

Kinesiology Extended

Courtney Harring's Integrative Project

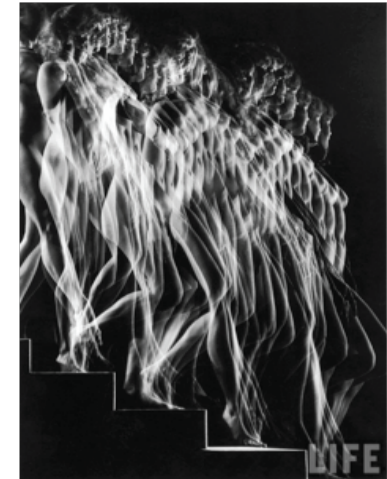
She leaps, legs and arms extended. The strength of her legs is evident in the contracted muscles as she is launched into the air with her arms perfectly straight pointing outwards, towards the audience. All of her energy is focused on this jump. As her body reaches in all directions, there is a moment where her body is literally in flight. She has reached her maximum height, her maximum extension and her maximum energy potential. As an audience member, I am able to feel the heightened sense of energy. My heart pauses, for there is something happening not only on stage but within me as well. It is in that moment that her body becomes a vessel of communication. It is this moment when the human body transforms from something of show, to a vessel of enlightenment. Her movements are full of energy not only in that moment, but also in the moments past.

Kinesiology Extended is a piece that explores the continuation of movement in space after its completion in real time. I am interested not only in tracing the physical motion path the body makes through space, but also the energy path created by the body. I have designed an immersive experience through a mixed media video installation, in which time and space are obscured to simulate these physical and energy paths.

Dance, when not viewed in person, lives on in video and photography. It is only because of these mediums that I am able to view the work of Loie Fuller today. Loie Fuller was a pioneer in modern dance in the early 1900's. She was known for her skirt dances, in which she would wear a long silk dress with long bamboo poles attached to her arms. With the poles she would swirl the fabric in intricate formations to create a beautiful spectacle. It is her work that first inspired me to think about past motions as a physical objects that could

exist in space. To learn more about how others have thought about movement in time, I looked to photography for answers. Photography is used to suspend time and motion within a single frame. The photographic work of Gjon Mili and Manuel Cafini especially speak to the capture of movement in time.

Gjon Mili's work shows movement and the passing of time through editing and stacking images in space. His work explores time by presenting multiples in way that shows a progression of movement. There is a rhythm and heartbeat in his photography through this use of multiple still images. Manuel Cafini also illustrates movement but in a much more abstract and fluid way. He uses motion blur to his advantage in his photographs. Through brightly colored clothing the figure's motion is seen through fluids streaks of color.



*Top Left: Manuel Cafini
Bottom Left: Loie Fuller
Right: Gjon Mili*

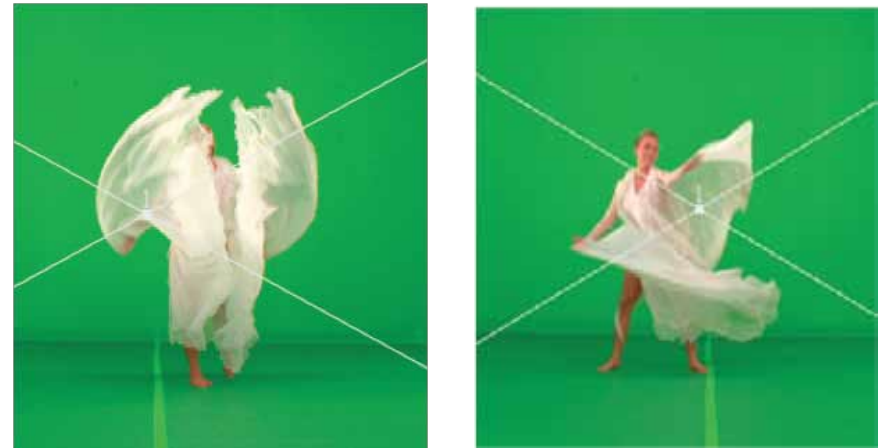
Since the beginning of my process I have wanted to make motion in time visible in a sculpted 3-dimensional form. In looking for ways to translate the “concept of motion” into sculpture, I looked to the work of Peter Jansen. His work is similar to Gjon Mili’s in the way he stacks multiples to create motion. From his work I was able to see the complexity of motion paths when made into a physical form. His work clearly defines each movement, showing the body in each position within one whole movement.



Peter Jansen: Motion Sculpture

Early on in my exploration of movement paths, I began working with Peter Sparling, a well-known choreographer, dancer, and a Thurnau Professor of Dance at the University of Michigan. I needed to feel these movements with my own body, and to experience the progression of time with movement. Peter led me through an improvisation movement exercise in front of a green screen. Dressed in a costume with long flowing sleeves, I moved through the space with my body to discover the costume was acting as a “physical” motion path when

the film. From looking at stills from the footage, I began to draw connections to Cafini’s work. Much like Cafini’s work, I found that the fabric acted as a sort of motion blur. This is when I realized the reason for my interest in Loie Fuller. Viewing these different ways of presenting motion in time and space, I was able to realize that all of these different artists are striving to do the same thing; to document motion paths created by the human body. Cafini and Mili used light to capture the body, while Jansen and Fuller used physical objects to show these motion paths.



Stills from the original footage shot with Peter Sparling

Following this discovery, I began to think about separating the body from the fabric. In my modern dance class, my instructor talked about “carving out space with your body.” I began thinking about space as a material, and my body moving through it. I then questioned how my body affects the space around me while in motion. I started to conduct experiments using a green screen suit with various materials attached to the suit. A green screen suit is used in film and photography

when the body needs to be edited out of the frame. After eliminating the body in editing, I was able to see how the material moved through space. The material was acting as the filled negative space that would result from “carving out space.”



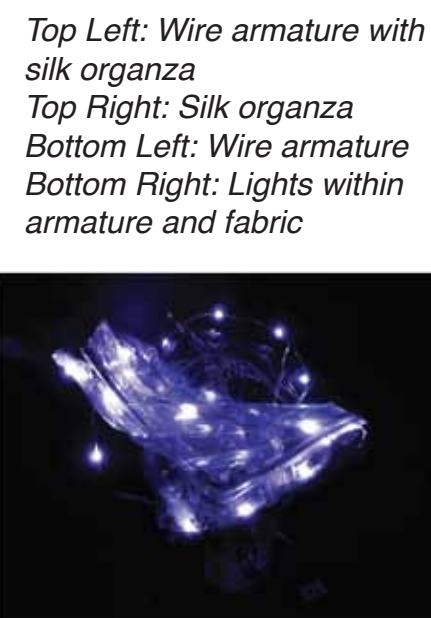
Unedited and edited stills from footage with green screen suit

Seeing the movements without the body led me to ponder the energy involved in movement; not only the energy used to make the movement, but also the energy left behind after a movement is made. In the practice of T'ai Chi, there is much focus on the outcome of physical movements. For example T'ai Chi movements are creating energy known as one's chi. T'ai Chi is used to extend this energy, to understand it and let it flow out from the body. John Kotsias explains in his book *The Essential Movements of T'ai Chi*, “to extend Ki or Chi means to direct your energy and spirit outwards...Extending Chi allows us to have awareness not only of ourselves, but also of that which is around us. It is the natural flow of one's energy outward, unimpeded, unobstructed and continuous.” Positive energy is first being created by the person, then flows

out from the person through the use of movement.

This explanation of energy helped me to realize what I really was trying to accomplish with this piece. I wanted to not only draw out motion in a physical space, but also to make visible the energy that extends from the body when motion is created. I turned to the element of light. Light is one of the most obvious forms of energy because it can be seen. Light is also what is used in photography and video to capture movement. Thus it seemed to be the most obvious medium to use in creating my piece. I wanted to create a physical piece made of light, or at least that looked as if it were made of light. This, I was told, is impossible, however I still set out to break the laws of physics.

Choosing the movements I wished to convey in my piece, I began creating small (12"x12"x14") wire armatures that mimicked Jansen's way of communicating motion. I didn't want these armatures to be visible, but I wanted to create a piece that was relatively true to the actual motion path. Draping different materials over the armatures, I sought to blur this motion, as seen in Cafini's work. The folds in flowing fabric resembles the streaks of light as seen in motion photography. The material would only act as something physical that I could bounce light off of, rather than the main focus of the work. It was my hope to find a material that would be sheer enough to look as if the material wasn't actually the material, but instead just composed of the light being reflected on it. Experimenting with plastics and sculpted fabrics, I finally settled on a sheer silk organza. The organza was very transparent and held the shape when fabric stiffener (Sculpt or Coat®) was applied and then sculpted.



Top Left: Wire armature with silk organza

Top Right: Silk organza

Bottom Left: Wire armature

Bottom Right: Lights within armature and fabric

Once the form and materials were chosen, I needed to discover the light source. I experimented with attaching and shining different lights on the folds of the fabric. These experiments however, left me with simply a lit object. My piece that was once so much about human movement had lost the element of actual human movement. The fabric had taken on its own movement, yet it lacked the connection to the body in time and space.

Returning to the studies I conducted with Peter Sparling, I decided to incorporate the video into my piece. However, I did not want the video to become the piece. A sculptural element needed to remain; a physical form that would trace the movement being created in the film. I sculpted a silk organza form that abstracted some of the movements I found in the film. Again I was looking at how the movements of the fabric would look without the body present. Finding an overall form that captured many of the movements found in the film, I started to project the film on to the form. By projecting the edited video onto the fiber form I was able to bring all of the elements together.



Stills from edited footage from earlier studies

This piece plays with the physicality of motion within time. The translucency of this fiber sculpture suggests the movement remains in state of questionable physicality. The fiber draws out the movements of the past, while the video moves in and out of the fiber. The video is showing the movement that precedes the movements represented by the fabric. With the presence of the body in the film, the viewer is able to make the connection between the body's movements and the extension of those movements portrayed in the fiber. By using fiber there is also the connection between the costume being worn by the dancer and how fabric acts as a physical motion path. I am suggesting the movement's non-existence in real time, yet the fiber still exists physically within a space. Thus I am switching what is usually physical (a body moving) with the abstract concept of energy being left behind after a movement is made.

This concept needed to be housed in space of its own. Conceptually it is complex, thus I needed to create a space in which time, space and reality could be obscured. Thus I created a space of illusion. Constructing a 9'x4'x5' wooden structure, I used mirrors angled strategically to create the illusion of a large space. Placing the fiber sculpture within the structure, the mirrors create multiples of the fiber. Thus making it seem as if the space is filled with the fiber sculptures. Video projections are then cast into the constructed space and move in and out of the physical fiber as well as the reflections of the fiber in the mirror. There are moments when the video syncs up with the sculptures and there are moments when the video falls onto the mirrors. When the image falls onto the mirror it becomes less physical and more ethereal. The video becomes, as some have described it, a "light painting."



Structure built to house mirrors, the fiber sculpture and the projector

I desired for the piece to be about the experience of viewing the illusion within the structure, rather than about the appearance of the structure. Thus, when presenting my piece, I placed it at eye level behind a curtain with a peephole in the middle. The curtain added an element of surprise to the work. Walking up to the curtain, the viewer is unaware of what is behind the peephole. By adding the peephole I was able to direct the viewer's gaze and make my piece more of an experience. Also, since the viewpoint is very precise, it plays into the illusion of space. In conjunction with the mirrors, the limited view makes the space seem as if you are looking into a small room rather than a large box.



Uncoverd peephole looking into the structure from the outside



Top Left: View presented to audience

Top Right: Viewers looking into peephole

Bottom Left: View behind curtain



I have created an immersive experience that leaves the viewer questioning the reality of what they are viewing. The video and the environment it is projected into, creates a world in which it is possible to see human movement in various time frames and various physical forms. Through the use of projected video I am able to create paintings of light that conceptually and visually make my piece stronger. Kinesiology Extended has led me to question other ways in which the concept of human movement extended in time and space can be portrayed and expanded upon. Including the use of

different materials, different movements outside dance, and the use of static movement and actual movement as in a video. It also raised questions as to what is possible when using light as a medium. In addition, the ways in which this concept could become more immersive, perhaps through making an actual room installation. These questions drive me seek more answers dealing with extension of human movement. As the author John Steinbeck once wrote, "Many a trip continues long after movement in time and space have ceased."



View from within the peephole



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