AN EXAMINATION OF MEMORY ARCHIVIZATION THROUGH A CREATIVE

WEARABLE ARTIFACT

by

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BA, Michigan State University, 2013

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Fashion Studies

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ABSTRACT

This study incorporated embroidery with autobiographical memory to create a wearable story line that draws pictures of the life experience across different ages. The study drew from 5 participants' precious memories as an inspiration to create a line of necklaces representing key points in participants' lived experiences, thereby transforming the memories into tangible items that can be held, touched, and worn. Lesage couture embroidery and 3D printing were incorporated to interpret the memories. The final designs were shown to participants to observe their interaction and collect their verbal and non-verbal feedback.

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Chapter 1: Introduction

Contemporary fashion scholar Carole Hunt (2014) believes that fashion holds memory, meaning that fashion creates a space in which individuals, groups, and societies can inscribe cultural meanings and histories into fashion-related objects (p. 213). The focus of this research was to translate life story, in this case known also as autobiographical memory, into wearable fashion jewelry. As part of the research, a creative collection of five necklaces was made inspired by five participants' (i.e., narrators') most important memories. In so doing, the study created personalized artifacts as a way to capture narratives and to connect autobiographical memory to fashion design. My interpretation is a combination of participants' "stories" and general life conditions. The goal of incorporating embroidery with autobiographical memory was to create a wearable story line that draws pictures of individuals' life experiences across different ages. The intention of creation here was not so much to address objective accuracy but instead to emphasize the emotion, interaction, and archival function that the jewelry brings to my narrators as they wear the jewelry. The representation of the jewelry reminds the narrators of their accomplishments, failures, or rewards in the past and enhances the memory of their respective achievements and experiences. Ultimately, their interaction with the jewelry becomes a process and a way to enhance self-confidence.

Chapter 2: Literature Review

While extensive research has been undertaken on autobiographical memory and fashion design, trends, and preservation, few studies have attempted to connect and relate these two areas. This literature review surveys the contemporary study and interconnection of memory preservation, fashion history and design, and the use of fashion artifacts, personal clothing, and jewelry as potential memory archive sites.

Autobiographical Memory and Fashion

In *The Autobiographical Self in Time and Culture*, Qi Wang (2013) discusses the concept of autobiographical memory and its influence on the development of self-confidence, self-identity, and self-perception. Wang suggests that to repeat one's memory is to review one's achievements from the past, which encourages individuals to pursue their desired life goals. Her work suggests that memory is a storage system, which can hold both personal and collective lived experiences.

Carol Hunt (2014), in "Worn Clothes and Textiles as Archives of Memory," believes that personal clothing can hold, store, and preserve memory because of its intimate relationship to the wearer. She argues that fashion can be used to archive cultural and individual memories. In "Dis/continued Selves: Why Do Women Keep Clothes They No Longer Wear?" Maura Banim and Ali Guy (2001) examine the relationship between the wearers and their clothing by studying why people save the clothes they no longer need. Banim and Guy point out that this may be because clothing can retain multiple layers of meaning for individuals. They suggest that keeping old clothing is a way to preserve the special memories associated with such garments; in this way, clothing can be the media for a process of self-identification.

Mourning and Fashion

Mourning is an important subject in fashion in different cultures and eras. The mourning

object is often selected because of its intimate connection to the deceased, thereby maintaining a connection between the deceased and the living. Judith Simpson (2014) explains in "Materials for Mourning: Bereavement Literature and the Afterlife of Clothes" that people who lose loved ones often maintain a connection to the latter by saving articles of their clothing. Through smell, texture, and closeness, the clothing can store and reinforce the memory of the deceased, thereby providing comfort to the bereaved.

During the 18th century, hair was used as a very popular memorial for the dead. Christiane Holm (2004) explains in "Sentimental Cuts: Eighteenth-Century Mourning Jewelry With Hair" that hair gained in popularity as a permanent symbol of the deceased because it lasts longer than the body. Holm's article helped me articulate and supported my thinking of jewelry as the specific memory archival site for my research.

Feminism and Archival Memory

Rozsika Parker's (1984) *The Subversive Stitch: Embroidery and the Making of the Feminine* exemplifies a feminist methodology for building memory and archival projects that advance both individual and societal histories. Parker discusses the neglect and downgrading of women's art forms such as embroidery, and the latter's ability to archive, record, and trace hidden histories and traditions. Her re-evaluation of embroidery as an evolution of women's art was a major contemporary breakthrough in art history and criticism disciplines because it fosters the emergence and expansion of contemporary arts and crafts.

Lynn Skordal's "The Needle and the Sword: The Early Women's Movement in Twenty-Four Hankies" provides images of 24 vintage hankies to illustrate how women used handcrafted projects to exhibit and celebrate the early women's movement (Minnesota Center for Book Arts, 2013). Unlike a traditional written document, Skordal's book relies on pictures, fabrics, and

stitcheries to archive the concept of women's freedom.

Judy Chicago's (1979, 1982) installation *The Dinner Party*, now permanently exhibited in the Brooklyn Museum (Brooklyn Museum, n.d.), is widely regarded as the first epic feminist art work. It celebrates and archives the memory of important women in history who have contributed to the women's movement. Through a celebration of women's crafts of needle work and pottery, the installation translates all the guests into symbolic images that represent a whole range of women's achievements and yet also embody women's containment.

Archival Memory and AIDS Victims

This research project discovered several works that deal with memory preservation. Cleve Jones, for instance, initiated the NAMES Project AIDS Memorial Quilt that represents, celebrates, and archives the memories and stories of AIDS victims (The NAMES Project Foundation, 2011). Christopher Capozzola (2002) in "A Very American Epidemic" described the NAMES quilt project as an installation that established a public environment and platform for the victims and their loved ones to share their stories with the communities in which they live. Capozzola discussed how the needlework reflected the struggles and challenges and preserved the memories of AIDS victims and their families. Memories collected through this project is an example of ways to carefully listen to personal stories and to design and translate them into needlework.

Installation Research

The sculpture titled "Efflorescence" created in 1997 by Toronto contemporary artist Catherine Heard (n.d.) was also a major influence on my design work. Her project visually recalls the fatal skin disease that causes flower-like images to appear on the skin. From a

distance the sculpture looks like actual diseased skin and recalls the fear regarding the dreadful disease. In reality the images are actual embroidered textures of poppies and bushes. Heard's sculpture influenced my work because the raised embroidered surface provided a strong realistic and emotional vision. This helped me understand how embroidery and texture can be used to evoke a strong emotional response. Heard's work influenced my decision to design a collection of embroidered necklaces that are all related to the personal and often emotional stories of my study's participants.

Chapter 3: Methodology

The focus of this research was memory preservation in fashion; it sought to reveal how fashion is a medium that can hold personal memory. The study employed mixed methods encompassing oral history, interviews, and the design and production of a collection of necklaces that are directly related to the participants' personal memories. The collection items function as wearable memories because they are all inspired by participants' personal experiences. The goal of this creative project was not to unify participants' memories as a cohesive unit but rather to produce individual pieces that are fluid and dynamic. The project used two technologies—embroidery and 3D printing—to illustrate how memory can be archived.

Interviews

Interviews were conducted with five participants between 20 to 70 years of age who have varied backgrounds. Participants were selected based on the information they provided in the demographic form (Appendix A). Information collected included gender, age, occupation, ethnicity, and the place they have lived in. Participants were sourced through Yeates School emails and friends' reference. The demographic form was designed to help me pick five people from most various backgrounds. The diversity of their backgrounds provided interesting story lines and greater inspiration for the creation of the fashion jewelry collection. To minimize the risk of revealing participants' identities, they are all identified by pseudonyms.

The interview component consisted of two parts. In the first interview, participants were asked to discuss one of their personal stories which then inspired the design of individual accessory pieces, thereby making their memories into tangible articles that could be held, touched, and worn. There were ten questions mainly focused on their previous experiences as well as their general life styles. These questions were designed to collect more details and

information that could enrich my design. In the second interview, the completed accessories were shown to the participants and their feedback was collected. They were asked to choose which one was inspired by their memory after seeing all the five pieces, and then I explained my interpretation and making process to them. As participants examined the respective pieces, I observed and made notes of both their verbal and non-verbal feedback.

Creative Practice

The creative project employed two design technologies: embroidery and 3D printing. Embroidery is a traditional practice, often associated with the past, while 3D printing is a new and developing design production technology. As memory is fluid and dynamic, the combination of embroidery and 3D printing facilitated the process of presenting the past in the present. The use of both traditional and emerging technologies references the importance of Qi Wang's (2013) idea that autobiographic memory functions to appreciate the present while learning from the past. Embroidery was used to illustrate the participants' stories based on their links to the past.

Embroidery Research: Ecole Lesage Paris

In preparation for this project, I undertook research at Ecole Lesage Paris. I enrolled in the professional couture class at the Ecole Lesage in summer 2015. The course taught the hook and needle technique. The course had two parts; the first part introduced stitch techniques, and during the second part I used the techniques for a design project (see Figures 1 and 2). The embroidery skill I adapted from the Ecole Lesage prepared me for this research project by providing the skills and techniques of working with beads, sequins, leather, suede, gold thread, silk thread, and ribbons. The unique technique at Ecole Lesage is the hook stitch, a basic embroidery process used to apply individual sequins and stitches by tambour hook (White, 1994), which accommodates various materials and styles in embroidery design.



Figure 1. Stitch sample.



Figure 2. Ecole Lesage Paris couture course sample. Source: http://www.ecolelesage.fr/en/#haute-couture

3D Printing

3D printing was used to build a shell for the precious "story" jewelry and to make each piece wearable. The printed necklace frame was installed onto the embroidered pieces, which is a new process of production work with tech materials. 3D printing has three outstanding features. First, the process allows for greater complexity and variety (Campbell, Williams, Ivanova, & Garrett, 2011). Complex shapes and simple shapes are all the same to the printer because the design is printed in layers; the only difference is the digital model created in the computer program. Second, 3D printing has zero lead-time (Campbell et al., 2011). In fact, researchers and designers note that with greater accessibility to 3D printing in the near future, consumers will be able to self-design and print customized products immediately instead of waiting for days. Third, the machine prints by volume, rather than by individual pieces. The different sizes of cubes correspond to different fees for printing. The customer can fit many design features in one cube to save time and to stay within budget. Think2Thing, a Toronto-based design company that partnered with Ryerson University, used the Rhino 3D software to create designs and then print the necklace frame in nylon powder, which is initially white and can be dyed and painted in different colours to match the embroidery design.

Chapter 4: Design Process

Step 1: Pencil Sketch and Embroidery Sample

I wrote short journal entries after conducting the first interview with each participant to tease out the most important information and define the story lines. From there, participants' experience, stories, or memories were defined in key words that would inspire and guide me. At this stage, emotion sharing was very important to help me understand participants' mood in their stories. Based on the key words, I tried to bring myself into their stories to predict their possible emotions. In the initial sketches, I blended the emotion with participants' personal information and, pretending I was the respective participant, I drew several sketches for each emotion.

Each sketch began with the outlined shape, which illustrated the general background of each participant. An embroidery pattern was introduced at this stage to furnish the stories and some of the patterns were tested on the paper directly (See Figures 3 to 7).

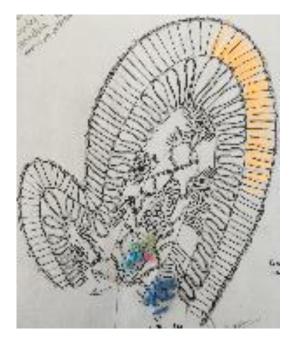


Figure 3. Step 1 sketch: Pauline. A mitten outline represents her grandmother, and the inner hand represents Pauline. In between are the paths that Pauline has to follow to grow up and to become a strong independent girl.

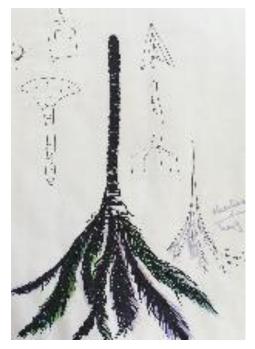


Figure 4. Step 1 sketch: Ivy. A triangle or trumpet shape outline represents the movement from a tight end to an open end, which indicates her desire for freedom.

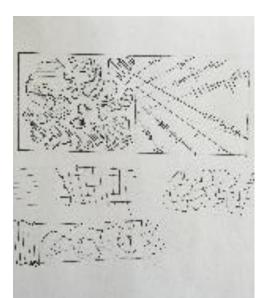


Figure 5. Step 1 sketch: Zack. Zack's sketch has a triangle outline that represents a timeline because his story is about his life changing from Jamaica to Toronto.

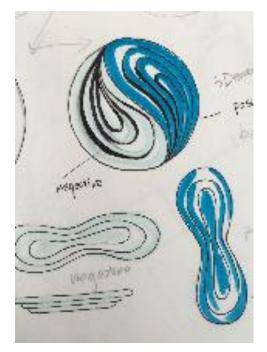


Figure 6. Step 1 sketch: Bianca. A circle outline represents the reunion of two lovers after 20 years. The shape refers to the yin-yang symbol in Chinese culture used to represent the female and male or positive and negative.

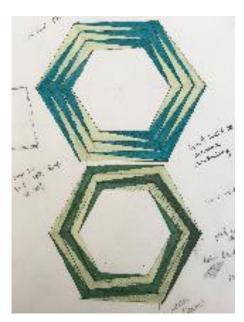


Figure 7. Step 1 sketch: Helen. A hexagon outline represents stabilization and stratification of life. The cycle is like a review of life, and also the similar family instruction passing down to the next generation.

Step 2: Sketch/ Embroidery Development

The five sketches selected from Step 1 interpret the stories well enough but lack coherence as a collection. In Step 1, I needed to imagine myself as each participant in order to fully understand their respective emotions within the story context, but I then had to transcend my role as an outsider in order to make the stories into a collection. This step was very challenging because it was difficult to detach from the stories, and to find a new angle to analyze them. Two of the participants were in their 20s, while the remaining three were in their 30s, 50s, and 70s, respectively. Their stories were about growing up, their job experiences and love lives, and general reviews of their lives. These five stories represented life stages ranging from adolescence to mature and late adulthood. Based on this idea, I tried to use a fan shape as the outline for each story so that a full circle would be formed when they are placed together. However, the shape limits the embroidery pattern design that I wanted to maintain from the initial sketches. With the same idea of thinking of life as a circle, I decided to use the circle as the outline shape and to section it in five fan shapes, with each fan filled with a design based on the same story. In this way, each story has five designs within a circle, and they all emphasize a single same idea. The new sketches not only were more coherent but also addressed the significant memory of the individual's life. Each circle has some empty spaces that are not embroidered, which indicates other memories and experiences that are not considered as important as the shared one(s), as well as any future memories that have yet to manifest. See Figure 8-12.

Name	Gender	Age	Occupation	Ethnicity
Pauline	Female	20-29	Student	Mixed race

Stronger, independent, confidant, knowledgeable, cherish, appreciation, thankful

Story Description:

Pauline is a second-year fashion communication student. She is second-generation Canadian and her family originally is from Palestine. She is very close to her maternal grandmother, who she considers as her pioneer. Her grandmother suffered wars and hunger at an early age, and later established a family in Canada. Pauline is very proud of her grandmother because of her grateful personality; she always shares love, cherishes love, and never talks about revenge, hate, or enemies.

The story Pauline shared was her 7-month study experience in Denmark. It was the first time she left her family and friends to live on her own. She experienced isolation for the first few months and finally made friends at school. She fell in love with the city, the culture, and the classes. Pauline felt she developed a stronger, smarter, and more independent self from the trip.

Design:

My interpretation of Pauline's story focuses on the relation with her grandmother and her exchange experience in Denmark. The disk has a radiant ring that gradually grows outward from the centre. Each layer indicates the challenge or accomplishment that Pauline experienced and achieved. The centre represents Pauline, and the outer layer represents her grandmother. The embroidery material in the centre is thin and fragile, and gradually becomes stronger and thicker as the ring size increases. It shows the close relationship between Pauline and her grandmother, and illustrates the forwardness in becoming a person similar to her grandmother.



Figure 8. Step 2 embroidery development: Pauline.

Name	Gender	Age	Occupation	Ethnicity
Ivy	Female	20-29	Student	Mixed race

Depression, freedom, be self, exploring, music, dream

Story Description:

Ivy's story is about finding her true self, who she really wants to be. She had many struggles and finally was able to free herself from the depression and confusion from her childhood and teenage years. Ivy is interested in music, spaces, and video games. She had depression when she was a child but her parents were not aware of that and didn't believe it when she asked to see a doctor. Ivy felt much tension with her father because he wanted to control everything. Ivy felt it was very difficult to be true to herself because of her father's control and discouragement. The story she told me was about a singing performance she had done with her friend in middle school. They remixed a Japanese pop song with Jamaica drum and keyboard. Her father told her not to do it because people wouldn't like it and it was waste of time to do so. However, everyone liked it and she marked that experience as a small win to prove to her father that she was smart and talented, and that she should explore her interests.

Design:

The design illustrates an outward movement—a strong breaking-out emotion that Ivy kept hidden deep in her mind when she was young. The lines and shapes are inspired by sound waves and sketch out Ivy's efforts through all these year with music. Sharp angles, points, layers, and cardiogram are all used in this disk to enhance Ivy's desire to shout her inner voice. The disk should be viewed as a whole picture and not in five sections; there is no order by sections. The goal was to recreate the emotion and desire of fighting for self and trying to remove the barriers that blocked Ivy's dream.

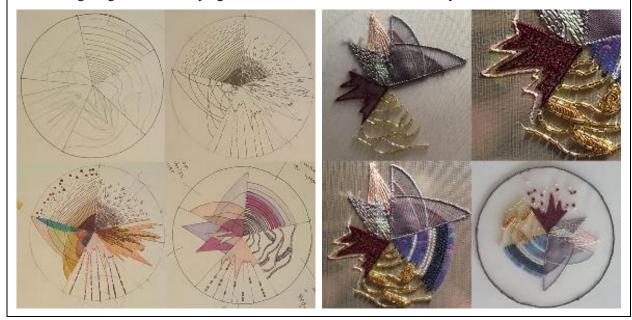


Figure 9. Step 2 embroidery development: Ivy.

Name	Gender	Age	Occupation	Ethnicity
Zack	Male	30-39	IT administrator	Black or African American

Nine uncles, fragmented, reconstruction, reborn

Story Description:

Zack emigrated from Jamaica when he was 19 years old. He now works as an IT administrator in Toronto. He grew up with nine uncles on his mother's side in Jamaica. His life back there and here in Toronto are very different. Zack used the word "fragmented" to describe his memory in Jamaica, because he did not have a plan for his life back there, and he did not want to do anything special; just be an regular kid and grow up and have a job. When he moved to Canada, he realized that education could help him to open his mind and there were many more majors to study and career options. He went to college and studied computer science so now he is able to do code design. His experience growing up with nine uncles was very unique and significant to Zack, because he inherited their manners, behaviours, and values. He considers himself to be a composite of his nine uncles.

Design:

The design plays with the concept of fragmentation and reconstruction, which represent Zack's previous 19 years and the next 12 years. Dots, vermicelli lines, and irregular shapes, are used to interpret these two concepts. The number 9 is also integrated into this design to echo his important experience living with nine uncles, and their personalities and values he has carried on. The nurturing colours blue, green, and yellow used on this disk were chosen based on the idea of rebirth and reconstruction. They represent water, plants, and earth—three important elements of life.



Figure 10. Step 2 embroidery development: Zack.

Name	Gender	Age	Occupation	Ethnicity
Bianca	Female	50-60	Artist, professor	White

Reunion, time, serendipity, disremember, neglect, flow

Story Description:

Bianca believes that memory is subjective and mutable. She has prosopagnosia, which causes her to not recognize faces. Her story is about love. Bianca told me that she has kept a painting for years that always reminds her of a particular man. She recently has been dating the same man she dated about 20 years ago. Bianca knew that the relationship would have not worked out 20 years ago but it seems it could work out now. Her story involves very complex and mixed feelings about seeing the same person differently after 20 years, and also about the missing 20 years.

Design:

My focus was to interpret Bianca's feelings about the missing 20 years, as well as the emotion she has whenever she thinks about this particular man. This disk has only two components, representing the flow of two lives during the past 20 years. The irregular shape represents memory fragments that sometimes are blurry and sometimes clear. The red suede creates the sense of forgetting and uncertainty, while the blue glass beads represent the clear memory and security. The two components also represent Bianca and her lover who was not involved in her life but somehow stayed in her mind throughout the past 20 years.



Figure 11. Step 2 embroidery development: Bianca.

Name	Gender	Age	Occupation	Ethnicity
Helen	Female	70+	Entrepreneur	White

Instinct, life lesson, father, family, appreciation, respectful

Story Description:

Helen is a businesswoman who runs an antique jewelry company. She follows her instincts and has her own aesthetic system when analyzing jewelry. Her story is about her father who passed away at the age of 82. Her father used to spend a lot time with his three daughters and taught them how to analyze art pieces. He also encouraged his daughters to be themselves, to do what interested them, and to follow their hearts and chase their dreams. Helen believes that her father had a great influence on her and her sisters in the way they appreciate what they own. They learned to be humble and respectful because of him.

Design:

This disk uses repetition and spinning to illustrate the similar family values Helen learned from her father, and has shared with her sisters. The family value is very important to each member in Helen's family. The family instruction is the key that links family members and will be passed onto future generations.

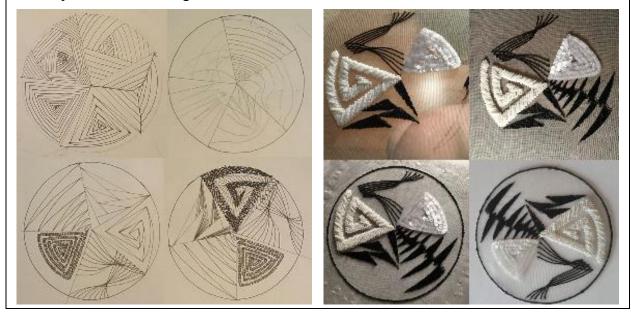
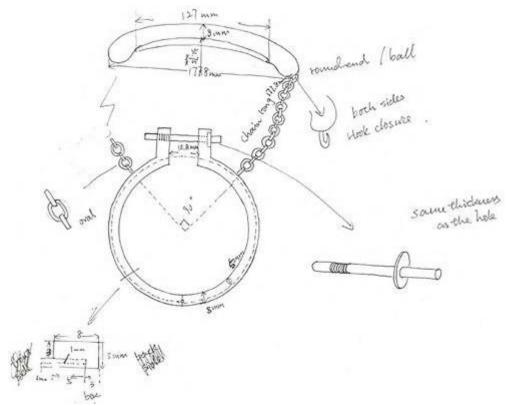
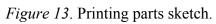


Figure 12. Step 2 embroidery development: Helen.

Step 3: Function and 3D Printing

I decided to make five necklaces. The pendants are five embroidery disks, each one consisting of two layers of organza and an acetate sheet sandwiched between them, and a round of reach stitch on the edge to lock the fabric from fraying so that the disk can be cut off clean. The rest of the necklace is 3D printed. The pendant frame has a crew on the top and hinge that can be opened on the bottom. Inside the frame there is a 1.5-millimeter groove for the disk to fit in. There are two hooks on the pendant frame and the bar as well so the chains can be removed from the necklace and reprinted if broken. The curve bar hugs the back of the wearer's neck when the pendant is worn, and two individual chains can be removed from the pendant frame and the bar. The necklace is printed in nylon, a very lightweight and durable material (see Figures 13-16). They are all printed in white and dyed in colours that fit the embroidery complexion (see Figure 17). The pendant frame refers to the tambour which indicates the old-fashioned style of embroidery, but the 3D printing technique and material result in a more modern and contemporary design. It represents the merging of old style and new technology.





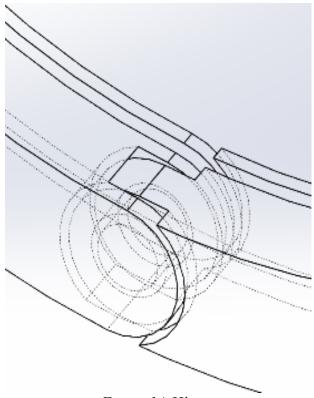


Figure 14. Hinge.

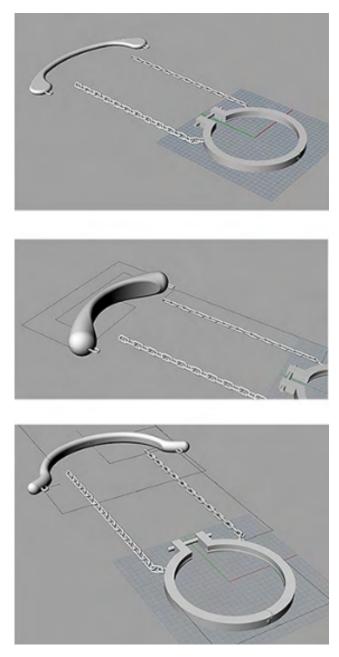


Figure 15. Design samples in program.

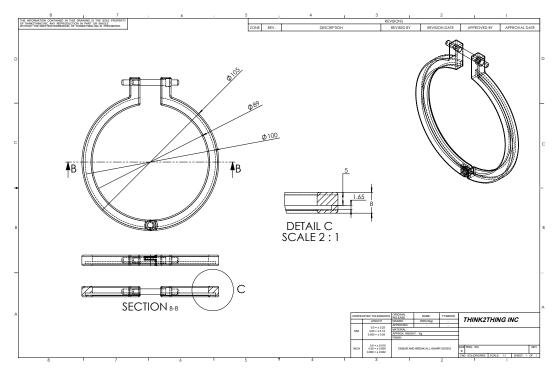


Figure 16. Frame design.



Figure 17. Nylon colour samples.

Chapter 5: Finding and Discussion

Second Interview

During the second interview, I initially asked participants to pick the disk that best represented their stories out of the five disks. They told me their thoughts on the pieces and explained why they chose their respective pieces. After that, I told them the correct answer and asked them how these disks made connections to their stories. Finally, I told them my concept and perspective in designing and creating these disks, and explained how 3D printing was introduced in the design (see Figure 18).



Figure 18. Final disks.

Only Pauline found her piece (A). Surprisingly, three other participants chose the same disk. They all were tempted to choose the more comprehensive and multi-media disk instead of the simpler ones, as they felt it had a connection to their experience. I also found that most of them did not make their choices based on the "autobiographical memory" they had shared with me during the first interview. They instead tried to select the one that they felt best represented the emotion portrayed in the disk, or chose the one that they thought was most developed. However, their inability to select the correct disks does not make me feel that I miss-translated their stories; instead, it shows the different perspectives of looking at one object. A total of four

participants picked the concentric circle disk; their interpretations differed from each other's, which somehow related to their general life situation or expertise.

The three people who chose the concentric circle disk in addition to Pauline shared the following:

- "Concentric circles have breaks in them, and in the way that the circles are something partial forming and reforming" (Bianca).
- "The concentric rings almost looks like layers of experiences; that's what it reminds me of. It repels outward, so you build on what you have before and it keeps ... getting bigger and bigger" (Ivy).
- "I gravitate to that piece because of the simplicity yet the vibrant colours remind me of carnival back there. Red, green, and gold is the Rastafarian colours, which is significant in Jamaican culture" (Zack).

Once I showed them the answers without telling them my concepts, they all found that they could make some connections to their disks. They came up with their own interpretations; some had similar concepts to mine while others had very different ideas. They came up with many new ideas and perspectives that I had not considered. Their explanatory remarks made the disk and story more interesting. Ivy saw feathers on her disk, which wasn't my concept but was the element I included in the initial sketch, and her other interpretation was very close to mine.

The following section presents each participant's final disk, along with participants' and my interpretations, respectively.



Figure 19. Brown disk: Pauline.

Brown Disk: Pauline

Pauline's interpretation. "I thought I told you about my trip to Denmark, and there are just so many different levels and layers. This one, it kind of like centralizes; maybe it's growth, this part here growing outwards. You know, it is also like a game, or a maze of some kind; could be navigated through."

My interpretation. My interpretation of Pauline's story focused on the relation with her grandmother and her exchange experience in Denmark. The disk has a radiant ring that gradually grows outward from the centre. Each layer indicates the challenge or accomplishment that Pauline experienced and achieved. The centre represents Pauline, and the outer layer represents her grandmother. The embroidery material in the centre is thin and fragile, and gradually becomes stronger and thicker as the ring size increases. It shows the close relationship between Pauline and her grandmother, and illustrates the forwardness in becoming a person similar her grandmother.



Figure 20. Purple disk: Ivy.

Purple Disk: Ivy

Ivy's interpretation. "I see a bird, where the gold is the head and other things are just feathers. I see this piece buried in so many backgrounds because you have so many layers cross over each other here especially; it's kinda like that was my core understanding and it's sort of radiating outward and I had things that go up and I had things that, you know, these mountains almost looks like they are obstacles, they are like key figments of my being, and this part I said it looks like a bird head—it also looks like a maze and it also looks, um, very dizzying. They seem to be the element of my experience, growing up. There is just something about the piece, everything is radiating outward in a sense and that's a big thing, like how I like to connect with people, how I like to pursue different paths of thoughts, how I like to have some things orderly and others are totally chaotic."

My interpretation. The design illustrates the outward movement—a strong breaking-out emotion that Ivy has hidden deep in her mind since she was young. All the lines and shapes are

inspired by sound waves and this disk sketched out Ivy's efforts through all these years with music. Sharp angles, points, layers, and cardiogram are all used in this disk to enhance Ivy's desire to shout out her inner voice. The disk should be viewed as a whole picture, and not in five sections; there is no order by sections. The goal was to recreate the emotion and desire of fighting for self and trying to break free of all the barriers that blocked Ivy's dream.

Green Disk: Zack

Zack is really influenced by colours. His first impression of the other disks and his understanding of his disk both showed this aspect. He related the colours to Jamaican culture, which was not my prediction at all. Even though he did not notice that I played with the idea of number 9 that represented his nine uncles, he was still able to make a connection to the idea of reconstruction and organic.



Figure 21. Green disk: Zack.

Zack's interpretation. "You know, I saw a lot of organic stuff on it, and I thought okay cool, and the colours are vibrant, I was like okay, that's from Jamaica; but I was like, it is more female, I felt it may be that's for a female audience that express being even vegan, you know someone more in touch with the nature, maybe I came off that way, maybe that's why I pulled that one out. ... I know it connects to me, because I said the colours is to be more carnival, the green is of course island like. I start to think New Zealand right away. But I am almost these ones, these paddles have a more organic feel."

My interpretation. The design plays with the concept of fragmentation and reconstruction, which represent Zack's previous 19 years and the next 12 years. Dots, vermicelli lines, and irregular shapes are used to interpret these two concepts. As a very important key, the number 9 is also integrated into this design that refers to Zack's important experience of living with nine uncles, and their personalities and the values he has carried on. The nurture colours blue, green, and yellow used on this disk were chosen based on the idea of rebirth and reconstruction. They represent water, plants, and earth—three important element of life. The shapes refer to cells and minerals as the base of organic life, and also reformation that went back to the concept of self-definition.

Red Disk: Bianca

Bianca's design was a difficult one for me, because I hardly could relate and bring myself to her experience. All my interpretation actually came up after I finished the embroidery, and the materials and techniques that I used definitely reminded me of her art work. I was excited that Bianca actually felt the same about the material choices, and that let her link the piece to her long-term interest.



Figure 22. Red disk: Bianca.

Bianca's interpretation. "It makes me think of, um, it's very colour graphic. And these parts that I find is quite interesting because they are very flashy, um, like they are almost like brain tissue, and as soon as I think about the brain then of course the whole thing makes me think of the body and so on. I think, I mean it's very beautiful. I guess part of it makes me think, you know so much of my work is about the body. Interestingly the rare time, because mostly when I draw I don't draw in colours, but the colours that I do use include the two colours that you have chosen so I thought that was very interesting"

My interpretation. My focus was to interpret Bianca's feeling of the missing 20 years, as well as the emotion she has whenever she thinks about the particular man she had once dated and is now again dating. This disk has only two components representing two lives flowing around during the past 20 years. The irregular shape represents memory fragments that are sometimes blurry and sometimes clear. The red-suede shape look like brain tissue, which creates the sense of disremembering, uncertainty, and shrinkage while the blue glass beads represent

boldness, strength, clarity, and security. The two components also represent Bianca and her lover, who was not involved in her life but somehow stayed in her mind throughout the past 20 years.

Black Disk: Helen

Helen's words reflected her status as a jewelry collector who was more likely to view pieces from the aesthetics and design aspects. She did not really relate to her story in the same way as I did, but she related her life style and habits to the disk.



Figure 23. Black disk: Helen.

Helen's interpretation. "I could also understand why you thought it was the black and white one, because it also is a very comprehensive composition. It's strong, and it's striking, so it has a great sense of drama. And the threads that you used played so many different rhythms of this; the thin one is almost musical and the strength of others."

My interpretation. This disk uses repetition and spinning to illustrate the similar family values Helen learned from her father, and has shared with her sisters. The family value is very

important to each member in Helen's family. The family instruction is the key that links family members and will be passed through generations. Five sections show the wave motion and spinning motion that create the dance-like and musical rhythm. The black and white parts seamlessly woven together recreate the sense of satisfaction, thankfulness, and cherishing.

Summary of Interpretations

The embroidery patterns were all abstract, so they can easily be connected to similar experiences and not only the exact stories I was told. Pauline, Ivy, and Zack found that the green disk looked organic; they used the words "nature," "plants," "bacteria," "island," and "vegetarian" to describe the design. Also for the red disk, Ivy and Bianca commented that the red part reminded them of the human body, using words such as "blood" and "brain tissue." Pauline also used the words "cell" and "parasites" for the red disk. In relation to the 3D printed parts, Ivy and Zack both mentioned the neck bar looked like the yoke of an animal. And Helen and Zack noticed the Asian influence regarding the printed necklace shape. The participants' key observations are illustrated in the following quotations:

- "And this one, the red one. It looks like, um, like a, I don't want to say parasite, it looks like bacteria, something you will see under a microscope. And the green disk also has similar microscopic imagery. Umm, it just, yeah, it looks like it's moving in this one. I don't know if it means anything to me but it looks like a cell" (Pauline, commenting on the red disk).
- "I feel safe. Because I feel I am a person who always tries to share my experience with others. The first thing I felt when I put it on was the texture, and even though it's printed in nylon, I'm surprised the finish could be so smooth. So it looks like something brutal or dangerous, almost like some sort of an imprisonment weapon, but then it's really soft. It's

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an accessory that looks almost brutalist, but it's actually quite gentle and these are experiences that we can't escape, but in this case you can, because you can just open it and it can fit, not it's stuck on you" (Ivy, commenting on the purple disk).

- "What I like about it is that it doesn't compete with the design, but it capsules it like a frame around the painting. ... I like the fact that the posture of it is not pretentious, it's utilitarian. Because this part, the neck bar, is behind the neck, so this you don't see, you just see it when laid flat on the table, and together it makes a very beautiful combination. And there is definitely an Asian influence in this, even the frame technology is very Asian" (Helen, commenting on the printed necklace).
- "Oh my god, this is so great. In my mind I was thinking of something very simple. It's so traditional, just right! ... This is ideal ... I would say the necklace looks like a yoke of the ox" (Zack, commenting on the printed necklace).



Figure 24. Pauline's Necklace



Figure 23. Ivy's Necklace



Figure 26. Zack's Necklace



Figure 27. Bianca's Necklace



Figure 28. Helen's Necklace

Conclusion

The findings prove that memories change over time; even a very clear memory still can vary with words and situations. In this case, since my participants did not clearly remember what they said to me exactly about the autobiographical memory during the first interview, when they selected disks, their responses were more focused on the general life experience and situation that were different from my interpretations. However, they all found that they could emotionally and logically connect to the disks once I introduced them to their pieces; however, without telling them my concept, their focal points varied from mine. The collection even further enhanced their remembrance about the autobiographical memory after I shared my interpretations.

The use of the Ecole Lesage embroidery technique really makes the design stand out because it allowed me to pursue the autobiographical memories using a diversity of materials, colours, and techniques. It functioned similarly as painting, which has a great sense of narrative for retelling old memories. The symbolic meaning of each different stitch was well blended in the collection within and between designs and that gives the five disks a good coherence. Instead of following the traditional embroidery style, the abstract motifs reflected on all five disks create the sense of impressionism, and shapes and colours also enhance the emotion. The abstractionism, on the other hand, opens up the emotional message to a wider public; both the participants and also the public audience will be able to connect to it. The same thing applies as the 3D printed necklace, as the tambour-shaped frame introduces the emotion of nostalgia that reinforces my design intention. The printed necklace and the embroidered disk are a good marriage, and the traditional Asian-influenced tambour frame hugs and protects the exquisite, fragile embroidery in the centre. The concept of using a modern solution to protect the traditional

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craft has been well thought out. The printed necklace was carefully designed and tested based on aesthetic and utilitarian aspects. The colours were all soft and stable, which does not compete with the design.

Overall, this collection was successful in the way it translated participants' stories into wearable fashion jewelry. Each necklace uncovered the similar emotion and mood with the correct background for every participant. All participants could link themselves to the designs, not only in relation to the autobiographic memories and their personal information they had discussed during the first interview, but also to other aspects of themselves that they had not revealed.

During the research, some people approached me and showed their interest to join this research. They were curious and excited about the memory inspired wearable jewelry. Their comments on the necklace collection showed that customer involvement in the designing process is very appealing. Also the 3D printed necklace can be printed in different materials or wax-cast for mass production in metal, which provided more options for the customers. Taking the feedbacks into consideration, I see a potential market for the customized wearable memory collection, and think it could be a good starting point for my design career.

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Appendix A: Demographic Form



Yeates School of Graduate Studies

Demographic Information Form

Please provide a response for each of the following questions:

- 1. What is your age?
 - o 20-29
 - o 30-39
 - o 40-49
 - o 50-60
 - o 60+
- 2. What is your gender?
 - o Male
 - o Female
 - o Other
- 3. What is your ethnicity or race?
 - o White
 - Hispanic or Latino
 - o Black or African American
 - o Native American or American Indian
 - o Asian / Pacific Islander
 - o Other _____
- 4. In which countries have you lived?
- 5. What is your occupation?

Appendix B: Interview Questions

First Interview

- 1. Please state your name, where you are from, and your occupation.
- 2. So tell me, what exactly do you do for a living?
- 3. What are one or two things that interest you outside of work and why do you find that interesting?
- 4. What is the first thing that comes to mind when you think of the word *memory*? Why?
- 5. When you remember or recall a memory, do you remember it visually in colour, shape, or texture?
- 6. What are some of the ways you recall or remember a memory? Give me an example.
- Would you please share an important memory, special moment, or experience in your life? It could be either happy or sad; please note that a sad memory could result in you feeling sad or upset.
- 8. Could you please explain why it is so important?
- 9. If you could use one of these two methods to preserve and transmit your memory, which one would you use and why? Embroidery and 3D printing.
- 10. Is there anything else you would like to add about memory that I may have missed or is there any question you want to ask me?

Second Interview

- 1. Please try to recognize the disk that represents your memory.
- 2. Examine this artifact and tell me what comes to mind when you see this piece.
- 3. How do you feel while you are wearing this necklace?
- 4. Do you recall the piece of memory you told me?
- 5. What do you like/dislike about this piece?
- 6. Is there anything else you see in this piece that relates/connects to your memory?

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