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A Jewelry Study on the Coexistence of Emotions
– Focusing on Copper Electroforming –

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February 2016

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A Jewelry Study on the Coexistence of Emotions
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Abstract

A Jewelry Study on the Coexistence of Emotions
— Focusing on Copper Electroforming —

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In this thesis, I intend to explore the meaning and significance of ambivalence, my personal understanding of feeling the coexistence of emotions, and how my emotional fluctuations have ultimately resulted to choosing copper electroforming technique and other specific materials to carry on the jewelry practices. Through recordings and observations on personal thoughts and feelings, I have realized that my works reflected my emotional status: the emotion not being composed of a simple and straightforward state, but rather being the amalgamation of them existing simultaneously. In psychology, such understanding of two or more emotions coexisting towards a subject is called ambivalence.

I found ways to recreate my emotional states from directly transforming drawings to three-dimensional figures by using copper electroforming technique. Other techniques like laser-welding and casting, and materials such as stainless steel, acrylic sheets, spray paint, silver, and charcoal were used to accentuate the fragility of the copper units, yet firmly create a jewelry piece for a comfortable wear. I
realized that I have actually accepted my ambivalent mind before I was even aware of it, and was portraying the positivity of having contrary emotions through my works.

In order to reflect the coexistence of emotions, I juxtaposed two or more contrary components (i.e. combining delicately created electroformed units with a sturdy acrylic sheet) in a single jewelry piece. As much as I was afraid to be in such a confusing state of mind, I wanted to be able to tell those who see the following works to feel more positive about how they feel about withholding many different emotions towards certain subjects. Throughout this thesis project, I have slowly begun to understand my inner self, and anticipate exploring who I am not only as an art jeweler, but also as an individual continuously trying to discover myself.

Keyword: ambivalence, coexistence of emotions, state of mind, electroforming
Student Number: 2013-21213
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I. Introduction

‘Attaching small and fragile beads on stern pebbles or stones, or laser-welding small fragments of wires to create a bigger structure have already represented my state of mind even before I was aware of it.’

08032015 personal notes

I always believed that I was uncomfortable with the coexistence of emotions until I realized that my works actually reflected myself embracing it. By recognizing, observing, and understanding the ambivalent mind, I have learned to adapt these practices and reflect them into my jewelry works positively.

It was natural for me to try my best to disregard ambivalent situations from occurring. The inability to be decisive with my own mind seemed weak of a person, and as a result, as the internal complexity relapsed continuously, I began to focus on a single, dominant emotion as much as possible. However, the recurrence of different emotions was not easy to completely disregard.

In this thesis, I intend to explore the meaning and significance of ambivalence, my personal understanding of feeling the coexistence of emotions, and how my emotional fluctuations have ultimately resulted to choosing copper electroforming technique and other specific

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1 ‘단단한 돌 위에 본드로 작고 약한 비즈 구조물을 붙이는 행위나, 얇은 선을 이어져 더 크고 건고한 모양을 만들었던 나의 모습이 내가 나를 알기 전부터 이미 나를 대변해주고 있었던 것이다.’
materials to carry on the jewelry practices. During this thesis project, I was able to understand that the jewelry works have already reflected my state of mind long before I even began my researches on ambivalence and have represented the coexistence of emotions. Focusing on copper electroforming technique, this project continued as a personal journey to finding the true meaning of self and how my understanding of the world and/or self has defined myself as not only an artist but also as a human being.

Through readings and self-reflections, I began to understand that feeling simultaneous and contradictory attitudes or feelings toward an object, person, or action was a natural thing and should embrace them for they most clearly illustrated my own state of mind. Soon, the negative judgment of feeling contrary emotions for the same matter and/or material became more positive and less grave of a problem.

The movie ‘Inside Out’ is an example that informs the audience that ambivalence is not a negative or pessimistic mindset. Joy’s journey to discovering the true meaning of happiness was especially inspiring, and it further assisted me to reevaluate the significance of being torn between contrary emotions. Consisting of many different subjects that I always thought of and was curious about,

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3 Joy is one of the five emotions inside the main character, an 11 year old Riley. Joy believes that she must end each and every day of Riley’s as a happy one and her other friends are less important to Riley than she is.
such as the changing of emotion, amalgamation of memories, and the construction of personality and behavior, this movie initiated my research on ambivalence and coexistence of emotions.

As Joy finally understood that she was not the only emotion dominating Riley’s memories, my everlasting conflict on feeling multiples of emotions finally began to clear out. The movie allowed myself to begin to understand all the confusing emotions and thoughts in my mind since I was a young girl, and also began to question the relationship between ambivalence and my works. Moreover, this allowed an opportunity to go over my past projects and discover that they have already been pertaining the positive understanding of emotional ambivalence even before I was aware of it.

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4 This is a movie about five emotions (Joy, Sadness, Disgust, Fear, and Anger) that live inside the head of 11 year old Riley. They compose Riley’s personality and control her daily decisions and emotions. Joy’s obligation to conclude Riley’s days as a happy one gets in the way due to her friends’ control over Riley. To prevent Riley from feeling devastated after leaving her hometown and settling down at her new home in San Francisco, Joy struggles even harder, but finds it too difficult to control the unconscious anxiety of Riley’s. Then one day, when looking at one of Riley’s happy core memories, Joy realizes that the reason the memory became a core memory was due to a sad occurrence, and that it was Sadness that led this particular memory to become a significant one for Riley. Joy finally understands that she is not the only one that composes Riley’s daily life and apologizes to Sadness for ignoring her negativity towards life.

5 Inside Riley’s head, there is a big headquarter where the five emotions live and control Riley’s thoughts and decisions. The main controller that connects Riley’s physical decisions with psychological train of thoughts is taken over by each and every emotion whenever a particular one is necessary. However, Joy thinks that she is superior to the other four emotions for she is overly obsessed with making Riley’s day a good one, and believes she has the complete control over making Riley’s life happy.
II. Ambivalence

According to the Merriam Webster Dictionary, ambivalence is a simultaneous and contradictory attitudes or feelings (as attraction and repulsion) toward an object, person, or action. Although people more or less understand and accept that there are multiple of emotions, they find it hard to agree that these emotions often coexist simultaneously. When psychologists first came up with the term ambivalence, it was understood and perceived as a negative, ‘unusual’, and even unstable (Fong, 2016) state of mind because people believed that opposing emotions could not coexist whatsoever. Such misunderstanding on ambivalence led the perception of emotional ambivalence to be a negative emotional occurrence. In John Ek’s thesis, *I AM WHAT I AM – An Essay about Ambivalence as a Part of the Creative Process*, he states that even some renowned theorists and psychologists such as Paul Eugen Bleuler, Sigmund Freud, and Paul-Claude Racamier believed that ambivalence was directly related to schizophrenia and thought of it as the conflict between love and hate, which was strongly related to melancholy. Moreover, Melanie Klein thought feeling

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ambivalent was a sign of depression and depressive anxiety (Ek, 6).

The uncertainty one felt by his/her frustrating inability to make an emotional decision must have driven people to feel compelled towards emotional ambivalence (Ek). However, today, ambivalence or the coexistence of contrary emotions is perceived less negative than it was in the past. Christina Ting Fong states in her study, The Effects of Emotional Ambivalence on Creativity, that there is a link between positive and negative emotion; creativity and the simultaneous experience of positive and negative emotions on the same event can actually result to an accelerating creative work results (Fong, 1017). Furthermore, she explains that individuals have difficulties recalling the moment they were emotionally ambivalent, and due to this reason, they believe such state of mind is unusual (Fong, 1018). However, Philip J. Koch stated in his study, Emotional Ambivalence, that emotions are like watercolors on a wet page for they blend together; and when this takes place, the original independent emotions are no longer separable from other emotions (Koch, 262).

The positive connotation of ambivalence today greatly relieved me for it once more proved that there was nothing wrong with feeling

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such a state of mind. Withholding and slowly respecting the ambivalent state of mind, the corresponding projects and jewelry works enabled me to observe and concentrate more on the embracement of having numerous emotions simultaneously. Different researches, readings, and self-reflections on ambivalence served as a stepping-stone to look into my inner-self and see the relationship between the works.

I believed that my ambivalence has only affected myself negatively until I began working on my projects, and thought working was an escape to forget about the emotional fluctuations I was going through. Although working was an enjoyable time, I was unable to observe that my projects were representing my ambivalent mind. However, I realized during this thesis project that I was never too cynical with having coexistence of emotions, and that I unconsciously have already accepted being ambivalent: and that I was portraying these contrary elements positively through my works. Being able to understand and connect what I was thinking about the world and my works motivated to work on my projects.
III. Earlier Works

Before being aware of it, attaching small, delicate pieces to rocks and pebbles, and welding thin pieces of wires to create firmer structures have already reflected the intricate emotions I have held within myself. The amalgamation of small units and fragile pieces to create something bigger and sturdier has emotionally comforted me, and this working habit has developed over time during this thesis project.

The first few work from 2013 and early 2014 roughly illustrate my tendency to present the never-ending coexistence of contrasting emotions, which I was still unaware of at the time. One of the reasons I had a hard time understanding the idea of ambivalence was that I had been carrying on several different projects and was unable to bring those into a unified theme and practice. The three main projects were:

1. Jewelries with picked rocks and silver
2. Jewelries with stainless steel, found rocks, and electroforming technique
3. Objects with wax rock models and electroforming technique

The first project was picking random rocks from the street and combining them with finer materials such as silver. The habit of picking pebbles and small rocks gave me a sense of control over what I was doing and also allowed me to communicate with the nature in a very personal way. I thought bringing together two materials (rock and
silver) from very different origins (nature and factory) could highlight the significance of both materials to its maximum effect. These works included attaching copper wires or craft beads to found rocks and completing broken parts of a rock with crystal clear resin. This series of work is the most literal form of showing the coexistence of emotions and they served as a bridge for observing more internal fluctuations of personal emotions. These practices have further enabled the exploration of different materials and techniques for developing this thesis project.
[Figure 1, Figure 2] Found Rocks with Beads and Wires
92.5 silver, found rock, epoxy resin rock, stainless steel
12.5 x 2.5 x 1 cm
92.5 silver, found rock
4 x 2.3 x 3 cm
92.5 silver, found rock, epoxy resin rock
2.5 x 3.5 x 3.5 cm
The second project was carried out using thin stainless steel and laser-welding technique to create an intricate, geometric figure that was both aesthetically beautiful and structurally firm. Gathering of small, fragile pieces and slowly transforming them into firmer, stronger figures without much alteration in their physical properties was what I wanted to illustrate in my works. The flexible, yet very rigid characteristics of stainless steel seemed to portray the image of strength and fragility at the same time. The thinner the steel wire, the more malleable it was, and by welding bits and pieces of the wires, the thinness of the wire was even more accentuated, while the bendable and delicate characteristics were mitigated. After the overall figure was created, it was put in electroforming basket for a copper coating to ensure stability and durability.
rose-gold-plated stainless steel, found rock
10 x 9 x 4 cm
gold-plated stainless steel, found rock, craft beads, resin
7 x 45 x 4 cm
black-pearl-plated stainless steel, rough amethyst stone
3.5 x 4 x 2.3 cm

gold-plated stainless steel, found rock

3.5 x 5 x 3 cm
The third project was inspired by the usage of electroforming technique from the previous project. Without electroforming, the finished structures with laser welding were too weak and fragile to be held together. However, electroforming created a new coating of copper, which not only increased the density and durability of the overall structure, but also enabled further patina and/or surface treatments afterwards. Whilst learning and using the basic fundamentals of electroforming, I was able to learn that electroforming can create completely new figures from scratch. To accentuate this particular characteristic, wax models of molded rocks were finely patterned with electrolytic paint (as known as silver lacquer), and were electroformed up to eight times for more durable structures. Using this method enabled the finalized models to have smoother and finer curved lines that stainless steel projects lacked. Finally, the wax was melted out from the figure, only leaving the skeletal figures of the rock.
[Work 8, Work 9] Same, yet Different, 2015
merlinite, copper with blue-black patina
each about 7 x 10 x 5 cm
The formation of metal particles from a mere drawing had the essence of creating something from nothing which appeared to have a parallel idea of having two contrasting features simultaneously. Also, hallowing out the wax from the electroformed figures suggested the idea of being a solid object that is absent at the same time. More active practices on electroforming technique led me to explore more about its potential usage. Although the traditional use for electroforming is to coat a non-conductive model (wax, twigs, etc.) with copper or other metals available, the very fact of being able to grow copper particles from simply drawing with conductive materials was the most intriguing and seemed like an appropriate method for this thesis project.

During these projects from 2013 to 2014, I brought together what I learned technically to further develop my works. The early projects have prepared myself to look more into the emotional fluctuations and how I see certain materials with my particular state of mind.

Exploring with electroforming technique especially enabled me to discover more about the different texture of metal and its relationship with the emotional states I was going through. Electroformed copper structures fluctuated in thickness and these variances were directly reflected in the fragility of the finished piece. A metal piece with extreme delicateness and brittleness seemed to resemble my very state
of mind. Through closer look into the basic fundamentals of
electroforming technique, I was able to not only learn about the
technique, but also closely practice this method for a more successful
ways of creating jewelries that withheld the meaning of the coexistence
of emotions.
IV. Electroforming

There are different types of electroforming, but I will only focus on copper electroforming technique, for it was the most affordable and easily approachable electroforming method available\(^1\). Electroforming technique is a metal forming process that forms parts through electrodesposition or electroplating on a model, which is also known as a mandrel. The technique is based on the electroplating principles by Michael Farady in 1833. It was further developed and systemized by Jacobi in Russia in 1838 and by Spencer and Joredan in England in 1839.

The method of electroforming is very similar to that of electroplating; however, some significant differences between the two techniques do exist. First, the thickness of the metal in the finalized model range from 0.1mm to 3mm for electroforming, where in electroplating, it is mere 0.001mm to 0.05mm. Second, electroforming allows non-conductive materials to be coated with desired metals while electroplating only works on conductive materials (Kim, 7)\(^1\).

When a model is prepared, it needs to be pre-treated with

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\(^1\) There are different metal finishes available for electroforming method, including nickel, copper, silver, and gold. The fundamental mechanism of the electroforming technique is the same: the only differences among each type of electroforming are the main components of the electrolytic solution and their ratio.

conductive paint or other conductive materials. It is then hung on a copper wire and put on the bus bar, the cathode (-) bars, connecting the electroforming tank (Kim, 15) and the rectifier. Generally, conductive metal such as brass, aluminum, or titanium bars are used for the bus bars. The rectifier attached to the electroforming basket, which is filled with electrolytic solution and activates the electricity to run in the basket, initiates the electroforming process. The anode plate, which is hung on the anode (bars) is also needed for faster and more effective electroforming. Anode plates should be at least 5 mm thick and should have a purity of 99.9% (Kim, 16). Moreover, the plates must be larger than the cathode model area. Anode plates can simply be attached to the anode bus bars, but to prevent them from pollution and over-deterioration, they are usually put and protected in anode bags.
The electroforming work condition is also critical; it can alter the result by great means. The solution must be between 20-32 degrees Celsius (°C) and the pH level should be around 3.0 to 5.0 (Kim, 13). As the mandrel is put on the rectifier and is activated, copper particles from copper plate and the electrolytic solution will travel to the model and coat it with copper.

The electroforming basket used for this particular thesis project had the rectifier voltage maximum of 30V and current maximum of 5A.
The active usage of electroforming in the jewelry field began in the middle of 1980s. Before then, such technique was unrecognized due to low prices in gold and other precious metals, which only allowed electroforming to be used as a substitute to pressing and stamping.

However, in the years of 1980 and 1981, gold price began to increase, and metalsmiths and jewelry field associates began to seek for alternative metals to work with, and naturally turned to electroforming techniques. With electroforming, hallow jewelries were easily created, which allowed more affordable production costs. Slowly, more specialists began to focus on this particular technique and supplied electroforming methods to schools, designers, firms, and manufacturers. As a result, electroforming has been fully established in the production of jewelry during the 1990s (Müller)\(^3\).

I researched artists who use electroforming technique in their works after the thesis project to prevent myself from being overly influenced by their works. This decision not only allowed more creativity to be demanded during the thesis project, but also permitted a better knowledge of electroforming in the jewelry fields through other researches. Albeit this reason, knowing artists with similar working method was significant: learning what others create with electroforming technique could further educate and develop my future.

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Electroforming has a great potential to offer diverse range of jewelry designs, and many artists have lately used electroforming techniques to deliver different effects in their final forms. Sejin Jeong accentuated the electroformed copper particles on her jewelries. Her jewelries were partially electroformed to exaggerate the different textures that could only be presented with electroforming technique. Dennis Nahabetian, a metalcraft artist from New York, also uses copper electroforming to create his vessels. His works are first modeled with metal mesh and then are electroformed to be copper-coated. This method allows the vessels to be relatively lighter in weight compared to other metalworks. Moreover, metal mesh not only lets the shapes of the vessels to be more organic, but also enables a particular texture once they are electroformed. Michael Glancy’s works incorporate glass figures and copper electroforming.
[Figure 4, Figure 5] Sejin Jeong, *He Handed Me a Little Apple* \(^1\)

Dennis Nahabetian, *Vessel #83* \(^2\)

\(^1\) https://www.pinterest.com/pin/208643395214504491/

\(^2\) http://crafthaus.ning.com/photo/vessel-83-libbys-choice?xg_source=activity
The focal point of my thesis project was the importance of natural growth. Electroforming technique must be pre-treated to activate the electroforming process, but the thickness and particular texture of the finalized forms primarily depend on the condition of the electroforming solution and its surrounding environment. This allowed myself to step back from attempting to control every part of the jewelry project procedures.

While getting a grasp of the basic performance of the electroforming technique, I began to explore how found materials from nature could be incorporated with copper and act as a whole. During this period of time, I used found rocks and pebbles then electroformed small particles (seed beads or thin wires) for metal finish.

1 6 http://michaelglancyglassworks.com/work/#jp-carousel-1023
[Figure 7] Electroformed Found Stones
As stated above, one of the important procedures of copper electroforming is the pre-treatment of the model. This process transforms non-conductive models to conductive models, which activates copper electroforming process. There are numbers of different conductive materials to pre-treat the non-conductive models. The most widely used material is silver lacquer, also known as electroconductive paint. Silver lacquer is usually applied with brushes and can be thinned with thinner solution. Although it is one of the most effective conductive materials for electroforming, it tends to be very expensive and is best used for coating the model, not drawing intricate designs. The solution is often too hard to control its thickness, despite the different sizes of brush tips, due to its tendency to dry quick. One of the key aspects of the electrolytic solution I focused on was its ease to control the texture and designs of the finalized drawings. Since brushes were hard to control, I began to look for a material with more sturdiness. Keeping in mind that any materials that are conductive can be electroformed, I began to use charcoal pencils.

The transition from silver lacquer to charcoal pencils is significant because it was the first major exploration I have done with the copper electroforming technique, and with it, I was able to begin new sets of works. I wanted to closely relate my works to my inner self, and believed that in order to do this, I should discover a material that
could literally trace my drawings into copper objects. Charcoal pencils were a good choice for this method since raw drawings could be transformed to copper figures and the rough lines could also be echoed through pencil drawings.

[Figure 8] Comparison of Conductive Paint, Charcoal Pencil, and Electrolytic Pen

Usually used for drawing, soft charcoal pencils have extreme fragility. However, this characteristic seemed ideal for my works since one of the objectives I was intending was to look for a material that could directly and literally reflect the very rough, almost wild characteristics of my emotions.
For the drawings, I used my non-dominant hand for more inherent dynamics of forms. Copper electroforming has a very unique texture that cannot be imitated by molding or hammering, and drawing with left hand seemed appropriate for it reflected not only the characteristics of electroforming layers, but also my intention for projecting sub/unconscious movements via non-dominant hand. If the roughness of electroforming and clashing of emotions were what I intended to present in my works, using such techniques and drawing methods suited this objective well, for they continuously let myself to be conscious of what I was doing. Many of these works have all the copper parts, the drawing, and paper to exaggerate the transition of the characteristics of figures and materials.
[Figure 9, Figure 10] Samples of Drawings and Electroformed Models
electroformed copper, graphite, tracing paper, stainless steel  
8 x 9.5 x 2.5 cm
electroformed copper, graphite, tracing paper, stainless steel
9 x 14 x 4 cm

gold-plated electroformed copper, stainless steel
11.5 x 10 x 1 cm
electroformed copper, tracing paper, graphite, stainless steel
8 x 8 x 1 cm
black-pearl-plated electroformed copper, stainless steel
8 x 7.5 x 0.5 cm
electroformed copper, stainless steel, gold-leaf
11 x 8.5 x 2 cm
Although drawing on a paper and recreating it into a copper figure showed the raw and natural characteristics of all the materials used, some of the obstacles were to be found. Yet the paper played a critical role on directly portraying the transition of charcoal to copper, it stopped from further enhancing of the copper parts due to its extreme fragility. The stainless steel pinbacks looked harmonious with the front parts of the brooch, but most of them were a bit overwhelming for everyday usage and were still unstable. In order to improve these problems, I began to separate paper parts, but instead, made the copper units even more fragile for extended portrayal of ambivalent image. These figures became easier to be treated with various color and texture: some units were hammered into thin layers.
gold-plated electroformed copper, black enamel, stainless steel
8 x 7.5 x 1.7 cm
black-pearl-plated electroformed copper, stainless steel
9.5 x 9.5 x 1 cm
electroformed copper with black patina, gold leaf, shrink tube, 92.5 silver, wire
24 x 33 x 3 cm
black-pearl-plated electroformed copper, 92.5 silver, wire, acrylics, stainless steel
10 x 5 x 1.5 cm
I started to explore other conductive materials to form metal figures. Throughout researches, I found out there were conductive epoxy glue, fabric, thread, and more, but decided to focus on electrolytic pens. With this particular pen, I began to create patterns with finer lines. As with the drawing pieces, these patterns were drawn without any size or keen measurements.

The copper units without paper support were hammered to desired thickness. Some units were laser-welded to create a larger unit and were spray painted into more vibrant colors. Different colors in the jewelry began to appear around this period of the project; since electroplating had a limited metal finishes and texture, I wanted to incorporate more colors for better portrayal of different emotions. The utilization of dyed acrylic sheets enabled more stability to the overall jewelry pieces, and allowed simpler and minimal silver pinbacks for more comfortable and stable wear. The contrary colors of the acrylic sheets and the variously colored copper further highlighted the coexistence of emotions.
electroformed copper, acrylic sheet, 92.5 silver, stainless steel, resin, spray paint
8.5 x 7.5 x 1 cm
platinum-plated electroformed copper, 92.5 silver, wire, acrylics, stainless steel, resin
26.5 x 13 x 0.5 cm
[Work 22] Single Twig, Bundle of Twigs, 2015
platinum-plated electroformed copper, acrylic sheet, 92.5 silver, stainless steel, resin
10.5 x 9 x 0.5 cm

4 8
Electroformed copper, spray paint, acrylic sheet, 92.5 silver, stainless steel, resin
8 x 9 x 2.5 cm
electroformed copper, acrylic sheet, 92.5 silver, stainless steel, resin
10.5 x 7 x 3 cm
electroformed copper, spray paint, acrylic sheet, 92.5 silver, stainless steel, resin
10 x 5 x 1.5 cm
[Work 26] Silver Lining, 2015
electroformed copper, spray paint, acrylic sheet, 92.5 silver, stainless steel, resin
7 x 9 x 2.5 cm
electroroemd copper, spray paint, acrylic sheet, 92.5 silver, stainless steel, resin
10 x 10.5 x 2 cm
electroformed copper, spray paint, 92.5 silver, stainless steel, resin
7 x 16 x 4.5 cm
Due to the excessive use of electroforming technique in the institution, it was very hard for me to have a full control over the solution basket, and this resulted to very unstable outcomes for each and every piece. Although this was quite a frustration in the beginning, expecting the unexpected soon became anticipation. Using the electroforming technique was a great opportunity for me because I was able to examine my emotional states and clearly observe different emotional occurrences. Unable to expect the final form and figure, I had to accept all the possibilities regarding the finalized electroformed model: it gave tension and great expectations as well. The unpredictability of the finalized electroformed models has allowed myself to rediscover the meaning of having a full control over something and letting something be. Even after the electroforming process was over, I had to be extra-cautious of other following procedures as well for laser-welding had the possibility to burn certain parts of the finished model and ultimately change the finalized looks of the structure.
V. Conclusion

Throughout this project, I was not only able to explore different techniques and mechanisms of metalsmithing for my works, but also was able to find the relationship between my state of mind and my final projects. The longing confusion on the coexistence of emotions slowly lifted away as they became a more natural incident. The artworks expect to portray that being ambivalent should not be considered as a negative occurrence of the mind, but as a normal phenomenon that brings oneself closer to one’s true self. I was able to be fully prepared to face other emotional turbulence and hope to bring peacefulness in the beholders through this thesis project.

My journey to finding the meaning of my works and myself began with exploring different kinds of techniques and materials. With my earlier projects, I was able to accept my emotional fluctuations more positively and applied my state of mind via the usage of copper electroforming technique. The development from transforming hand-drawings to copper unit to accentuate the contrast, using of various colors, and the incorporation of different materials for the stability of jewelries allowed myself to learn certain metalsmithing techniques, and also gave me a chance to fully accept my own states of mind. Throughout this thesis project, I was able to redefine the meaning and significance of the understanding of emotions from a negative to a
positive perspective of life and hope to further extend my journey as an art jeweler.
Bibliography


국문초록

여러 가지 생각이 한번에 복합적으로 진행되거나 동일한 것에 대해 상반되는 해석을 하게 될 때, 본인은 그러한 상황을 서둘러 벗어나야 만 할 불편한 상태로 생각해왔다. 그러나 이질적인 재료와 상반된 조형요소를 결합하는 장신구작업을 진행하면서 자연스럽게 하루하루의 내면을 들여다보게 되었고, 완성된 작업에는 복합적이고 양면적인 감성이 다층적으로 존재하고 있다는 것을 발견하게 되었다. 본 작업연구는 그러한 양가성에 대한 발견과 수용의 과정을 담고 있다.

작업은 레이저용접, 캐스팅, 동 전해주조 기법을 중심으로 진행하였으며 동 전해주조를 통해 목탄 등의 도전성재료의 드로잉을 입체적 형태로 만드는 작업이 중점적으로 실험되었고, 특히 전해주조 유닛 특유의 연약함을 보존하면서도 착용 가능한 형태로 제작하는데 중점을 두었다.

본인은 한 개의 장신구에 전해주조로 만들어진 부채지기 쉬운 형태와 브로치 브로치 아크릴의 견고함 같은 서로 대립되는 요소가 공존하는 작업을 진행하며 그러한 상반성의 병존이 결국 자기 자신을 구성하는 중요한 일부임을 깨닫게 되었다. 이제 연구자는 부정적 해석이나 혼란이 아닌 자연스러움으로 자신의 대립된 감정들을 바라본다. 그것은 모두 ‘나’의 일부이기 때문이다. 작품과 내면이 교감하는 지속적인 작품연구를 통하여 이러한 다양한 자신을 발견해 나가기를 희망한다.

주요어: ambivalence, coexistence of emotions, state of mind, electroforming
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