

Calder and Mondrian: An Unlikely Kinship

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by

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The hypothesis for this study stems from a single event: the meeting of the two artists in a specific place and time, specifically that of sculptor Alexander Calder (1898 – 1976) and painter Piet Mondrian (1872-1944) in Mondrian's Parisian studio in October of 1930. It was this meeting that ignited Calder's interest in non-figurative art, but more specifically, it was the catalyzing agent that brought Neo-Plasticism into Calder's artistic scope. This was the start of Calder's abstract career, and it was the foundation for everything he created thereafter. This meeting introduced Calder to a new artistic lexicon that became an intrinsic part of his oeuvre. Art historians have long undervalued this point of contact when examining Calder's life and works. Given the paucity of scholarly data on this meeting, this paper will address the effect it had on Calder's abstract program through comparison and analysis of specific works of art. The works are organized along a progression from the second to the third dimension that begins with Calder's oil paintings and results in his monumental sculptures. This progression is a visual development and not necessarily a chronological one, as Calder worked in all five mediums simultaneously. Drawing largely on stylistic analysis, the research will trace the maturation of Calder's kinetic and artistic theory as it relates to the theories of Neo-Plasticism that he learned from Mondrian.

Mondrian's paintings denied all narrative content, letting the lines and colors he used become the subject matter. By eliminating the object, he reduced the apparent complexity of his compositions, and he was able to create what he argued were the purest forms of expression. Mondrian fulfilled his ideas about Neo-Plasticism by incorporating its very principles in the design of his studio and apartment. When Calder entered this space, he was at once struck with inspiration:

It was a very exciting room. Light came in from the left and from the right, and on the solid wall between the windows there were experimental stunts with colored rectangles of cardboard tacked on. Even the victrola, which had been some muddy color, was painted red.

I suggested to Mondrian that perhaps it would be fun to make these rectangles oscillate. And he, with a very serious countenance, said: “No, it is not necessary, my painting is already very fast.”

This visit gave me a shock . . . This one visit gave me a shock that started things.¹

By entering into this space, Calder was instantly submerged into the world of abstraction. The room itself was irregularly shaped, but every surface was cleanly painted white. The studio was devoid of ornamentation; the furniture was functional, minimally designed, and painted white as well. Even though Mondrian displayed a tulip in a vase, an uncharacteristically naturalist element, he had also covered it over with white paint. Rectangles that had been painted in the three primary colors were pinned to the pristine walls, and Mondrian would reposition them variously to plan out new compositions.

This apartment was more than just a location where Mondrian assembled his compositions; it was the physical manifestation of his ideas about Neo-Plasticism in an everyday space. He explained the importance of organizing one’s surroundings along these lines in *Natural Reality and Abstract Reality*, an essay he wrote in 1919-1920 wherein an abstract-real painter is introducing two individuals to the workings of abstract art:

If all who agree shaped their rooms along Neo-Plastic lines, we could gradually dispense even with Neo-Plastic painting. Realized “around us,” the New Plastic is even more truly alive . . . Everything depends on the how – the how of position, the how of dimension, the how of color.²

¹ Alexander Calder. *Calder: An Autobiography with Pictures*. New York: Pantheon Books, 1966, p. 113.

² Piet Mondrian. *Natural Reality and Abstract Reality: An Essay In Trialogue Form*. Trans. Martin S. James. New York: George Braziller, 1995, page 88. In this essay, Mondrian uses the viewpoints of a naturalistic painter, a layman, and an abstract-real painter to address the scope of Neo-Plasticism from color

Here, Mondrian proposes the idea that it is possible to create a physical environment that is true to the same ideals one sees in his paintings. The “how” refers to how Mondrian saw position, dimension, and color. It was especially important to Mondrian to establish exactly which colors were pure and exactly which lines and forms adhered to Neo-Plasticism. Using secondary colors or diagonals denied the truth, as Mondrian saw it, of universality. Pure art would transcend the limitations of form, and if one were to organize their lives and environments according to these guidelines, one would be able to establish an externalized harmony with the universe.

Mondrian’s rearranging of the rectangles on his wall according to his will must have opened Calder’s eyes to the potential of movable solid shapes of color. Calder’s sculptural sensibilities and his ability to see and think in three dimensions made him critical of the limitations that hold static shapes firmly to a flat wall. It is not surprising therefore, that Calder’s first reaction was to propel the colored rectangles and to progress beyond a straightforward two-dimensional reading. This historic visit to Mondrian’s studio gave Calder a creative surge, the kind of “shock” that directed his full attention toward abstraction. Thus, this meeting was a pivotal turn for Calder not only because he began to work in the abstract, but because after that encounter with Mondrian, he specifically began to work in the idiom of Neo-Plasticism. Mondrian’s Parisian studio provided Calder with a new artistic idiom that would ground his art for the rest of his life. Calder himself did not yet know how he would later make his pinned rectangles move,

choice to perpendicular lines, and from the importance of abstraction to the establishment of pure relationships. The three characters move steadily from looking at various naturalistic scenes to entering the studio of the abstract-real painter that is undoubtedly based on Mondrian’s own Parisian studio. As they do so, the artist explains to his companions what Neo-Plasticism is and how one can apply it to art and to life. Although this is presented as a kind of fiction, this essay is a major text that very clearly explains Mondrian’s beliefs.

but Mondrian's idea of relationships, harmony, unity, and balance undoubtedly spoke to Calder's engineering background and artistic sensibilities.

Calder was born into a family of artists in 1898. His father and grandfather (Alexander Stirling and Alexander Milne, respectively) were both sculptors, and his mother Nanette Lederer was a painter. He was raised to appreciate the arts, and even created sculpture and jewelry as a child, but his parents encouraged their children to branch out and explore different professions. Perhaps because of this, Calder studied mechanical engineering at New Jersey's Stevens Institute of Technology after he graduated from high school. Following a series of unsatisfying jobs, he eventually found himself working in the boiler room of a ship, the *H.F. Alexander*, crossing from New York to San Francisco via the Panama Canal. Calder woke one morning off the coast of Guatemala to see both a luminous sunrise and a full moon visible on opposite horizons. The experience so moved him that he became convinced that he should be an artist to replicate his new appreciation for the universe. Soon thereafter he moved to New York and began to study painting, lithography, and other arts at the Art Students League.

When he graduated, Calder moved to Paris and continued painting, but soon began to turn his attention to sculpture. He created mechanized toys, wire portraits, sculptures of animals, and his highly popular *Cirque Calder*, a performance piece wherein miniature figures, manipulated by the artist, would perform flips, jumps, and other actions as though in a circus.³ Watching the *Cirque Calder* became a favorite event

³ Calder created the *Cirque Calder* in 1926 in Paris. He had previously made smaller toys and movable objects, but the *Cirque* was a much larger undertaking. Calder manipulated each piece in a complex performance that generally lasted around two hours. Each section was small enough that the entire *Cirque* could be packed into a suitcase and shipped for performances in both New York and Paris. It soon became popular enough that Calder charged an entrance fee to his apartment where curious artists and art lovers could watch his kinetic art in action. As a result of the popularity of the *Cirque*, Calder was given his first

of the avant-garde set, and through these performances, Calder's reputation as an innovator was established. The more he ran the circus, the more his popularity grew. After the *Cirque* had become an established pastime for artistically-inclined Parisians, Calder was introduced to the artists who would have the greatest effect on his art: Miró and Mondrian. It was his meeting with Mondrian, however, that transformed his art into something recognized for more than its humor and entertainment value.

There is little in the scholarly literature on Calder that would help to further illustrate the context of the meeting between Calder and Mondrian. In most cases, art historians have recognized the importance of the sculptor's visit to Mondrian's studio as a catalyst for Calder to work in the abstract.⁴ However, not much more is acknowledged beyond Calder's initial reaction, encapsulated by his statement. The scholarship has focused instead on the more obvious relationship between Calder and Joan Miró's (1893 – 1983) art⁵ or on Calder's art as a unique phenomenon.⁶

Calder met longtime friend Miró in Paris in 1928. Though Miró was not an official member of the Surrealist movement (1924-1950s) in Europe, he was affiliated with the group, and his art embraced the Surrealist ideology of pursuing art that

solo show at the Weyhe Gallery in New York in 1928. The *Cirque Calder* now resides at the Whitney Museum of American Art in New York City.

⁴ The meeting is often cited in monographs that use it as a starting point to illustrate other artistic influences on Calder's art. Although these texts present compelling arguments about the origins of Calder's abstract style, they still neglect the import of Neo-Plasticism or Mondrian. See, for example, Museum Of Contemporary Art. *Alexander Calder: a Retrospective Exhibition*. Chicago: Museum of Contemporary Art, 1974, p. 6 or Carmen Giménez and Alexander S.C. Rower, eds. *Calder: Gravity and Grace*. New York: Phaidon Press, 2004, pp. 22-26.

⁵ Scholarly literature that compares Calder to other artists inevitably returns to the relationship between Calder and Miró. This connection is presented as the foundation for Calder's abstract and Surrealist tendencies. For further reading, see Mark Rosenthal. *The Surreal Calder*. London: Yale University Press, 2005 or Turner and Wick. *Calder/Miró*, pp. 24-25.

⁶ When Calder is not being compared to others, he is presented as an artistic innovator who single-handedly invented kinetic art. In other words, he is presented as someone who was able to successfully introduce humor to abstract art. See, for example, Alexander Calder. *Alexander Calder: Oil Paintings, Oct. 10-Nov. 11, 1972*. New York: Perls Galleries, 1972 or Bernice W Mancewicz. *Alexander Calder, A Pictorial Essay*. Grand Rapids: Eerdmans, 1969.

transcended everyday reality. At its most prominent, Miró's art strove to address dreams, memory, the subconscious, and the cosmos through Surrealist or other means. Calder, too, emphasized many of these themes in his art, and the dream-like or even celestial quality of his art cannot be denied. In fact, everything from Calder's choice of organic forms to his use of fluid lines reveals Miró's Surrealist influence. The two artists share numerous themes: underwater or outer space motifs, the movement of forms through space (literal or suggested), and quite often biomorphism. Both artists were ostensibly fascinated with movement, which is featured prominently in Miró's dancing paintings and Calder's oscillating sculptures. Additionally, they both emphasized playfulness and whimsy in both abstract and figurative artworks. Indeed, much of Calder's subject matter incorporated traditionally Surrealist motifs. The monograph *Calder/Miró* finds similarities in their art particularly as it relates to the themes of constellations, the circus, and bestiaries.⁷ In fact, otherworldly environments and an emphasis on the fantastic are quite often the subjects for Surrealist art. Calder's *Constellation* series are the most obviously Surreal of his works. These sculptures have various carved wooden forms connected by a wire structure that mimic both constellations and the universe as a whole.

The related subject matter in these artists' works lays the foundation for an argument about their stylistic and theoretical similarities. Scholars assume that Miró's Surrealist paintings, even the monumentally-sized ones, are the ideological basis for all of Calder's three-dimensional sculptures because they share formal qualities. Scholars consistently find parallels in their use of biomorphic shapes and exploration of

⁷ Elizabeth H. Turner and Oliver Wick, eds. *Calder/Miró*. New York: Philip Wilson, 2004. *Calder/Miró* discusses the relationship between these artists both artistically and socially. It emphasizes their continuous discourse as a way to understand how one's art had influenced the other, and vice versa. The text also refers to how both Miró and Calder reacted to Piet Mondrian, then the most prominent geometric abstractionist in the West, but dismisses Mondrian's influence as limited.

compositional space. For example, Miró's *Morning Star (Constellation)* (1940) is reminiscent of Calder's *Constellation* (1943). Both are inspired by the cosmos itself (note the similar names), but more importantly both are dependent upon an intricate network of lines and forms. The shapes that Calder chose to link the wires could easily be seen as the three-dimensional representations of the forms that Miró painted. Despite how closely Calder's art may be associated with Miró, however, an analysis of his work should not only be examined through the lens of their familiar friendship.

While Miró reinforced figuration, Mondrian represented the extreme opposite: complete abstraction. That Calder and Mondrian were members of the Abstraction-Création group (1931-1936)⁸ in Paris, a loose association of artists all of whom were interested in promoting purity and non-objectivity through abstraction (both principles of Neo-Plasticism), affirms Calder's abiding interest in Mondrian's enterprise. As both were associated with Abstraction-Création, they were therefore likely to have been further acquainted with each other. Nevertheless, the idea that Mondrian's theories about abstraction have informed Calder's abstract art after 1930 is largely disregarded, perhaps not even understood. Yet a close analysis of Calder's work compared with Mondrian's principles offers every reason to claim that Calder was decisively drawn to Neo-Plasticism.

The catalogue to the exhibition *A Salute to Alexander Calder*,⁹ held at the Museum of Modern Art in 1969, recognizes the meeting at Mondrian's studio as the

⁸ The Abstraction-Création group was a loose association that allowed membership of all artists who worked abstractly. It was founded by August Herbin (1882-1960), Jean Hélion (1904-1987), and Georges Vantongerloo (1886-1965), and a vast array of artists such as Jean Arp (1886-1966), Wassily Kandinsky (1866-1944) and Mondrian were involved. The group strove towards purity in art through non-representational, abstract means, but did not limit itself to the artistic restrictions Mondrian embraced. It served as a balance to their contemporary opposite, the Surrealists. Its primary journal, *Abstraction-création: Art non-figuratif*, was published from 1932 until 1936.

⁹ Bernice Rose. *A Salute to Alexander Calder*. New York: Museum of Modern Art, 1969.

impetus for Calder to turn his attention to abstract art. As stated in the catalogue, “The Mondrians that had initiated the change in Calder’s formal approach were rectangular, but as soon as Calder turned to three dimensions he thought in terms of round shapes.”¹⁰ The discussion about format makes for a rather unsubstantiated argument, and the text soon returns to a discussion about Calder’s interest in constellations and mechanization. Here, Rose briefly introduces Mondrian as an influence in that he acquainted Calder with the possibility of abstraction. Mondrian is presented as Calder’s starting point on the road to abstraction, but he is not acknowledged as a stylistic influence. Most histories and interpretations of Calder follow in this vein.¹¹

Another study entitled *Calder/Miró* takes up this issue differently, choosing to argue that Miró had a much greater impact on Calder than did Mondrian. The analysis of Mondrian’s influence begins with Calder’s meeting at Rue de Départ, and again, it all but ends there. “Calder’s visit to Piet Mondrian’s studio in 1930 had caused a creative shock, and, besides the wire sculptures and the *Cirque Calder*, unprecedented abstract, movable or motorized sculptures began to emerge.”¹² While this statement offers the promise of some aesthetic relationship between Mondrian and Calder, the monograph then returns to Miró’s Surrealist tendencies and Calder’s replication of Miró’s biomorphic forms. No Neo-Plastic impulse that could have been triggered by Calder’s trip to Mondrian’s studio or afterwards is recognized. Rather, Mondrian receives a cursory note that describes him as the person who introduced Calder to abstraction and *not* to Neo-Plasticism.

¹⁰ Rose, *Salute*, p. 12.

¹¹ The essay “Calder: Gravity and Grace” by Francisco Calvo Serraller in *Gravity*, pp. 5-40, is just such an example. The meeting between Calder and Mondrian is used, once again, as a biographical note before the author turns to the more common discussion of themes and ideas he sees in Calder’s art.

¹² Turner and Wick, *Calder/Miró*, p. 60.

Calder: Gravity and Grace, published in 2004, is a comprehensive monograph about Calder's life and works. In this compilation of essays, interviews, and plates, the artist's biography and artistic inspirations and influences are addressed very generally to create a thorough, but conventional, overview of his life. The interaction between Calder and Mondrian is given especially broad treatment. Several pages are devoted to a biography of Mondrian and to a discussion of the apparent irony of Calder, a humoristic and organic sculptor, visiting the apartment of such an austere and serious painter. Here, the scholar Francisco Serraller presents this otherwise historical meeting as relatively inconsequential, implying that Calder could have visited any abstract artist's apartment and would have been equally compelled to abandon figuration. Although the author's analysis goes into some detail about Mondrian's Neo-Plastic theories about opposition, balance, and relationships,¹³ Serraller does not extend these concepts to Calder's work. In fact, the author argues the exact opposite, that Mondrian's art never had any effect beyond an introduction to abstraction: "Calder did not adhere to any one formal approach until the early Thirties and, according to his own statements, only did so then because of the profound impression made on him by Mondrian, whom, nevertheless, he never tried to imitate and whose influence never manifested itself in any specific way."¹⁴ Even though Calder and Mondrian both worked in the abstract, the author finds them diametrically opposed, both philosophically and stylistically, seeing Mondrian's art as purely geometric and Calder's as purely organic, without any crossover whatsoever. Any

¹³ In the catalogue *Calder: Gravity and Grace*, Serraller makes a brief statement about Mondrian's personal introduction to Neo-Plasticism. Mondrian's basic artistic ideals are explained significant background information is provided, but they are done so independent from the discourse about Calder. The text references Mondrian's belief in oppositional unity, the importance of the so-called "masculine and feminine" perpendicular, and the universality of Neo-Plasticism. See Giménez and Rower, *Gravity*, p. 23.

¹⁴ Giménez and Rower, *Gravity*, p. 26.

additional and more profound analysis of the Mondrian-Calder link is conspicuously lacking, establishing no further association between Mondrian's pictorial world and that of Calder.

Indeed, Calder's art may not maintain the strict right angles of Mondrian's *Compositions*, but that is not sufficient substantiation for the idea that the "organic" is completely relinquished in Neo-Plasticism. Mondrian himself recognized the relationship between nature and Neo-Plasticism: "Everything that appears geometrically in nature shares plastically in the inwardness that is proper to the geometric."¹⁵ In fact, close analysis of the works reveals that the color, lines, and composition of Calder's abstract art echo Mondrian's theories about Neo-Plasticism to the core. It is understandable that scholars of Calder's life and work would have disregarded this link in favor of the more obvious comparison between Calder and Miró, or even in favor of seeing Calder's art as uniquely and independently derived. However, the impact of Neo-Plasticism is too great to be ignored. Even though Miró plays into Calder's choices for shapes and forms, it is Mondrian's effect on Calder that forms the greater foundation for his work, providing him with an artistic lexicon that is rooted in Neo-Plasticism.

Neo-Plasticism was an artistic movement that gained momentum in the early 1920s. Artists who subscribed to its principles operated solely in the abstract, denying any sort of figural representation. Advocates for this theory adopted a reduction of visual elements to minimal means in order to create an extreme form of artistic purity. Colors were reduced to black, white, gray, and the three primaries (red, yellow, and blue). Surface embellishment was completely eliminated and lines were simplified to horizontal

¹⁵ Mondrian, *Natural Reality and Abstract Reality*, p. 38.

and vertical perpendiculars. Mondrian himself argued the importance of the perpendicular in *Natural Reality and Abstract Reality*:

Natural appearances generally *veil* the expression of relationship. Therefore if relationship is to be expressed determinately a more exact expression of relationship is needed . . . The relationship, not so much of dimensions and planes, as of their *position* with regard to one another. The most perfect expression of this relationship is the perpendicular, which expresses the relationship of two opposites.¹⁶

Compositions were invariably arranged asymmetrically to construct discrete proportional relationships. Neo-Plastic artists believed this extreme sort of purity in form and color expressed the epitome of a transcendental universal harmony. The movement was more than these aesthetic guidelines, however. Neo-Plasticism was centered on a “belief in a balance between the universal and collective and the specific and individual.”¹⁷ Additionally, artists embraced the idea that the balance and harmony that are emphasized in Neo-Plasticism was the key to a utopian society.

Mondrian created his apartment to be a Neo-Plastic space. The lines, colors, and shapes he used intentionally mirrored the principles of his paintings. For the artist, Neo-Plasticism was an expression of universality, and much of his writing discusses what universality was and how to achieve it.¹⁸ “The universal is plastically manifested as *the immutable in terms of relationship, based upon the perpendicular relationship.*”¹⁹ By making his paintings (and his studio) austere and precise, he surrounded himself with an intense form of minimalist abstraction that he believed to be the manifestation of purity.

As Meyer Schapiro writes, “Mondrian wrote in more than one article that his goal was to

¹⁶ Mondrian, *Natural Reality and Abstract Reality*, p. 22. Emphasis in original.

¹⁷ Paul Overy. *De Stijl*. London: Thames and Hudson, 1991, p. 12.

¹⁸ Mondrian is known for his numerous writings that can vary from essays and dialogues to notes in a sketchbook. He was a consistent contributor to the magazine *De Stijl*, and Calder would have had access to these articles and Mondrian’s other writings both as a contemporaneous Parisian artist as well as a member of the Abstraction-Création group with Mondrian.

¹⁹ Mondrian, *Natural Reality and Abstract Reality*, p. 35. Emphasis in original

achieve an art of 'pure relations.' These, he believed had been 'veiled' in older painting by the particulars of nature that could only distract the viewer from the universal and absolute in art, the true ground of aesthetic harmony."²⁰ Mondrian held so exactly to his ideals of Neo-Plasticism that he eventually broke with the group because other artists within the movement, who although espousing the same ideals, as did Theo Van Doesburg, began to introduce diagonals and other, non-primary colors to their compositions,²¹ whereas the strictness of Mondrian's program demanded that Neo-Plasticism remain within the realm of two-dimensional and not cross over into architecture. He did, however, express a desire for Neo-Plasticism to become the pervasive style for all human environments, but he was only able to express this in his own carefully controlled surroundings. His studio apartment is the primary example of his move into the third dimension.²² As such, it remained a private space.

Indeed, other artists did not rely solely on painting, but explored the possibilities of applying Neo-Plasticism to three dimensions. Gerrit Rietveld (1888-1964), for example, designed an entire building based on Neo-Plastic principles. The rooms of the Schröder House in the Netherlands are defined by movable partitions, for instance. Each

²⁰ Meyer Schapiro. *Mondrian: On the Humanity of Abstract Painting*. New York: George Braziller, 1995, p. 28.

²¹ Theo Van Doesburg (1883-1931) was the head of the Neo-Plastic group as well as a painter, and a writer and editor for their magazine, *De Stijl*. "By 1925 the two men [Van Doesburg and Mondrian] had become intensely competitive and their different views about the admissibility of the diagonal led to their estrangement as Van Doesburg countered the balanced horizontals and verticals . . . with the unstable and dynamic diagonals of what he called Counter-Composition of Elementarism." See Overy, *De Stijl*, pp. 69-70.

²² Mondrian created a few other architectural spaces that adhered to Neo-Plasticism, including a room for Ida Bienert, a German art collector. His plans for the location were highly planar as he used black lines to delineate each surface that he then filled in with a solid color (red, yellow, blue, black, white, or a shade of gray). The blueprints and sketches that he executed for this project almost appear as though they are preparation for another oil painting. They present a geometrically designed interior that emphasizes Neo-Plasticism above all else. Due to inadequate funding, Mondrian was unable to realize this space, however. See Nancy Troy. "Mondrian's Designs for the Salon de Madame B..., à Dresden." *The Art Bulletin*, Vol. 62, No. 4. (Dec., 1980), pp. 640-647.

surface has a purposefully designed placement, size, and color, following closely to Neo-Plastic ideals. The sliding walls have minimal surface decoration, and when they move, they create new spatial relationships. In this sense, they imitate the way that the perpendicular lines in many of Mondrian's paintings seem to avoid intersection by sliding past one another. Rietveld is also famous for his furniture-objects, such as *Red and Blue Chair* (1917), a functional exploration of Neo-Plasticism in the third dimension. This chair, painted only in black and primary colors, has a clear geometric ordering and, as with the Schröder House, exhibits non-intersecting but perpendicular lines. Another artist, Jacobus Johannes Pieter Oud (1890-1963) also used the basics of Neo-Plasticism in his architecture, as with his *House for Three Families* (1928). A pencil sketch of this design shows smooth surfaces, perpendicular lines, and a precise placement of planes. In this way, both he and Rietveld found three-dimensional expressions for Neo-Plasticism.

No other Neo-Plastic artist held his art as strictly to the ideals of Neo-Plasticism as did Mondrian, and many were interested in exploring the three-dimensional potential of the movement. Numerous artists created furniture, architecture, and paintings or sketches that dealt with the way Neo-Plasticism could address depth and space. These artists created an environment through design, and they did so while maintaining the principles of Neo-Plasticism. Calder, by contrast, found a way to make three-dimensional, abstract, and non-objective art as stand-alone objects. His visit to Mondrian's studio enabled Calder to do what Mondrian found counter to the principles of Neo-Plasticism: to express non-figurative, pure, abstract art in the third dimension. Although Calder did create three-dimensional Neo-Plastic art, he did not limit himself to

functional expression, as with the other artists. His art is fully abstract with the sole intent to express purity of means; it refrains from expressing any truly practical purpose.

For the first three weeks after his meeting with Mondrian, Calder worked on a series of paintings that echoed the Neo-Plastic sentiments envisioned in Mondrian's apartment. Even though these paintings do not represent Calder's first use of oil or canvas, they are most certainly his first foray into abstraction.²³ While these paintings represent Calder's initial reaction to Mondrian's Neo-Plastic apartment, the scholarship still tends to ignore the connection and treats them summarily as an extension of Miró's interests. The existing scholarship insists on relegating even those elements in Calder's early abstract paintings that would claim the direct influence of Mondrian on being the result of Miró's influence. Calder did not stay with Mondrian's angular geometry alone; he also introduced organic forms into his paintings. The idea of biomorphic shapes that so characterizes Miró's work was infusing itself into Calder's art at the very same time that Calder was responding to Mondrian's pure forms. These paintings, however, are best seen as an amalgamation of Mondrian and Miró's influences. *Untitled* (1930) [1], for example, shows both Mondrian's and Miró's influences. It introduces a large amoebic form to the painting that would be completely out of place in any of Mondrian's works. However, this work also attempts to recreate the overlapping structure that Mondrian was actively using in his current paintings such as *Composition with Yellow Patch* (1930) and that he continued to employ throughout the 1930s. Calder's painting expresses a similar manner of spatial delineation that defines the character of Mondrian's

²³ Before his meeting with Mondrian, Calder had created some abstract oil paintings that were generally related to the circus and urban scenes. The colors were very rarely pure primaries, and he also experimented with various perspectives. For further information on these oil paintings, see Calder, *Oil Paintings*, 1

art: a large black shape crosses the boundary between the top gray section and the bottom white area; the gray is similarly invaded by a small yellow circle. The significant elements of Neo-Plasticism in *Untitled* [1] (e.g. flat colors, clearly defined forms, and oppositional relationships) do not address the ideals of the typical rigidly geometric style that Mondrian espoused and can be regarded as a transitional work. Indeed, Calder's personal interpretation of Neo-Plasticism does still include the introduction of biomorphic shapes that fully assert Miró's continued influence on Calder's abstract development. These organic forms will continue to be present throughout his art in many of the forms that he chooses, especially those that hang from his ceiling mobiles. Yet while Miró's biomorphic shapes can be found at the ends of the branches within Calder's abstract sculpture, it is Mondrian's theories about Neo-Plasticism, however, that will emerge as the structural and compositional foundation of his art.

Another of these first abstract paintings to hint at Mondrian's influence is *Untitled* (1930) [2], an austere black and white oil painting echoing the colors of Mondrian's grids. While this painting lacks the clear vision and determination of a Mondrian piece, the commanding impression that Mondrian had on Calder is obvious in the numerous Neo-Plastic elements of this work. A large rectangular black bar bisects the canvas on the right side, while a thin, black, horizontal line extends from this bar near the top, and another touches the opposite edge of the canvas, a distribution of elements that points directly to Mondrian's influence of establishing subtle tensions between the component parts of his composition, vividly exemplified in *Place de la Concorde* (1938-43).

Untitled [2], also of 1930, attempts to create an internal equilibrium by weighing the two thin lines against each other and again by balancing the black bar against the

open white plane beside it. This equilibrium is a microcosm of the complex relationships Mondrian was already painting at the time of his meeting with Calder. Calder has here reduced his color palette to basic black and white, the classic complementary opposites, and has directed his lines to form horizontal and vertical perpendiculars, the signature right angles of Mondrian's art. The perpendicular lines create discrete proportional relationships through asymmetrical placement.

As one studies Calder's art, it becomes obvious that Calder's visit to Mondrian's studio had a pronounced effect on his turn to abstract art. The minimal use of color and line limits any notion of depth in Calder's abstract work. As with Mondrian's paintings, depth, through the expression of color relationships, is worked out completely on the surface. The forms themselves are made even more distinct by the stark contrast that black makes against white. With *Untitled* [2], Calder is testing theories about reducing colors to basic hues and combining them with linear relationships. This manifests a self-styled examination of Neo-Plasticism. The result is a painting that is austere; its minimal forms create purposeful oppositional and asymmetrical relationships. Calder's decisions - from limiting the colors to black and white, to employing perpendicular lines of varying volume - reveal his intention to continue in a Neo-Plastic vein, especially after having fully adopted the abstract idiom.

Although these early paintings begin to exhibit Calder's understanding of Neo-Plasticism, particularly the establishment of oppositional relationships created by asymmetrically balancing one form or field against another, they also show Calder's innate understanding of volume, mass, and the subtle distribution of weight, that reveals his own background as an engineer. *Untitled* [1], for example, pairs two fields, one gray

and one white, and does so with an angular, but disjointed, border. The black mass imposes itself over both sections, while the yellow circle is absorbed into the gray half. Calder placed the black form over the thinner area of the gray field and the yellow circle within the wider section. This careful arrangement of forms creates an equal visual distribution of color, even though the two sides are the deceptively appearing reverse of one another. Calder's experience with balance and weight as a mechanical engineer,²⁴ coupled with a methodical displacement of forms based on a careful mathematical model, is translated here through the specific and purposeful arrangement of lines and shapes. The colors and forms, although minimal, have been intentionally organized to create the greatest visual impact, as suggested by Mondrian:

Just as line needs to be *open* and *straight* in order to express expansion determinately, so must color be *open*, *pure*, and *clear*. If it is, then it radiates vitality; but if color is closed and confused, then it will obstruct the life force and predominantly express limitation, the tragic. By means of its technique, especially its planarity, the New Plastic can achieve equilibrated expression of opposites in color too.²⁵

Mondrian is unequivocal in his insistence that color must be as carefully organized as his perpendicular black lines. Both color and line must follow the principles of Neo-Plasticism to create the stable harmonies that Mondrian espoused. Calder addressed this need for balance in color and line by organizing the painting in such a way that each line and shape has a direct effect and relationship with the other forms. Hence, there is

²⁴ After graduating from the Stevens Institute of Technology, Calder pursued engineering-related employment for several years, with varying degrees of satisfaction and success. His sister Margaret Calder Hayes wrote in her family memoir of several of his careers, each resulting in a humorous anecdote. "He [Calder] worked as a salesman for International Harvester. His days as a tractor salesman ended abruptly when he inadvertently plowed up a farmer's cucumber bed with the machine he was demonstrating. 'Young feller,' fumed the enraged farmer, 'next time you go monkeyin' around, learn to know a cucumber vine when you see it.'" Needless to say, Calder's playful attitude and artistic impulses were not satisfied in these jobs, and his family encouraged him to become an artist instead. See Margaret Calder Hayes. *Three Alexander Calders: A Family Memoir*. Middlebury, Vermont: Paul S. Eriksson, 1977, p. 69.

²⁵ Mondrian, *Natural Reality and Abstract Reality*, p. 103. Emphasis in original.

nothing superfluous in the handling of *Untitled* [1], but this painting shows more than a reduction of aesthetic elements; it presents an asymmetry that links the individual elements as a whole. Calder's familiarity with evenly balancing unequal volumes, one that he established as a mechanical engineer, would emerge countless times in his later abstract sculptures.

A third oil painting of this very same year, also identified as *Untitled* (1930) [3], exposes Calder's desire to return to wire and sculpture. This painting shows a twisting line that imitates the bend of a wire, one of Calder's favorite mediums.²⁶ He thoroughly embraced the potential of wire, a medium that could not only be easily manipulated to suggest the third dimension, but elevated, as he claimed in his writings, to be a bridge between science and art:

Wire, rods, sheet metal have strength, even in very attenuated forms, and respond quickly to whatever sort of work one may subject them to. Contrasts in mass or weight are feasible, too, according to the gauge, or to the kind of metal used, so that physical laws, as well as aesthetic concepts, can be held to. There is of course a close alliance between physics and aesthetics.²⁷

Wire was, for Calder, a useful tool for exploring Neo-Plasticism. In his later sculptures, the wires behave as Mondrian's perpendiculars do: they are the supporting grid that establishes the form of the composition. *Untitled* [3] anticipates Calder's sculptures of wire and even implies three-dimensionality, although it remains a flat, two-dimensional painting. At this point, Calder had not embraced the movement or physical depth that he

²⁶ Calder first began using wire extensively in 1926, creating mechanical toys that would be the precursors to the *Cirque Calder*. "I started [making toys] right away, using wire as my main material as well as working with others like string, leather, fabric and wood. Wood combined with wire (with which I could make the heads, tails and feet of animals as well as articulating parts) was almost always my medium of choice. One friend of mine suggested that I should make bodies entirely of wire, and that is how I started to make what I called 'Wire Sculpture.' In Montparnasse, I became known as the 'King of Wire.'" See Alexander Calder. "Permanence Du Cirque." *Revue Neuf*, [Calder Foundation](#). 1952.

²⁷ Alexander Calder. "A Propos of Measuring a Mobile." [Calder Foundation](#). 1943.

had first proposed in Mondrian's studio. Shortly after he created *Untitled* [3], Calder turned his attention to sculpture and began to create abstractly in the third dimension.

Calder's reliefs²⁸ can be seen as an extension of his earlier oil paintings into a three-dimensional space; at the same time they serve as a stylistic bridge between Mondrian's two-dimensional paintings and Calder's oscillating sculptures. *Red Panel* (1936) demonstrates Calder's idea of moving Mondrian's rectangles away from the wall. An S-shape is formed by two biomorphic forms, one on top of the other and two circles near the upper right corner. All hang separately from the flat red canvas against the wall. Because the forms are allowed individual space and motion, they appear lighter than if they had been painted on a canvas. Nevertheless, they are still bound by the edges of the plywood board behind them, and the forms only slightly penetrate beyond the rectangular boundary. Separated from this panel while unable to move away from it, they appear to hover while still being tethered. This distance between the metal forms and the plywood background is a reiteration of Mondrian's insistence on the relationships that underlie his paintings. The forms approach the third dimension in a way that only Mondrian's studio was capable of doing until now.

This move away from the picture plane fully realizes the implied depth of Mondrian's paintings, but without sacrificing the Neo-Plastic truth behind the works. As observed in *Calder: Gravity and Grace*, "According to Mondrian, the expressive power of the elements in a composition is directly related to its ability to establish relationships, among which there is one that predominates: the perpendicular."²⁹ The motile sculpture *Red Panel* finds the perpendicular not only in the harmony between one line or form and

²⁸ These sculptures are sometimes known as "wall mobiles," but I will use the term "reliefs" in order to avoid confusion with Calder's works that hang from the ceiling.

²⁹ Giménez and Rower, *Gravity*, p. 23.

another, as in the relationship between elements in Mondrian's work, but also between the forms and the wall itself. The space that the forms create in relation to the plane from which they appear to move away creates a perpendicular that is a defining characteristic of the piece. The relief is not determined by the forms (as with Miró) or by the lines (as with Mondrian) but instead by the action of negative space. The perpendicular is created by the vertical placement of forms *and* by the vertical canvas, all in relation to the horizontal distance. This is a direct externalization of Mondrian's idea of an interior, balanced structure. It is nascent "movement," as Calder noted when first in Mondrian's studio, introduced by the strength of its three-dimensionality.

The Snake and the Cross (1936) is another relief that affirms Calder's externalization of Neo-Plasticism. In this sculpture, the canvas is reduced even further than the monochromatic plywood of *Red Panel* to a pure white rectangular frame. Inside the frame are three shapes; there is a green curve that extends above two interlocking red and yellow forms. The shapes themselves appear less attached to the wall behind than with *Red Panel* not merely because of the elimination of a background but also because the frame is pushed to the same extension as the forms themselves. The frame, substituting a canvas in this relief, is again level with the forms, but this time it extends with them into three-dimensional space instead of limiting them to the two-dimensional wall. The idea that Calder is addressing Mondrian's fixed rectangles through these hanging shapes becomes more evident to the viewer, although *The Snake and the Cross* remains a motionless piece.³⁰

³⁰ Motion here, does not refer to the kind of rhythm that Mondrian created and later perfected with works such as *Broadway Boogie-Woogie*, but rather a literal motion of something shifting in space. Mondrian described his form of internalized rhythm in *Natural Reality and Abstract Reality*: "In the New Plastic, rhythm, no matter how inward, is always present, and is even varied by the diversity of dimensions through

The relief *Object With Red Ball* (1931) follows the paradigm set by *The Snake and the Cross*, but reduces the canvas further by taking the piece away from the wall and situating it on a base. What was the entire side of the frame in *The Snake and the Cross* is here eliminated completely. The objects hang with a sense of greater weightlessness and reduced dependence on the stand upon which they are balanced. Parts of the reliefs are fixed to the wall, while other parts exist separately. Where Mondrian's paintings were bound by the edges of his two-dimensional, rectangular canvases, the sides of Calder's reliefs begin to drop away. Calder is using Neo-Plasticism in a form that exists in either (or both) the second or the third dimensions. The sculpture still lacks physical depth, but some forms are beginning to emerge beyond the flat panel of Mondrian's paintings. Although these reliefs are not yet fully kineticized, they continue to suggest movement and freedom. They thus become the sculptural link between the second and the third dimensions; the sculptures are still bound to the wall (and in some respect still retain the two-dimensionality of the canvas form), but they have clearly moved away from the flat plane of painting. Of course, *Object With Red Ball* does not itself rely on the wall, it still asserts a reliance on the gallery space and the relation between that space and the solid base and rectangular boundaries that echo the shape of a canvas. Nevertheless, these forms hang at precise distances one from another, and they continue the reduction of color that is based on Mondrian's ideas of harmony through Neo-Plasticism.

Calder's reliefs offer a stylistic transition point between the oil paintings that can

which the primordial relationship, that of position, is expressed. And this makes it a *living reality for us humans.*" Emphasis in original. See Mondrian, *Natural Reality and Abstract Reality*, p. 37. According to this principle of Neo-Plasticism, the position of line, color, and form establishes an internal rhythm (not a pattern) that implies movement and draws the eye from element to element.

be read as almost direct translations of Mondrian's Neo-Plasticism and the fully realized vision of oscillating rectangles revealed through Calder's mobiles. The lines and colored forms that Calder saw in Mondrian's apartment have been transformed into sculptures that hang both on, and away, from the wall. The reliefs are Calder's exploration of three-dimensional space without rejecting the two-dimensionality of the canvas.

While Calder's reliefs are a step away from the third dimension, his mobiles fully extend into it. In the mobiles, the idea of a flat canvas is eliminated entirely and the forms are brought deliberately away from the wall. They hang at various angles, heights, distances, and depths to create a purely sculptural translation of Mondrian's Neo-Plastic vision of harmony and balance. Mondrian limited his experience with Neo-Plasticism to painting, applying it literally to his own apartment. In a sense, entering Mondrian's studio is like stepping into Neo-Plasticism. Mondrian's apartment was meant to surround and envelop the viewer into a complete Neo-Plastic experience. Calder's mobiles take the idea of a reduced canvas and extended forms and become a different three-dimensional manifestation of Mondrian's ideals. These sculptures re-establish the idea of a viewing distance between the spectator and the work. That is, the mobiles are observed as objects, separate from the viewer. In Mondrian's apartment, the viewer dissolves within the Neo-Plastic environment; in Calder's art the viewer interacts with it. The observer can change a mobile with just a blow of air or tap of a finger. Mobiles elicit an active relationship with the viewer as two discrete entities, but Mondrian's apartment subsumes the viewer entirely. Mondrian would have the viewer adapt his own environment to match his ideals about Neo-Plasticism. Calder does not require anything of the viewer besides his presence. Although both of these artists are addressing the

abilities of Neo-Plasticism in the third dimension, they embrace divergent opinions.

While Mondrian's apartment seeks to absorb the viewer into a complete environment, Calder's mobiles reiterate the idea of the viewer as a separate spectator and the art as an object.

The mobiles hang from nearly invisible wires attached to the ceiling, disregarding the walls or floors on which painting or sculpture depends. The forms appear weightless and are in constant spatial negotiation with the other forms. The steel wires that link each form to the other define these balances and therefore explicitly refer to the internal structure that Mondrian was only able to suggest. "There is the idea of an object floating—not supported—the use of a very long thread as a long arm in cantilever as a means of support seems to best approximate this idea of freedom of the earth."³¹ Plastic harmony is manifest in the balance inherent in the mobiles. The universal relationships that Neo-Plasticism had stressed so firmly are vividly exercised here.

The extension of Calder's sculptures away from a flat plane and fully into the three-dimensional world is clear with *Cône D'ébène* (1933). The forms that structure his reliefs have abolished the canvas entirely in the creation of their own independent composition. Calder's art has been freed from the wall and is no longer limited to the second dimension; the canvas has been eliminated, and depth has been fully introduced as a means to express the theory of Neo-Plasticism. A cone, a sphere, and an amorphous piece all hang at various lengths from a larger wire structure. The main bar divides into two wires, one holding the cone and the other supporting another bar which in turn holds the sphere and the other amoebic form. Although the shapes are all of various volumes

³¹ Alexander Calder, as quoted in Ruth O'Hara, comp. *Alexander Calder: Selected Works 1932-1972*. New York: O'Hara Gallery, 1994, p. 8.

and weights, the bars are perfectly horizontal and the wires exactingly vertical, echoing Mondrian's insistence on the perpendicular. The depth that is suggested in the reliefs is fully realized in this sculpture that exists without reliance on a flat wall. Calder achieves a balance for the three dissimilar pieces that comprise this work and makes the sculpture almost seem afloat. He further reduces his forms by painting the entire work black which heightens the idea of differing volumes and densities perfectly harmonized.

Calder's mobiles were created from the bottom up (i.e., not from the support downward and outward); he started with the smallest branch and progressed upwards until he created the final product. Planning the exact balances created only by specific pieces of an exact shape and color was mathematically complicated. Calder, however, was able to comprehend intuitively how the wires were to operate to sustain the desired balance among the shapes and how the entire construction would fit together as a whole. He needed relatively little planning to accomplish the task. In some of his mobiles, he would randomly choose pieces of broken glass and find perfect balances for all of them. As with Mondrian, who had an innate sense about the distribution of his Neo-Plastic elements, Calder aimed to express a similar kind of harmony. But while Mondrian planned and designed his relationships on a two-dimensional surface and kept them there, Calder instinctively developed these same ideas in a three-dimensional space using his mobiles.

Black, White, and Ten Red (1957) exhibits the balance inherent in Neo-Plasticism by emphasizing the mathematical properties behind the structure. In this mobile, Calder references Georges Vantongerloo's ideas on the geometric. Vantongerloo (1886-1965) was a member of both Neo-Plasticism and the Abstraction-Création group who believed

in the translation of Neo-Plastic principles through mathematical, volumetric works that emphasized relationships through proportionally differing dimensions. Vantongerloo interpreted Neo-Plasticism in terms of interrelations of volumes and geometric construction. His emphasis was on the balance between positive and negative, and between matter and space. Like Mondrian, he used perpendicular lines, primary colors, and flat compositions for his paintings, sculptures, and architectural models. These same ideals operated to create the ideal balance within *Black, White, and Ten Red*, a mobile which, like the others, is purposefully constructed with shapes, lines, and balances to create a precisely structured composition. The wires create a literal dependence of one carefully balanced form on another, therefore emphasizing the internal balance and harmonies stressed in structures created on the basis of Neo-Plasticism. The mobile itself can be visually divided into different balances and counterbalances. By numbering the different forms and analyzing them as mathematical variables, Calder's works can be seen as mathematical equivalencies. For example, the weight of forms 8, 9, and 10 are equal to 1 through 7; 1 and 2 are equal to 3 through 7; 3 is equal to 4 and 5; black and white are equal to 1 through 10. This mobile exhibits the same mathematical principles found by artist Anthony Hill (1930-), as described in his essay entitled "Art and Mathesis: Mondrian's Structure." Hill proposes a general approach to Mondrian's paintings as a series of interconnected nodes in which the "infra-structure is a polyhedral [a three-dimensional form] network."³² This method can easily be applied to Calder's work. By mapping out the relationships as a grid-like network, it becomes evident that *Black, White, and Ten Red* is an inherently mathematical sculpture; it is an interconnected series of intersections and varied forms that produce a specific artistic equation.

³² Anthony Hill. "Art and Mathesis: Mondrian's Structure." *Leonardo*, Vol. 1, No. 3. (Jul., 1968), p. 235.

The work *S-Shaped Vine* (1946) is useful in suggesting a broader idea of form relationships as a whole. Even though there is no continuous wire linking all of the aluminum pieces, there is a definite structure, an s-shaped one to be precise, to which the mobile adheres. The larger wires and those that make up the basic s-shape create a framework for the piece and force discipline on the branches. The smaller extending arms disturb this arrangement when taken one by one, but when viewed as a whole, they serve to further balance the entire piece. It must be remembered that these mobiles do not exist as they are shown in photographs. They are kinetic pieces, constantly in motion because of air currents created within the space they occupy. Each branch is specifically structured so that the forms do not hit or touch each other. It is an intentionally silent mobile, as most of Calder's mobiles are, so that the viewer is never distracted by individual pieces and instead is forced to take on the totality of the work as a whole.

George Rickey explains the necessity of movement in Calder's mobiles:

Such artists [as Calder] design with "movement itself" as distinct from a movement which is incidental or accessory . . . without changing the form. Their movement is as intrinsic as that of a gramophone record or an airplane in flight; without it the object would be something else.³³

Even though the "branches" of the mobile move separately, the work is understood as a whole to suggest the ideals of Neo-Plasticism in expressing universal balance and harmony. As the sculpture twists and contorts, new relationships are formed in space and demand a constant reorientation on the viewer's part. Kineticism is the driving force behind the mobiles. In the same way that rhythm in Mondrian's paintings is implicit in his compositions because of the placement of specific rectangles of color that appear to slide past one another, Calder's rhythms are both inherent and overt because the

33 George W Rickey. "The Morphology of Movement: A Study of Kinetic Art." *Art Journal*, Vol. 22, No. 4. (Summer, 1963), p. 224.

piece itself is changing externally. Just as with Mondrian, so too with Calder the same relationship is never seen twice in their works although the same principles are being viewed at work. Like Mondrian's *Compositions*, Calder's mobiles have a deceptive simplicity with a highly complex underlying set of balances and harmonies. Again, the flat colors (limited to primaries, black, and white) stress the diverse range of volumes present in their work.

While Calder's mobiles represent the first stylistic step toward encompassing full three-dimensional space, he continued to remove himself from a reliance on the gallery space by concentrating on a new medium: the "stabiles." These are the grounded version of his mobiles that preserve the same harmonies explored kinetically, but they are now attached to the floor instead of the ceiling. As a stabile, *Little Spider* (1940) is a larger scale version of the ceiling mobile, yet it retains many of the same properties. It has a series of balanced arms with various shapes at the ends that create the illusion of a floating picture plane. Here, however, the sculpture is reliant on the floor for support rather than extending from the ceiling.

These sculptures, be they reliefs, mobiles, or stabiles, continue to use the same colors, lines, and principles inherent to Neo-Plasticism. Even though the medium is greatly dissimilar to an oil painting, the foundation and structure of the art is the same. For instance, *Performing Seal* (1950), a stabile painted a solid, uniform black, shows very clearly how Calder has embraced the perpendicular lines that are the basis for Mondrian's ideas of universal harmony in art. Although the figure shows flat circles balanced on steady perpendiculars, the kinetic nature of *Performing Seal* allows it to access various depths. Additionally, as *Performing Seal* reaches higher, the circles at the end of the

arms decrease in size. This can be seen as a variation on Mondrian's ideas about architecture: "Mondrian advocated a conception of architecture as a multiplicity of planes, in contrast with the traditional attitude based on the manipulation of three-dimensional mass."³⁴ Although Mondrian never fully embraced the idiom of architecture, except for the anomalous design for the room of Ida Bienert,³⁵ it is nonetheless instructive to think of Mondrian's innate "architectural" sensibilities as having an effect on Calder's spatial conceptions. Where Mondrian accepted what Troy calls a "multiplicity of planar views"³⁶ in architecture, Calder exercised this principle in sculpture. Calder has engineered his stabiles so precisely that unequal forms still create equal balances. Nevertheless, each arm remains in a straight horizontal or vertical. This reiterates the Neo-Plastic emphasis on creating relationships through asymmetry.

The work entitled *More Extreme Cantilever* (1949) is a fixed and anchored version of Calder's mobiles. As a stabile, it no longer enjoys the freedom afforded to those works that are attached to the ceiling, but its connection to the floor implies a centrality to the kinetic arms. Despite its dependence on the ground, *More Extreme Cantilever* remains just as weightless as any of Calder's mobiles. The arms hang, dangle, twist, and spin at the touch of wind, just as before. They are carefully balanced on a single thin rod of metal attached to a similarly balanced stand. Calder has engineered a perfect balance in which each of the arms and each of the forms plays an integral part to the success of the whole. This balance is characteristic of Neo-Plasticism, especially the theory of form relationships. The three-dimensional nature of the work, however, presents a focus on Mondrian's perpendicular. In *Natural Reality and Abstract Reality*,

³⁴ Troy, *Environment*, p. 63.

³⁵ Troy, *Madame B.*, pp. 640-647.

³⁶ Troy, *Environment*, p. 63.

Mondrian wrote “Whether in art or simply in conscious contemplation, we must reduce the curved to the straight.”³⁷ This stabile’s most prominent feature is the long arm that hangs from the base. Although it begins as a curve, the rod becomes nearly parallel to the floor. Calder has physically manifested Mondrian’s transformation to the perpendicular and in doing so has embraced one of the primary tenets of Neo-Plasticism.

Calder went even further in his exploration of Neo-Plasticism by developing the same principles in his monumental stabiles (commonly abbreviated as simply “monumentals”). These works have completely freed themselves from any dependence on gallery or museum space as required by a painting, a stabile, or even a mobile, and instead depend on the universe itself for support. Joan Marter’s essay on Calder’s monumentals describes their relationship to their surroundings: “With the increase in scale, these works assumed a more active role in relation to the location. While a ten-foot construction is a pleasant accessory for a museum terrace or a small park, a fifty-foot stabile interacts aggressively with its site.”³⁸ Indeed, these sculptures are so immense that they often stretch from one end of a plaza to another, forcing the viewer to walk below, around, or through it. Monumentals dominate their space and create a surrounding environment that reflects the sensibilities of Neo-Plasticism, most especially the insistence on form relationships. With his monumental *Tom’s* (1974), for example, each of the legs can exist only because it is balanced against the others. That is, if the balance of any of the work’s individual components shifted slightly, the work would collapse upon itself, destroying the entire composition. Again, Calder painted the work pure black to stress the volume of the work and to emphasize the idea of a complete

³⁷ Mondrian, *Natural Reality and Abstract Reality*, p. 39.

³⁸ Joan M Marter. “Alexander Calder’s Stabiles: Monumental Public Sculpture in America.” *American Art Journal*, Vol. 11, No. 3. (Jul., 1979), pp. 75-85.

harmony created by stable pieces. Even the idea of weightlessness exists in *Tom's* as the spaces between the legs and the relatively small area that each leg uses to support itself creates the illusion of lightness in such a heavy work.

Tom's is made of massive sheets of heavy steel that have been affixed to the earth. Any random movement that was allowed in his other sculptures is here abandoned in favor of concentrated gravitational magnanimity. While a few of Calder's monumentals still retain kinetic parts, this monumental is completely stationary. As Calder's art becomes increasingly massive, it begins to take on the "implied" movement and rhythm found in Mondrian's paintings. The legs all appear to stem from a central post. It is as though Calder has taken one of his mobiles and balanced it on its arms. Calder is no longer using dangling shapes, but instead has reduced his sculpture to solid black, perpendicular lines and nothing else. In this way, it is identical to the issues he was grappling with in *Untitled* [1], one of his earliest two-dimensional abstract works.

Calder's monumental sculptures, although immense in scale, are constructed so as not to appear as just hulking sheets of steel. In fact, they appear much lighter and more delicate than they actually are. *Black Beast* (1957), for example, is over six feet tall, eleven feet wide and eight feet long, but it rests on five small, tapered legs. Calder has balanced these heavy metal pieces with careful precision. The weight of the solid steel is placed in just such a way that each layer depends on the others for support. These sheets have been cut to incorporate negative space that therefore creates the illusion of fragility. The cut-outs visually lighten the heavy steel and reintroduce the delicate nature of a hanging mobile.

Although Calder's monumentals are physically the most dissimilar comparison to

Mondrian's rectilinear canvases, the purity of form, color, and line are prominent enough to suggest comparison. The works have not deviated in the slightest from his original abstract oil paintings with regards to upholding Neo-Plastic ideals. Other works maintain these principles even though they were created over thirty years since Calder first entered Mondrian's studio. *Southern Cross* (1963), for example, exhibits the Neo-Plastic foundation Calder learned about in Mondrian's studio. The lines are still perpendiculars; the colors remain primary; the composition is still based on finding relationships through placement of forms. The only fundamental difference between Calder's monumentals and Mondrian's paintings is the shift from the second to the third dimension. In this way, the monumentals are the complete three-dimensional extension of the rectangles on Mondrian's walls. *Southern Cross* offers evidence of Mondrian's influence in all that Calder did. The foundation of Neo-Plasticism and its fundamental objectives remain intact. Calder has taken these ideals to their extreme; he has expressed in monumental sculpture what Mondrian did on canvas.

While the existing scholarship has relied heavily on the link between Calder and Miró, the objective of this thesis was to re-evaluate Calder's works after 1930 and to show that there is evidence of an alternative view. Mondrian's influence strongly underpins the foundation of all of Calder's abstract works. It is true that Miró introduced biomorphic shapes to Calder which he continued to employ in his works, but Mondrian provided Calder with an entirely new artistic lexicon. Calder's first abstract oil paintings can be read therefore as a highly literal interpretation of Mondrian's art, yet the paradigm of Neo-Plasticism continues as Calder's works out its principles in the third dimension. This process was gradual but complete; it began with his reliefs and ended with his

monumentals. As Calder's works grew larger and expanded further into the third dimension, they fully retained the qualities of Neo-Plasticism. When Calder met Mondrian in his Parisian apartment, he was introduced to a new form of aesthetic expression, namely, the abstract. This meeting was a fundamental change in Calder's artistic aspirations, and it not only inspired Calder to work in the abstract idiom, but more specifically, to work with the language of Neo-Plasticism. All of Calder's non-figurative art since his initial meeting with Mondrian was informed by Neo-Plasticism. The achievement of his works must be examined through this lens in order to understand what they truly represent: they are the three-dimensional manifestations of Mondrian's canvases; they are the oscillating rectangles Calder envisioned in Mondrian's studio. These two artists are inextricably linked, and the relationship between Mondrian and Calder examined more closely elicits a better understanding of Calder's abstract program.

However important the influence of Mondrian's Neo-Plasticism on Calder's work is, the fact remains that Calder himself did not espouse a philosophical or theoretical devotion. Rather than addressing the theoretical foundations or inspirations for his work, Calder instead focused his writings and interviews in discussing the practical details of his art: how he constructed his sculptures or where they were displayed, for example. Mondrian, however, was an established member of the Theosophy Society, a philosophical movement using components of various religions to develop an understanding of a spiritual universalism. While Mondrian's strong Theosophical viewpoint is clear from his writings, but Calder rejects such a theoretical underpinning.³⁹

³⁹ Calder was notorious for his hesitancy to discuss the theory behind his works. He once explained this reluctance: "When an artist explains what he is doing he usually has to do one of two things: either scrap what he has explained, or make his subsequent work fit in with the explanation. Theories may be all very well for the artist himself, but they shouldn't be broadcast to other people. All that I shall say here will be

Thus, in the end, a fundamental divide separates these two artists. Mondrian's oeuvre is defined by its relationship to theory. Mondrian was industriously devoted to the uncovering of artistic universals; he denounced naturalistic art because he saw it as imitative, misleading for its false reproduction of the perfection found in nature. Instead, Mondrian searched for a similar perfection, but aesthetic (not naturalistic). Thus, it is perhaps most revealing to see his art as the remnants of this search, evidence of his quest for absolute artistic truth. In this way, is Mondrian's art anything *but* theory?

While certainly not anti-theoretical, Calder's art is not subordinate to the theory which shapes it. For Calder, art is defined not by its theoretical project, but by the unique object-viewer relationship inspired by each piece and by pieces experienced together:

It happens that all those who have something of mine, painting, mobile, or static statue, say that it makes them very happy. For example, children adore mobile statues and understand their meaning immediately. I have seen children, here in France, in America or in Great Britain, run and shout with joy in my exhibitions. They like it instinctively.⁴⁰

It is the experience of the viewer which propels Calder's artistic enterprise. Thus, while Mondrian's art is explicative of his theoretical mission, Calder's art is illustrative of the encounter between audience and art.

This difference, however, between Calder's art and Mondrian's - the artists' distinct intents - does little to negate their stylistic similarities. The aim of this thesis was to develop a deeper understanding of these connections than is currently accepted in the scholarly literature regarding Calder's work. The goal has not been to diminish the importance of Miró, or any other artist, whose influence on Calder is far more documentable, but instead to suggest a new approach for re-evaluating Calder's abstract

about what I have already done, not about what I am going to do." Calder in Giménez and Rower, *Gravity*, p. 49.

⁴⁰ Giménez and Rower, *Gravity*, p. 54.

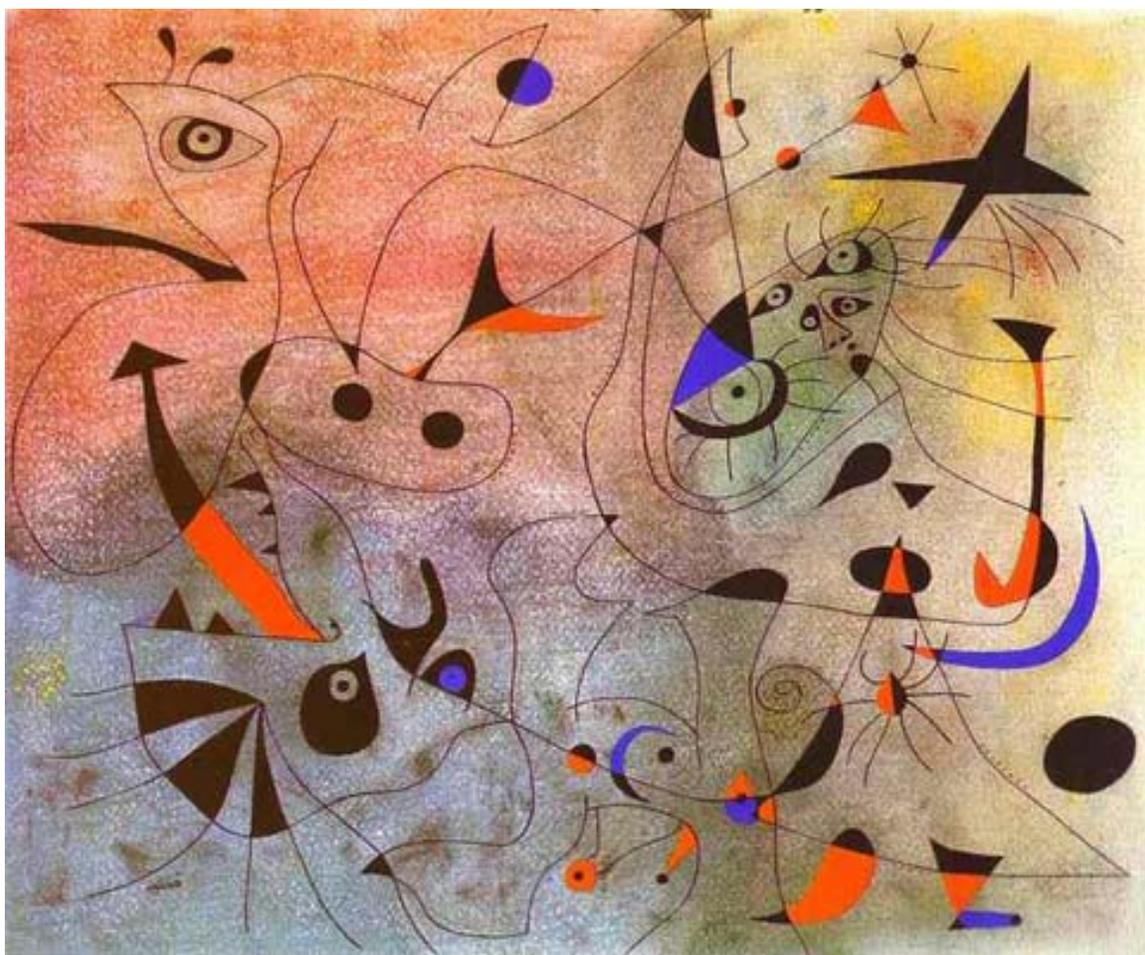
works. While it is commonly agreed that Mondrian was the “spark that started things,” he must also be seen as a significant force behind Calder’s artistic program. If Calder’s art can be seen as being grounded in the theories of Neo-Plasticism, then Neo-Plasticism must also be seen as not limited to painting, architecture, and functional objects. Rather, Calder presents a purely abstract, three-dimensional extension of Mondrian’s two-dimensional paintings. This thesis has not just addressed Calder’s work, however, but also the influence of Neo-Plasticism in the third dimension. It evolved from a comparison of two artists to a complex examination of the theories of both artists and their mutual relationship. This thesis opens a new dialogue for research into both artists and the movements with which they are associated.

Figures

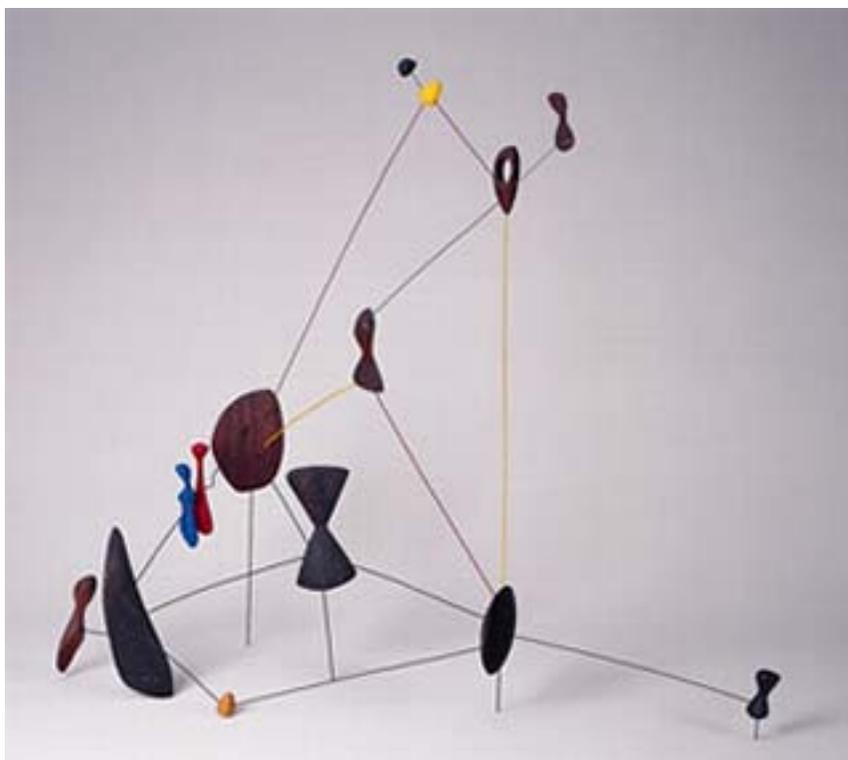


Frans Postma. *26, Rue du Départ: Mondrian's Studio in Paris*
1995

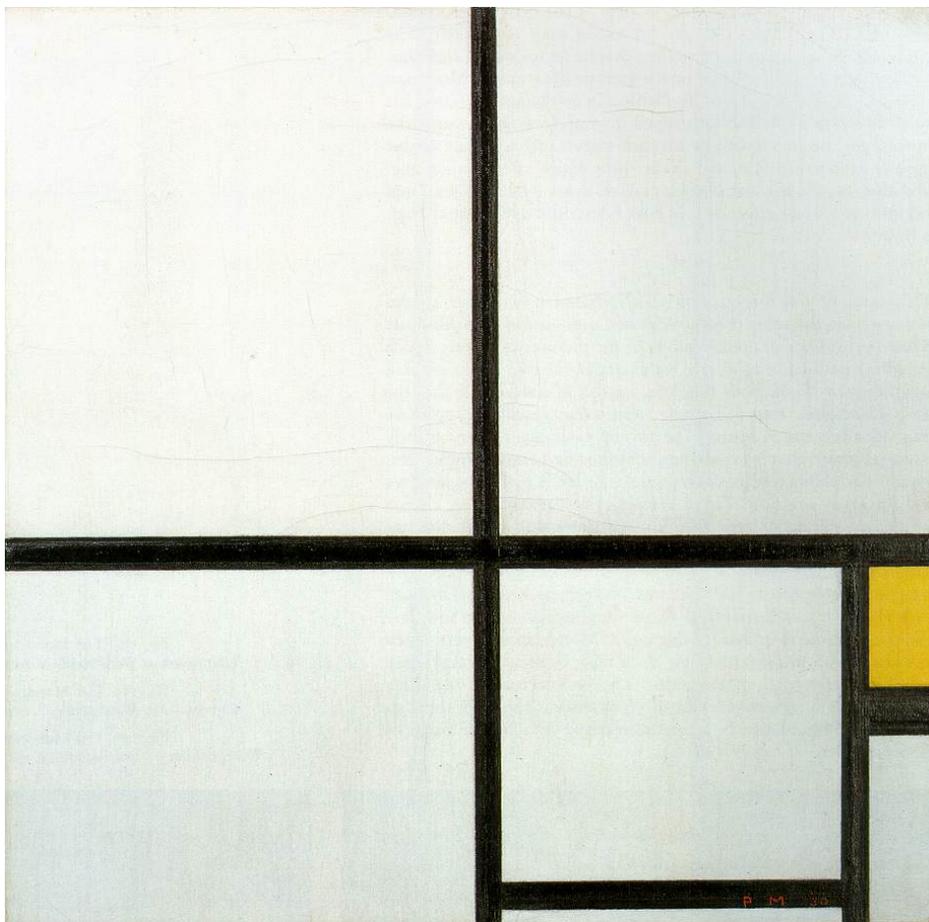
Color reconstruction of Piet Mondrian's studio



Joan Miró. *Morning Star (Constellation)*
1940
Gouache and turpentine paint on paper
38 cm x 46 cm



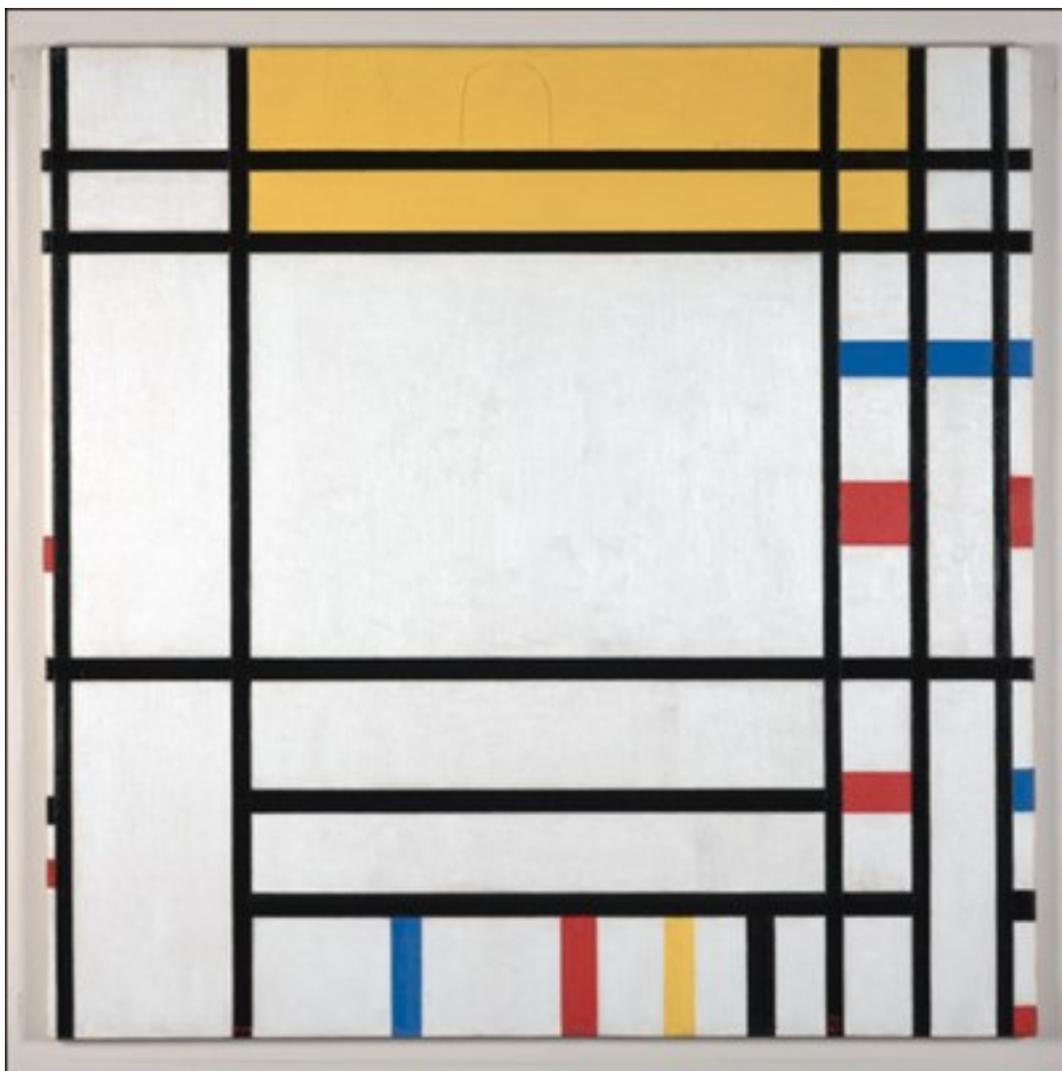
Alexander Calder. *Constellation*
1943
Wood, wire, and paint
33" x 36" x 14"



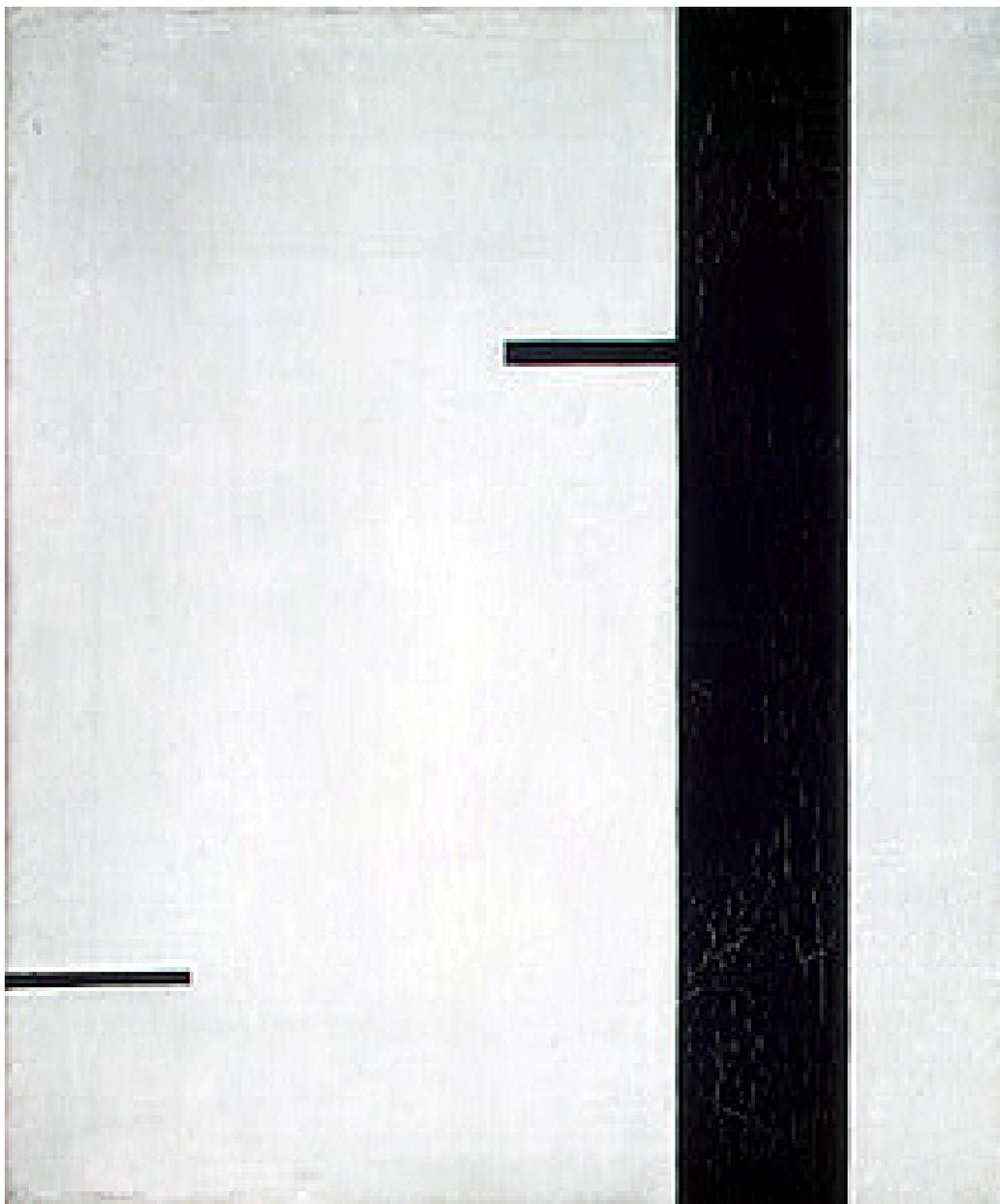
Piet Mondrian. *Composition with Yellow Patch*
1930
Oil on canvas
46 x 46.5 cm



Alexander Calder. *Untitled* [1]
1930
Oil on canvas
21 1/8" x 32"



Piet Mondrian. *Place de la Concorde*
1938-1943
Oil on canvas
37" x 37 3/16"



Alexander Calder. *Untitled* [2]

1930

Oil on canvas

31 ½" x 25 1/16"



Alexander Calder. *Untitled* [3]

1930

Oil on canvas

28 3/4" x 23 3/4"

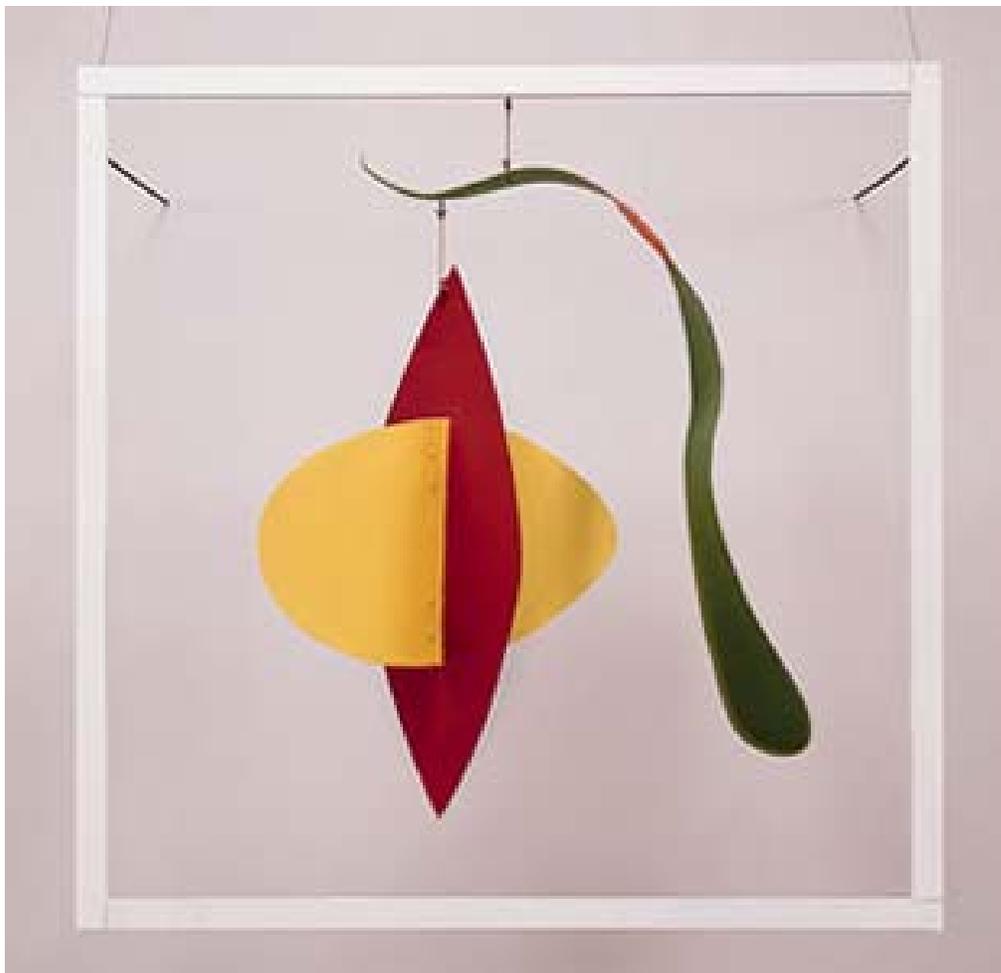


Alexander Calder. *Red Panel*

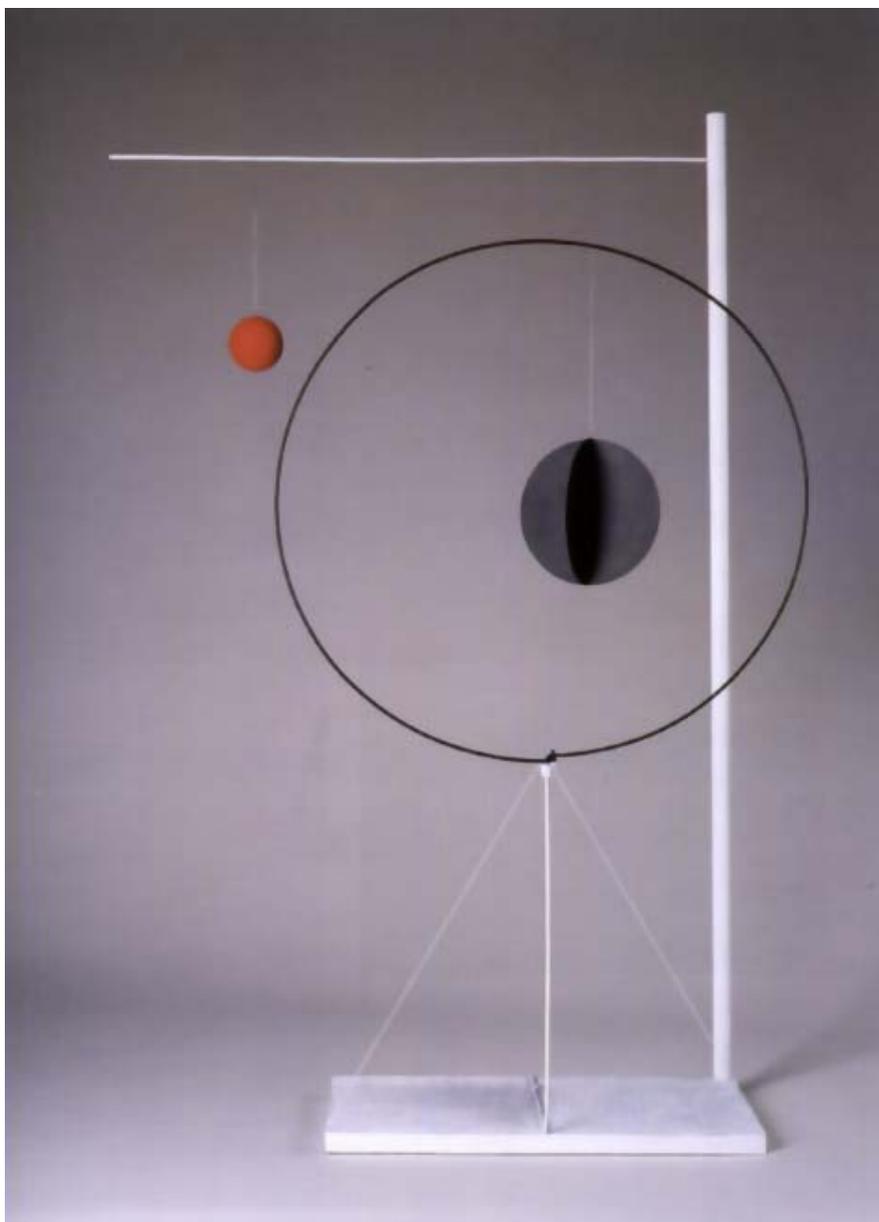
1936

Plywood, sheet metal, tubing, wire, lead, string, and paint

108" x 60" x 45"



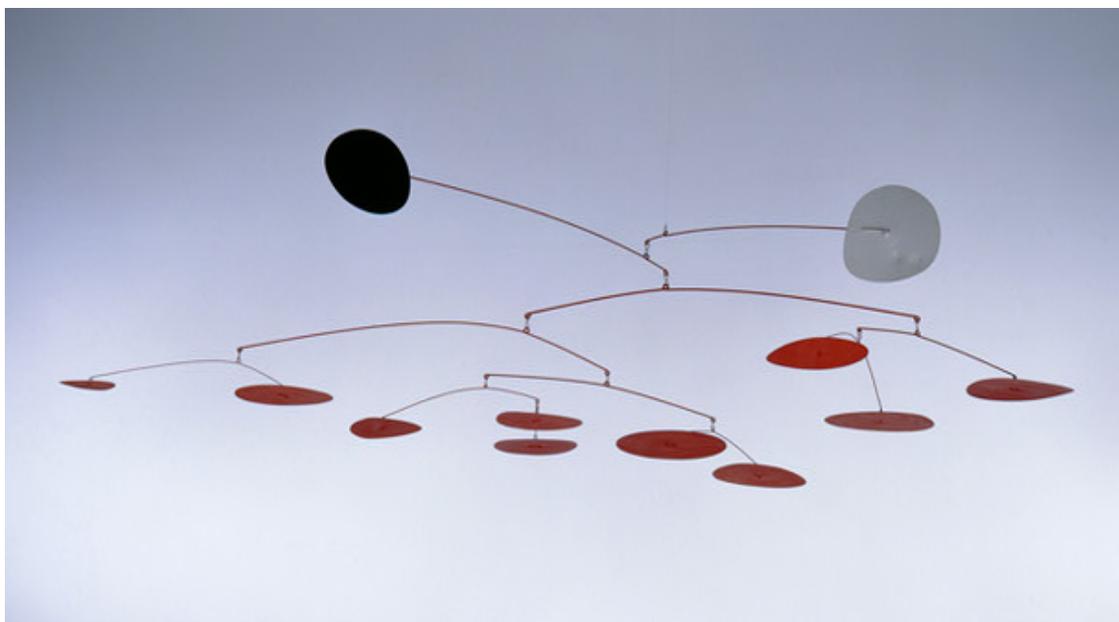
Alexander Calder. *The Snake and the Cross*
1936
Sheet metal, wire, wood, string, and paint
81" x 51" x 44"



Alexander Calder. *Object with Red Ball*
1931
Wood, sheet metal, wire, and paint
61 1/4" x 38 1/2" x 12 1/4"



Alexander Calder. *Cône D'ébène*
1933
Ebony, metal bar and wire
106" x 55" x 24"



Alexander Calder. *Black, White, and Ten Red*
1957
Sheet metal, wire, and paint
33" x 144"

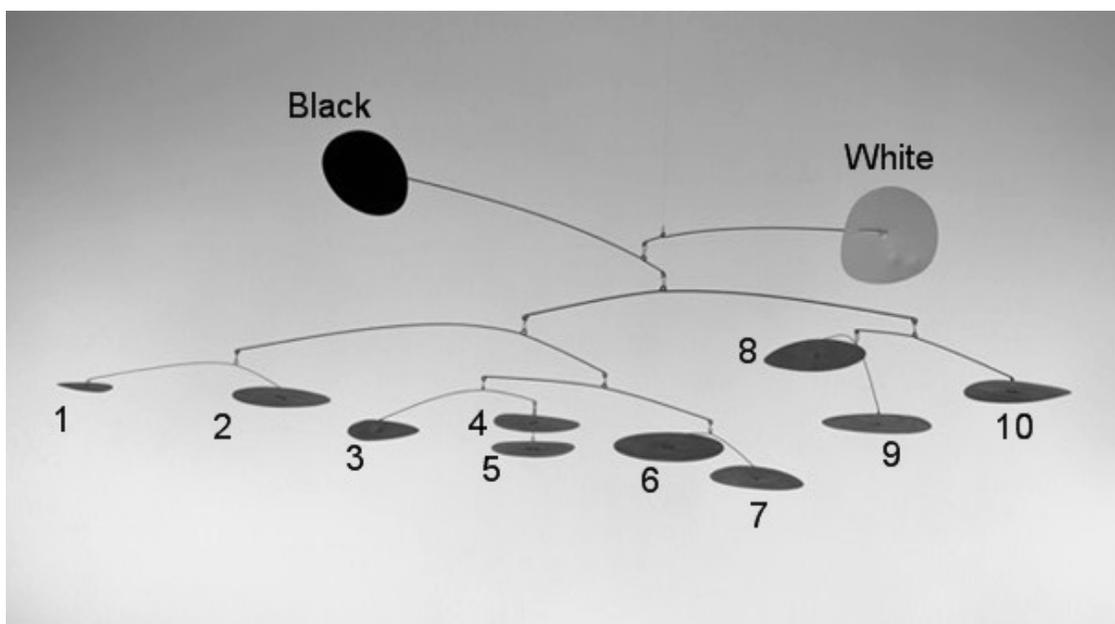


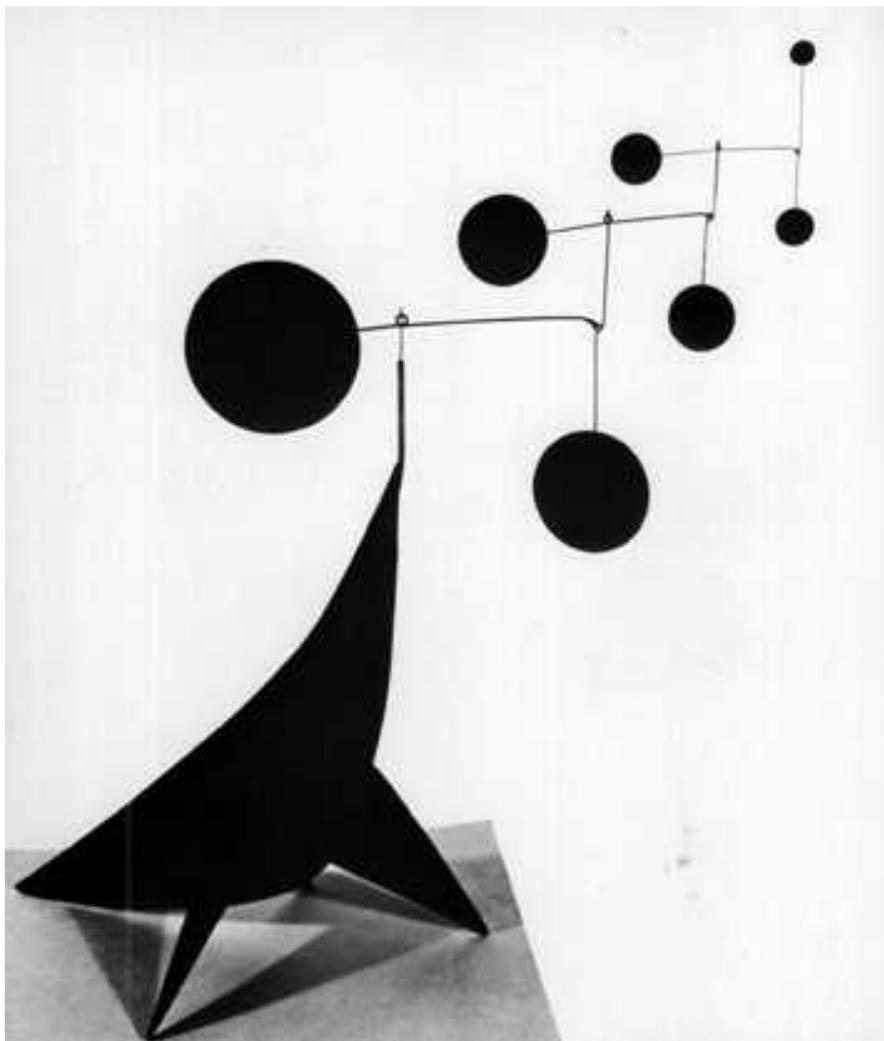
Diagram
Alexander Calder. *Black, White, and Ten Red*
1957
Sheet metal, wire, and paint
33" x 144"



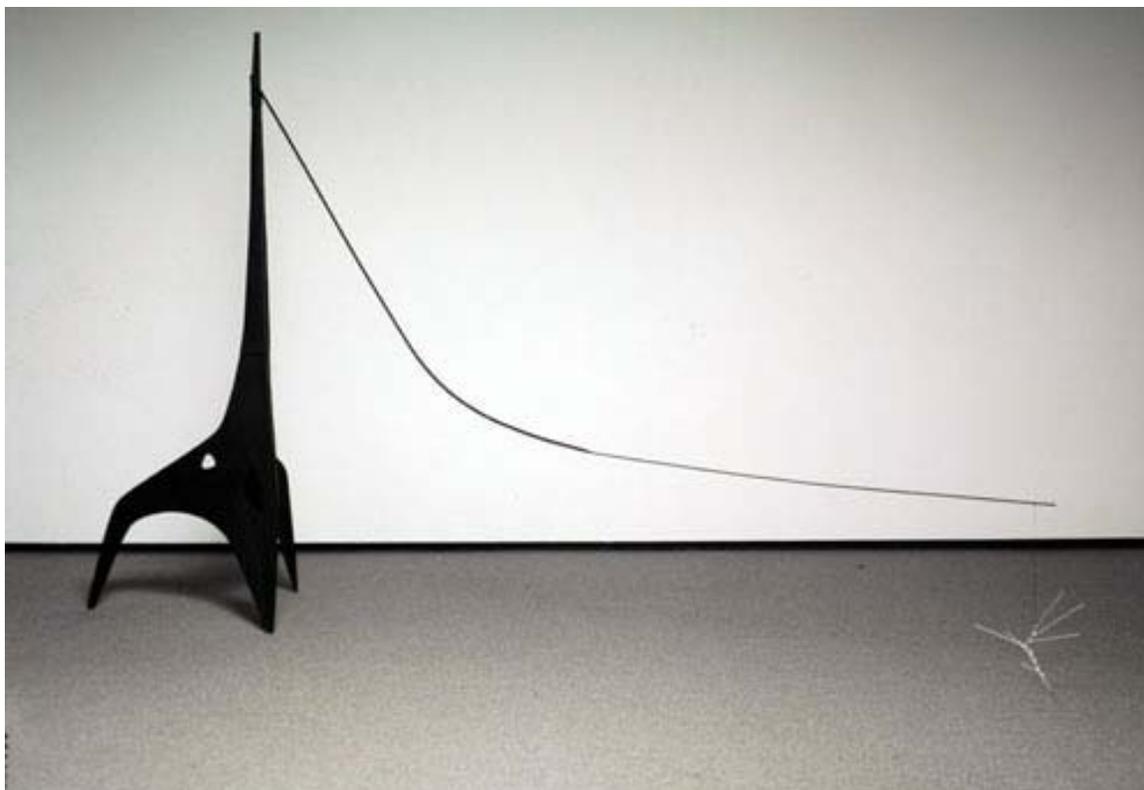
Alexander Calder. *S-shaped Vine*
1946
Sheet metal, wire, and paint
98 1/2 x 69 in.



Alexander Calder. *Little Spider*
c. 1940
Sheet metal, wire, and paint
43 3/4 x 50 x 55 in.



Alexander Calder. *Performing Seal*
1950
Sheet metal, wire, and paint
33 x 23 x 36 in.



Alexander Calder. *More Extreme Cantilever*
1949
Sheet metal, wire, string, and paint
88 x 133 1/2 x 31 in.



Alexander Calder. *Tom's*
1974
Steel plate, bolts, and paint
296" x 216" x 264"



Alexander Calder. *Black Beast*
1940
Sheet metal, bolts, and paint
103" x 163" x 78 1/2"



Alexander Calder. *Southern Cross*
1963
Steel plate, rod, bolts, and paint
243" x 324" x 211"

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