5-1-1966

Optical and Mechanical Movement in Painting

Carolyn LePage

Follow this and additional works at: http://scholarworks.rit.edu/theses

Recommended Citation

This Thesis is brought to you for free and open access by the Thesis/Dissertation Collections at RIT Scholar Works. It has been accepted for inclusion in Theses by an authorized administrator of RIT Scholar Works. For more information, please contact ritscholarworks@rit.edu.
OPTICAL AND MECHANICAL MOVEMENT
IN PAINTING

by

Carolyn DeMallie LePage

Candidate for the Master of Fine Arts
of the
Rochester Institute of Technology
May, 1966

Adviser: Fred Meyer
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. HISTORY AND DEVELOPMENT OF MOVEMENT IN PAINTING</td>
<td>1</td>
</tr>
<tr>
<td>II. THE NUDE</td>
<td>5</td>
</tr>
<tr>
<td>III. FIVE MONTHS IN 1966</td>
<td>7</td>
</tr>
<tr>
<td>The Pink Ladies</td>
<td>8</td>
</tr>
<tr>
<td>Self-Portrait and Portrait</td>
<td>8</td>
</tr>
<tr>
<td>White Dancing Girl</td>
<td>9</td>
</tr>
<tr>
<td>IV. TECHNIQUES OF PAINTING AND CONSTRUCTION</td>
<td>10</td>
</tr>
<tr>
<td>Paint</td>
<td>11</td>
</tr>
<tr>
<td>Sand</td>
<td>11</td>
</tr>
<tr>
<td>Motors</td>
<td>12</td>
</tr>
<tr>
<td>Wire and Canvas</td>
<td>12</td>
</tr>
<tr>
<td>V. THE MEANING OF KINETIC IMAGES</td>
<td>14</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>19</td>
</tr>
</tbody>
</table>
INTRODUCTION

It is practically hopeless for a woman to be an artist. After all, men can't have babies. If male artists could have babies, they wouldn't go to the trouble of being painters... A woman who is trying to be an artist is dividing herself...they should create at home.¹

The subject of my painting involves the feminine aspects of womankind, while the media are masculine mechanical and technical devices which produce movement and create a third dimension for paint. Research involving the history of techniques that produce movement has been used to support my venture and I have attempted to show the importance of movement in painting today.

In my painting I have tried to combine a feminine approach with an aggressive experiment in kinetic painting. I believe a creative woman can find a successful outlet in painting and be no less a homemaker.

The world of art has always been a male stronghold reluctant to admit a female as a matter of habit and custom. Despite the sexual revolution of our time, in American women are still expected to be of a weaker sort than the American male.

This makes it more difficult for women to develop the necessary ego, the self-contained, self-directed orientation toward life and work that they need as artists. Women, however, have accepted their advanced status with enthusiasm and believe that their artistic potential has always been as great as men's and that recent social changes have freed them to develop their talents more fully. Talent, conviction and persistence are necessary to insure success as an artist. If a woman has these qualities, she can continue her artistic pursuits while sharing her creative energies with her family.
CHAPTER I

HISTORY AND DEVELOPMENT OF MOVEMENT IN PAINTING

*****
The first marked break with the static composition of the classicists is evident in the painting of Eugene Delacroix. Delacroix has been proclaimed the leader of the modern school by virtue of the "singular and persistent melancholy that eminates from all his works." His Arabs, lions, pashas and warriors do not end as specific individuals represented in one dramatic movement of their lives, but are images of the total emotional life of humanity...a kind of remembrance of the greatness and passion of universal man. The breadth, irregularity and apparent spontaneity of his brush stroke was directly opposed to the smooth surface, static technique of the classical school. Delacroix introduced juxtaposed colors according to theories he developed. For the first time he used color as form, not as the decorative accessory of the classicist.

Optical movement was first evident in painting in what is referred to as "dynamic cubism" first seen in Deluanay's Eiffel Tower and in Marcel Duchamp's Nude Decending a Staircase (1913). The historical importance of the painting became the key to the Armory Show in 1913 in New York City. For the first time Americans were introduced to the Avant-Garde painting which they reacted to with rage and vehemence.

---

3 Ibid.
The kinetic factor apparent in the *Nude Descending the Staircase* was the result of a dissatisfaction with Cubism and an effort to reveal the force inherent in static objects.

Giacomo Balla's *Leash in Motion* (1912) and Luglio Russolo's *Dynamism for an Automobile* (1913) used the kinetic approach in a movement known as Futurism. The Futurist painters advocated such factors in modern life as its speed and aggressiveness—"to renew art by seeking the style of movement." They proclaimed a racing automobile more beautiful than *Winged Victory*. Marcel Duchamp set a bicycle wheel atop a stool in 1913 and called it *Mobile*. The Russian Constructivists Naum Gabo and Antoine Pevsner issued a manifesto in 1920 proclaiming their freedom "from the 1,000 year old error of art, originating in Egypt, that only static rhythms can be its elements. For present day perception the most important elements are the kinetic rhythms."

Alexander Calder really put movement into art with *Circus* in 1926. His wind and motor driven mobiles followed in the 1930's and became the first recognized aerial expressions of art in motion. Giacometti's *Suspended Ball* of 1931, Brancusi's *Fish* on a rotating pedestal in 1926 and Thomas Wilfred's *Lumias* of the 1930's with swimming projections of colored light, paved the way for motion in art.

Today kinetic artists see their art as expressing not only the machine but nature itself. George Rickey says, "Nature is
rarely still. She follows natural laws: Gravity, Newton's law of motion, the traffic laws of topology."

Naum Gabo said, "Look at a ray sun—the quietest of our silent strengths. It runs 3,000,000 kilometers per second. Our starry sky—does anyone hear it?"

Jean Tinguely owes more to Dada than to the logic of the dynamo. His rattly, self-destroying machines spring from a view of man as a prisoner of cogs and cam wheels rather than their masters. Says Tinguely, "Life is play, movement, continual movement. Only the fear of death makes us want to stop life, and to fix it impossibly forever. The moment life is fixed, it is no longer true; it is dead, and therefore uninteresting."
Duchamp—Nude Descending A Staircase—1912
CHAPTER II

THE NUDE
Modern art illustrates explicitly that the nude does not simply represent the body, but relates to all the structures that have become part of our experience. The Greeks related the nude to Geometry; Twentieth Century man with a vastly extended experience of physical life, and more elaborate patterns of mathematical symbols, requires more complex patterns for his art. The Greeks perfected the nude in order that man might feel like a god. Modern man appreciates the imperfections of human experience and behavior and depicts with great emotion the unclad body with all its flaws and ugliness.

The nudes in my paintings are young and gay. They are not intended to be beautiful but, rather to depict a tragic flaw in modern society. The Pink Lady represents the girl who is convinced that romance is an end in itself and romance means only the erotic stimulation preceding sex. Indulgence in the sex act is unimportant to her and is bait by which she obtains the gratification of being an object of romance. She is a tease; she is frivolous as conveyed by her oscillating movements.\(^5\)

---


Examples of small studies
Whirling Dancer
CHAPTER III

FIVE MONTHS IN 1966

****
Pink Lady With Swinging Foot
Pink Lady With Shoulder Motion
Pink Lady With Eyes Agog
The Pink Ladies

The paintings that I have completed in the last five months deal with the feminine woman as an aggressive part of our society. The Pink Lady series combines the wanton, sensual qualities of feminity with a sense of active aggressive behavior illustrated by the movement of special sections of the paintings. Their nudeness gives them a forthright candor that says, "This is the joie d'vivre."

The anatomy of the figures is far from ideal for the purpose of showing the imperfections in life as well as giving vitality to the figure. The exaggeration of the flesh colors is an attempt to draw attention to this Lady as one who possesses an individual personality and spirit.

The mechanical movement of the foot, arm and eyes in the Pink Lady series is an expression of the desire to display herself in a manner that is sexually stimulating and not altogether socially acceptable.

Self-Portrait and Portrait.

The Portrait of a Lady showing four views of the same woman is a combination of photographed heads and bodies drawn in charcoal in the same manner as the photograph. The four-sided rectangular box provides a challenge for design and serves to illustrate the various roles that today's woman is required to present to modern society: modesty, aggression and sexuality.
The second four-sided rectangle actually produces sixteen views of a clothed female figure in succession to give the effect of a blending of facial expression, hair arrangement and costume. The rapid movement gives one the feeling of continual change and is viewed from four sides as the viewer walks around it.

White Dancing Girl

White Dancing Girl is an experiment with colored light on white, machine-stitched organdy. The ghost-like quality as she turns within a white box, gives the feeling of a temporary existence. Life itself is so important that one must live it to its fullest. Human beings are physically frail but their works and creative energies will withstand many tests of endurance. One of the most enduring of the creative arts is the stage. White Dancing Girl symbolizes the fleeting, temporary human endeavor as she whirls, hesitates and passes through the great stage of life.
Detail - Faces of Revolving Lady
Rising Lady in two positions
Revolving Lady in four costumes
Detail of Face of Revolving Lady
CHAPTER IV

TECHNIQUES OF PAINTING AND CONSTRUCTION

*****
Detail: Use of paint and charcoal
Paint

Acrylic paint was used because of its qualities of quick drying and good coverage. Acrylic is versatile enough to adhere to many types of materials and will allow other mediums to be applied over it. Sheffield gold paint was used to affect a feminine flavor in some cases and in others to produce visual movement by the light changes that strike it. When applied under acrylic it provides a non permeable surface for scratching through from other layers. In areas where no change in appearance or oxidation of the "goldness" is desired, gold leaf was used.

In several instances satin glow varnish was combined with gold paint and gesso to produce a green patina-like color. Varnish was also used to adhere charcoal to the surface and to act as a fixitive. The varnish, when partly dried, can be scratched to produce texture.

Sand

In addition to the materials mentioned above, on some canvases sand was mixed with the acrylic gesso at the start of the painting, and spread over the canvas in a desired pattern. Sand lends a very tactile quality to the Pink Ladies and their surroundings. When sand was used, no other pigments were applied until the sand had dried into a sculptured surface.
Motors

The motors which operate the movement of the paintings are geared down, slow moving display motors connected to the moving parts by nylon threads and supporting wire.

The revolving box contains a turn table which revolves at approximately 30 revolutions per minute.

The Pink Lady With Swinging Foot and Pink Lady With Eyes Agog are battery operated and are more easily hung and transported than Pink Lady With Shoulder Motion which requires current to operate.

Wire and Canvas

The heads and various sections of the Pink Ladies are constructed of stretched canvas over wire. The surface can be shaped to any form and the weight of such a construction has the advantage of being able to move easily even when being driven by a small motor.

The shapes of the heads are significant because of the need for an irregularity of form when something such as a moving form is combined in painting. The irregularly shaped head serves as a transition between what is considered a traditional canvas and the startling movement of the separate parts. The stretched canvas and wire forms function well when prepared with acrylic medium which stiffens and gives the canvas strength to remain erect.

White Dancing Girl is constructed of white organdy, machine stitched with piano wire sewn into the seams to give it a flexible
frame. As she turns, she twists, then hesitates as the electric motor turns her around. At the foot of the box, there are three light bulbs flashing in succession. One is painted red, one blue and one white.
Detonation of motors
CHAPTER V

THE MEANING OF KINETIC IMAGES
Every radical movement in the last one hundred years, regardless of how abstract, has tried to extend the boundaries of realism. The Constructivists claim they explored the reality of structure and material; the Surrealists, the reality of the unconscious; the Cubists and Futurists, the reality of simultaneous experience; the Expressionists, the reality of inner feelings; the Impressionists, the reality of atmospheric light. The realism of today uses real time and real motion.6

One may explore also a new set of objects perhaps somewhat more related to painting and sculpture. Separate forms may be given the added dimensions of light, sound and movement. These might exist alone or in groups within a given space. To various panels, more akin to painting, the same dimensions may be applied. An important problem to be studied here are the relationships of objects to environments. When does an object become an environment? When aspects of light, sound, movement, cause an object to separate out or merge with an environment.

How it will be done depends upon the individual artist. Some works may be pure, some may consist totally of new materials, some mixtures of old and new. In any case the new forms should lead to new experience and insight, hence to deeper insight and broader knowledge of nature and man and his works.7

Time is probably the most important part of life today for it is essential for life itself. We have become more aware of its elements through scientific and artistic achievements in the past decade. Experience that we value so highly is comprised of time


7Ibid. Quotation by Robert Watts, p. 119.
16 passed. Lately artists have tried to extend our awareness to be able to comprehend time-space relationships. Music has always depended on intervals in time to exist, but only recently have the visual arts begun to explore the possibilities of creating a fourth dimension. Artists are less concerned with volume and the physical and plastic aspects of creative art as they have become impotent with their familiarity. "To incorporate our experience of the world in the forms of space and time, is the single goal of our creative art."³

In a fun-house we experience many of the sensations that the modern artist is trying to produce in a different form. Seeing is not believing and things are not as they appear to be. Many illusions of the third and fourth dimensions are created by the changes of light and sound as they bounce from surface to surface to create eerie sensations. The element of surprise and the unpredictable lurks around every corner.

A fourth dimension occurs when movement is introduced. Actual movement or the illusion of movement produces changes in the appearance of the artistic work to give the feeling of infinite change. The changes exist as time-space relationships either in regular patterns or unexpected intervals. Time-space relationships are perceived by individuals in different ways.

There is an essential difference between motion as we experience it and as the physicist describes it. To the physicist motion is primarily the displacement of an object relative to other objects. Usually perceived motion has no such relative aspect, but is considered to be entirely the affair of the moving object and may be described as a temporary attribute of that object. Even though we can make ourselves aware of the displacement of a moving object in relation to other objects, this awareness is not a part of perceived motion. It is difficult to describe the perception of a moving object because there are so many variable factors that enter into the way that an individual will perceive an occurrence of motion. The change in motion may produce the illusion of movement of the object itself, movement of its surroundings, or movement of both, depending on the speed of change, the conditions of lighting and the shapes of the objects. Only a carefully constructed series of tests by a physicist can determine perceived motion.¹

Artists using motion are trying to intensify our awareness of the basic processes of nature. They are trying to illustrate a world of molecules that collide, swing and rotate while forces hold them together; electrons that move, revolve, and spin; that a living organism is an intricate array of chemical processes. The movements of man and other living organisms can be related to basic

rhythms of nature, years, months, days, heart beat, pulse, breathing, etc.

Kinetic art dispels the old idea of the world as a static, two dimensional portrait of observed appearances, and becomes involved with the realities of natural rhythms and patterns of time and space.
BIBLIOGRAPHY


