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Rochester Institute of Technology

A thesis submitted to the faculty of

The College of Imaging Arts and Sciences

In candidacy for the degree of

Master of Fine Arts in Metals and Jewelry Design

School for American Crafts

Live in the Moment: The Essence of Life

by

Ta-Wen Huang

May 2014

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Abstract

I have thought about the essence of human life ever since I witnessed the impermanence of people's lives through a near-death experience I had when I was nineteen years old. Life is a given amount of time, space, and memory, and every person, event, and object in the universe is stored up in time, space, and memory. These three factors combine to create the unique experience, character, and life of each individual person.

A number of experts from different fields, as well as international celebrities, have publicly expressed various thoughts on life. However, most of their theories are explained with difficult words or equations. As an artist and architect, I want to depict the appearance of human life via my understanding of these theories as well as my own experiences. In my eyes, the complex world in which we live is composed of geometric patterns. Every object, every room, every person, and every living creature, from the micro to the macro, is defined by a form derived from a geometric pattern. Nature itself is full of geometric patterns that define and redefine every structure, each moment, and all events as they unfold.

In this thesis paper, I discuss my main influences as an artist and the inspiration behind my thesis topic, as well as the background of each piece in my body of work. I want to use my artwork to signify, through these patterns, that the present moment is the most important point in time of a person's life. The present moment is the only thing that people can change; yet, people are constantly regretting their pasts and planning their futures. Neither the past nor the future is changeable: we cannot turn back time and the future does not yet exist. Therefore, the present moment is the only point in time that matters. In this moment, people exist as they are; in the next

moment, they will be different. Our lives will be led in other directions as time moves forward. This is a major theme in my pursuit of art.

Influence

The most important influences on my artistic ability come from my culture and my father. In Taiwan, children learn Chinese characters through pictures because the basic characters of the Chinese language are derived from images. For me, looking at Chinese characters is the same as looking at pictures. Moreover, instead of fairy tales, my father used to read me Tang poetry¹ in my early childhood. Tang poetry is composed of antique characters and modes. At the time, I was too young to understand antique writing, so my father told me, "If you think words are pictures, then stories are animations. Chinese characters came from real objects, but you have to release your imagination when you read and write them." I then learned to translate my imagination into my writing, and my writing into my art.

My early life also influenced my way of thinking. My father was a teacher of literature and drawing, but he was also an advocate of science. In order to encourage my brother and me to involve ourselves in the sciences, my family used to watch programs such as *MacGyver* and *Star Trek* on weekends—my first exposure to science and science fiction. I believed that science could solve most of the world's problems. In my early education, I gravitated toward the sciences, especially mathematics and physics.

While studying art, literature, mathematics, and physics at the same time, I enjoyed switching my thoughts from one to another, even though people believe that math and physics are diametrically opposed to art and literature. Due to my love of both literature and science, I entered my university's Department of Design and graduated with a BA in architecture. Although architecture is considered a design

¹ Tang poetry http://etext.virginia.edu/chinese/frame.htm

program, architecture students believe that they are both artists and craftsmen. Students are trained to develop concepts and then apply their art form to the design of buildings. These students also believe that buildings themselves are a form of functional artwork for cities. However, I realized that being an architect actually involves telling other people's stories via my own design. Instead of being a translator, I prefer to share what I myself know, feel, and see.

I consider my art to be a kind of storybook, including parables, issues, feelings, and messages, and I am like a writer trying to simplify complicated issues for the understanding of general readers. As in my artwork, I want to present my understanding from the perspective of different fields, simplify complex issues, and create solid objects. I hope my audience has the chance to access those different fields and viewpoints when they look at my artwork.

Inspiration

I was involved in a traffic accident when I was a sophomore in college. As I saw the car coming toward me, I had a sudden, strong sense of everything around me. At that moment, motion suddenly froze, but memory kept welling up in my mind. I heard the last sentences I said to my family and my friends. Many important scenes from my life flashed through my mind and those memories were so bright. Every scene, every event, every person, and every facial expression seemed to have been deeply inscribed on my heart, even though I had not recalled them for a long time.

I spent a week in the hospital, during which time I thought about my situation and what I had felt at the moment of the accident. I realized that life is very fragile: this minor accident had reduced my capability to walk for a whole week. I had always planned for my future, but I realized then that an accident could suddenly destroy my plans, or even my life. The feelings I had at that moment changed me a great deal. I used to think that if I was not in a good mood, I did not need to respond politely to other people, even my family and friends. Since my accident, I try to be nice to the people who are close to me each time I see them, as I really have no idea if we will ever meet again.

In that moment, I perceived the weakness and impermanence of human life, and the way in which life inspires people during catastrophes. This accident gave me a chance to look at my nineteen years of life and see it as a series of choices; whether the results are good or bad, making choices is the only way to move forward. Thus, every choice is both a cause and an effect, and all of those causes and effects coiled together to compose my life. The accident was an effect at that moment, but it also became an opportunity for me to peer into the essence of human life.

"Life" is a gigantic and complicated word. Some religions believe in reincarnation or in heaven and hell, and through these theories people understand the meaning of life. However, as Confucius said, "While you do not know life, how can you know about death?" Thus, scientists often try to find out how life first appeared in this world. Ideas such as the Big Bang theory² point to the sources of life, while Darwin's theory of evolution presents changes in living organisms. These theories have both ideological and academic value, but I think learning about life as we know it is what most people have to do. Indeed, everyone is constantly learning about life every day.

Many experts from multiple scientific fields have explained life for more than a hundred years. For example, Hermann Minkowski,³ a mathematician, used four dimensions⁴ to explain life. In general, everything that is alive is also mortal: people will die, food will rot, flowers will fade, and forms will perish. No living thing can escape from aging. Conversely, life involves everything, including the universe,⁵ so not only do philosophers, rationalists, theologians, and scientists try to decode life, but also every person has his or her own questions about life.

Time is a basic element of life because it is the unit with which people calculate the length of life. But what is time? Isaac Newton's Absolute Time theory pointed out that time is completely separate from and independent of space.⁶ Most people share this common-sense view because it fits their experiences. A traditional timeline, a line with

² Hawking, S (Placeholder1) (Placeholder1) (Hawking)tephen. and Mlodinow, Leonard. *A Briefer History of Tim*, chapter 8.

³ < http://www-history.mcs.st-andrews.ac.uk/Biographies/Minkowski.html >, para. 7.

⁴ Hawking, Stephen. and Mlodinow, Leonard. A Briefer History of Time, p. 35, para. 2.

⁵ Hawking, Stephen. and Mlodinow, Leonard. A Briefer History of Time, chapter 8.

⁶ Hawking, Stephen. and Mlodinow, Leonard. A Briefer History of Time, p. 28.

single arrow symbol, is the simplest example of Absolute Time theory. Time is the axis of life and events are just points on life's timeline.

Time is a natively unusual concept: it is impossible to prove that it exists, but every person knows that it exists. The idea of time passing or flying is basic to people's understanding of life. Then, does time exist? If there were no human-made time measurements, the earth would go back to its natural time measurement, which is one day. The most fundamental astronomical period we experience is a day's journey into night and back again. Deeply imprinted in our biology as our circadian rhythms, the day/night, light/dark cycle sets the ebb and flow of our sleep and wakefulness. Yet, the polar day and the polar night would make it difficult to measure time, because constancy makes time meaningless. As Ian Hinckfuss said, "Time is the daddy of all processes. It is the 'process' by virtue of which all other processes take place."8 In order to record changing processes, people created time, and it is change that provides the illusion of time. From this explanation, it is easy to see that change creates and gives value to time. Therefore, creating an art form that depicts "change" is the main idea behind my depiction of "time." Violent changes are apparent and sudden, but there are many more slight changes in people's daily lives. Although slight changes can be easily ignored, especially when compared to violent changes, these slow processes demonstrate the effects of time more clearly than rapid ones. Thus, I will use the changes inherent in daily life to depict the existence of "time" in people's lives.

Space is an indispensable element of life. People live in spaces, and every event has to happen in a space. A "space" is also a place for storing stuff. Compared with

⁷ Frank, Adam. *About Time*, p. 10

⁸ Hinckfuss, Ian. *The Existence of Space and Time*, p. 63.

⁹ Frank, Adam. *About Time*, p. 300

time, space seems easier to understand because it is a physical concept. People can describe the shape and size of a space, whether it can really be seen or not. Space is therefore a sort of entity, even though people cannot touch it.

I hold a BA in architecture, so space is a familiar concept to me. Architecture is the knowledge of designing and creating spaces. Every student has to anticipate what kind of feelings, experiences, and events the design of a space will provide. While studying architecture, I began to understand that architecture is not only a combination of humanities and technology, but is also a construct of the relationship between humanity and space. Therefore, in addition to storing objects, space supplies people with fullness of heart. In human life, meeting, feeling, and experiencing have to happen in various spaces: the same place might appear again and again, but different timing, people, and conversations will develop different mood and events. Thus, the value of a space is based on its providing experiences for people. In order to address this aspect, I created an art form that presents the relationship between life and space by applying my background in architecture to my artwork. The relationship between life and space is manifested in links, which appear during the movement from one space to another. The links between these spaces shape human life.

In Julie Tremblay's *Reflections*¹⁰ collection, I strongly sense the combination of time and space. *Reflections* consists of 10 figures that are hand sculpted from castoff industrial sheet metal. Each figure is posed to convey sadness, loneliness, or happiness as ordinary experiences in human life. The sheet metal reflects light and makes the sculptures transparent; this feature also creates illusions between different modes of existence, which vanish in a moment as afterimages. At first, 'moments of life' was the artistic theme I



Reflections No 8 by Julie Tremblay

wanted to explore; however, after my deep discovery of time and space, other elements became apparent.

Time and space seem to be very different concepts, yet they are similar in essence. Time arranges events, while space arranges objects. Moreover, changes appear in a space and experiences are accumulated via time. Hermann Minkowski considered space and time, which were formerly thought to be independent, to be coupled together in a four-dimensional concept called space-time. ¹¹ In the space-time of relativity, four numbers or coordinates can specify any event. ¹² Since each person has one life, two people are able to meet each other by appearing in the same place at

¹⁰ Julie Tremblay http://www.craigscottgallery.com/?sec=4&news_id=60
Reflections No

^{8&}lt;a href="http://www.craigscottgallery.com/?sec=2&artist_id=27&picture_id=1011&sort_order=8">http://www.craigscottgallery.com/?sec=2&artist_id=27&picture_id=1011&sort_order=8

^{11 &}lt;a href="http://www-history.mcs.st-andrews.ac.uk/Biographies/Minkowski.html">http://www-history.mcs.st-andrews.ac.uk/Biographies/Minkowski.html, para. 7.

¹² Hawking, Stephen. and Mlodinow, Leonard. A Briefer History of Time, p. 35, para. 2.

the same time at different moments in their lives. The four-dimensional concept provides a clear shape for the depiction of life. However, compared to reality, it is hard to visually present the idea that I exist in one place at this moment, and even if I do not move, in the next moment I will be in a different four-dimensional space. Thus, the challenge of shaping this concept is how to present the essence of the four-dimensionality of daily life.

Changes and experiences are preserved in memory. I believe that memory is the most important part of life, and the weight of one's life depends upon the quality and quantity of one's memories. As I maintained, in order to record changes, people created the concept of time, and the secret to this is memory. The order of memories helps people to understand that every event happens step by step, and it is the reason that people can feel time passing.

Every choice in people's lives depends on their memories and experiences, since memories give people the capability of knowing right from wrong and of predicting cause and effect. Memory is a history of each individual person; yet, it is not only what people go through, but also what people learn, think, and dream. Learning is remembering the experiences and achievements of our forebears, while thinking helps people to use their memories to make better choices. Thus, memories and impressions are the concrete evidence of life. I believe that memories are attached to objects; thus, in an empty space, there is nothing to provide experiences and therefore nothing that needs to be remembered. I will therefore use certain objects in my work that represent not only my memories but also the evidence of the existence of my life.

In conclusion, in certain ways, life is like a movie: it is composed of moments in time as a movie is composed of frames. In a movie, each frame has its own scene, story, and time point, which make it unique. Even though adjacent frames may look

the same, they still exist individually at different points in time. In life, although every moment relates to other moments, it still exists individually and has its own time, space, event, and choices. The order in which time is strung together at every moment creates a unique life for each person in the world.

In my artwork, I attempt to portray memory, time, space, and life as seen through my eyes.

Body of Work

Whenever (Figures 1, 2, 3, 4, & 5)

"A memory should have a moral ending: it's its raison d'ktre, otherwise it's mere gossip." ¹³

I believe that slow processes demonstrate the effects of time most clearly, so I started to look into my daily life for examples of such processes. I found that I repeat most behaviors from day to day, such as going to school and eating breakfast. I also found that I drink a cup of tea every day. During this activity, I can feel time slowly passing as my sensations change slightly every second. I love to watch the water change color and the tea leaves expand. However, I found that I could not recall many details from my daily reenactment of this scene.

I chose to represent tea drinking in this artwork in order to depict the slow passing of time. By photographing my tea-drinking habit for several weeks, I found that although I used the same cup and sat in the same place at the same time every day, the pictures that I took were never the same. Sunshine provided different types of light, shadow, and color, and other elements changed as well, such as the number of tea leaves and the water.

Presenting the design of teabags, the shape of tea leaves, and the color of tea became the challenges of this design. First of all, I tried to find teabags which fit my concept and my character the most on the market, so I chose the teabags, which have a clean pyramid shape, form Tea Fortă¹⁴. I then tried to figure out

¹³ Morand, Paul. *The Allure of Chanel.*, p. 60

¹⁴ < http://www.teaforte.com/ >

how to combine them with my thought of design. Next, since this piece was about capturing the moment, I had to keep the shape of tea leaves. How to make the tea leaves became my first challenge. I tried casting, folding, chasing, and using silver clay, but none of these methods worked very well. I then started to review my other designs. Most of my works are composed of wires—which is part of my character—so instead of making "real" leaves, I tried to represent them symbolically. My first concern regarding tea was color and clearness; however, the design had to be able to hold the teabags and tea leaves in the same position without evaporating. Therefore, I chose to use clear epoxy resin, which can be colored and will solidify and stay clear.

In creating this cup set, I designed each cup using photographs to determine the color of the tea, the level of the water, and the spots on the teabags; the objective was to create unique tea cups at unique moments. However, when the tea cups were lined up, a timeline did not exist: I couldn't figure out which one belonged to which day. I therefore realized that even though memory is extremely important, in the course of one's whole life, few events will be remembered. People accumulate memories in every moment, but they also lose memories every moment, and many unremarkable memories eventually vanish.

Size: six-piece set of cups, 7" x 7" x 3" each

Materials: glass teaware, teabags, sterling silver, fine silver, and clear epoxy resin Methods: chasing, soldering, and sandblasting

Multi-universe (Figures 6, 7, 8, & 9)

"The multiverse is the hypothetical set of multiple possible universes that together comprise everything that exists: the entirety of space, time, matter,

and energy as well as the physical laws and constants that describe them.

The term was coined in 1895 by the American philosopher and psychologist William James. The various universe within the multiverse are sometimes called parallel universes."¹⁵

The multi-universe is a concept of science fiction. The basic idea of the parallel universe is that every choice can create a universe. For example, if a person can make three different choices at this moment, then the universe he is in will split into three different universes.

The original design of my concept of space-time was to line up a few slightly different cubical spaces to represent the idea that even though I occupy one point in space-time now, in the next moment I will be at a different point in space-time. I therefore tried to design every cubical space in this piece with furniture, a window, and a door. The changes in these circumstances throughout the artwork represent the concept of space-time. When I was making the entrances/doors, I realized that the choices we make in life are like doors that provide access to other spaces. People literally move from space to space via doors, and in life, people move forward by making decisions. When I need to make a decision, I have to ponder the risks, just as children may peep through a keyhole to see what is going on in the next room.

I started this piece by recording and building doors. During these processes, I went through many different doors. I employed the idea of four-dimensional spacetime and used my background as a building designer to create the different spaces that I went through. Meanwhile, I also realized that I always pace back and forth in a few specific places. Yet, because every moment is unique, even if I go back the same

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¹⁵http://www.universe-galaxies-stars.com/Multiverse_science_29.html, para.1.

place, nothing in the space is the same, including me. I then have to face totally different choices and I might see different people or events at that moment. So I found that instead of using multiple scenes to create a form of multiverse, repeating the same scene is actually closer to reality.

Since doors are the main idea of this piece, I started by making doors. In order to create spaces that were different, but also similar, I chose to use sand casting instead of handcraft. This was my first time using this method, and it was different from regular casting. During the process, I made some defective doors (Figure 8), which fit the idea from the first piece, "Whenever." Although even those doors that seemed perfect could not be exactly the same, I chose to make each separately. I then developed simple three-dimensional graphs of geometrical cube models, which present places in human life, and used similar walls and floors to present the same places. Wood is one of the original materials of building. I then created a wooden structure to represent a short span in a person's life based on the multiverse theory. Since according to the theory, the universe is expanding, I designed the ends of the structure to be cut irregularly in order to evoke a feeling of continuousness, and I burned one side to represent the past. Even though the vertical spaces are on the same time points, each person can only appear in one space each time: whether he likes it or not he is going to exist at the next moment.

Size: 24" x 12" x 17"

Materials: sterling silver and wood (maple and walnut)

Methods: sand casting and woodworking

Chain of Events (Figures 10 & 11)

The previous piece, "Multi-universe," shows that life in the multiverse theory is gigantic and complicated. Though the multiverse theory represents life as a gigantic net, I think that real life may be more like a single chain, which was the inspiration for this piece. The function of doors is to connect spaces: once a door is opened, two spaces are attached, and people have to move forward to face other choices. In this process, people are not able to know which choice will lead them to better places, and the only thing to do is move forward.

In this work, I use geometric structures to symbolically represent events or experiences—in this case, my own experiences in my life. I define the term "event" as a scenario that includes time and space, objects and emotions. Every event connects to other events, creating a link, and every link becomes a chain of events. Each structure I make, in this case the cube, is not shaped perfectly as defined by its geometry, but instead has been rearranged as a unique new structure symbolizing an event in a person's life. My intention is not to make a perfect representation or geometric balance, but rather to create a new structure, defined by that moment in time and space, becoming the event in its own unique way—the link of events that shapes a person's life. Moreover, I believe that everyone has had some glorious moments in their lives, such as a graduation or a wedding. In order to present these important moments, I set diamonds in some of the cubes (Figure 11). During the design process, I turned this piece into a wearable accessory; this represented how time and space may change, but life derives from the human heart. I entitled this piece "Life" because it became a chain that emerges from the center of a person (Figure 10).

Size: 6' long

Materials: sterling silver, brass, and diamonds

Methods: soldering and flash setting

A Place on Time (Figures 12 & 13)

In "Chain of Events," life is portrayed as dominated by people's choices;

however, life also includes physiology and psychology. Psychologically, when

troubles happen in my life and I have to struggle by myself, I feel that the spaces I am

in are not as flat and stable as what I see. The feeling is like standing on a slope and

looking up at doors on the ceiling that I can see, but cannot reach.

The original piece in this design was a brooch (Figure 16). After some

discussion, I enlarged it to become a sculpture, increasing the intensity of the design

and representing my own feeling of struggle. I started with the big cube, which

represents a difficult moment in my life. This cube is made imperfectly and is placed

diagonally in order to show the crooked space, which makes it difficult for me to reach

some points and presents a space that contains choices to which I can only look up. On

the other hand, even though life is full of choices and difficulties, it does have some

quiet time, so the small cube is made whole, representing the regular movements of my

life. I made the small cube white, a calm and peaceful color, to represent an ordinary

moment, and kept the big cube the original color of steel, which has a tougher feel, in

order to demonstrate my feelings about the two different space-times.

Size: 6.5' x 8.5'

Materials: steel

Methods: welding, grinding, and power coating

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Life (Figures 14, 15, & 16)

"The only reason for time is so that everything doesn't happen at once." -

Albert Einstein

When I started this thesis, I tried to avoid using circles because it looked like everything was happening all over again. However, in the process of creating this thesis, I recalled the memories and feelings associated with my traffic accident. I felt that life is full of choices and that all choices are both causes and effects, which coil together to compose my life. Every choice is both an effect and a cause, so every moment in a person's life relates to the other moments. In my life, every choice I make stems from my past, so I realize that every memory, movement, and choice affects who I am at this moment—and yet, this moment is passing. In this piece, in order to connect a visual chain of events that could record who I am, what I am thinking, and what I understand at a given moment, I tied the beginning and the end of the chain

together with material I happened to find handy. Linking the chain in this way created a

Size: 30" long

Materials: sterling silver, brass, spring steel, and ribbon

circle to present every moment of my past create who I am now.

Methods: soldering

20

Figures



Figure 1 – Whenever



Figure 2 – Whenever



Figure 3 – Whenever (detail)



Figure 4 – Whenever (detail)



Figure 5 – Whenever (detail)



Figure 6 – Multi-universe

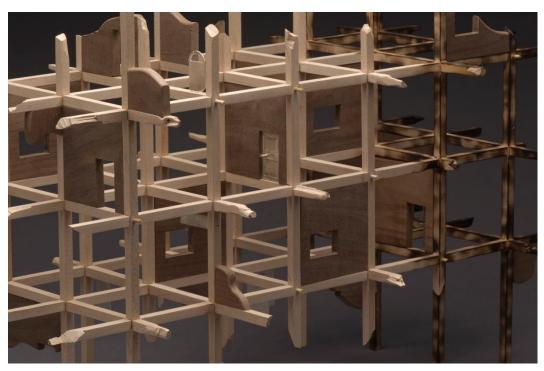


Figure 7 – Multi-universe



Figure 8 – Multi-universe (detail)



Figure 9 – Multi-universe (detail)



Figure 10 – Chain of Events



Figure 11 – Chain of Events (detail)

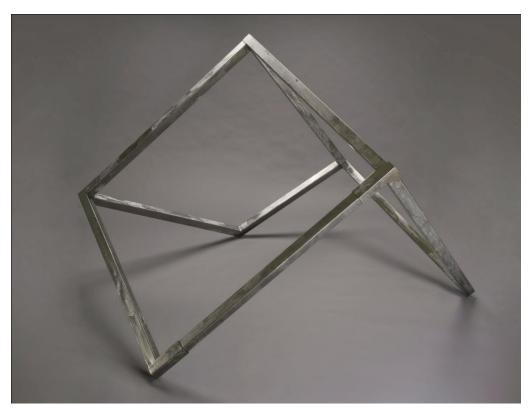


Figure 12 – A Place on Time



Figure 13 – A Place on Time

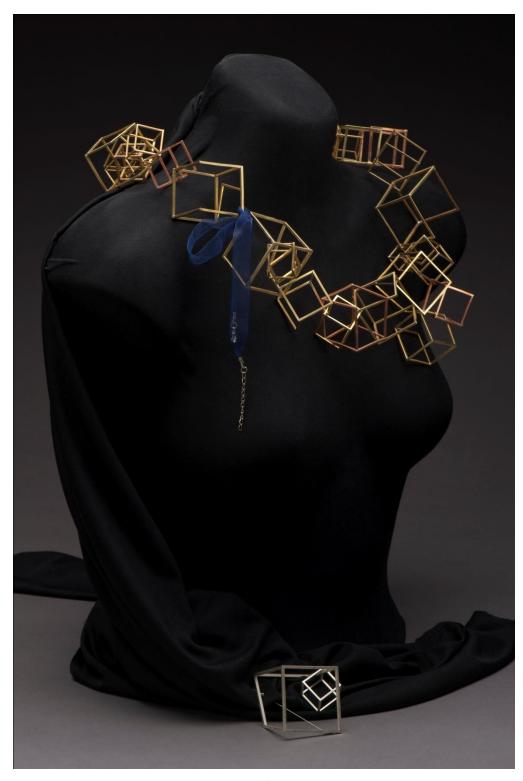


Figure 14 – Life

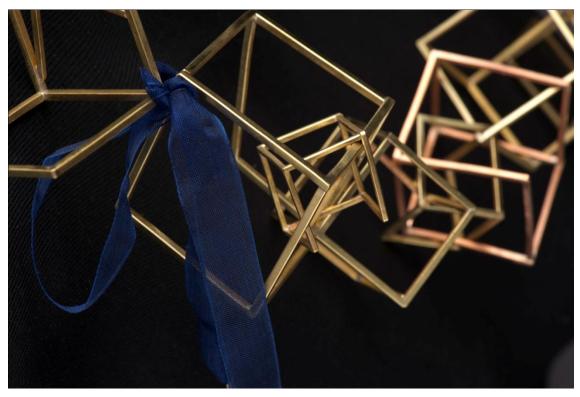


Figure 15 – Life (detail)

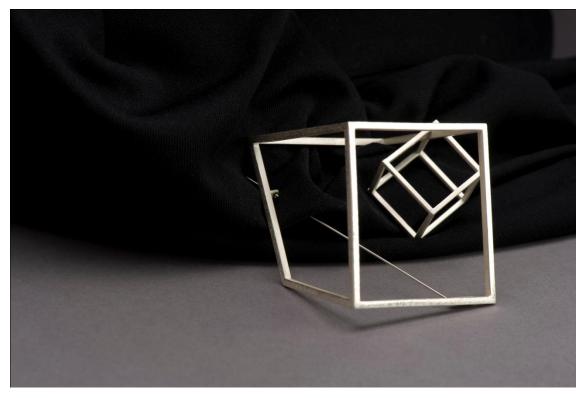


Figure 16 – Life (detail)

Even though I can describe my artwork quite reasonably, when I introduced my work to viewers, some points were difficult for them to understand and for me to explain.

- "Whenever" and "Multi-universe" are easy to understand as shapes, but a few viewers suggested that some images would help them to more easily grasp the concept.
- 2. Although the process from "Multi-universe" to "Chain of Events" is intelligible, some viewers thought that doors seemed to be important elements in the process. Perhaps I should have created more work involving doors. I agree with my viewers that I missed some important points; my thinking moved forward too quickly. Someday, I might do some basic work with doors.
- 3. In "Chain of Events," viewers had trouble with the display. Why use the figure? They thought the display seemed designed to be pleasing to the eye. First, events happen to humans, so I maintain that "Chain of Events" should use the human figure as part of the display. Moreover, a compounded display might be another choice. Second, I do not deny my consideration of beauty in this piece; from my perspective, artwork must combine art, craft, and beauty.
- 4. Several viewers mentioned that "Chain of Events," "A Place on Time," and "Life" have many similarities. The reason for these similarities is that the form of the artwork strongly represents the primary concept I had at that moment; therefore, I increased the strength of the art form.

Conclusion

As an artist, I want to share what I see, what I know, and what I think. In this thesis, I created five pieces that reflect my life, my background, and my knowledge; yet, each piece is a step toward my discovery of the essence of life. I also included some scientific theories in my pieces, and I hope that, by seeing my artwork, people can access new fields of knowledge with which they are unfamiliar.

At the conclusion of this investigation, I now think of my life in this moment as being supported by everything that has happened to me, and I believe that the present moment is the only moment in which I can be myself. Loss and gain are normal in human life, so in this moment I am already different from who I was in the last. During the present moment, I see, hear, learn, and think, and then I become a different person. I do not excessively think about the past or anticipate the future. The past is solid fact, which becomes nutrients for the rest of my life. As for the future, perhaps if I can cherish every present moment, it will happen in the way I want. Thus, "live in the moment" is what I have to learn now.

During my thesis year, I explored, researched, and studied many aspects of life, but life has innumerable aspects. It is impossible to fully analyze and understand life in few pages or in one year. In consideration of this effort, my next venture as an artist and human being is to frequently recall this concept in my attempt to create new art forms in this continuous cycle of life.

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