RALSTON CRAWFORD: STRUCTURES OF TIME

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RALSTON CRAWFORD: STRUCTURES OF TIME

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ABSTRACT

Ralston Crawford is an American artist best known for his Precisionist aesthetic style that celebrates the edifices of modern America such as bridges, silos, and grain elevators. Crawford utilized a highly controlled technique in which subject matter was defined by sharp-edged, simplified forms, minimal details, and nominal emotional content. It is less well known that Crawford was a prodigious photographer and produced over ten thousand finished prints, few of which were exhibited in contrast to his paintings. Similar to his paintings, many of Crawford’s photographs are sharp-edged geometric abstractions sparse in contextual or expressive details. Because of this, his photographs form ideal matrices that allow the free exploration of the nature of time. I use Crawford’s examples of photographs contained in the Hallmark Photography Collection of the Nelson-Atkins Museum of Art in Kansas City, Missouri, to characterize time in Crawford’s photographs in four categories: momentary, transitory, impervious, or entropic. That is, time that is either transitory and measured, momentary and instantaneous, impervious and lasting forever, or entropic and chaotic without reason or measure. I apply concepts of time among modern thinkers and photographers active during the onset of Crawford’s career. I use art historical evidence and formal analysis to explore Crawford’s photographs and reason how each of his photographs
expresses a specific “motif” of time. Time that is either transitory and measured, momentary and instantaneous, impervious and lasting forever or entropic and chaotic without reason or measure. Finally, I have included an appendix that briefly explains the neuroaesthetic underpinnings of how the brain sees art and in what way it relates to the interpretation of Crawford’s photography.
The faculty listed below, appointed by the Dean of the School of Graduate Studies, have examined a thesis titled “Crawford Ralston: Structures of Time,” presented by William S. Ritter, candidate for the Master of Arts degree, and certify that in their opinion it is worthy of acceptance.

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RALSTON CRAWFORD: STRUCTURES OF TIME

Ralston Crawford is an important American artist whose career extended through the second and third quarters of the 20th century. He is an important bridge between various areas of American art, including Cubism, Precisionism, and American Abstract. He was influenced by European Modernist artists such as Picasso, Cezanne, and Matisse, but unlike European artists, his art was more centered on things rather than abstract concepts. He interpreted the European concepts in a distinctly American style, never divorcing the subject from the composition. This theme resonates in both his paintings and photographs, which visit architectonic structures of modern America.

Crawford is best known for his Precisionist aesthetic style that celebrates the edifices of modern America. Crawford’s paintings feature such structures as silos, storage tanks, bridges, and grain elevators. It is less well known that Crawford was also a prodigious photographer. Although during his career he produced over ten thousand finished prints, in contrast to his paintings, few were exhibited. The study of the photographs is a relatively new area of investigation. Many of Crawford’s photographs highlight architectonic constructs celebrated in his paintings. We will examine the structures featured in his photographs and use them as matrices to explore various concepts and structures of time.

The creation of a painting occurs over what we call “measured” time; it is a process that calls for the artist to modify his or her work prior to its completion. In contradistinction, photographs are “time-based” in that an image is often captured in a fraction of a second. They are always created in the present; however, the impressions of photographed forms have myriad effects on the viewer. For example, images appear to suspend time, halt the passage of time, capture instants or slices of time, or make time eternal, and they convey all
manner of other visual reactions. In this essay, I investigate how Crawford’s photographs contained in the Hallmark Photography Collection of the Nelson-Atkins Museum of Art, Kansas City, Missouri, can be seen as characterizing time, resulting in four distinct categories: momentary, transitory, impervious, or entropic time.

In this study, my discussion of time in Crawford’s photographs are placed in context by a brief biography, an overview of his photographs recently collected by the Nelson-Atkins Museum of Art, and some observations in general about the relationship between his photographs and his paintings. Next, I review concepts of time among modern thinkers prevalent during the outset of Crawford’s career. Following that, I apply concepts of time to photography and suggest that Crawford’s photographs can be seen as communicating four distinct motifs of time. Finally, I have included an appendix that briefly explains the neuroaesthetic underpinnings of how the brain sees art and why Crawford, consciously or not, exercised various modern concepts of cognition in creating his art.

**The Nelson-Atkins Collection**

A significant collection of Ralston Crawford’s photographs that encompasses his entire career was recently acquired by the Nelson-Atkins Museum of Art. Senior curator of photography Keith Davis has long championed Crawford’s work, including an introduction written for a Crawford exhibition titled *Abstracting the Vernacular* held at the Laurence Miller Gallery in New York, November 2–December 30, 1995. In 2005, Davis was instrumental in the acquisition of six Crawford prints received as a gift of Hallmark Cards, Inc. Additionally, in 2015, under an agreement with Crawford’s son Neelson, Davis

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acquired 125 of Crawford’s photographs, forming a unique collection with full range of the artist’s repertoire, many of which had not previously been on public display. The collection is an especially rich source for those wishing to achieve in-depth knowledge of Crawford’s photography. Subject matter includes docks, rock formations, and architectural fragments of urban life. There are photos taken during Crawford’s travels, which include bull fights and religious ceremonies. The New Orleans music culture of the 1940s–1960s is vividly displayed with photographs of parades, funerals, church services, night clubs, streetscapes, signage, and portraits of local musicians and bands. Many of the photographs correlate formally with Crawford’s paintings, but Crawford believed that photography was an artistic medium in its own right. Crawford had the unique capacity with both his paintings and photographs to visualize common subjects as arrangements of flat, carefully-balanced planes and sharply-lined contours.

**Ralston Crawford**

Ralston Crawford (1906–1978) (Figure 1) was born an American citizen on September 25, 1906 at Saint Catharines, Ontario. His father was a ship’s captain, and Crawford grew up along the Great Lakes and enjoyed being on the water during voyages aboard his father’s ship. His earliest memories were images of shipyard dry docks, grain elevators, and the austere expansiveness of open water. The close connection to the sea lasted his entire life and had a profound influence on Crawford’s work and choice of subject matter. With the sea in his blood, Crawford became a restless, constant traveler both in his own country and throughout the world. Crawford was an indifferent student, but he took a

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special interest in art. His teachers believed that Crawford had talent and encouraged postgraduate work while in high school. At age twenty, Crawford became a merchant seaman and signed up on the L’Perla, a banana boat that sailed the Americas, ending up in Los Angeles in 1927. With the support of his sister, Jessie, Crawford commenced formal art studies and spent two terms at the Otis Art Institute in Los Angeles while also working part-time as an illustrator for Walt Disney. Because of the commercial art’s “lack of idealism,” Crawford moved on to “fine” art and became a painter.

Always with the desire to travel, Crawford next entered the Pennsylvania Academy of Fine Arts located in Philadelphia, Pennsylvania, where he spent three and a half years refining his painting skills. The Pennsylvania Academy encouraged a conservative, representational approach to art, but while there, Crawford was influenced by his mentor, Hugh Breckenridge, who upheld the case for modernism. Breckenridge did not preach a specific style but insisted on a balance between intelligence and emotion, characteristics that Crawford would uphold throughout his career. Crawford was torn between his father’s sobriety and his mother’s sentimental impulses. He had a lifelong obsession with control, for fear that his emotional side would betray him. “I am long on feeling, and a lot of discipline or steering of that feeling is necessary.” The key bibliographic sources for Ralston Crawford are William Agee and Barbara Haskell.

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By studying the local collections of Earl Horter and Dr. Albert C. Barnes, Crawford would receive extensive in-depth exposure to modernist art. Horter had assembled an impressive collection of assorted art, including twenty-two Picassos and works by Braque and Matisse. He also displayed the work of two Pennsylvanians, Charles Sheeler and Charles Demuth. These artists, with their architectural subject matter, sharp flat planes of color, and smooth paint handling, would influence Crawford’s later pictorial choices. Dr. Barnes’ collection included over seven hundred Post-Impressionist works of art. Barnes was one of the few champions of formal analysis, emphasizing the importance of line, color, and space. Barnes’ analytical approach appealed to Crawford’s desire for order and formal relationships. Crawford especially admired Cézanne, with his reduction of architectural forms and planes and his fracturing and flattening of the picture plane, resulting in the transformation of three-dimensional space into the two-dimensional space of the picture plane. Throughout his career, Crawford would emulate this approach in both his painting and photography.

In 1931, Crawford left Philadelphia for the excitement of New York. He experienced financial difficulties, but slowly advanced his mode of simplification in his portraits, landscapes, and interiors. By 1934, Crawford created his first paintings that featured a sharp-edged planar style similar to Precisionists Charles Sheeler, Morton Schamberg, and Charles Demuth. During this time, Crawford married Margaret Stone, a sculptor who came from a wealthy Delaware family. Stone’s family financed a six-month trip to Europe and supported Crawford’s developing career. Unfortunately, marriage to Crawford was not easy, mainly because he was more interested in being an artist than a
provider and had little regard for sentimentality. The marriage was pushed over the edge by the stress of caring for a disabled son, with Margaret asking for a divorce in 1939.

This established a pattern prevalent throughout Crawford’s lifetime, where he would associate himself with wealthy women who would finance his extensive travels, taste for fine wines, and tailored English suits and sports cars, despite receiving a minimum of emotional support. Crawford married Peggy Frank in 1942, the financially and socially well-placed vivacious co-founder of The Cincinnati Modern Museum of Art. Peggy shared Crawford’s enthusiasm for art. They had two sons and a compatible marriage until Crawford’s constant travels led to a separation in 1970. During the last years of his life, Crawford enjoyed the companionship of Mrs. Bonnie Nelson, and with members of an exclusive New York club called The Century Association.

By the late 1930s, Crawford had achieved a degree of success, with several solo exhibits at important galleries in New York. His success was achieved by employing a sharp-edged Precisionist aesthetic that celebrated American architectonic structures. In 1938, Crawford turned to photography as a means of further extending his visual experience. He used photography to set the stage for his paintings, but soon became skilled with this new medium and employed photography as a stand-alone art form and as a means of escaping the pressure of the art market that demanded he paint “the same old thing.” Starting in the 1940s, Crawford’s paintings became progressively more abstract. He pushed himself to avoid a set formula or a settled look. He constructed a painting by the use of autonomous abstract planes and shapes distilled from architectural structures that approximated the style of Synthetic Cubism. Crawford’s artistic development was interrupted by World War II. At age 36, Crawford entered the Weather Division at the Army Air Force Headquarters in
Washington, D.C. With his assignment as the Chief of the Visual Presentation Unit, he personally observed the devastation of war. In order to draw accurate weather maps, Crawford visited plane crashes and bombed areas. Immediately after the war in 1946, he observed an atomic bomb explosion staged at the Bikini Atoll in the Marshall Islands. Crawford seemingly responded to these scenes of violence by altering his post-war pictures from the controlled and orderly to the chaotic. He incorporated multilayered elements of jagged edges and twisted, disjointed lines illustrating the destructive nature of war, culminating in a series of abstractions illustrating the Bikini atomic bomb blast. Crawford’s paintings would more or less continue in a similar abstracted mode for the rest of his career, except for an occasional revisit to an earlier Precisionist aesthetic.

Unlike his paintings, Crawford’s photography was horizontal in format and followed no set stylistic progression or pattern. It was more closely aligned to direct, personal observations gained through extensive travel. Similar to his paintings, many of Crawford’s photographs featured architectonic structures; but in contrast to his paintings, Crawford’s photographs of architectonic structures were actual lived experiences. As with his painting, Crawford’s approach to photography was cool and controlled. Many times, he would take a roll of film seeking to find the one “final” answer. However protracted his method might have been, Crawford’s photographs always captured and recorded a segment of “real” time. Crawford stated, “My pictures mean exactly what they say.”

What Crawford’s photographs say about time is open to speculation and subject to multiple interpretations. Nonetheless, by use of formal analysis and knowledge gained from the scientific and humanistic approaches to time, I use Crawford’s photographs as scaffolds
to explore the structure of time which I have divided into four “motifs”: momentary, transitory, impervious, and entropic.

Prevalent Thoughts about “Time” during the Early, Formative Years of Ralston Crawford’s Career

Time is a concept that is always on our mind. When should we eat and when should we sleep? It determines how we will organize our day or coordinate a career. Time enters into every aspect of life. Does time come to meet one and pass one by – an infinite succession of nows – or is time given all at once and moves within a predetermined trajectory? Are humans a rock in a stream or are they the stream that moves over the rock? Throughout history, philosophers and scientists have had a fundamental interest in the nature of time.

At the onset of Crawford’s career, two of the century’s most famous modern thinkers met for a supposedly cordial and scholarly event. On April 6, 1922, Henri Bergson (1859–1941 (Figure 2) a French philosopher, and Albert Einstein (1879-1955) (Figure 3), the renowned German theoretical physicist, joined in a debate about the nature of time.6 Bergson believed time was immeasurable and part of human nature or “soul,” while Einstein, the scientist, was convinced that philosophers had a harmful effect on the progress of scientific thinking by removing certain fundamental (measurable) concepts of science from the domain of empiricism to the intangible heights of the a priori. To most observers, Einstein won the debate, and as a result, during Crawford’s life, time came to be considered a physical and not a psychological event. Following World War I, American industry, driven

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by scientific discoveries and superior engineering skills, dominated the world’s economy. Crawford lived in a time when a humanistic (Bergsonian) approach to time was waning.

Science is deductive, asks where, relies on scientific data, requires third person verification, and deals with general principles. The humanistic approach to time is inductive, asks why, uses metaphors, and deals with higher-level metaphysical questions. The relevance of philosophy declined with the rising influence of science. Today, a scientific approach has even invaded the art world. Neuroscience is attempting to demonstrate how the brain sees art from a physiological standpoint. Some fear that neuroaesthetics “will explain away” art, totally eliminating a humanistic interpretation. Many scholars, such as Irving Massey, believe there is an unbridgeable divide between the scientific and humanistic approaches to the perception of knowledge, including time. The former requires rationalism and the latter requires intuition. I argue that photography rather uniquely does bridge the divide between science and art, and photographers such as Ralston Crawford, consciously or not, employ a combination of “science” (technical expertise) time and “art” (human insight) time when creating their work. We next explore concepts that come to bear on our perception of time.

The Greek philosopher Plato (428–348 B.C.) was one of the first thinkers to speculate about the character of time. Plato believed in a sensible, temporal world characterized by a timeless present. Time to Plato was independent of events that occur in time. “Platonism with Respect to Time” or “Substantivalism in Respect to Time” is the view that time is like an empty container into which things and events can be placed. It is a

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container that exists independently of what, if anything, is placed into it. If time exists autonomous to events, it could be possible for there to be a period of time during which nothing changes except for the pure passage of time itself. Ralston Crawford first started taking photographs in approximately 1938. By our calculations, that was approximately eighty years ago, but if all events ceased to exist at some point during that time span, we would have a period of empty time or “time freeze,” and Crawford’s photographs could be one hundred or even ten thousand years old. We would have no way of detecting empty time or knowing of its existence or its length.

Presentism is the view that only objects in the present exist. It is a theory that focuses on the temporal present: time only exists in the present moment. So long as an object or event which is spatially distant from us exists in the present moment, then it exists. The Taj Mahal and Grand Canyon exist, but Socrates and Ralston Crawford do not exist because they are not present in the present moment. Crawford’s photographs remain real, but Crawford himself is unreal since he lacks the property of being temporally present. According to this line of reasoning, Crawford’s photographs are a point in the present. If the events of the past are unreal, then what do photographs actually show? Crawford’s photographs can be analyzed in the real now which would be akin to formal analysis, but the art historical observations would not exist from the Presentism viewpoint, since his photographs do not have a physical basis in a non-existent past, and would have no value in influencing a non-existent future.

Plato’s student, Aristotle (384–322 B.C.) looked at things in a different way. Aristotle argued that time does not exist independently of events that occur in time. This view is called “Reductionism in Respect to Time,” or “Relationism in Respect to Time” and
argues that time can be reduced to a dialogue about temporal relationships among things and events. To Aristotle, time was not a dot as in Presentism, but a continuum represented by a line with no beginning or end. Aristotle maintained that time cannot have a beginning or end because in order for time to have a beginning, there must be a first moment in time. But in order to count as a moment of time, it would have to come between an earlier period of time and a later period of time, which would be inconsistent with it being the first moment of time. Aristotle’s argument speaks to Eternalism, which is a philosophical theory that articulates that all points in time are equally real. The past and the future exist as much as the present. We may not be able see the past or the future at the current moment, and they might not be in the same space-time vicinity, but they should be listed as things that exist. According to Eternalists, time flows from the present moment moving forward into the future, leaving the past behind, but if there is no beginning or end, should time be represented by a single line with each moment of time standing in temporal relations with its own time stream, or are there manifold time streams with multiple lines, branches, closed loops or discontinuous lines? If Presentism is true, then neither the past nor future objects exist, and there could be no time streams, and it would be impossible to travel to the past or future. But scientists actually believe the laws of physics allow for time travel, which in turn validates the past, present, and future, allowing Ralston Crawford’s photographs to be viewed from various topologies of time.

Common sense asserts that the basic things in the universe are ordinary objects, like golf balls, trees, and human beings. These objects persist at one moment and the next and so on. Physicists argue that Einstein’s Special and General Theory of Relativity suggests that the world does not consist of persistent objects, but a series of events. Special relativity says
that observers with different frames of reference moving at different speeds can have
different perceptions whether a pair of events happened at the same time or at different
times. Someone moving faster than another person would experience time passing slower
and vice versa. The present is not absolute, but depends solely on the frame of reference.
Time becomes a dimension intertwined with the three dimensions of space (space-time). The
past, present, and future depends solely on your position in space-time. Time becomes part
of the structure of the universe. Since distinctions between the past, present, and future are
illusory, we can think of all objects and events as being timeless and eternal. Consider a roll
of film shown in the cinema. Each still photograph on the reel is a picture of an event in a
particular time and place. The photographs don’t change, but the sequence creates an
illusion of motion. In reality, there are only unchanging events in fixed sequences giving the
illusion of motion, change, and the persistence of time. An enduring object is sometimes
called a “space-time worm,” because it is a consecutive series of events snaking through
time and space.

Einstein believed that time was relative and distinctions between past, present, and
the future were illusionary. J.M.E. McTaggart (1866–1925) argued that there was no such
thing as time at all, and that “the appearance of a temporal order to the world is a mere
appearance.” McTaggart was a Cambridge philosopher and Idealist, and in 1908, three years
following the introduction of Einstein’s papers on special relativity, he published “The
Unreality of Time,” which questioned whether the world was really a four-dimensional
block universe. He debated the question that if time is a spatial dimension, was there a
process whereby one thing could become another. He made two divisions: A-Series events
have the property of being past, now, or future, and these properties determine their position
in time and are subject to change. He continued that B-Series events are linked in a chain by earlier-than and later-than relations, and this linked chain is the order of time. These relationships are permanent. McTaggart offered a phenomenological analysis of the appearance of time in terms of his A and B Series. He argued that the B-Series is unsatisfactory since it links time in a fixed sequence and does not allow an adequate explanation for a change of time. The A-Series contains change and is more likely to be an adequate conception of time, but is contradictory since a thing or event cannot simultaneously be past, present, and future. Since the A- and B-series exhaust the possibilities of how reality can be defined as temporal, McTaggart argued that time does not exist.⁸

What is apparent from the theoretical arguments illustrated above, is that time is difficult to define. Human geographer Yi-Fu Tuan (1930 –) in his book *Space and Place* (1977), stated that how time and place are related is an intricate problem. If time is conceived as flow or movement, then place is a pause.⁹ With this view, human time is marked by pauses, just as theoretical time may be represented by a line, circle, or a four-dimensional universe. Tuan contended:

Place is an organized world of meaning, it is a static concept. If we see the world as constantly changing we could not establish a sense of place. While it takes time to form an attachment to place, the quality and intensity of experience matters more than simple duration. A rooted community is unlikely to have museums and societies for the preservation of the past. The effort to evoke a sense of place is conscious and it is the mind at work, and the mind – if allowed its imperial sway – will annul the past by making it all present knowledge.

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Tuan takes a humanistic approach to time – a time that is not empirical but is felt. As discussed, there are two basic pathways in dealing with the concept of time. One is a scientific approach, which depends on the collection of measurable data and third-party verification. The other depends on human intuition. Henri Bergson was one of the most famous and influential French philosophers of the late nineteenth and early twentieth centuries. Although he lost the debate with Einstein, his writings have had a profound effect in the development of modern art. Bergson is best known for his work *Creative Evolution* (1907), in which he separated intellectual modes of inquiry from the faculty of intuition. To Bergson, intellectual inquiry (time) is a conception of the natural sciences and mathematics. It is symbolized by a unit of measure (clock) and extends into the future as a homogenous medium (years, hours, feet, etc.). Bergson believed symbols do not adequately express our inner experience of time, which is felt and not measured. The intellect distorts our experience of the world and cannot grasp the inner temporal life of things. In *Creative Evolution* Bergson stated,

> The existence of which we are most assured is our own, for all other objects that we have are notions that are superficial, ours are internal and profound. There are two ways to know a thing. The first stops at the relative–outside of an object. The second attains the absolute-inner being states of soul. I am in harmony and enter into them by an effort of imagination.

Bergson separated the intellectual (measurable) perception of the world from intuitive (unmeasurable) perception of the world. To Bergson, intuition is the soul’s inner force called duration. Duration (*duree reelle*) is lived time. It can only be shown indirectly through images that can never reveal a complete picture. Bergson, in his analysis of consciousness, declared:
In reality, the past is preserved by itself, automatically. In its entirety, probably, it follows us at every instant; all that we have felt, thought and willed from the earliest infancy, there, leaning over the present which is about to join it... Our past, then, as a whole, is made manifest to us in its impulse; it is felt in the form of tendency although only a small part of it is known in the form of ideas.

Thus, the past is extended into the present and there is a never-ceasing conjunction of the past with the present; hence the spontaneous heterogeneity and unforeseeability of duration.

There is a continuous present, and conscious experience is explained exclusively in terms of the past, which somehow is automatically prolonged in the present by the ineffable process called duration. Bergson concluded so far as consciousness is concerned, to exist means to endure, and to endure is to be a

qualitative multiplicity, with no likeness to number; an organic evolution which is yet not an increasing quantity; pure heterogeneity, within which there are no distinct qualities. Duration is the stuff out of which conscious existence is made; for a conscious being, to exist is to change and to change and duration can only be a process which emerges continuously in the absolute new. This conception of duration, Bergson feels, is strengthened by other considerations. If time is thought of as real, the new must be ever-springing and the forms that arise must be essentially unforeseeable, otherwise, time is only a repetition and not in any sense a reality.\(^\text{10}\)

In September 1914, Scottish philosopher G. Watts Cunningham (1881–1935) presented a paper in the *Philosophical Review* titled “Bergson’s Conception of Duration.” Cunningham asserted that for the future to succeed, it is not determined by the present moment. Bergson said duration is heterogeneous because each conscious state is an original element in a no less original history. Watts argued that man’s purposes are largely instrumental in what he observes in the world around him. Forward-reaching aspects of

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consciousness demand a meaning, a logical purpose in order to identify between earlier and later stages of experience needed for a continuous cognitive experience. Conscious duration must be more than memory overflowing into the present. Bergson asserted the past is made manifest to us in its impulse; it is felt in a form of tendency. Watts replied that consciousness involves an end, and conscious experience must in some real sense be anticipatory. Bergson saw the past as an “organic whole” active in the conscious present; Watts countered that the future must be operative in the present. The anticipatory aspect of consciousness cannot be ignored. Personal experience is forward-reaching and subject to never ceasing change and is not wholly blind and uninterested in its change. One essential characteristic is its anticipatory nature and a tendency to become not just anything but something. To summarize, Bergson identified time as an amalgam of the past overflowing into the present and the source of deep-seated spontaneous ineffable creativity. Watts conceived of time as a linear process where the past and future conjoin to create a premeditated present.

Modernists interpreted Bergson’s duration as the “inner” creative force; a special capacity of entering into an intuitive experience of the world that “lifts the veil” of pragmatic concerns to reveal an inner élan vitale; a true spontaneous generation of art. Modernists wished to justify their aesthetic innovations by declaring them to be a product of their duration (duree), and thus, in line with the creative force of past innovators who remained true to their intuitive abilities. Classic Greek and Renaissance art was created by scientific reasoning, resulting in the development of a vanishing point and other memetic

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devices that cohered with intellectual (measurable) concepts of time. Italian Futurists
employed the Bergson concept of duration as a way to sweep away measurable time in order
to revolt against the past in all its forms. Futurist artist Umberto Boccioni (1882–1916)
described Futurism as anti-rational and spontaneous avant-garde force which must liberate
the world of its rational past.\(^\text{12}\) Boccioni’s pictorial formula consisted of spontaneous “force
lines” seen emanating from *Unique Forms of Continuity in Space* (1913) (Figure 4) that are
unfettered by the limitations of three-dimensional space or measured “clock” time. “Force
lines” were intended to galvanize the intuitive capacities of the spectator and draw him or
her into a durational dynamism, and in the case of Futurism, a national revolution.\(^\text{13}\)

Time can be envisioned as a point, a line with a series of temporal events, the fourth
dimension of space-time, or as in McTaggart’s case, not existing at all. Intuition assigns time
as an unmeasurable duration expressed as the élan vitale. Wassily Kandinsky (1866–1944),
in his treatise *Concerning the Spiritual in Art* (1912), found time not only to be a life force
but a spiritual force represented as a triangle that moves slowly onwards and upwards
striving towards the abstract; the non-material. Kandinsky stated,

> In every segment of the triangle are artists who can see beyond the limits of their
segment and are prophets to those about him. Every segment hungers consciously
and more often unconsciously for their corresponding spiritual food offered by artists
who create by the expression of their inner soul. Every human who steeps his or her
art in the spiritual possibilities of his art is a valuable helper in the building of the
spiritual pyramid which some day will reach to heaven.\(^\text{14}\)

\(^\text{12}\) Antiliff, “Creative Time,” 58.
\(^\text{13}\) Vivien Greene, ed., *Italian Futurism 1909-1944: Reconstructing the Universe* (New York: Guggenheim
\(^\text{14}\) Wassily Kandinsky, *Concerning the Spiritual in Art* (London: Constable and Company Limited, 1914), 10–
20.
Kandinsky was an admirer of Mme. Helena P. Blavatsky (1831–1891), a founder of the Theosophy Society, whose members seek to approach the problem of the spirit by way of inner knowledge possessed by sages called Masters, who have access to eternal truths. According to Blavatsky’s teachings, many of the world’s religions have their origin in a universal ancient religion called the “secret doctrine,” and were known to Plato and early Hindu sages. The inner truths are timeless, promoting that the universe is an outward reflection of the universal Absolute.\(^\text{15}\) Ralston Crawford’s photographs are motifs of time that convey the various concepts of time as outlined above. As we shall see, his photographs are amalgams of time that intellectualize time as being external and material, internal and durational and spiritual and universal.

**Photography and Time**

**The State of the Medium at the Onset of Ralston Crawford’s Career**

Photography is a time based medium – the first to picture time. It provides a representation of the temporal interval in which it is made. The goals of photography in respect to time are to 1) create a “sense” of time, and 2) represent time as an abstract philosophical concept. Joanna Lowry in “Time and Photography” (2010) stated that photography’s relationship to time is complex and may be approached from two different viewpoints. On one hand, photography could be considered a “technology” producing a very distinctive set of signs, and these signs are intrinsically related to the stopping of time through the operation of a shutter mechanism and the chemistry of the darkroom. On the other hand, photography can be thought of as a “medium” that is engaged with the production of photographs as aesthetic visual objects that render the concept of temporality

in some meaningful way. Photographs can suspend time, show the passage of time, capture moments of time, make time eternal, or even suggest the end of time. Since the speed of light is not infinite, but limited to 186,000 miles a second, we never see the exact now, and when we view a printed photograph, it is always an image of the past. As French philosopher Roland Barthes (1915-1980) explained,

The present of physical reality is the infinitely thin membrane that separates all we know (the past) from what we portend (the future). There is, in short, a gap between an event and our knowing or observing it. The gap is one of distance and time. It is built into the physiology of our bodies. It is the gap issuing from the finite velocity of light. That gap is the punctum. The gulf that remains between the photograph’s spectrum and its spectator.

In the early years of photography, the temporal unit of time recorded on film was quite long. Extended exposure times obliterated anything that moved and the subjects being photographed, many times appeared tense due to having to stay still for several seconds or more. Walter Benjamin (1892–1940) in “A Little History of Photography” (1931) spoke to the long exposure times that sitters had to suffer through during the early years of photography; that their apparent discomfort inscribed the element of duration into the photographic image. The imposition of the technology of photography upon the subject – its demand for an extended pose – inadvertently exposed a deep subjective relationship to time and duration. This subjective duration, imposed by technology itself, was eliminated by shorter exposure times.17

The development of the dry-collodion process invented by Richard Maddox (1816–

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1902) in 1871 and lenses that better concentrated light reaching the photographic plate, allowed moving objects to be recorded as “snapshots” of time. The Lumieres brothers, Auguste (1862–1954) and Louis (1864–1948), with their Cinematagraphe, transformed the photographic relationship to time and spectator by projecting moving objects in full flight onto a screen. Photography offered a new way for the spectator to think about the photographic image and time. An instantaneous photo implied the notion of “the event,” something has happened. A technological construct of time replaced the discursive narrative. Photographs embodied a reality apart from what the mind ordinarily perceives.  

Pioneers such as Eadweard Muybridge (1839–1904) and Etienne-Jules Marey (1839–1904) continued photography’s quest for arresting time by inventing devices which permitted images to be taken in rapid succession. Their work allowed for the recording of the duration of an action, a duration that could then be dissected with the use of sequential photographs into successive moments of time. Each moment of time was recorded individually or superimposed in a blurred progression of images used by such Italian Futurist photographers as Anton Giulio Bragaglia (1890–1960) (Figure 5) to represent the dynamic movement of time. As technology advanced, the moments of time in a recorded duration have become shorter and shorter and now approach one-third of a microsecond. Even so, there still always is a time gap between the “event” (zero time) and the observer. This is the point at which the object gazes back, stands, from this perspective, outside time. Roland Barthes maintains that photography is a carnal sharing directly with the subject, a direct relationship to the physical reality. The light that emanates from the subject is the

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same light that creates the latent image on the photographic plate. The photograph is a picture of the radiant event before the camera and cannot be bound by the usual understanding of time. It is the existential replication by infinite repetition of something that occurred only once.

André Bazin (1918–1981) in “The Ontology of the Photographic Image” (1967) maintained:

The photographic image is the object itself, the object freed from the conditions of space and time that govern it… Photography does not create eternity as art does, it embalms time, rescuing it simply from its proper corruption.\(^\text{19}\)

Ainslie Ellis, in “Reading Photographs” (1977) argued that photography is concerned with images that are a product of light and awareness. Light is the essential key in a process that uses optical, mechanical, and chemical means to form a permanent image, but awareness of the photographer alone illuminates and vivifies the process. According to Jonathan Byer (1977), “good” photographs are a combination of arête (technical excellence), tension, and attention that springs from self-discipline. Some photographs communicate too quickly. One wants photos that are hard to understand. They invite the viewer to participate and decipher and through this enter into the realm of art. “Good” photographs demand to be read. They are constructs of frustration and ambiguities.\(^\text{20}\)

Although photography cannot record the absolute present, it does record moments of time. With the advent of the light and portable 35mm camera, photographs could be taken

\(^{19}\) André Bazin and Hugh Gray, “The Ontology of the Photographic Image,” *Film Quarterly* 13, no. 4 (Summer 1980): 4–9.

faster and almost everywhere. In 1932 French photographer Henri Cartier-Bresson (1908–2004) discovered the 35mm Leica camera. He wrote:

   It (the Leica) became the extension of my eye, and I have never been separated from it since I found it. I prowled the streets all day, feeling very stung-up and ready to pounce, determined to “trap” life – to preserve life in the act of living... There is nothing in this world without a decisive moment.

   Cartier-Bresson strove to capture the entire essence of a situation. Elements of a picture may be scattered in time and space, and the photographer needs to know how to bring them together. The photographer needs to reach a precise awareness of what he is trying to do. How does one fail? The glance becomes vague; the eye wanders off. Photography is the only method that fixes forever the precise and transitory instant; it preserves reality. One must never manipulate reality, but accommodate to the particular situation. Cartier-Bresson related,

   The photographer must release the shutter at the decisive moment. To me photography is the simultaneous recognition of an event as well as of a precise organization of form which gives that event its proper expression.21

   With *Behind St. Lazare* (1932) (Figure 6) Cartier-Bresson spectacularly captures a man’s leap into space. The amazement grows as the eye notices the leaping ballet dancer on the poster mirroring the man’s leaping movement, the shape of the dancer’s arched back matched by the hoops in the water. The moving rhythms of the fixed fence contrast with frozen action of the moving man. Even the hands of the clock seem poised in sympathy with the angle of the man’s leap. Cartier-Bresson has skillfully recorded a moment of time.

**Ralston Crawford and Time**

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Ralston Crawford was a keen observer of the world around him. With his photographs he transformed his observations of architectonic structures and people into geometric studies where formal structure was more important than content. The lack of definitive meaning of many of Crawford’s photographs allows us to speculate about what they represent in the context of our understanding of time. Crawford never explicitly mentions the element of time and how it relates to his photographs. It is up to the observer to decide. Nonetheless his photographs are conduits for the greater exploration of time including its many different connotations. Although each individual observer will form different conclusions, I assert selected photographs in the Nelson’s collection represent time as being momentary and instantaneous, transitory and passing, impervious and everlasting, or entropic and chaotic.

A Moment in Time

Ralston Crawford started photography in a deliberate, serious manner around 1938. He had been painting for about ten years and was increasingly recognized as an important American painter with several successful one-man exhibitions at the Boyer galleries in Philadelphia and New York. Crawford turned to photography in order to extend his “viewing experience.” He used the camera to magnify and clarify his visual impressions and obtain source-specific information such as light patterns that affected the appearance of structures represented in his paintings. The camera served as a sketch pad for his work, which demanded control, energy, and meticulous composition of spatial elements. His initial photographs were amateurish, taken while traveling in Louisiana and Florida, but soon evolved to a uniform high standard. Many of Crawford’s earliest photographs are undated and relate directly to architectonic structures featured in his paintings. Although a decidedly
American artist who believed in the industrial might of America, Crawford’s view of
photography is strikingly similar to that of Cartier-Bresson. Like the French photographer,
Crawford would search for the decisive moment.

Sometimes I photograph a single subject with a whole roll of film with a Leica, Contac or Rolleiflex – the choice being determined by what I am trying to do. These many shots may mean no more in relation to the final photograph than a few pencil lines would mean in relation to a completed oil painting, but by making numerous exposures, you learn not to be fooled by the seemingly “final quality” of any photo that appeals to you. You learn to ask yourself if it might not be better to take it from another angle or another way entirely; later on, you are inspired to print the same negative in a variety of sizes and cropings. This is not drudgery, but an interesting activity all the way. You will make illuminating discoveries.

Art critic James Johnson Sweeney (1900–1986) in 1950 praised Crawford’s ability to
select the proper moment.

Selection is the basis for all art. Nothing comes from nothing. Everything in an artist’s work is drawn from the world outside him save for the energy to discover, prefer and combine. The essence of artistic beauty is harmony within the work. For in Crawford’s work we recognize the same vocabulary of shapes in the camera’s mechanically and chemically achieved records, as in the products of the painter’s free hand. Selection in Crawford’s case is “visual understatement.” Nothing is overstressed. The eye is never sated. The onlooker is always left with an appetite for just a slightly warmer tone, for a stronger slightly more emphatic line; an avoidance of compositional crowding that balances on the verge of emptiness and a provision of subtle, delicate tension.

Created in 1939 or 1940, Aerial View of Pedestrians (Figure 7) (Gelatin silver print)
(6 1/16 x 7 15/16 inches) is reminiscent of Cartier-Bressons’ Behind St. Lazare. Art
historian Barbara Haskell in 1985 observed that Ralston Crawford’s genius was an unerring

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ability to perceive in subjects and situations a formal power that others ignored.\textsuperscript{24} \textit{Aerial View of Pedestrians} is an example how Crawford is able to transform an ordinary street scene into a powerful formalist study. At the bottom of the photograph a woman’s foot is caught in midair, frozen in a decisive moment, a point in time. As she walks away from the other pedestrians, her elevated left foot catches the eye and confers a sense of implied movement that contrasts and contradicts the movement of the other figures in the photograph who are walking up and down a presumed walkway. Unlike the solo woman at the bottom left, the three women at the top left are walking in a lock-step manner and appear to be engaged in happy conversation. Their shadows line up in parallel, giving a sense at least on first glance, of a harmonious \textit{gestalt}. The young man at the bottom right is alone and his body is elongated by the effects of the aerial perspective. He appears to be in a state of angst, staring out at the distance with no particular focus. Instead of his right foot forward like the women at the top left, he is analogous to the woman at the left bottom with his left foot forward and like her, appears to be on the verge of disappearing off the perimeter of the photograph. As opposed to the young stylish appearing women in the upper left, the woman at the bottom wears clothes that suggest an old baggy coat and out of fashion shoes.

The figures in \textit{Aerial View of Pedestrians} provoke a variety of feelings dependent on the viewer’s past experiences. The women at the top of the photograph may represent happiness associated with the companionship with friends. The man at the bottom appears uncertain and edgy, and the woman at the bottom left withdrawn and lonely. Are the man at the bottom right and the woman at bottom left walking off the border of the photograph?

\textsuperscript{24} Haskell, \textit{Ralston Crawford}, 33–38.
because they have been rejected from society because of age, or for some other factor that might have alienated them from mainstream society?

Around 1938 while living near New Hope, Pennsylvania, Crawford became engaged with communism and became a member of the Marxist leaning organization, the American Artists Congress, a society led by his friends Stuart Davis (1892–1964) and Louis Lozowick (1892–1973). This group was concerned about the negative effects of industry on society and supported the view that artists needed to form an alliance with organized labor in order to assure that Congress would be effective in its struggle to maintain democracy and peace. Despite having a more sanguine view of American industry than his colleagues and even with the knowledge of the Moscow trials of 1936–1938 and atrocities that followed, Crawford did not “close the case” for himself on communism until 1945.\(^{25}\) Perhaps *Aerial View of Pedestrians* reflects Crawford’s Marxist views held at that time.

Even though *Aerial View of Pedestrians* is an early example of Crawford’s photographic oeuvre, it illustrates how he was able to use his technical skills to create a sense of delicate tension and employ human figures as architectonic constructs. This was achieved by the careful cropping of the photograph including eliminating parts of the heads of the three women walking in lock-step down the walkway, by removing all personal characteristics of the figures that occupy the upper right portion of the photograph, and by eradicating the body of the individual that created the shadow seen in the very upper left corner. Additionally, the close-cropped woman at the lower left and the man at the lower right create a feeling of mystery as they walk off the edge of the picture into a space unknown. The viewer is left contemplating who these people really are and where they are

\(^{25}\) Ibid., 33.
going. *Aerial View of Pedestrians* represents a moment of time. The photograph asks more questions than provides answers. It invites the viewer to participate and decipher, and it demands to be read.

**Ralston Crawford and the Passage of Time: Transitory Time**

*Grain Elevators, Buffalo* (1942) (Gelatin sliver print) (9 x 13 3/8 inches) (Figure 8), is another early Ralston Crawford photograph. As stated, Crawford’s father was a ship’s captain, and Crawford grew up along the shores of the Great Lakes. His early memories were permeated with images of shipyards, dry docks, and the stark expansiveness of lakes. These images form the basis for many of Crawford’s austere sharp-edged architectonic style arrangements of flat, carefully arranged planes and stiffly lined contours. Grain elevators were a frequent inspiration for Crawford’s oil paintings and photographs. *Buffalo Grain Elevators* (1937) (Figure 9) is an oil featuring white silos that stand smooth, clean, and reassured. They seem indestructible and give the impression that they might last forever. The elevators in Crawford’s photograph *Grain Elevator, Buffalo* have a similar presence. They appear to be strong vertical architectonic pillars with a sense of monumentality amplified by the camera’s upward looking perspective; they stand ready to withstand a heavy load and the duration of time. However, they also show signs of wear with surfaces that are cracked and grooved. The silos have long diagonal shadows crossing over their forms. The implied movement of the shadows create a sense of friction with the verticality of the silos and challenges their solidity, their eternalness. Instead of representing an instant of time caught at the decisive moment as in Crawford’s *Aerial View of Pedestrians*, the silos’ diagonal shadows represent the linear progression of time. Crawford’s photograph is surreal in that it juxtaposes the supposed timelessness of the pillar/silos with the transitory
movement of shadows across their material substance. Keith Davis in 1995 pointed to the dualities and tensions that pervade Crawford’s work: simplicity and complexity, timelessness and flux, realism and abstraction, the cerebral and the emotional. He explained that Ralston Crawford uses the most common things to express large and small abstract forms. Crawford has an unmistakable faith in seeing and thinking in that order. He depicts a world distilled to the most basic geometry of sensation and emotion.26 During an interview in 1958 with Edward H. Dwight, Crawford explained,

“I am very much interested in a kind of pictorial counterpoint – the juxtaposing of one melody or theme in relation to another or several – it is out of this argument or contrast that interest is created in pictorial structures. This must be part of the total plan – I am not interested in producing the decorative.”27

*Egypt* (1962) (Gelatin silver print) (9 x 13 1/16 inches) (Figure 10) is a more extreme example of the transit of time with architectonic pillars worn down by a combination of natural and human forces. Crawford was an incessant traveler throughout his lifetime, visiting such diverse countries as Egypt, India, and Spain. In *Egypt*, Crawford demonstrates his extraordinary ability to see and organize. The ruins of ancient Egypt are brought together in a brightly lit balanced pictorial setting. The mass of the stone columns is evenly distributed with the large column on the left, roughly equal in size to the combined corpus of the two smaller columns on the right. Three smaller, similarly sized columns hold down the middle. The statues of three headless men are placed among the columns, their size diminishing from left to right lending a three-dimensional perspective accentuated by a chiaroscuro effect of shadows created by the men’s lower bodies. The three headless men’s

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26 Davis, *Ralston Crawford: Abstracting the Vernacular.*
left feet step forward, giving the impression that they are advancing through time, but their bodies are broken and eroded. Their material substance is dissoluble, and their permanence is just an illusion. Their historical footprints serve merely as symbols for the passage of time.

Crawford was influenced by his studies in Philadelphia at the Pennsylvania Academy of Art and at the Barnes foundation in Merion, Pennsylvania. Dr. Albert Barnes, an avid collector of Modern art, insisted that a picture’s formal structure was as important as its content. Crawford’s photographs of architectonic constructs satisfy Barnes’ formalist approach. Crawford stated:

I believe I quote William James more or less correctly, at least in general substance – forms remain forever, they may lose their individual character but they are indestructible – like the shapes on a much-used blotter.28

In Street Light (1938) (Gelatin silver print) (6 3/4 x 9 9/16 inches) (Figure 11), Crawford combines a variety of forms to achieve a compositional accord. We see a photograph taken from an elevated vantage point with the camera’s eye located slightly below an overhanging street light, which is apparently attached to a nearby telephone pole. The telephone pole looms as a large dark vertical structure that divides the photograph into two parts. Sunlight brightly illuminates the rooftops of wooden houses on the left side of the photograph while to the right, there is a house and large tree left in darkness. An oval-shaped streetlight hangs in front of the darkened house and tree and in contrast to those structures appears bright and bathed in sunlight. The difference in perceived illumination is due to cells in our visual system that are more responsive to abrupt light-to-dark changes represented by the streetlight as opposed to gradual changes in illumination as seen with the

28 Agee, Ralston Crawford, Statement from a Crawford untitled, undated manuscript.
harder to make out structural details of the darkened house on the right. Crawford uses an ordinary object to arouse a deeper meaning based on our mutual knowledge of a street light. The street light appears to symbolize a beacon of light in the face of darkness. It is surreal in that it represents an ambiguity that extends beyond our normal sense of reality. This mystery is enhanced by the close cropping of the street light with the viewer never actually seeing the street below. Despite the presence of diagonal lines formed by roof tops and a guidewire, there is no sense of movement. A feeling of stillness prevails. There are no people or signs of life except for a distant tree adding to the quietude of the photograph. The photograph suggests that time is impervious and the scene will last forever. But on closer examination, we see the tree has leaves, so it must be summer. But the seasons are transitory and summer will not last forever. Through the use of simple structural elements, Crawford in Street Light appears to convey a sense of permanence dissociated from the passage of time, but in fact his scene is dictated by the movement of one season leading to another. Aristotle argued time is defined as a continuous process with no beginning or end. Elemental structural elements may last forever, but according to Aristotle’s concept of time, shapes will change. With Street Light, life is not detached from but in fact is dictated by the passage of time.

**The Precisionist Aesthetic and Time Eternal: Impervious Time**

The Precisionist aesthetic is dominated by a primary interest in American architectural and industrial themes and by the careful employment of a reasoned abstraction in which subject matter is reduced to basic geometric forms. Precisionism lacked a group consciousness and was never a formal school or movement. No one artist was responsible for establishing the Precisionist style. As the term “precisionism” would suggest, the work of Precisionists was precise with a highly controlled approach to technique and form.
Subject matter was defined by sharp-edged, simplified forms, minimal details, and smooth handling of surfaces. All traces of the painting process were eliminated with pictures brought to a flatly defined textureless finish. Early examples of the Precisionist esthetic included the work of young artist Americans such as Charles Sheeler (1883–1965) (Figure 12), Morton Schamberg (1881–1918) (Figure 13) and Charles Demuth (1883–1965) (Figure 14). As was customary at the beginning of the twentieth century, young artists were encouraged to travel abroad and witness the great achievements of European art found in countries such as England, Holland, Spain and France. The lessons learned from this experience would later manifest themselves in the architectonic nature of their mature Precisionist compositions. While in Europe, they also came in contact with the European avant-garde. With the assistance of Gertrude Stein (1874–1953) and her circle of friends, they experienced the work of Parisian avant-garde artists such as Georges Braque (1882–1963) and Pablo Picasso (1881–1976), the initiators of Cubism. In place of the usual memetic conscripts of Renaissance art, Cubism substituted a new vision in which objects were seen as a series of dismembered, geometric shapes in a shallow, flattened picture plane. Instead of assuming that a picture was an illusion of reality, the Cubists proposed a painting no longer had to be representational and was its own new reality. By 1914, with the outbreak of World War I, travel to Europe was curtailed but the new ideas emanating from Paris had a lasting effect. On returning home from Europe, young American artists adopted Cubism’s tendency for geometric simplification as a new form of artistic expression, which was subsequently employed in both painting and photography.29

In terms of photography, the Precisionist tendency stood as a transition point between pictorialism and straight photography. The Pictorialist style of photography prevalent at the beginning of the twentieth century was used to ensure artistic value and attempted to mimic oil painting as much as possible. A soft focus technique was employed to create atmospheric effects with images softly bathed in the gentle light of dawn or dusk. Alfred Stieglitz (1864–1947) was the leading proponent of the pictorial style and promoted his work as well as the work of other photographers such as Edward Steichen (1879–1973), Clarence H. White (1871–1925), and Gertrude Kasebier (1852–1934), which was published in his high quality photographic quarterly, Camera Work. Pictorialists were attracted to architectural and industrial themes but saw them as romantic forms, shimmering as in a mist, as demonstrated by Stieglitz’s The Hand of Man (1901) (Figure 15) and Steichen’s Flatiron – Evening (1906) (Figure 16). By the mid 1910s there was a growing awareness that photography did not need to imitate painting, and qualities unique to photography such as sharpness, clarity, and objectivity became increasingly more appreciated. Stieglitz and Steichen eventually switched to sharp edged “straight” photography.30 As a leading proponent for photography to be a legitimate artistic medium in its own right, Paul Strand (1890–1976) in 1917 noted:

Photography’s uniqueness is its absolute unqualified objectivity. Unlike other arts that are really anti-photographic, objectivity is the essence of photography, its contribution and at the same time its limitation.

Simultaneously, with the sharpening of the camera’s images, there came a new awareness of America’s angular architectonic structures, which would become the backbone of the Precisionist aesthetic. These structures allowed artists to take a logical and disciplined

approach marked by extreme simplification of form, unwavering sharp delineation, and methodical, deliberate abstraction as illustrated in Paul Strand’s early photograph, *Abstraction, Porch Shadows Twin Lakes, Connecticut* (1916) (Figure 17). It is unique in its sobriety and acuity. It is people-less, lacks emotion, and reflects no involvement in social issues. It is purely a geometric abstraction. Morton Schamberg followed suit with his photograph *Untitled Cityscape* (1917) (Figure 18) with its reduction of an urban skyscape into a series of rectangles. These photographs were precursors to a broader Precisionist aesthetic which would reach its fruition in the mid 1920s.\(^{31}\)

At the turn of the twentieth century, America was basically an agrarian society, divided between the extremely wealthy and very poor. American art, including photography, was required to conform to some acceptable European tradition. With the advent of World War I, America was to undergo vital transformations which would affect businessmen and artists alike. Faith in science and technology illuminated the horizon of America’s growth. Mechanical innovations, such as the gasoline engine and the electric motor, and improved modes of communication, transportation, and production contributed to a general sense of optimism. One of the most important elements contributing to the prosperity of America was an increase of construction, particularly the skyscraper, but also roads, bridges, and industrial complexes. It was in the heyday of American growth in the twenties that the Precisionist artists emerged. As the country experienced a psychological reaction to the mass destruction wrought overseas in World War I, there was a call for America to seek its own national identity. A shift from representation to pure abstraction was too radical a step for American sensibilities. Americans wanted art to be about things. It is in this context that

\(^{31}\) Tsujimoto, *Images of America.*
Precisionist artists such as Charles Sheeler emerged as the dominating force of American art in the 1920s, serving as a compromise between European abstraction and America’s tradition of realism.\textsuperscript{32}

Charles Sheeler is the archetypal Precisionist artist. Like Crawford, twenty years his junior, Sheeler began his career as a painter. Sheeler’s early paintings such as those exhibited at the historic 1913 Amory Show or International Exhibition of Modern Art reflected his exposure to the European avant-garde and resembled works by French artists such as Cézanne (1839–1906) and Derain (1880–1954). Because of lack of sufficient funds realized from the sale of his paintings, Sheeler at age 29 turned to photography as an additional source of income. Unlike Crawford, who maintained a passionate attitude toward photography, Sheeler bore a more commercial stance with photographic assignments for architectural firms and art galleries. Around 1916 Sheeler began to approach photography as a legitimate artistic medium with photographs of his Doylestown, Pennsylvania, farm including \textit{Bucks County Barn} (1916) (Figure 19) which provided material for a solo show in 1918 given by Marius de Zayas (1880-1961) at his Modern Gallery in New York. With a move to New York, Sheeler began photographing as well as filming the New York skyline. His photographs incorporated the Precisionist aesthetic, emphasizing the soaring angular forms of skyscrapers and incorporating dramatic, stylized lighting and unusual angles, as seen in the film \textit{Manhatta} (Figure 20). Similar to Crawford, his early photographs were an effective “set-up” source for his paintings, but unlike Crawford, whose Precisionist style painting preceded his photography, Sheeler’s photographs of American architecture preceded his introduction of similar motifs into his paintings by more than five years. As

\textsuperscript{32} Ibid., 73–86.
their careers progressed, both artists employed photography as a stand-alone medium.

Sheeler was awarded an important photographic commission in 1927 documenting the River Rouge Ford Motor plant just outside Detroit. One of the photographs from the River Rouge project titled *Criss-Crossed Conveyers* (1927) (Figure 21), was praised by critic Samuel Kootz as showing a powerful image of industrial design and combining commercial photography with fine art skills. Kootz wrote, “By careful selection, composing and cropping, Sheeler was able to emphasize the inherent geometry of the industrial world.”

Kootz’s words are strikingly similar to those of James Johnson Sweeney written twenty years later, noting:

> Ralston Crawford’s works are proof of the prime importance of selective vision – the ability to prefer and combine shapes suggested by the outer world toward the compassing of a consistently sought after inner harmony.

Sheeler’s principal biographers, Martin Friedman and Constance Rourke, interviewed Sheeler on several occasions. They wrote that Sheeler had a pietistic belief in America and an unqualified admiration for technology. Sheeler considered himself primarily as an American craftsman. Philosophies of traditional and modern art were of little interest. He had a white-collar view of the world and ascribed to the Protestant beliefs of wealth and cleanliness. He had a moralistic belief in technology as America’s new Manifest Destiny and the religion of the modern age. In two of his most important oil paintings, *American Landscape* (1930) (Figure 22) and *Classic Landscape* (1931) (Figure 23), Sheeler illustrates his vision of the sanguine, limitless, eternal nature of American industry.

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Ralston Crawford shared an exalted view of industrial civilization with contemporaries such as Joseph Stella (1877–1946) and John Marin (1870–1930), who perceived American technology as a metaphor for spiritual transcendence. For Crawford, industrial structures were the American equivalent of Europe’s Gothic cathedrals. He thought American industry represented an eminently assured and stable civilization. His paintings suggest a sense of optimism and further possibilities. Stylistically Crawford’s work was linked to Precisionism’s architectonic subject matter with sharply defined geometric forms. He shared Precisionists’ insistence on ordered pictorial discipline and the elimination of all emotional excess. Crawford was a generation younger than Precisionists such as Sheeler, and by the late 1930s, Precisionism had become an historical movement with Sheeler having a retrospective exhibition at The Museum of Modern Art in 1938. Crawford’s attitude toward architectonic structures was different from that of the majority of the Precisionists, who saw the American industrial landscape as primarily a means to unite recognizable subject matter with the abstract form and flattened space of Cubism. Sheeler said, “It’s purely a visual thing.”

To Crawford it was more than the simply visual. He endowed his work with psychological mystery that transcended purely formalistic interpretations. Crawford claimed his work was filled with emotion, but he had difficulty expressing his emotions due to his abstract vocabulary. As we have seen, Crawford became familiar with the Precisionist aesthetic during his student days in Philadelphia with visits to the Earl Horter collection, but more importantly, he was influenced by the work of Cézanne (1839–1906) and the Cubists Picasso and Juan Gris (1887–1927) collected at the Barnes Foundation in Merion, Pennsylvania. As a result, Crawford learned to focus his attention on the classical problem
of spatial organization and specifically the relationship between the picture plane and the illusion of the third dimension. His style was flatter and more aggressively simplified and more broadly handled than that of other Precisionists. He was most interested in the formal Cubist analysis of structure achieved through selection, simplification, and organization of geometric shapes. Crawford always insisted that his work, no matter how abstract, grew out of something seen and was always based on a specific site or subject, and was not purely a geometric abstraction. He maintained that his sharp-edged paintings and photographs featuring intentional juxtapositions of line, form, and shape and were premeditated, calculated compositions, the opposite of Abstract Expressionism, which relied on spontaneous creation. Crawford once explained, “My pictures mean exactly what they say, and what they say is said in color and shape.”

*St. Petersburg to Tampa Negative* (1940) (3 5/16 x 5 1/6 inches) (Figure 24) has the line, form, and shape of a premeditated composition. This photograph of a causeway is taken from below the horizontal, and the looking up technique emphasizes the clean angular form of the causeway. The causeway’s light sides and darkened roadway form a triangle with its tip pointing down a path that appears to go on forever. This impression is accentuated by the dark road being contiguous with the equally darkened sky, conveying a sense of universality and that the sky is the limit. The street lights on the sides of the causeway are vertical elements that help to define the sides of the causeway but also can be interpreted as having hands reaching toward the sky. Their implied movement is juxtaposed with the flat calm stillness of the water in the Gulf and the absence of human activity. There is a structure in the far distance which appears to be a lighthouse, suggesting a possible beacon to the future.

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and time never ending: an Aristotelian type of time with no beginning and no end. Bridges were a favorite subject for Crawford, who between 1938 and 1940 created multiple oils and photographs featuring bridges and causeways including *Whitestone Bridge* (1939) (Figure 25) and *Maitland Bridge* (1938) (Figure 26).

Crawford was able to perceive in subjects and situations a formal power that others ignored, and he turned ordinary subject matter into monuments impervious to time. In 1939, Crawford created his most famous painting titled *Overseas Highway* (1939) (oil on canvas, 28 x 43 inches) (Figure 27). This painting, as with his photograph *St. Petersburg to Tampa Negative*, has a below the horizontal vantage point of a causeway that seems to go on forever, speeding precipitously into space. Crawford’s painting was embraced by a nation emerging from the Depression, and he became an overnight celebrity when *Overseas Highway* was published in *Life* magazine.  

Subsequently, Crawford was chosen to serve on the artists’ selection committee for the 1939 New York World’s Fair. The theme of the fair was progress through production with the unconditional belief that machine and science can provide for an ever more efficient and prosperous future. Material objects came to reflect optimism in a future where the work of industry could reshape every aspect of life for the better. The fair was seen as a celebration of corporate capitalism as a modernizing agency. Similar to the impervious time symbolized by *St. Petersburg to Tampa Negative*, industry would lead America toward a never-ending bountiful future.

36 Haskell, Ralston Crawford, 52.
Photographed 32 years after the *St. Petersburg to Tampa Negative, Coulee Dam Staging Area* (1972) (Gelatin silver print) (13 x 19 1/8 inches) (Figure 28) is an example of Crawford’s horizontal approach of revisiting certain motifs of time repeatedly throughout his lifetime. *Coulee Dam Staging Area* also conveys a sense of strength and permanence. Vertical steel beams indicate that they can support a heavy load. Diagonal supports add reinforcement and point optimistically toward the sky. Heavy shadowing augments the monumentality of the steel beams. All edges are clean, and the girders are new and part of the construction for the dam’s third power plant built between 1967 and 1974. The scene is quiet, there are no living things or moving shadows, and there is no reason to doubt that the beams may last for a lifetime which from a fundamental human standpoint is forever. Crawford received a government grant to photograph the building of the dam, and in frequent letters to his friend Mrs. Bonnie Nelson, noted that this project would be a means to support his frequent travels abroad. His letters also suggest optimism for the future, despite chronic health concerns, which appears at least in part because of Bonnie’s companionship.38

*Bridge Approach* (1940) (Gelatin silver print) (4 3/8 x 6 1/2 inches) (Figure 29) offers an alternative perspective of time. As opposed to *St. Petersburg to Tampa Negative*, the camera’s eye takes a more horizontal viewpoint with the roadway abruptly disappearing at the entrance of a nearby bridge. The guiderail along the left becomes gradually smaller as it progresses towards the bridge entrance, trivializing the importance of the roadway as it travels forward. The surface of the roadway shows signs of wear and tear with oil stains and

38 Ralston Crawford, Letters to Mrs. Bonnie Nelson, Ralston Crawford, Box 3, Smithsonian Archives of American Art, Washington, DC.
pieces of debris. There is a car driving up to the bridge entrance, but it is anticipated that it will soon disappear off the edge of the photograph and into an uncertain future. The street light on the left is impassive and points down. There are no signs of a boundless energy that pervades the St. Petersburg to Tampa Negative. Bridge Approach does not appear impervious to time but instead worn down by the passage of time. Bridge Approach was photographed around the time Crawford and wife Margaret confronted the painful reality that their eldest son was mentally handicapped. Subsequently, because of this tragedy and strains caused by Crawford’s general lack of sensitivity, Margaret filed for divorce.\(^{39}\) The prospect of divorce and the medical condition of his son drove Crawford into a deep depression with ideations of suicide, possibly accounting for a more pessimistic vision of time characterized by Bridge Approach.

In an article in *Modern Photography* (September 1949), Crawford explained,

> My photography follows my painting in a great measure. So, in general it is of a rather abstract variety…A few years ago the idea of working from photographs was considered “inartistic.” Now many painters recognize photographs as an informative, stimulating source to be incorporated with other experience. They are in no way a substitute for one’s experience. Rather they are an extension of that experience. They magnify and clarify other observations. They are sometimes used to obtain specific information concerning the movement of light patterns in relation to its possible effect on picture structure. On occasion I use the camera as sketch pad and record endless variations on a theme such as the “El.”\(^{40}\)

Crawford’s “El” was the Third Avenue Elevated Railway, a street railway built in 1852, with coaches pulled by horses. In 1877 the city council permitted the use of a noiseless steam engine. By 1880, the El extended from South Ferry in Manhattan to Bronx Park. Cable traction was put on the El in 1892, and an electrical system was installed in

\(^{39}\) Haskell, *Ralston Crawford*, 54.

\(^{40}\) Crawford, *A Modern Artist*, 76.
1899, which lasted until the El was torn down in 1956. Similar to the work of Berenice Abbott (1898–1991), who recorded images of the El ten years earlier, *El, Second and Third Lines Street* (1936) (Figure 30), Crawford photographed the El at various angles and light conditions. His camera’s perspective was often located well below the horizontal, pointing upwards in an attempt to emphasize clean angular forms and various geometric profiles. Crawford’s almost endless artistic examination of the “El” with the use of photographs, as well as drawings, lithographs, and paintings, suggests that Crawford’s “careful looking” was more than mere experience, but rather an example of “creative evolution” where according to Henri Bergson, past observations emerge continuously into the absolute new through the immeasurable ineffable process called duration. According to Edith A. Tonelli in 1983, the strongest photographs in the El series are those that maintain the bold foreground design element of the striped pole, but also include some background content to establish a subsidiary rhythm within the composition such as the alternating lines of light and shadow from the tracks as seen from below. *Third Avenue Elevated* (1948) (Gelatin silver print) (13 ½ x 9 1/8 inches) (Figure 31) is a close-up photo of a striped steel girder. The girder fills the photograph with its monumental verticality magnified by the down to up orientation of the camera’s lens. The girder flooded with sunlight is in sharp focus, revealing its rough, worn surface. The background is out of focus and is a dark blur divulging no detail or sign of life. The railroad tracks above are barely visible, blocked from view by the massive

girder. The girder dominates the picture in silence, its architectonic form created by vertically connected triangles providing strength, security, and a sense of timelessness. When the El was constructed, the steel industry was emerging as the pillar of American industry. As the industry evolved, it provided materials that secured America’s industrial might and to Precisionist artists, evidence of America’s boundless, unlimited future. Unfortunately, the Jones and Laughlin Steel Company that built the girder no longer exists, and the presence of rust spots and chipped paint signals that the girder was not timeless, but momentary and undergoing decay. The El, a structure that appeared to be impervious to time, was destroyed by the wrecking ball in 1956.

Entropic Time: Chaos

By the early 1940s, Crawford became increasingly famous due to a successful one-person show at the Boyer Gallery in New York and because of national publicity afforded by Overseas Highway. His tightly drawn studies of industrial subjects were perceived as distinctively American. Crawford escaped the challenges against modernism launched by the Regionalists and Social Realists. His work was praised by critics who admired their successful compromise between subject matter and abstraction. Due to this success, dealers insisted that Crawford maintain his established Precisionist style. Crawford felt entrapped by the demands of the art market and wanted to extend the boundaries of his art. As a result, his art became more abstract, with hard-edged overlapping planes and simplified, flattened, and distorted motifs. Despite the highly abstract appearance of his work, Crawford insisted that his art was not similar to the a priori abstractions of the geometric artists, and was not imaginary but based on emotional contact with the natural world.
The further development of Crawford’s emerging abstract style was halted by his enlistment into the Army Air Force at the beginning of World War II. Crawford was assigned a job with the Visual Presentation Unit, Weather Division, where he would draw weather maps based on plane wreckage. In place of clear-cut shapes, he employed splintered lines and jagged edges to portray disorder and destruction. Crawford, through the observation of bombed areas, became increasingly aware of the ravages of war facilitated by American industry’s production of weapons of mass destruction. This awareness was heightened by Crawford’s experience as an observer of the atomic bomb detonation in 1946 at Bikini Atoll in the Marshall Islands. After this experience, Crawford created a series of paintings based on his observations at the Bikini Atoll and explained them as comments on the force of destruction saying, “Destruction is one of the dominant characteristics of our time.” Crawford’s art had shifted from the confidence of the Precisionist aesthetic to an art that spoke of a world coming apart, a world whose stability and prewar assurance had been irrevocably lost. As a result, Crawford’s work changed from representing the structure of time as being orderly, albeit momentary, transitory, or impervious, to entropic.

*Duluth Railroad Scrap* (1961) (Gelatin silver print) (12 ½ x 16 9/16 inches) (Figure 32) speaks of an entropic world. As opposed to *Duluth* (1961) (Gelatin silver print) (13 ¾ x 16 1/8 inches) (Figure 33), which is a sharp-edged image of the ordered intricacies of a modern railroad engine, *Duluth Railroad Scrap* provides a vision of chaos, where junk is piled up and where nothing fits in place. The engine in *Duluth* illustrates the Precisionist concept of a neatly ordered, ongoing and never-ending faith in American industry, while *Duluth Railroad Scrap* depicts an industry in chaos; the end of an industrial era that lacks energy and direction and has become entropic. Both photographs share the Cubist tendency
of flattening the picture plane and laying out subject matter in geometric configurations. In *Duluth*, there are sharply focused mechanical elements evenly distributed throughout the photograph. The viewer tends to see the picture as a whole with no one structure completely capturing the attention of the observer. In contrast, *Duluth Railroad Scrap* is more softly focused with the center point of a diagonally placed undercarriage capturing the eye. The mechanical components of the engine pictured in *Duluth* appear worn but functional, while in *Duluth Railroad Scrap*, everything is broken and without purpose, with the center of a discarded undercarriage drawing special attention to its uselessness. But despite its chaotic appearance, there is a paradoxical sense of movement displayed in *Duluth Railyard Junk* not seen with the orderly *Duluth*. The undercarriage appears to be precipitously balanced on another piece of junk. At the bottom left and middle right there are diagonally positioned structures, adding to a sense of instability and implied movement. Entropic time, as pictured in *Duluth Railroad Junk*, retains energy but lacks order and discipline. Watts, in his critique of Bergson’s durational time, demanded that for time to exist, it requires purpose. Aristotle insisted that for time to have meaning, it was necessary that it possess an infinite linearity. Entropic time as captured by *Duluth Railroad Junk* has no purpose or linearity and is characterized by unstructured chaotic energy.

Crawford’s photographs have a stylistic affinity to those of Walker Evans (1903–1975). Evans was photographer for the WPA Farm Security Administration, who focused on the vernacular. He especially favored unfashionable subjects such as auto junk yards. Evans’ prints created an illusion of artless objectivity, but are in fact similar Crawford’s in that they are a product of a carefully considered artistic vision. Both artists had misgivings about the by-products of the industrial age. In *Joe’s Auto Graveyard, Near Bethlehem, Pennsylvania*
(1936) (Figure 34), Evans records the organic life of man-made things.\textsuperscript{44} We see a group of abandoned cars assembled together in the Pennsylvania countryside. Although abandoned, they still seem to have life. Their chassis remain mostly whole, and they are grouped neatly together, all facing the same direction. They have a presence in the present and therefore are moments in time, but simultaneously are the waste products of the past and a reminder of the relentless progression of time. Crawford’s \textit{Junk Yard} (1958) (Gelatin silver print) (6 9/16 x 9 9/16 inches) (Figure 35) is a close-up of smashed-up cars. The cars have lost their integrity and are recognizable only as pieces of bent metal and broken glass. There is no apparent order, with car parts and broken pieces of glass chaotically strewn together. We see multiple overlapping geometric elements signaling a lack of structured energy and purpose. Time appears to have come to a standstill. On closer review, however, there are multiple diagonals competing for the eye’s attention, with one dominant diagonal running from left to right through the mid-portion of the image, with its distal tip forming the center point of the photograph as it joins the more static horizontal and vertical elements that fill the right side of the photograph. \textit{Junk Yard} calls to the various structures of time. Is time as according to Plato, something that stands by itself either empty or full as represented by the rectangular structure on the right side of the photograph? Or is time a linear process advocated by Aristotle and illustrated by the gradual upward incline of the dominant diagonal in the middle of the photograph? Is the upward slant of the diagonal a symbol to Kandinsky’s belief in mankind’s inevitable upward progression to the universal? When viewing the “dead” ruins of \textit{Junk Yard}, can we agree with McTaggart that time does not exist, or does it exist for measured moment or instant as in an automobile crash? Is time, as seen in \textit{Junk}

\textsuperscript{44} Davis, \textit{An American Century}, 167.
Yard, static and dead, or is it entropic with unstructured energy similar to astrophysical conditions present before the “Big Bang” and the being of time? Ralston Crawford’s photographs posit many questions and demand to be read. They transport the vernacular into the kingdom of art.

**Summary**

I have used a combination of formal analysis and art historical information to characterize selected examples of Ralston Crawford’s photographs contained in the collection of the Nelson-Atkins Museum of Art. I have attempted to place them into a particular “motif” of time. Crawford’s photographs were created in the present moment, but as soon as they were recorded, they became documents of the past. Our minds never perceive the absolute present, with mental processing and cognition lagging several thousand milliseconds after an event. Crawford’s photographs afford us the opportunity to examine the past. Is past time an instantaneous event precisely measured by the science of Einstein and captured by Aerial View of Pedestrians, or is it characterized as a linear and transitory progression of events as suggested by Aristotle and illustrated by the passing of shadows across the surface of grain elevators in Grain Elevators, Buffalo? Plato argued that time is an entity unto itself, and not defined by a series of events. The steel girders of Grand Coulee Dam Staging Area point defiantly toward the sky. They are just there, impervious to the passage of time. Finally, there is McTaggert’s assumption that time does not exist at all. The entropic scrap heaps seen in Duluth Railroad Scrap and Junk Yard illustrate a chaotic world where time no longer has meaning.

My interpretation of Crawford’s photographs is personal and not absolute. Formal analysis is a humanistic, subjective, and unmeasurable undertaking resulting in conclusions
that may vary from one observer to another. Art history is also relative and can change with the addition of new information or a change in the political environment. Our scientific and humanistic understanding of time will continue to evolve, especially with the explosion of new information technologies that make time more “virtual” than “real.” Crawford’s photographs provide examples of the structures of time, structures that are not fixed, but are in fact fluid, with their ongoing interpretation being influenced by new scientific discoveries, continued human experience, and the ineffable nature of time.
APPENDIX

A FEW WORDS CONCERNING A NEUROAESTHETIC APPROACH TO ART

Neurobiologist Semir Zeki argues that, “We see with the brain” and no theory of aesthetics is complete without an understanding of its neural underpinnings. What Zeki means is that images recorded on a passive retina are passed on to various centers of an active brain that then determines which features of what is registered on the retina will form the content of one’s perception. Over the years, art has been approached from various vantage points including the documentation and analysis of art historical information, formal analysis of its structure, or the investigation of its iconoclastic significance.

As a physician, I have always been intrigued with the “physiology” of art. Why do certain works of art resonate more than others? Wouldn’t knowing the “physiology” of art enhance both our knowledge and appreciation of works of art, just as the knowledge of human physiology has aided in dealing with human health and disease? Recently there has been the development of the “science of art with the investigation of how the brain functions as it sees art. Learning how the brain works while viewing art has been facilitated by the development of PET and MRI scanners, which detect increased blood flow to activated brain tissue and by high fidelity telemetric EEG recording devices that identify areas of increased cerebral electrical activity in ambulatory subjects actively engaging with works of art. One recent discovery is that neurons responsible for visual processing are organized in discrete units, each with a specific role in detecting an external sensory input of only a certain type. Some neurons “fire” when exposed to horizontal or vertical lines, while others are activated only by movement, position, or color. Additionally, different neurons process information at different rates, with the perception of color occurring before form,
which in turn occurs before movement. Thus, while it seems that we see a visual image all at once as a whole or gestalt, the isolated discrete visual elements are never reintegrated as a picture but are separate components of one’s inner visual representation. The nervous system thus deconstructs visual information into such attributes as color, luminance, and motion. Activated visual neurons located in the primary visual cortex next stream their isolated bits of data in parallel fashion to the higher WHERE and WHAT visual processing centers. The WHERE stream is sensitive to differences in luminance, motion, and spatial location, whereas the WHAT stream is sensitive to simple shapes and color. These centers then stimulate other areas of the brain encompassing the limbic system, which regulates emotions, and the prefrontal cortex, which is the seat of memory and other higher order cerebral activities including an aesthetic appreciation to art.

Zeki takes the somewhat unusual view that artists are neurologists studying the brain with techniques that are unique to them. They, wittingly or not, are exploiting the characteristics of the parallel processing-perceptual systems of the brain in creating their work by emphasizing or restricting the neuro response of the various visual processing centers. Artists’ work reflects visual shortcuts utilized by our minds. Neurobiologist Margaret Livingstone (2007) has shown that puzzling painterly effects can be explained through recourse to the physiology of the brain. She reveals how artists make use of complex interactions between the different components of the visual system to create visual effects in their art. The shimmering quality of water or the sun’s glow on the horizon seen in some impressionist paintings are produced by isoluminant objects distinguishable only by color. This strategy plays on the WHAT and WHERE centers. Isoluminant forms are processed in the WHAT center but are not fixed with respect to motion or spatial location,
since the WHAT system does not process this information. Therefore, isoluminant forms are experienced as unstable or shimming. Conversely, since shape is processed in the WHERE center, artists use differences in luminescence to produce form and leave color for expressive, rather than descriptive purposes.

Ralston Crawford’s black and white photograph *Railroad Electric Wires* (1976) (Gelatin silver print) (5 ¾ x 8 7/16 inches) (Figure 36) takes maximal advantage of the WHERE visual center and minimizes activation of the WHAT center. There are no color or simple shapes that are processed by the WHAT center. Conversely, the image is filled with complex spatial relationships, exhibits maximal variance in illuminance with the white sky contrasting with black wires and possesses implied movement expressed by multiple diagonals formed by the electric wires and support structures; all characteristics favored by the WHERE center. Crawford is exercising the “law” of isolation by maximizing certain sources of information in order to create maximal cerebral efficiency. The visual impact of wires seen against the sky is magnified by the selective input of information into only certain portions of the brain’s visual system. This permits the visual mind to concentrate on specific variables such as luminal variance, the spatial appointment of lines, and the sense of movement. With *Railroad Electric Wires*, primary visual centers are not distracted by clutter, texture, or fine details. The horizontal and vertical supporting structures superimposed over the exposed diagonal railroad electric wires come to immediate attention. The horizontal and vertical supporting structures are static, but the diagonals formed by the electric wires suggest movement and create visual ambiguity and interest by breaking the “law” of symmetry and the brain’s need to form a whole from the sum of the parts. *Railroad
*Electric Wires* is in fact an abstract, neuronal mystery that demands attention but provides no apparent answer. Its impact is the same whether held upright, sideways, or upside down.

Versed Aviv’s review article published in the journal *Frontiers in Human Neuroscience* (2014) asked, “What Does the Brain Tell Us about Abstract Art?” Aviv theorized that abstract art offers a particularly unique opportunity in that it evokes visual stimuli which are not primarily object related. It frees us from automatically activating memory-based “survival mechanisms” and frees our brain from the dominance of reality, enabling the brain to flow within its inner states, create new emotional and cognitive associations, and activate brain-states that are otherwise harder to access. *Railroad Electric Wires* frees us from being “locked up” in time. On close examination, its two strong vertical lines anchor us in a moment of time. Upside down (Figure 36a), the same image with its downward pointing diagonal crosspiece suggests the movement of time. Left side up (Figure 36b), the photograph exhibits strong vertical and horizontal elements, suggesting that time is secured forever, but with the right side up (Figure 36c), the strong vertical appears to plunge downward, speaking to the end of time.

In 2011, V.S. Ramachandran reasoned that art’s endless timeless appeal may be that it speaks to an oneiric right brain-based language that is unintelligible to the more literate left hemisphere. Ralston Crawford’s photographs at first seem to be literal recordings of easily identifiable objects, but they achieve sustained appeal by expressing nuances of meaning that are difficult to convey through the spoken language. In this regard, Crawford’s photographs may activate areas in the right hemisphere that express the “feel” of time – a time not easily measured or explained by words, neuroscience, or astrophysics but inseparable from human experience.
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*Railroad Electric Wires*

Left Side Up
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BIBLIOGRAPHY


*Crawford, Ralston*. Minneapolis: The University of Minnesota Gallery, University of Minnesota, 1949.


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National Archives, Washington, DC.


Smithsonian Archives of American Art, Washington, DC.


VITA

I have had an interest in the visual arts from an early age. I grew up in Allentown, Pennsylvania, a city with population of about one hundred thousand situated ninety miles west of New York City. My parents were familiar with New York, and we made frequent trips to the metropolitan area, mainly to visit art museums. My favorites were the Metropolitan Museum of Art and the Museum of Modern Art. The MoMA was especially attractive since Abstract Expressionism was at its peak, and other contemporary movements such as Pop and Performance Art were getting underway. Retrospectives of major artists and art movements were held on a regular basis. The museum’s photography department under the leadership of Edward Steichen featured breakthrough exhibits such as the “Family of Man” held in 1955.

My interest in art history continued through college. I enrolled in college at Lehigh University in Bethlehem, Pennsylvania, where I majored in science, mainly biology and chemistry; however, I also took advantage of courses in the liberal arts including art history. After graduating with a B.A. degree in biology, my interest in science led me to medical school and Jefferson Medical College in Philadelphia, Pennsylvania. During my tenure in medical school I frequently visited the Philadelphia Museum of Art with its rich collection of French Impressionist and early modernist works of art.

Following four years of medical school, I pursued post-graduate training in internal medicine at Case Western Reserve University in Cleveland, Ohio, and at Emory University in Atlanta, Georgia. After achieving board certification in internal medicine, I went on to complete a cardiology fellowship at the University of Texas, Southwestern Medical School in Dallas, Texas. In conjunction with the publication of research studies and passing
cardiology board examinations, I became a Fellow of the American College of Cardiology. After serving two years as an officer in the United States Army Medical Corps, I moved on to the Kansas City area, where I have practiced clinical cardiology for the past forty years. Over the ensuing years I had little time to pursue my interest in the liberal arts.

About ten years ago, I was fortunate to be selected to enter a then new Museum Guide Program at the Nelson-Atkins Museum of Art. This program allowed me to learn more about art and gave me the opportunity to give night and weekend tours on a wide variety of artworks in the Museum’s permanent collection. My interests in art were subsequently broadened to the contemporary scene by my work as a docent at the Kemper Museum of Contemporary Art.

With this background and after partial retirement from the practice of cardiology, I entered the University of Missouri-Kansas City Art History Master’s degree program. My main interest has focused on American art of the late nineteenth and early twentieth centuries with papers on George Inness, Arthur B. Davies, Thomas Hart Benton, and Charles Sheeler. I have also written about the English Romanticist John Martin and the Russian modernist Wassily Kandinsky, as well as the American abstract expressionist Franz Kline. I have taken a special interest in Ralston Crawford, since his work forms a bridge between early twentieth-century American modernism with its tendency to be representational and mid-twentieth-century work that pursues pure abstraction. Crawford insisted that his work always starts about something seen, and photographs are always representational, but in Crawford’s case their meaning is many cases is abstract.