume II (altered), 1961

EXPANDING THE POSSIBILITIES OF SCULPTURAL MOTION

Maxwell Davidson, in his monograph of Rickey's early works, describes the year 1954 as "a pivotal year for George Rickey. For the first time he is confidently forging ahead with sculptures and devices that carry his unique imprimatur."²⁴ It was in 1954 that David Smith came to Indiana University to teach for a year as a visiting artist, at the request of Rickey.²⁵ During their time together at Bloomington, Smith became the keystone that brought together many earlier influences and helped Rickey develop his own signature style. The two artists had first met at a party in Woodstock, New York, in 1937, but it was in the 1950s—when Smith lived in Bolton Landing, New York, and Rickey spent a summer teaching at a camp in Lake Placid—that their friendship developed. At Bloomington, Smith gave Rickey a welding lesson that added a new variant to his fabrication techniques.²⁶ He also encouraged Rickey to become more generous in scale and to experiment with different materials, and he reinforced the Constructivist principles of sculpture to which Rickey had already been exposed.²⁷

Both Smith's and Rickey's working techniques followed those of the Russian Constructivists, whose focus on continual form built up in space became highly important to twentieth-century sculpture. Early Constructivists, working within the revolutionary climate of Communist Russia in the second decade of the twentieth century, broke away from the then-traditional methods of casting or carving away material to make sculptures and instead investigated space by building up separate elements. These elements did not have to be physically connected; visual relationships could be created between two components of a sculpture by utilizing the negative space between them to imply volume. Some Constructivist sculptures incorporated kinetics, using movement—both literal and symbolic—as a call for political change.

For Smith, the influence of the Constructivists can be seen in his construction techniques and in his use of negative space to complete forms. Smith first created Surrealist-like sculptures that used wire to "draw" in space. He then began welding large cubes and other geometric shapes into towers of stainless steel, grinding their surfaces to achieve an individual finish that reflected its surroundings. The anthropomorphic quality of Smith's large, abstract steel forms coupled with their uniquely polished surfaces to reveal the importance that Smith placed on the individual artist's gesture.

Rickey had first been exposed to Constructivism through a longtime friendship with Naum Gabo and an acquaintance with Antoine Pevsner, two brothers who were pioneers of the style.²⁸ Both worked as Constructivists at the beginning of the movement, and Gabo incorporated kinetics into

his sculpture. Together the brothers wrote the *Realistic Manifesto*, which outlined their aims. In this seminal text, they affirmed the construction principles of the movement: "Space and time are the only forms on which life is built and hence art must be constructed."²⁹ Further, they claimed that their art was an essential embodiment of modern times: "We affirm in these arts a new element the kinetic rhythms as the basic forms of our perception of real time."³⁰ In 1967 Rickey would publish a history of Constructivism, *Constructivism: Origins and Evolutions*, which, like much of his other writing, provided an astute historical analysis while offering insight into his artistic inspirations.³¹ As the 1950s progressed, his manner of building up form in his sculptures, as well as his integration of reflective light and movement, showed an affinity with the engineering principles and aesthetic concerns of the Constructivists.

Moving away from his earlier Calderesque mobiles, *Planes and Circles* (fig. 10), from 1957, demonstrates the additive manner in which Constructivist sculptures built form. Wire circles capped with flat, rectangular, polychrome stainless steel planes sit on several parallel wires that fit tightly together and complete the top edge of a square frame. The circles are secured to the square by a pendulum that swings on a pair of bearings. The planes, attached tangentially to the wire circles, leave the circles unbalanced and prompt their pivoting motion. As the circles rotate, the planes emphasize their movement. Rickey constructed form in the space within the outline of the core square and the wire circles and, further, through the colored rectangular planes that create a circular volume as they trace a path of motion.³²

Triads (fig. 11), completed in 1958, is a wall-mounted sculpture that rocks to and fro in the wind. Its form, punctuated by three sets of circular frames located in the upper, middle, and lower regions, recalls a spiral cranking motion. A gimbal situated in the middle near the perpendicular wall mount allows the sculpture to swing with the air current, while the solid disks at top and the hollow circles at bottom also rotate when the vertical balance is disrupted. The implied volume of these circling parts, and the repetition of their round shape at the top, center, and bottom of the sculpture, suggest a cylinder— a shape that is outlined by the wires stretching between the ends of the sculpture. Rickey's economical use of stainless steel is highlighted by the thinness of the metal circles and delicacy of the wires.

Rickey spent much of the 1950s developing his sculptural form, experimenting with new mechanical devices, and cultivating the intersection of movement with form. He was still using color, but this element quickly subsided as he focused more heavily on constructing shapes and different types of movement. During this decade, he also developed his academic and writing career by composing many publications that examined movement within contemporary culture

Figure 11, Triads, 1958

and art, specifically sculpture. His texts discussed a broad range of art-related topics, including the role of art and how it functioned, how it should be presented in a public arena, and art education. Rickey's first solo exhibition of sculpture was at the John Herron Art Institute in Indianapolis, in 1953.³³ That same year, George and Edie's first son, Stuart, was born.

Since completing *Silver Plume II* in 1952, he had been expanding the scale of his works, exploring the possibilities opened up by the welding skills he learned from Smith. As early as 1953, the size and weight limitations of the pivot that Rickey had utilized for several series, including *Bridges, Acrobats, Carrousels,* and *Vines,* became markedly apparent. He began to replace this device with a rotor, which consisted of a beam with gently rounded ends that fit into two sockets, allowing the rotor to turn smoothly and stably.³⁴ This construction facilitated the movement of pieces connected to the rotor, such as rotating flat panels. Rickey first used only vertically aligned rotors, as in his series *Little Machines of Unconceived Use,* and then expanded the potential of this device by tilting rotors in many directions, as in his *U.N.* works. In 1954 he also began working more with pendulums, which varied the total weight and distance on either side of a fulcrum to induce movement. The pendulum became an essential element in many later works, particularly those shaped like lines or blades. Rickey soon developed pendulums that rested on two pairs of bearings perpendicular to one another and that could move in a conical path, which he classified as a variation of the gimbal.³⁵

By 1955 he had begun to combine different movement technologies into one sculpture. For example, in his series *Seesaw and Carousels*, created from 1955 to 1956, he used both gimbals and devices he called "space churns." During these years he also moved away from the linear wire form of his early sculptural work, focusing on geometric forms welded from stainless steel.

In 1955 the family moved to New Orleans, where Rickey became chairman of the art department and a professor of art at Tulane University. He spent most of his second year at Tulane on a prearranged sabbatical in Rome.³⁶ This is the same year that he began calling his works "kinetic sculptures" rather than "mobiles."³⁷ In Rome he made more innovations to his movement devices, and began several other series of works that used multiple mechanisms in a single sculpture, such as Rotors, Water Plants, and Flowers. These works utilized a gimbal to balance a long vertical piece that housed many small, fluttering rotors on the upper end. Below the pivot point, these elements were weighted by a piece of rock or quartz. This same combination of technologies is present in a later work, *Column of Nine Rotors with Two Triangles* (fig. 12), from 1973, which uses a gimbal to balance a vertical column bracketed by two triangles. Nine spinning rotors complete the form of the column.

tors with Two Triangles, 1973

In 1959 Philip Rickey, George and Edie's second son, was born in New Orleans, and the family spent their first summer at Hand Hollow in East Chatham, New York, the place where they would settle into a house the next year. In 1960 Rickey spent part of the summer teaching at the University of California at Santa Barbara. Later, from 1985 to 2001, he would maintain a studio in Santa Barbara.

At the end of the 1950s, Rickey created *Acrobats* (fig. 13). In this small tabletop sculpture, a thin stainless steel base extends up and splits in two. On either side, multiple small planes, brightly enameled on both surfaces, turn on pivots. This is one of Rickey's last works to utilize the device of a pivot, which allowed only a few options for movement and greatly restricted size. By the end of the decade, he had formulated more stable assemblies allowing for delicate works that shifted dynamically and fluidly, often with simultaneous motion through multiple planes. The years spent practicing the lightness of Calder's mobiles and experimenting with the constructive method and metal-working skills of Smith had culminated in the creation of his own oeuvre of mechanisms and forms to describe motion-pendulums, gimbals, rotors, lines, blades, and planes-that would be eagerly received by both American and European audiences in the next decade.

KINETICISM AND THE 1960s

The American art scene of the 1960s welcomed George Rickey, who, like many other artists at the time, also played the role of art historian and critic. He was interested in the cleanly cut lines and industrial materials that characterized works made in the prevailing Minimalist aesthetic. The Minimalist trend, along with artists' growing exploration of kinetics, aligned art with the machine technology that was quickly evolving in society. Many artists were experimenting with motion as a metaphor for social change or a commentary on the proliferation of machines and industrial production.³⁸ Rickey, however, utilized industrial materials to achieve a fluid, poetic motion that followed nature, avoiding political and social commentary.

America in the sixties provided a wealth of material for an artist interested in movement. The increasingly ubiquitous automobile, the highway boom, and travel into space embodied a culture obsessed with movement and a desire to break free from norms. The recent invention of the Portapak, a small, relatively cheap, and portable video camera, allowed many to even produce their own moving videos. This culture looked radically to the future, but still remained firmly tied to its roots through a respect for nature and the physical splendor of the land. Both the culture of the 1960s and America's roots in nature were present in Rickey's work, which utilized geometric forms and the machine aesthetic of contemporary commercial-fabrication techniques, while recognizing nature as a source of motion.

The widespread desire to portray motion can be seen in Rickey's *Untitled ("Belloli" Space Churn)* (fig. 14), from 1964, a sculpture that resembles a planet with concentric rings. Rickey had completed his first recorded "space churn" in 1953, but his interest in the form resurfaced in the sixties, when it would evolve from small models into large-scale outdoor works increasingly complex in their movement.³⁹ His expansion of this theme coincided with the first manned space travel: in 1961 the Soviet cosmonaut Yuri Gagarin traveled into space and fulfilled what seemed, at the time, an impossible yet ultimate movement. Rickey's 1964 piece is cut from sheet metal and is an early model to test the form and motion of the space churn—a sculpture incorporating multiple rings, each with its axis set off center so that they would circle at different speeds and in varying patterns. The balance and weight of each ring affects the others, keeping the spinning motion captivating and dynamic. Rickey's earliest space churns were operated with a hand crank, but he added flat vanes to the outer edges of later sculptures to prompt them to move with the wind.⁴⁰

Kinetic art had achieved even more recognition in Europe than in the United States, in part because of the Constructivists' heavy influence on European art in the early part of the twentieth century, as well as the value that the German Bauhaus tradition placed on the use of industrial construction techniques. Although many American artists were working with kinetics, Europe remained the place where these artists found inspiration. In the spring of 1961, the first major exhibition of kinetic sculpture, "Bewogen-Beweging," was held at the Stedelijk Museum in Amsterdam and the Moderna Museet in Stockholm. Rickey contributed a work to this show and visited the exhibition to write a review for the journal *Arts*. Here, he formed his conclusions about the heavy influence of Constructivism on kinetic art, and first formulated the idea for the book on Constructivism he would publish in 1967.⁴¹ By this time, he was enjoying much recognition in Europe, participating in exhibitions in Berlin and receiving several public commissions. In 1964 his international reputation was cemented when his *Two Lines Temporal I*, a work made of two 35-foot steel blades that swing in the wind, hovered over the outdoor crowds at the exhibition "Documenta III" in Kassel, Germany.⁴²

Whereas Rickey had spent the first part of the 1950s constructing devices to display motion, he spent the years between 1957 and 1962 experimenting with a larger scale, trying new materials, and learning how to most effectively use the mechanical techniques he had developed.⁴³ While on sabbatical in Rome (where he combined a gimbal with rotors in his series *Rotors, Water Plants,* and *Flowers*), Rickey also began his *Ommagio a Bernini* works. This series, initiated in 1957 and completed in 1960, signaled his next transition, a shift that narrowed his selection of forms to blade-like lines and moved away from the use of color.

Figure 14, Untitled ("Belloli" Space Churn), 1964

In 1960 Rickey received a Guggenheim fellowship and took another sabbatical from Tulane. With this grant, he was able to sculpt full-time in East Chatham, where the family settled permanently the next year. In 1961 his Guggenheim fellowship was renewed, and he resigned from Tulane. The opportunity to commit a large portion of his time to one place and one studio coincided with the simplification of forms in his sculptures. In the idyllic landscape of East Chatham, movement surrounded him and nature enveloped his works, complementing and enhancing them. This expansive setting also allowed him space to work on very large projects. In 1961 he began teaching foundation design courses to architecture students at Rensselaer Polytechnic Institute (RPI) in Troy, New York. There, he met and began to work with Roland Hummel, an engineering professor at the School of Architecture, in a collaboration that continued for the rest of Rickey's life.⁴⁴

It was also in 1961 that Rickey discovered the reverse knife-edge bearing, which allowed him to use blades that moved independently of one another. *Sedge Themes* was his first series exploring the formal possibilities of this technology. In another work that uses this bearing device, *Bubble Chamber I* (fig. 15), from 1962, alternating blades are fixed to a wall as pendulums, weighted so that they rest at acute angles. The playful lines pointing in all different directions hint at the activity of a bubble chamber—a device used in physics to heat liquid to the point of boiling and vaporizing, creating trails of microscopic bubbles that are used to measure the energy of charged particles.⁴⁵ In 1962 Rickey began working with monumental blades, forms he would continue to use in *Two Lines Oblique* (fig. 16), a towering outdoor sculpture from 1967. Here, two fifteenfoot lines situated atop a tall Y-shaped base swing delicately back and forth and sometimes, in a playful wind, circle completely around. Although works such as this were much larger than Rickey's earlier sculptures, they remained as intricately constructed as his smaller works.

By 1965 the blade had become his signature language. In *Twenty-four Lines* (fig. 17), from 1968, numerous blades converge into the shape of a single large blade, emphasizing his simplified selection of forms. This streamlining reduced the number of variables within his works, and Rickey focused on developing a simpler set of forms in more complex ways. He also became even more directly concerned with movement and how it might be variously displayed. In 1966 he left his teaching post at RPI to again commit his efforts to sculpture full-time.

Figure 16, Tivo Lines Oblique, 1967

Figure 15, Bubble Chamber I, 1962

The blade was a simple, slender, poetic shape that recalled the needles, masts, and clock pendulums from Rickey's past and resembled the blades of grass and swaying tree branches that surrounded him in East Chatham. It allowed him to investigate which kinds of technology achieved the subtlest movements, and how weights and forms might create a specific type of motion. In an interview, he related how this lean, straightforward form let him focus on understanding how construction and movement worked: "I could try and reduce the elements to their simplest possible essence. And it is that which has led me to using linear forms, to try to eliminate everything that is not contributing to the movement."⁴⁶ As each blade was added to a sculpture, it suggested ideas for other shapes and movements. Shifting and crossing one another, the blades wove a story of Rickey's progression through the discovery of motion.

combine into a fluid wave.

During the 1960s, Rickey's titles had begun to express the growing austerity of his use of form, describing the geometric shapes and motions of the sculptures rather than referencing subjects such as aspects of nature, as his earlier titles had. As the motion in his works became more refined and exact, this change in how he titled them reflected a shift in subject matter from nature to movement. His was an aesthetic of consistent forms unified into a language of motion; but, crucially, each work's movement remained unpredictable under the forces of nature.

This focus on blades provided the sculptor with an understanding of motion that gradually led him to involve other forms. He began working again with planes, which used the same pendulum technology as blades, and then in 1966 he began to stack the planes.⁴⁷ One example of this, Four Rectangles Oblique (fig. 18), from 1972, examines the movement of rectangular planes. Four rectangles form a square, with each segment presenting different motions that

CULTIVATING THE ARTISTIC PROCESS

In 1968 Rickey received a stipend from the Deutscher Akademischer Austausch Dienst (DAAD), the German Academic Exchange Service, and set up a studio in Berlin that he would maintain from then until 1995. After having spent the first two decades of his life in Europe, in a sense he returned in 1968. In 1970 he began splitting his time between East Chatham and West Berlin.

In the wooded Dahlem district of Berlin, his living and studio spaces were much smaller than in East Chatham. There, and in the many other transitory working spaces he occupied throughout his itinerant life, drawings and maquettes became particularly important to his working process and testing of ideas. Rickey used drawings to work out many formal concerns and then progressed "to some rather crude model . . . to see how I can get the traffic organized, because there are certain things you cannot draw, even in perspective"; mainly, drawings cannot reveal "what will happen when the movement has started."⁴⁹ Lucinda Barnes documents the importance of drawing to Rickey's construction process, noting that sketches were an initial means of rendering his ideas, that they reveal individual aspects of his thought process, and that they allowed a spontaneity that was not possible in sculptural models, which remained subject to the forces of gravity.⁵⁰ The drawings are alluded to in the sculptures themselves as the moving parts cut through the air, tracing the lines of the preparatory sketches used in their construction. In Rickey's words, "Blades in diverse configurations followed, a kind of kinetic drawing in space, first planar, then defining volume— space cut up by lines, pierced by lines, limited by lines." ⁵¹

During this time, having already decided to focus on a few forms, Rickey continued to expand the possibilities of motion in his sculptures. Looking back in 1980, he discussed this development:

I make things now that I would never have thought of as possible. If I have been working on the development of a language, which in some ways I have, at the same time I've become more and more aware of what it is possible to say with that language. For example, for years I accepted what I would call linear movement or movement along a straight line. Then I came to realize that one can design an object in which the movement is along a curve. It's like a phrase of music that takes an unexpected turn.⁵²

Up until this point, the paths traced by his sculptures' parts had been linear, planer, or gyratory. As he began using his lines and rectangles to outline a conical path, and then further developed their movement to allow them to circle outside of that path—in what he called "excentric" movement—the visual options of his sculpture increased dramatically.⁵³

Figure 19, Two Rectangles, Open Excentric, 1977

Figure 20, Two Open Rectangles Excentric, 1977

Maquettes provided an important tool for testing this excentric motion. In 1977 Rickey created *Two Rectangles, Open Excentric* (fig. 19), which would serve as a model for another work from 1977, *Two Open Rectangles Excentric* (fig. 20), itself a study. In both models, two long rectangles circle around a central armature. In the first, the top-heavy rectangles create a seemingly dramatic balance. However, the weights are visible, evidencing Rickey's rigorous working process of testing weights and bearings through drawings and maquettes, a process that ensured his sculptures' ultimately graceful movement.

In these explorations of motion, Rickey regularly negotiated the seeming dichotomy between nature and the machine. For example, the large stainless steel sculpture for which *Two Open Rectangles Excentric* was a study was designed to sit in the landscape or in a sculpture courtyard with the sky on the horizon, so that the movement of the sculpture within nature and the movement of nature as a backdrop would conflate into one lyrical scene. While the reflection of sunlight and the surroundings on the metal further integrates such sculptures into the environment, the sharp flicker of silver with each shift calls attention to their mechanistic roots in stainless steel.

Through his reverence of nature as the source of movement, Rickey argued the failings of the machine and its use by some other kinetic artists. In 1979 he completed *Two Conical Segments, Gyratory Gyratory Gyratory II* (fig. 21), an outdoor sculpture that stands tall with two arms extending horizontally from the top of a post. Its steel joints hold rotating conical segments. In another outdoor work, *Two Open Triangles Up Gyratory* (fig. 22), from 1982, two triangles create a frame with the center left empty. The triangles circle around the sculpture's central point, the top of the post to which they are attached. Driven by air currents, both sculptures present a simplicity of structure in which a motor would instantly be extraneous. Rickey described how movement activated by the hand is too clumsy, and by the machine, too predictable: "the hand, especially the untrained hand, is too heavy," and "repetition [caused by a machine] soon can become boredom." ⁵⁴ The movements of his highly planned structures are ultimately dependent on random chance: a sharp wind can transform a subtle motion replicating the waving of branches or blades of grass into wild forms circling unpredictably in the air. These idiosyncratic actions resist the boring, repetitive mechanical motion expected from Rickey's industrial materials.

This contradiction also extends into his treatment of those materials. The sharpness of steel crafted into long metal forms in these works introduces ideas of mechanical production, but the machine is disavowed by evidence of the artist's hand and working process. Nan Rosenthal describes how Rickey "grinds the surface in short, random strokes, with a motorized rotary carborundum disk, so that they become responsive to light." ⁵⁵ When he stopped using color

Figure 23, Study for Faceted Column, 199

Figure 25, Two Cubes, 1988

to polychrome his steel surfaces, he polished most of the works to a shiny, fluid finish that evinced his touch. He felt that this transformation of the steel's finish brought his works to life, noting that "when [stainless steel] comes from the factory . . . the surface is just a dull gray, lifeless surface . . . I want to break through that uniform gray and have it become more lively in relation to light."⁵⁶ Study for Faceted Column (fig. 23), from 1991, exemplifies this polish and how it contributes to the harmony of the work by presenting a continuous surface along the segmented forms. This study was for a much larger sculpture that combined many of these faceted pieces into a large vertical column in the atrium of a tall office building, the Trigon Building, in Berlin. In that setting, the polished finish reflects the work's surroundings, just as its vertical orientation emulates them.

Several more works illustrate how Rickey's intricate working process balances the opposition between the natural, delicate, lyrical movement of his forms and the machine aesthetic of their materials and exacting construction. In the late 1960s and early 1970s, he created a series

of spirals, small tabletop sculptures made of stainless steel wire that he often gilded. In *Two* Lines with Spirals (fig. 24, see images on pages 14 and 15), dated about 1973, each of the two components was crafted from a single piece of industrial wire twisted into a graceful spiral that weighs down one end of the line.⁵⁷ In *Two Cubes* (fig. 25), from 1988, the cubes rest upon two arms that extend from a central base, forming a Y. The six-inch cubic forms appear heavy but rotate lightly and discretely. Another sculpture constructed in 1988, XIII (fig. 26), consists of an X-shaped base on which sit three I shapes, each held up on a support. In this instance, Rickey's calculated use of steel forms produced a refined and symbolic structure that acknowledged a friend's thirteenth anniversary. The sharp-edged forms of mechanistic wire and steel that compose these works initially evoke hard, rough, rigid power, but in each case the sculptor transforms them into exquisite artistic statements. In fact, part of his originality is rooted in this ability to imbue heavy industrial materials with a grace that lies outside their typical manufacturing context.

Figure 26, XIII, 1988

EXPERIENCING RICKEY'S SCULPTURES

Throughout his career, George Rickey remained dedicated to teaching and promoting the arts through his written art criticism, his public sculptures, and his constant emphasis on the importance of history and teaching. In 1980, in a continuation of this commitment, he established the Hand Hollow Foundation, where artists could spend their summers working and participating in lively discussions. In the 1990s he made yet another aesthetic shift in his own art, returning to the creation of small, colored objects. In One Rotor One Counterweight (fig. 27), from 1993, a rotor hangs over a triangular base, and small painted rectangular planes circle to produce a kaleidoscope of bright colors. Early in his career, dissatisfaction with the ability to show motion through painting had led him to work in sculpture. Now, late in life, he revisited the integration of color and motion through these small, colored objects that he called "paintings."⁵⁸

Rickey's lifelong pursuit of an aesthetic language of motion had been an exploration through space and time, leading him to discover and rediscover both places and design challenges, but it was always "simply the pursuit of what is possible." ⁵⁹ Although his journey had taken him to many places, his studio remained the space where he translated his travels into delicate kinetic works. In 2001 he returned to the Midwest, where his journey had begun, moving to St. Paul, Minnesota, and maintaining a small studio there. Rickey died in St. Paul on July 17, 2002, at the age of ninety-five.

The life of his sculptures continues, however. Their motion oscillates between arrested, slow, and fast, with different parts moving at varied rates in an ongoing series of unrepeatable instances. Over time, a viewer might stand in front of a sculpture, walk around it, or occupy a space beneath it, each time experiencing a different impression of movement. Etoile VIII (fig. 28), a maquette from 1983 for a larger version, is made of many fluttering, circling, and individually rotating parts that offer an endless array of potential movements. In a 1984 discussion of how he approached motion in this sculpture, Rickey explained: "My intention is that these periods [of oscillation] be slightly different from one another, and that they be long enough so that the observer cannot easily anticipate reversal of direction." 60

Figure 28, Etoile VIII, 1983

Figure 27, One Rotor One Counterweight, 1993

This emphasis on the unknown makes directly experiencing his works essential to appreciating them. Their movement denies effective reproduction in a single image: "Since a photograph records only one instant and one instance among variations and never the factor of chance, it provides a false record of kinetic sculpture, which can have no 'correct' posture at rest." ⁶¹ Consequently, Rickey's sculptures are often represented by several pictures that capture particular moments in a sequence resembling a short film, displaying his work in stop-motion. Even these sequences, however, only hint at the complete movement that the viewer observes when standing in front of the same work, or when walking around it to take in the many viewpoints it offers.

Only through direct engagement with Rickey's sculptures can the viewer appreciate the many layers of form that they contain: the form of the steel sculpture itself, the path traced by its elements, the negative space of the surrounding air and environment, and, most particular to his kinetic works, the endless potential of a motion impelled by the unpredictable powers of nature. The subtle, natural movement, reflective surfaces, and anthropomorphic proportions all help to capture the imagination of the viewer. Further, the relationship of the different parts to one another and the paths of motion they outline create a Constructivist-inspired "virtual volume." ⁶²

Figure 29, Unstable Quadrilateral, 1990

Figure 30, Open Triangles One Up and One Down (slender), 1983

For instance, in *Unstable Quadrilateral* (fig. 29), from 1990, two blades placed at a diagonal from the central base create the illusion of a filled plane as they move back and forth. In *Open Triangles One Up and One Down (slender)* (fig. 30), from 1983, a three-dimensional form is carved in space by the triangles as they circle up, down, and around. The negative space of the environment frames the sculptures but also provides the source of their movement. When this source disappears—if, for instance, the wind stops blowing—the motion temporarily halts, but its potential is ever-present. The viewer is left to imagine how the activity and the forms it creates might continue. Rickey commented on this essential component of his works: "I realized that the form didn't need to be a closed mass but could be a series of points or lines around which the mind makes an envelope." ⁶

In Constructivist art, movement was often symbolic of a call for ideological or political change. Rickey, however, used movement on a more personal level, to inspire reflection. The subtle movement that he ultimately wanted to stir was in his viewers, coaxing them to be aware of their existence in time and nature. The fluid, poetic, lyric motion of his sculptures encourages viewers to appreciate art, nature, and form within the course of their daily lives, as the surrounding world moves quickly, dramatically, and mechanically. As Valerie Fletcher writes:

Rickey's works can gently heighten viewers' awareness of time actually passing and, in a marvelously indirect way, persuade them to recognize the beauty of pure abstraction. His sculptures tempt passersby to stop and look. . . . By the time we have watched the motions through several changing cycles, the sculpture has had its intended effect: we have slowed down, stopped, become gradually detached from the demands of our busy lives.⁶⁴

Traveling to see Rickey's sculptures completes their course, stirs change in the viewer, and supplies one of many possible endings to the remarkable journey that Rickey made in his life and in his art. He wrote of his unique quest to uncover motion, "I did not want merely to set a static art in motion, nor did I want to describe the dynamic world around me with a series of moving images. I wanted the whole range of movements themselves at my disposal, not to describe what I observed in the world around me, but to be themselves performing in a world of their own."⁶⁵ Today, viewers who enter the world that George Rickey created continue to be enthralled and inspired by it, as his dynamic sculptures endlessly perform their idiosyncratic movements.

ILLUSTRATIONS, INCLUDING THE GEORGE RICKEY SCULPTURE ARCHIVE AT NOTRE DAME

Fig. 1 – George Rickey, *Ship I*, 1954, painted mild steel and brass, 18.75 x 20 inches, private collection Zollikon, Switzerland, photo by Geoffrey Clement

Fig. 2 – George Rickey, *Three Vertical Two Horizontal Lines (Pivoting)*, 1966, stainless steel, 56 x 36 x 6 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 3 – George Rickey, *Two Vertical Two Horizontal Lines*, 1974, stainless steel, 28.5 x 28.5 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 4 – George Rickey, *Diptych: The Seasons*, 1956, painted steel, 24 x 60 x 21 inches, Snite Museum of Art, gift of Mr. Thomas T. Solley

Fig. 5 – George Rickey, *Abstraction in 4D*, 1959, stainless steel and polychrome, 11 x 43 x 15 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 6 – George Rickey, *Fish*, 1951, steel and polychrome glass, 22 x 32 inches, collection of the Indiana University Art Museum

Fig. 7 – George Rickey, *Four Last Leaves*, 1952, steel and bronze, 41 x 48 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 8 – George Rickey, *Silver Plume I*, 1951, stainless steel, 18 inches high, collection of Dr. and Mrs. Clinton Hollister

Fig. 9 – George Rickey, *Silver Plume II (altered)*, 1961, stainless steel, 10 feet high, collection of Mr. and Mrs. Larry Gilbert, London

Fig. 10 – George Rickey, *Planes and Circles*, 1957, steel, bronze wire, and polychrome, $8.5 \times 6 \times 6$ inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 11 – George Rickey, *Triads*, 1958, stainless steel and brass, 53 x 41 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 12 – George Rickey, *Column of Nine Rotors with Two Triangles*, 1973, stainless steel, 27 x 5 x 5 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 13 – George Rickey, *Acrobats*, 1960, steel and enamel, 21.5 x 15 x 1.5 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 14 – George Rickey, *Untitled ("Belloli" Space Churn)*, 1964, bronze, 12.5 x 12.5 x 10.5 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 15 – George Rickey, *Bubble Chamber I*, 1962, stainless steel, 41 x 49 x 9 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 16 – George Rickey, *Two Lines Oblique*, 1967, stainless steel, 25 feet high, Snite Museum of Art

Fig. 17 – George Rickey, *Twenty-four Lines*, 1968, stainless steel, 8 x 6 feet, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 18 – George Rickey, *Four Rectangles Oblique*, 1972, stainless steel, 44 x 43.5 x 11.25 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 19 – George Rickey, *Two Rectangles, Open Excentric,* 1977, stainless steel and lead counterweight, 26 x 8 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 20 – George Rickey, *Two Open Rectangles Excentric*, 1977, stainless steel, 36 x 9.5 x 1.5 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 21 – George Rickey, *Two Conical Segments, Gyratory Gyratory II*, 1979, stainless steel, 123 x 124 inches, Snite Museum of Art, acquired with the funds provided by Mr. and Mrs. Al Nathe

Fig. 22 – George Rickey, *Two Open Triangles Up Gyratory*, 1982, stainless steel, 9 feet 8 inches x 4 feet 9 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 24 – George Rickey, *Two Lines with Spirals*, circa 1973, stainless steel wire, gilded, 13 x 2 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 25 – George Rickey, *Two Cubes*, 1988, stainless steel, 21 x 24 inches, Snite Museum of Art, bequest of George Rickey

Fig. 26 – George Rickey, *XIII*, 1988, stainless steel, 17 x 36 x 30 inches, Snite Museum of Art, bequest of George Rickey

Fig. 27 – George Rickey, *One Rotor One Counterweight*, 1993, stainless steel with polychrome (rotor), $8.5 \times 6 \times 6$ inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 28 – George Rickey, *Etoile VIII*, 1983, stainless steel, 4 x 9 x 9 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

Fig. 29 – George Rickey, *Unstable Quadrilateral*, 1990, stainless steel, 23 x 24 inches, Snite Museum of Art, gift of the George Rickey Workshop

Fig. 30 – George Rickey, *Open Triangles One Up and One Down (slender)*, 1983, stainless steel, 56 x 12 x 5 inches, Snite Museum of Art, promised gift of the George Rickey Foundation

ENDNOTES

- ¹George Rickey, "The Morphology of Movement: A Study of Kinetic Art," Art Journal 22 (Summer 1963): 220-31.
- ² Nan Rosenthal, *George Rickey* (New York: Harry N. Abrams, 1977), 25.
- ³ Rickey, "The Morphology of Movement," 228.
- ⁴ Ibid., 225.
- ⁵ Rosenthal, *George Rickey*, 20; Lena Vigna, "Indiana Born: The Early Lives of the Artists," in Holliday T. Day, Dore Ashton, and Lena Vigna, Crossroads of American Sculpture: David Smith, George Rickey, John Chamberlain, Robert Indiana, William T. Wiley, Bruce Nauman (Indianapolis: Indianapolis Museum of Art, 2000), 46.
- ⁶ Rosenthal, *George Rickey*, 20–21; Vigna, "Indiana Born," 47.
- ⁷ Rickey, "The Morphology of Movement," 228.
- ⁸ Rosenthal, George Rickey, 42.
- ⁹ Maxwell Davidson III, George Rickey: The Early Works (Atglen, PA: Schiffer Books, 2004), 23. Davidson cites the Ship series as the first to use the gimbal and describes how a gimbal consists of a pivot that allows an object to rotate on a single axis. When another gimbal is placed within and perpendicular to the first, an orthogonal support allows the inner object to remain upright as its support pitches and rolls.
- ¹⁰ George Rickey, "Observations and Reflections, 1964," reprinted in *George Rickey: Kinetic Sculpture on Clydeside* (Glasgow: Scottish Arts Council and Glasgow District Court, 1982), quoted in Vigna, "Indiana Born," 46.
- ¹¹ Tomii Reiko, "Between Two Continents: George Rickey, Kinetic Art and Constructivism, 1949–1968" (Ph.D. diss., University of Texas at Austin, 1988), 2. In footnote 4 of the introduction, Reiko remarks that in the 1950s Rickey taught Renaissance art, modern art, and other courses at Muhlenberg College, Indiana University at Bloomington, and Newcomb College.
- ¹² Rickey, quoted in John Gruen, The Artist Observed: 28 Interviews with Contemporary Artists (Chicago: A Cappella Books, 1991), 250.
- ¹³ The Moving World of George Rickey, DVD, directed by Kevin MacDonald (London: Figment Films, 1998).
- ¹⁴ Rosenthal, George Rickey, 27.
- ¹⁵ Rickey traveled to Mexico in 1939 and 1941. Valerie Fletcher, "George Rickey: Poetry in Motion," in Valerie Fletcher, Lucinda H. Gedeon, George Rickey, and Philip Rickey, George Rickey: Kinetic Sculpture; A *Retrospective* (Vero Beach, FL: Vero Beach Museum of Art, 2007), 15–16.

- Mountain College.
- 1985), 141.

- "Crossroads of American Sculpture," 65.

- ²⁴ Davidson, *The Early Works*, 50.
- Rosenthal, George Rickey, 34.
- himself." Rosenthal, George Rickey, 34.

¹⁶ Rosenthal, *George Rickey*, 27. Albers came to the Bauhaus school as a student in 1920. In 1923 he was appointed an instructor, a position he held until 1933, when he came to the United States to teach at Black

¹⁷ Rickey, quoted in Jeanne Siegal, Artwords: Discourse on the 6os and 7os (Ann Arbor, MI: UMI Research Press,

¹⁸ George Rickey, "The Mobility of Americans," translated by Catherine LeGuet as "La Civilisation du Movement," Les Temps Modernes, August-September 1946, 24-29.

¹⁹ When Moholy-Nagy founded the school, it was called the Institute of Design; it was renamed the Institute of Design in Chicago in 1944. By the time Rickey attended, the school had taken on an engineering and architectural focus, but art was still important to the curriculum during the late 1940s and 1950s under Moholy-Nagy's successor, Serge Chermayeff; see Holliday T. Day, "Crossroads of American Sculpture," in Day, Ashton, and Vigna, Crossroads of American Sculpture, 74117. Rickey became disenchanted with the school's failure to continue the principles taught in its strong design foundation courses into the more advanced coursework and specialized design vocations; see George Rickey, interview by Joseph Trovato at the artist's home, East Chatham, New York, July 17, 1965, transcript, Smithsonian Archives of American Art.

²⁰ Davidson, *The Early Works*, 3. These subject titles are taken from the chapter headings of Maxwell Davidson's monograph, in which he gives a detailed account of Rickey's early sculpture.

²¹ Rosenthal notes that this was Rickey's largest work to date, was built to withstand varied weather conditions, and allowed for more freedom in its movement; Rosenthal, George Rickey, 32. Day also comments that this was Rickey's largest sculpture and that it broke away from his small works that sat on pedestals; Day,

²² Rickey, quoted in Gruen, *The Artist Observed*, 246.

²³ See Day, "Crossroads of American Sculpture," 71: "New metal-working techniques, such as welding, were also necessary to making larger pieces in steel. Although Silver Plume II (rotated on a tripod that rotated around a base) had been made without welding because it pivoted on a point, welding had to replace the solders Rickey had been using to construct his small works."

²⁵ Day describes that Rickey, then teaching at IU, urged Henry Hope, the art historian who led the art department, to invite Smith to teach at IU for the 1954–55 academic year. Rickey himself left IU in January 1955; Day, "Crossroads of American Sculpture," 64. Rosenthal also notes Rickey's friendship with Smith in

²⁶ Rosenthal elaborates that "at that time Rickey was still joining metal parts with silver and lead solder exclusively, and he asked David Smith to show him how to weld with oxyacetylene. . . . In future years when Rickey needed to go on to heliarc- and spot-welding, he bought the equipment and taught the techniques to

²⁷ Smith's works were larger than most sculpture of the time. He was also liberal with materials, spending large sums of money on them. Rickey followed this advice when he could afford to. Day, "Crossroads of American Sculpture," 65; Rosenthal, <i>George Rickey</i> , 34.
²⁸ In 1963 Rickey visited Naum Gabo and Josef Albers in Connecticut. Fletcher, Gedeon, Rickey, and Rickey, George Rickey: Kinetic Sculpture, 110.
²⁹ Naum Gabo and Antoine Pevsner, "The Realistic Manifesto," in <i>Art in Theory 1900–2000: An Anthology of Changing Ideas</i> , ed. Charles Harrison and Paul Wood (Malden, MA: Blackwell Publishing, 2003), 299.
^{3°} Gabo and Pevsner, "The Realistic Manifesto," 230, quoted in Day, "Crossroads of American Sculpture," 75n20.
³¹ George Rickey, Constructivism: Origins and Evolutions (1967; repr., New York: George Braziller, 1995).
³² Davidson discusses the structure of this work in <i>The Early Works</i> , 81.
³³ Rosenthal, <i>George Rickey</i> , 51.
³⁴ Ibid., 38.
³⁵ Ibid., 42.
³⁶ Ibid., 51.
³⁷ Day, "Crossroads of American Sculpture," 70.
³⁸ Rickey elaborates on the presence of movement in art of the time in "The Morphology of Movement," 220–31.
³⁹ Davidson, <i>The Early Works</i> , 127; Rosenthal, George Rickey, 48–50.
^{4°} Davidson, <i>The Early Works</i> , 20; Rosenthal, George Rickey, 43–46.
⁴¹ Rosenthal, <i>George Rickey</i> , 60.
⁴² Reiko documents the importance of Rickey's intercontinental travel to his work, and particularly to his development as a Constructivist sculptor, in "Between Two Continents."
⁴³ Ibid., 17.
⁴⁴ Fletcher, Gedeon, Rickey, and Rickey, <i>George Rickey: Kinetic Sculpture</i> , 109.
⁴⁵ Davidson, The Early Works, 239.
⁴⁶ Rickey, quoted in Siegal, Artwords, 142.

- Rosenthal, George Rickey, 68.
- ⁴⁸ Ibid., 46.
- College Museum of Art, 1977), 8.

- ⁵³ Rosenthal, *George Rickey*, 75.
- ⁵⁴ Rickey, quoted in Siegal, *Artwords*, 143.
- ⁵⁵ Rosenthal, *George Rickey*, 74.
- ⁵⁶ Rickey, quoted in Siegal, *Artwords*, 145.
- ⁵⁷ Davidson, The Early Works, 261.
- ⁵⁸ The Moving World, directed by Kevin MacDonald.
- Davidson, The Early Works, 159.
- ⁶² Rosenthal, George Rickey, 47.
- ⁶³ Rickey, quoted in ibid., 48–49.
- ⁶⁵ Rickey, quoted in Gruen, *The Artist Observed*, 258.

⁴⁷ Rosenthal describes how Rickey's planes "are compound pendulums weighted underneath with lead or a steel bar at the short end—that is, the end nearest to the bearings—to compensate for the rest of the plane."

⁴⁹ Rickey, quoted in Gruen, *The Artist Observed*, 257, and Siegal, *Artwords*, 145.

⁵⁰ Barnes, in her study of drawings for sculpture, separates them into four categories: the elementary sketch, the variation or modification of an established form, the working or technical drawing, and the drawing of unrealized sculpture. Lucinda A. Barnes, George Rickey: Drawings for Sculpture (Williamstown, MA: Williams

⁵¹ George Rickey, "Veksoelund," in *Skulptor Veksoelund* (Veksoe, Denmark, 1984).

⁵² Rickey, quoted in Gruen, *The Artist Observed*, 258.

⁵⁹ Gruen, *The Artist Observed*, 257, "Reflecting on the philosophy and aesthetics of his work, George Rickey maintains that it is simply the pursuit of what is possible."

⁶ Rickey, "Etoile," a talk given to the Connecticut Commission on the Arts, December 1984, quoted in

⁶¹ Rickey, "The Morphology of Movement," 227, cited in Reiko, "Between Two Continents," 5n11.

⁶⁴ Fletcher, in Fletcher, Gedeon, Rickey, and Rickey, George Rickey: Kinetic Sculpture, 26.

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