Rochester Institute of Technology RIT Scholar Works

Theses

Thesis/Dissertation Collections

4-19-2018

Share Food With Love

Bowen Liu bl3449@rit.edu

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

Recommended Citation

Liu, Bowen, "Share Food With Love" (2018). Thesis. Rochester Institute of Technology. Accessed from

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

ROCHESTER INSTITUTE OF TECHNOLOGY

A Thesis Submitted to the Faculty of
The College of Imaging Arts and Sciences
School for American Crafts
In Candidacy for the Degree of

MASTER OF FINE ARTS Furniture Design

Share Food With Love

by

Bowen Liu

Date: April 19, 2018

Chief advisor Andy Buck Signature Date Associate advisor Richard Tannen Signature Date Associate advisor Stan Rickel Signature Date Chairperson Glen Hintz Signature Date

Thesis Committee Final Approvals

I. Abstract

The home experience of serving food for friends and family, and sharing food is a significant event in my life. Furnishings play a prominent role in this circumstance. For my thesis, I created works that enhance the conditions and ambiance of the residential dining and living experience.

When sharing with friends, happiness is my primary objective. I love to create works containing peacefulness and coziness that could help people calm down and relax. For my thesis body of work, I incorporated gentle curvilinear lines and symmetric shapes to suggest peaceful and harmonious feelings. My material choice was wood as the primary material, along with other materials, selected for reasons of contemporary aesthetics and appropriate function. I took advantage of colors and textures coming naturally from the materials. To invite users to enjoy my work, I created smooth, continuous and tactile surfaces. Each piece of my design was based on the research into lifestyle and dining culture. Creating furniture and other objects that help bring people together through the ritual of the dining experience was my goal.

My aesthetics is influenced profoundly by Scandinavian design because of my summer experience in Denmark, 2015. Seven weeks was not a long period in a lifetime, but it was long enough to get a sense to begin with. I started to know a new environment with a deep history of modern design, and refreshed my mind. I researched the Scandinavian influential designers, such as Alvar Aalto, Finn Juhl, Arne Jacobsen, Bruno Mathsson, etc. I also researched furniture brands and designers world-wide to study what is timeless and what is happening currently, such as Michael Thonet, Charles and Ray Eames, and brands like Vitra, Carl Hansen & Søn, Design Within Reach, Normann Copenhagen, and Menu. My sources also included leading design and lifestyle magazines about travel, food, design and culture, such as Monocle, Wallpaper, Cereal Magazine, Elle Decor, Rum Interior Magazine, and Gentle Woman.

II. Discussion of Sources and Research

Growing up in a family who has a tradition of eating at home when celebrating festivals, I used to eat at home with family and close friends. They were sweet childhood memories to buy fresh ingredients in the market and cook at home, share news at the dining table, and have conversations in a comfortable and intimate atmosphere. The concept of sharing food with people I care about was embedded in my mind. For my thesis, I wanted to design and make furnishings for residential dining and living experience as my contribution to this life experience. As Allie Weiss, an associate editor in Dwell at the time said, "Ambience is a key ingredient to any meal— materials, textures, and mood all impact a certain flavor." (Weiss, 32)

Sharing, simplicity, honesty in materials, minimalism, design sympathetic to the interior, and timelessness in both aesthetics and function are my pursuits as a designer/maker. I chose some aspects of the Scandinavian design as my source because my design thoughts were close to its design philosophy conceptually. Judith Gura, a design historian, wrote about the background and the development of Nordic design in her book "Sourcebook of Scandinavian Furniture, Design for the 21st century". She explained why Scandinavian countries had their specialties of design and what they did to spread their design to the world. She mentioned many designers and their works that provided me with clues to research deeply.

"Viewing design as an integral part of everyday life, with strong links to national folk and crafts traditions, Nordic designers melded these concepts with the newly minted modernity of their Continental counterparts. In their interpretation of modern design, beauty and function were interdependent; objects were meant to be used, rather than merely admired. These designers were less concerned with newness for its own sake than they were with finding timeless solutions to specific needs. Produced by like-minded manufacturers, their designs were easy to understand, attractive, and for the most part affordable."

"The Nordic version of accessible modernism was most often referred to as humanistic. It emphasized simplicity and natural materials, but more important, it implied a concern for the user in furniture that looked inviting, was pleasing to the touch and was comfortable to use." (Gura, 14)

The other reason why I chose Scandinavian design as my source was that this style pioneered modern design. It was inspired by modern art, and northern nature. During that time, the group of Nordic designers promoted their works by holding several exhibitions of "Scandinavian design" in Western Europe and North America, such as Triennale di Milano trade fairs in the 1950s, and the "Arts of Denmark" Exhibition in New York's Metropolitan Museum of Arts in 1960. Scandinavian design started to spread its interpretations of modern design to other countries, especially to the United States and Great Britain in the mid-twentieth century. It influenced the design world deeply and broadly. At the present time, it still plays a significant role in contemporary design. I researched furniture design world-wide, so I recognized the importance of this design—one of the most profound design methods in furniture history to this day.

I primarily used the technique of wood bending in my thesis body of work. With the round cross section, it created a continuous gentle curvilinear form constructing my works aesthetically and functionally. The bending element minimized the number of parts to assemble a piece of furniture and made the transition flow. Ultimately, it became a part of my visual design language. I researched the history of bending wood and how it took place in the modern design.

"Bending wood was not an innovative idea by Michael Thonet. The Egyptians and the Greeks already knew how to bend wood. The technique was mainly used in ship building. Bentwood furniture had already appeared in 17th century in the form of the English Windsor chair, and it was in England that the first patent applications were field." (Vegesack, 13)

Bent wood furniture has existed for a very long. But Thonet was the person who made bentwood furniture famous around the world. He had produced the first furniture components using bentwood in the 1830s. With the experiments and the development of him and his company, bending wood furniture got spread broadly and kept moving with the time of modern design. One hundred years after Thonet, Alvar Aalto

explored more of wood bending forms, the applied function into forms. He involved more humanity and the concept of art and design into wood bending technique. This is a paragraph essay talking about Alvar's sense about form and function, art and design.

"Aalto's Domus essay maintains that lines and forms have the power to migrate in and out of our consciousness. They help us see and make sense of the world around us, produce meanings, even suggest new solutions to the problem. Suggest sting a fluid and porous relationship between locations, meanings, and between subject and object, art is posited as something that helps us organize, represent and make sense of the world around us and enter into communion with other people. Putting pictures on the wall is not enough; only by entering the shared transitory symbolic realm of art can both the producer and viewer submit themselves to dialogue, change, and transformation." (Pelkonen, 144)



Alvar Aalto Studio in Helsinki, Finland. 5

The essay made me think about how to present my concept with the physical works, what the curve meant to me, and why I wanted to create curved form in my furniture design. I thought the logic was that my objective to design furniture was to create the cozy domestic environment. I wanted to provide the care and comfort to people who use my furniture. In order to achieve it, visually, I incorporated gentle

curvilinear and symmetrical shapes to provide the calm feeling to people. Aesthetically, besides designing the cohesive views of a piece, I tried to explore many possibilities of the proportion, the relationship, and transition between each part to create interesting details. Functionally, when people use my furniture, it would become an interaction and dialogue between my work and the users. They would better understand my design decisions through physical touching them and using them, what make sense to the users and the decisions of my work. More importantly, all my work was carefully handcrafted based on knowledge of fine woodworking techniques. It was the foundation of creating the high-quality thesis body of work that would last lifelong time. I focused on the quality. It was the strong bond between users and my work.

When Aalto first time using wood bending lamination technique, Aalto and his wife designed the Armchair 41 for Paimio sanitarium during the year 1930-1931. "The Armchair 41 is primarily an extrapolation of its function and the material used in its making." (Eisenbrand, 159) There is a paragraph of the discussion of Aalto's design process:

"Before beginning to design he insists on putting aside all practical concerns, arguing that only a more unconscious process allows one to accommodate both practical as well as human concerns. Using his by now signature formal trope the curvilinear form as an example, he explains how it first appeared in his work through material studies with wood, without any particular functional purpose in mind, but later gained several different kinds of functional application." (Pelkonen, 139)



I comprehended his way to study materials without thinking about practical purposes. It felt free to explore forms and push technical boundaries. After all the experience and practice, I would gain the knowledge to manipulate materials to achieve my goal eventually. The learning process was similar to what I did in my thesis. The difference was that I later became to have a functional purpose in mind at the beginning, then use the knowledge to achieve it. I drew a lot of sketches with different compositions of bent forms to see what they looked like. Then I made several models to know which idea was more mature in three-dimension. When making the real work, I was honest to the material and the making process. I utilized materials to take advantage of their natural colors and textures. In my thesis body of work, I was in charge of selecting the right material and composing them harmoniously. Conclusively, I was exploring the curvilinear form, applying it to the function, and using the nature of materials to make the body of work that contained the sense of domesticity.

III. Critical Analysis

My thesis body of work pursed the goal of making well-designed works that served contemporary people's life and creating the style to last aesthetically and functionally to the future generations, with a solid research base. I began with the U3 Serving Trolley as my first piece. It was inspired by the lifestyle of cooking and making drinks to serve family and friends. Having a serving trolley is important for those people who could use it to either serve food from kitchen to the dining table or store and move liquor and spirits around at home.





U3 Serving Trolley, Ash, Baltic Birch, Milk Paint, wheels, 36"L x 18"W x 44"H

I chose wood as the primary material for my furniture was because wood itself is natural. It provided the peaceful feeling to the interior environment where people live. For U3 Serving Trolley, I chose the white color to match the light color wood— ash. They were corresponding to each other to provide the visual harmony. The edge of each tray was slightly higher than the surface. It prevented the tableware from falling off, and in the meantime, it also allowed the tableware, especially plates, to extend beyond the edges so that it made more space on the surface. Comfort and function were the primary considerations when I designed and made furniture. To achieve these goals, the heights of the handle and trays were tested repeatedly and located in an ergonomic position.

There were some good results coming from the making process. For example, the detail of where the handle connected to the structure was a good design solution. It appeared as white clean dots where the parts were connected. I carefully drilled the holes through the handle to the vertical structure parts. I used steel rods as the connection to glue the handle to the structure. Then I used white Delrin® plastic rods to cover the holes. After sanding, the connections appeared as clean white dots. The color matched the other white sections. It looked thoughtful and intentional. However, for the future improvement of this detail, I would choose to use a bigger diameter plastic rod to cover the holes. This would be more obvious so that it would be more pleasing visually and proportionally.

On the other hand, there were some solutions that did not work so well. For example, the wheels made noise when the cart was moving. I outsourced aesthetically matching wheels for the U3 Serving Trolley. But the center part of the wheel was plastic. When the metal pin turned within the plastic hole, it made noise. When making it again next time, I would design and customize the wheels to have a better-quality rolling structure. I would choose a wheel with a metal center part to fit the rolling part better. The other decision I would make differently for the next time would be not to paint the two ends of the handle. The paint covered the end grain of the wood. It hid the material quality of the wood.

After the U3 Serving Trolley, I started to design the Gathering Low Table. The idea was from the experience of spending time with family members and close friends in the living room gathering around the coffee table. When my parents and I had dinner at home, we sometimes ate casually on the coffee table in our living room. When I invited my friends to my home, it was a casual environment. We would sit close around the coffee table, while we were chatting and sharing food. People were closer when sitting on the floor. But the coffee table height and table top size were not particularly designed for people who sit on the floor to use it. For this reason, I decided to design and make an appropriate table for people who have this lifestyle.

Functionally, the Gathering Low Table was designed for four people to sit comfortably and to have the capacity to add more people occasionally. I decided to have the main structural support run in the middle, on the ground. In this way, the table structure would not be in the way of users' legs. Besides the table, I designed four seat pads to match it. When sitting on the floor, users can feel more comfortable and enjoy the company for a longer time. Aesthetically, I liked to create the continuous curves and lines by using the whole length of the material. It created a visual flow to make my work look simple, interesting and elegant. Technically, I pushed my technical boundaries by making the long bending piece for the Gathering Low Table. The full material length was at least 105" long to achieve the form. One of the challenges was to make the thickness even throughout. But I managed it well after some practice and the making experience. For the material choice, I decided to use maple to provide a light color to delight people and lighten the color of the interior environment. Maple is a close grain hardwood. After sanding well and finishing, the surface was smooth to touch. It showed an exquisite tactile quality.





Gathering Low Table With Seating Pads, Maple, High-Density Foam Seating Pads, 73"L x 34"W x 13"H

I designed the table top shape referencing the super-ellipse shape. It was a visual harmonious shape. The reason was that it was a closed and symmetric shape based on a mathematical formula. Super-ellipse is a

closed curve resembling an ellipse, retaining the geometric features of semi-major axis and semi-minor axis, and symmetry about them, but a different overall shape. It is a mathematical form coming from the French mathematician Gabriel Lamé, who generalized the equation for the ellipse. The name was coined by the Danish poet and scientist Piet Hein. He was famous for the winning proposal based on a superellipse with n = 2.5 and a/b = 6/5 for a roundabout in the Sergels Torg city square in Stockholm, Sweden, in 1959. It solved the traffic problem that could not be solved by either straight lines and rectangular patterns or circular lines. Here is the quote from Piet Hein when he explained the city plan proposal:

"Man is the animal that draws lines which he himself then stumbles over. In the whole pattern of civilization there have been two tendencies, one toward straight lines and rectangular patterns and one toward circular lines. There are reasons, mechanical and psychological, for both tendencies. Things made with straight lines fit well together and save space. And we can move easily — physically or mentally — around things made with round lines. But we are in a straitjacket, having to accept one or the other, when often some intermediate form would be better. To draw something freehand — such as the patchwork traffic circle they tried in Stockholm — will not do. It isn't fixed, isn't definite like a circle or square. You do not know what it is. It isn't aesthetically satisfying. The super-ellipse solved the problem. It is neither round nor rectangular, but in between. Yet it is fixed, it is definite — it has a unity." (Hicks, 66)

I created the pleasing visual ellipse shape based on the research of the super-ellipse to achieve two main purposes: one was to make enough functional space for four people, and also have the possibility to welcome more people joining smoothly for occasional circumstances because there were no sharp corners; The other purpose was to match the structural elements aesthetically. The unique ellipse shape of the top was corresponding to the round bending base structure visually. The ends of the table top were suggesting the position of the legs visually.

One improvement I will make is to make the wooden seat pads bigger next time. In that way, the wood margins around the cushions will show more clearly. I want to show my design intention more clearly. Another improvement will be to design a better attachment to make the seat pad an integral piece.

While making the Gathering Low Table, I was interested in making the hand-shaping detail of the round cross lab transition. The result was a good example of using both machinery and hand tools for exquisite craftsmanship. The process of making the Gathering Low Table inspired me to make a side table that was based on that transition and to celebrate it. It became the Gathering Side Table. During the process, I decided to dye the maple base black in order to show the purity of the round cross lab transition. It served this purpose well. But on the other hand, the dyed black maple base dematerialized the wood quality. It appeared to be like blackened steel instead of wood. It did not highlight the material quality of wood. In the future when I make it again, I would either select the right tone of wood and keep in its original color or I would choose an open grain species so that after dying, it would still show the wood grain.

For the table top, I wanted to explore some other materials. I chose white Carrara marble as the table top for two reasons. The first reason was the material quality. Carrara marble is a natural stone with a long history of being used in sculpture and architectural decor since the time of Ancient Rome (from 753 BC to 476 AD). The second reason was that the color contrasts with the black base structure. It was a solemn combination that provided a strongly calm feeling. Both reasons suggested the timeless aesthetic that I pursued in my body of work. In this perspective, I believed the aesthetic choice worked well.

The Gathering Side Table is a side table. In the living room, it would be placed along with lounge chairs or sofas so that people can put drinks and hors d'oeuvres on it when they gather together. This table would be also good for people to enjoy time alone, reading a book and relaxing.

There were some improvements that I wanted to make in the future. One was to join the legs and the rails in a different way. I did open floating tenons from the top surface to join the rails and legs. The joinery at the top was aesthetically distracting. In the future, I would make the floating tenon hidden in the leg, by cutting the bottom of the rail, then setting the rail down on the floating tenon. In this way, it would not show any distracting element on the top of the table. The other improvement was to improve the

connection between the marble top and the wooden structure. Since the marble top was very heavy, any slight movement of the marble top would shift the rubber bumper easily. To solve the problem, I would make four appropriate-depth holes in the rails to seat the rubber bumpers, so that the rubber bumpers would not shift easily and last longer.





Gathering Side Table, Dyed Maple, White Carrara Marble, 24" D x12" H

When designing a new work, I was also thinking about the interior environment, such as where to put the furniture in the room, and what the scene would look like when people use it. When it came to my last piece—the Fin Barstool, I was thinking about a breakfast bar at home. When waking up every morning, it is the sweet moment to have breakfast with people we love. To contribute to this lifestyle, I started to design the Fin Barstool. It's the similar visual language as the other pieces in my body of work. I created round bending elements to construct the main support structure. The specific function decided the radius of the curve. The back legs were slightly angled so that they could be more stable. I wanted the seat to have an integral and sleek look, so I decided to create an entire shell form as the seat. They were two shells. The inner shell was upholstered with matting and leather for comfort. I did not intend to show any hardware on the back of the seat, so I used hook and loop fasteners to attach both shells together.

The appearance of the walnut plywood form worked well to achieve my aesthetic goal. But structurally, the solution of attaching the two shells together needed to be improved. The hook and loop belts came with an adhesive back so that they could attach to the seat surfaces. The adhesive attachment looked temporary to me. For a high quality of work, I would prefer hardware connections in the future. Another improvement was that I would thicken the diameter of the legs. In this way, the shoulder and the joinery could be bigger between the rail and the leg. The whole stool would stay more firmly and potentially last longer.







Fin Barstool, Walnut, Cognac Leather, W18" x D20" x H36", Seat H 26"

All in all, each piece of my thesis body of work was pursuing the same goal that I described in the Abstract, by practicing my aesthetic theory and exploring and pushing the limits of wood bending lamination techniques.



Gallery Installation View, Bevier Gallery

IV. Conclusion

I am interested in making high quality furniture that visually comforted people. My long-term goal is to let my work live with owners for their lifetime and be passed down to generations with love. Every design decision that had been made was based on my long-term goal. In the current design field, I see my work as contributing in two ways. Firstly, my work keeps craftsmanship at a high level. I learned the solid foundation of fine woodworking techniques from my highly respected professors. The work will last. Secondly, my work contributes to the concept of a comfortable, simplified, and minimal life. The aesthetics of my work are simple. There are many different things happening in the current design field. I do not expect my work to please everybody. I focus on producing my work to attract the group of people who had similar lifestyle as mine. The concept of a comfortable, simplified, and minimal lifestyle is that we live with the essential furniture and objects that we would use often or we deeply love or have an

emotional connection with. The interior space is comforting. The furniture and objects should be well designed and crafted so that we could enjoy them for a long time. In this lifestyle, we could focus on the meaningful and valuable things that interest us and spend less time on distracting and useless objects.

I learned so much during my thesis year. Once starting on my very first official piece, I experienced a fluid process with new works coming to mind naturally. I understood more deeply about concepts and became better at techniques through the making experience. The whole thesis experience extended my view. Every piece led me to the next piece organically. The more I did, the more I experienced and confident I became.

I started to read books and browse influential design magazines consistently. Then and now, I study art and design history, and keep my eyes open to what is going on in the current design field. Research leads me from one subject to another, one name to other names. The process of designing and making my thesis body of work helped me to establish an objective attitude and critical thinking. In my thesis year, I studied deeply things that attracted me and tried to find reasons why these decisions had been made. The whole experience of research, design, and making made me understand design more deeply and know myself better.

Based on the experience of my thesis body of work, I am confident and excited to keep developing my concept of the contemporary high-quality lifestyle and make more works to contribute to it.

V. Bibliography

- [1] Weiss, Allie, Dwell magazine, March 2016, p. 32.
- [2] Gura, Judith, Sourcebook of Scandinavian Furniture, Design for the 21st century, p. 14.
- [3] Vegesack, Alexander Von, Thonet classic furniture in bent wood and tubular steel, p. 13.

- [4] Pelkonen, Eeva-Liisa, Alvar Aalto: Second Nature, Vitra Design Museum, 2014, p. 144.
- [5] Photo credits to Rich Stapleton. Cereal. https://readcereal.com/alvar-aalto/
- [6] Eisenbrand, Jochen, Alvar Aalto: Second Nature, Vitra Design Museum, 2014, p. 159.
- [7] Pelkonen, Eeva-Liisa, Alvar Aalto: Second Nature, Vitra Design Museum, 2014, p. 139.
- [8] Photo credits to MoMA. https://www.moma.org/collection/works/92879
- [9] Hicks, Jim, "Close-Up/ Piet Hein Bestrides Art and Science", LIFE magazine Oct 14, 1966, p. 66