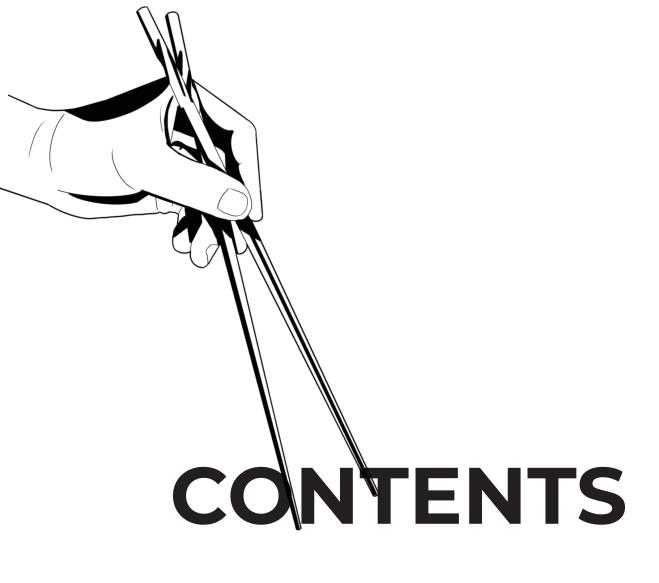


Dennis Siegert



6 INTRODUCTION 30
IDEATIONS

8
MENTAL HEALTH

40PROTOTYPES

12
CULTURAL STUDIES

54 FINAL STAGE

20
PRECEDENT STUDIES

64RESTAURANT DESIGN

24USER RESEARCH



IND-402-04 Design for Nourishment and Social Change

Dennis Siegert Professor Amanda Huynh

Industrial Design Spring 2021

INTRODUCTION

Sharing a meal with someone can be very rewarding. The idea of being with friends or family and strike a conversation with them makes eating a meal feel more warm and welcoming. Many studies have shown that sharing a meal with others has many benefits.

The notion of being with the family helps the child to learn behavior by modeling the parents. It also helps children understand qualities such as empathy and understanding of important values. Sharing a meal helps a child's mental development. When a child experiences few shared meals because of lack of family presence they could potentially develop social problems in the future.



Design Objectives

objective of the project is to encourage the act of social eating among people due to the significance and benefits of eating together. This setting is located in big restaurants to create a new experience for the users so that they can learn about social eating and sharing food.

User Groups

- The setting of the restaraunt is to allow any user to be able the experience food sharing to be able to learn more about it.
- All Access for those who want to have a new experience of eating and create exposure to the problem of lack of social eating.

Research Questions

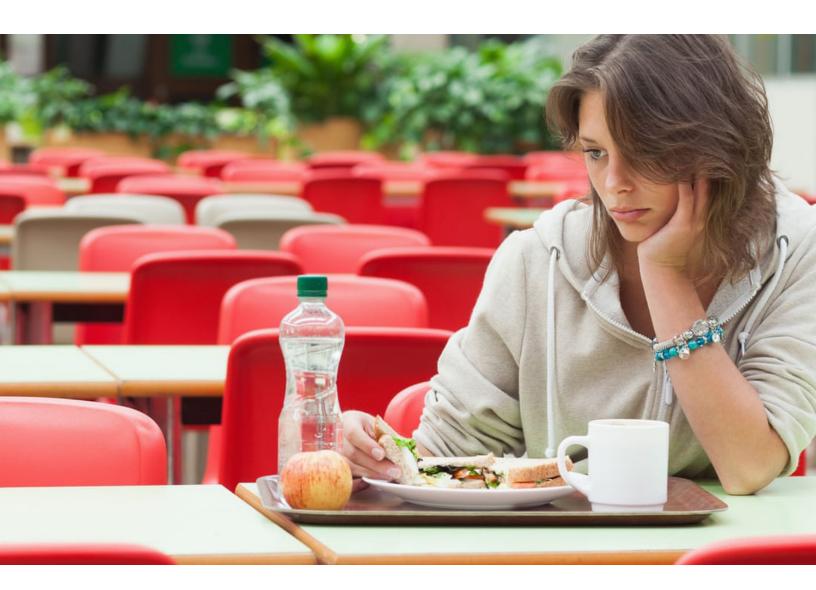
- How can we change human behavior when we are eating?
- How can we adopt/encourage social eating within a group that is not used to social eating?



MENTAL HEALTH

As modern life is growing, the tradition of coming together and eating has changed with it. As the world is modernizing and time is changing, people start to not have any more time to come and eat together. In the United States this has been the strongest case. As people go to work for long hours and spending time with families have been very limited. Being at work from nine to five gives people no time to eat with their families, which not only creates a large impact in the family but also creates a higher chance of depression along with it.





"Having few shared meals and frequently 'eating on the run' are associated with poorer dietary intake...As most young adults indicated they enjoy and value the time that is spent eating with others, it may be beneficial for health promotion strategies targeting young adults to address the management and reduction of individual time barriers to having regular, shared meals."

— Nicole I. Larson

Importance of Family Dinners

A recent study from the CDC has shown that merely, showing warmth and sensitivity, having routines, sharing books and talking with children, sporting health and safety, can help boost development. (Centers for Disease Control and Prevention)

The results showed that the frequency of family dinners had a positive effect on adolescents, and related to externalizing symptoms, and positively related to emotional well-being, prosocial behavior, and life satisfaction. This did not change with differences in gender, age, or family affluence, however the study showed that these associations were partially created because of parent-adolescent communication, and resulted in 13% to 30% of the effect of family dinners on mental health. In a study published in the January 2009 issue of the Journal of the American Dietetic Association, researchers observed that while young adults enjoy and value time spent eating with others, 35% of males and 42% of females reported lacking time to sit down and eat a meal.

FREQUENCY OF FAMILY DINNERS

Percentage of Children Who have Frequent Family Dinners

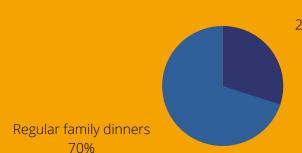
Sample of:

26,069 ADOLESCENTS (AGED BETWEEN 11 TO 15)



WHILE RESEARCHING, THOSE WHO HAD FREQUENT FAMILY DINNERS HAD A POSITIVE EFFECT TO ADOLESCENTS

AVERAGE 13% TO 30% OF ADOLESCENTS WHO HAVE LESS FREQUENT DINNERS HAVE EFFECTS ON MENTAL HEALTH



2 to 3 family dinners 30%



CULTURAL STUDIES

Canadian anthropologist Gillian Crowther stresses that commensality — sharing a meal with someone, eating and drinking together behind the same table — is one of the most important manifestations of sociality in all cultures. Eating together confirms the sense of belonging, being part of a community.

A shared meal is a social event where thoughts, experiences, and emotions are shared. On a more covert level, acceptance or distance towards other is being expressed, as well as respect or disdain.

The cultural rules and etiquette of eating are connected to a shared meal. Margaret Visser, the author of many popular books about the history and culture of food, has emphasised that learning good manners often starts at the dinner table. Family dinners teach us more than just food-related values and dining conventions. We also learn moral virtues, such as generosity, discipline, and respect. Good manners are related to the rules of sharing as well: offering food to others, waiting after others, not taking portions that are too large.

This can also be affiliated with tableside manners such as "don't talk while eating", "do not play with your food", or "don't slurp".



China

In China food has many functions. Food has a significant importance in China as it is a social experience. When food is consumed by a group of people together or eaten in a religious ceremony, the sociality of food is identified. In many ways, food is a means for people to establish and express relationships with one another.





Social Functions of Food.

Establish and Maintain Relationship

Eating behavior, once formed, has continuity. People moving to other regional or countries, will continue keeping their tradition

2 Express the Degree of Relationship

In Chinese culture, service of expensive and rare foods usually shows the respect to the guests. A formal dinner includes 4–6 cold dishes, 8–10 hot dishes, served with soup and fruits.

3 As a Group Characteristic

Food has many symbolic meanings; it establishes the relationship between people and their environment

4 Celebrate Important Event

People eat special food to celebrate important events or festivals. Specific food will be served for specific social events in China.



Japan

In Japan, sharing a meal is seen as a significant event. Eating together and eating the same food is seen as a way to learn about other people. The phrase "onaji kamameshi wo kuu" means roughly "we are all in this together or "we all understand each other". This phrase is common when it comes to connecting with other people by eating at the same time and same menu.

Sharing a similar menu with their adult children and their grandchildren who live far away and being able to eat together virtually will make elderly people feel closer to them and increase their happiness, according to research. It may also stimulate discussion of recipes that have been handed down in the family over generations.



Kyoshoku

Kyoshoku is one of the most important dietary habits in Japan. What it is is an relationship between family and community members. After the Japan Food Education Committee issued focus groups with many young people who eat alone, most of their eating habits changed alone.



Italy

In Italy, gastronomy is almost like philosophy. It is a source of pleasure and sociability. It creates moments to talk, laugh, and strengthen relationships. Most Italian families describe food and dinner as a sense of pure pleasure.





Eating with Friends and Family

Eating together is both metaphorical and practical expressions of commitment. On the table is when relationships grow and relationships peak. Traditions are built when it comes to eating together as it teaches children and friends about the values of Italian culture. Holidays especially is a big part of what sets sharing a meal together to have a larger meaning. Different generations come together and pass on stories.

Eating at Home

Rather than ordering takeout, most Italian families cook at home as it is a source of stability and love within a family. The person who cooks is seen as an iconic figure of sharing food. It is not just the time put into making the food, but also choosing the right ingredients.



PRECEDENT STUDIES

From observing what is existing it is to help understand what other people designed and their own solutions. First case studies are taking a more personal way of sharing food. From stacking plates to creating a more experience like quality to the user. This is to help further try to build the project further to make it stronger.



Designers: Lella and Massimo Vignelli, Compact



Designer: Omid Sadri, The Lanturn



Designer: Boir

Precedent Study 2

Observing restaurants sharing objects. From understanding what solutions have been accomplished. Looking at unique ways of sharing food and making the dining experience unique.



Designer: Elad Kashi



Designer: Joey Roth, Sorapot



Designer: Bilge Nur Saltik



User Research

Learning the User

Probes are used as a way to understand the research group. By giving the user a task, it helps the designer to be able to understand the user group better. In many cases they are used to further backup findings or even as a way to promote the goal of the project. The given probe was used to let the user be aware of the importance of sharing food and the significance of it. The users were asked to choose a simple dish of either fried rice or pasta and make it with some creativity. Then to share the food with either their roommates and friends and then write about the experience.





Probe Study 1

"Made the fried rice as instructed, however, added cauliflower and pork to the recipe. Also made lion head meatballs to go with it. It was a fun process because I enjoyed cooking and teaching my friends the recipes."



Probe Study 2

"Made the eggs first as instructed. Then I started the oil with garlic cloves and some black pepper. Next, I added chopped-up chunks of vegan sausage and added the rice in. After the rice was thoroughly heated, I seasoned it with some salt and soy sauce.

I shared the dish with my roommates, and they also cooked smaller dishes to go with the rice. We ate together and laughed a lot. I felt very happy to cook something for them!"



Probe Study 3

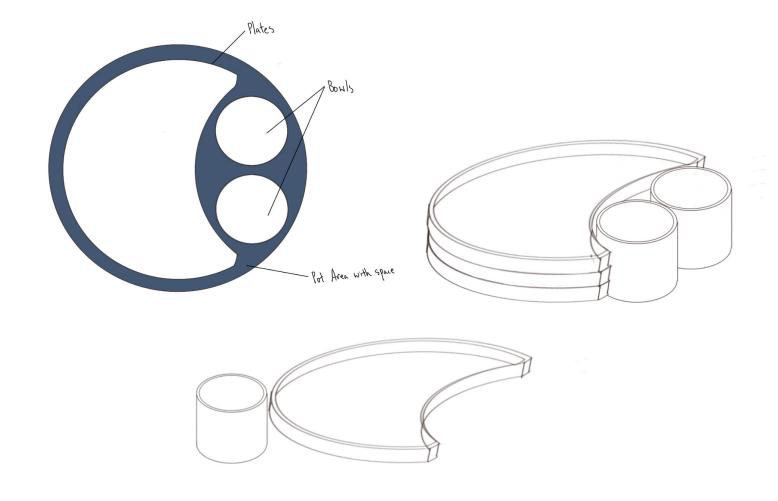
Followed the recipe and added kimchi to give it the spice. Was fun to make and my roommates liked it. Cooking for others seems more enjoyable than cooking alone.

Learning From Sharing

The probs was to teach people to understand the importance of food and sharing. The goal of these probes was to create a sense of awareness to people of the significance of eating with other people. It is also to create questions for the user.

"How can eating with people create a positive impact for me?" "Why does sharing food create such an impact?"

"What can I learn from this Experience?"

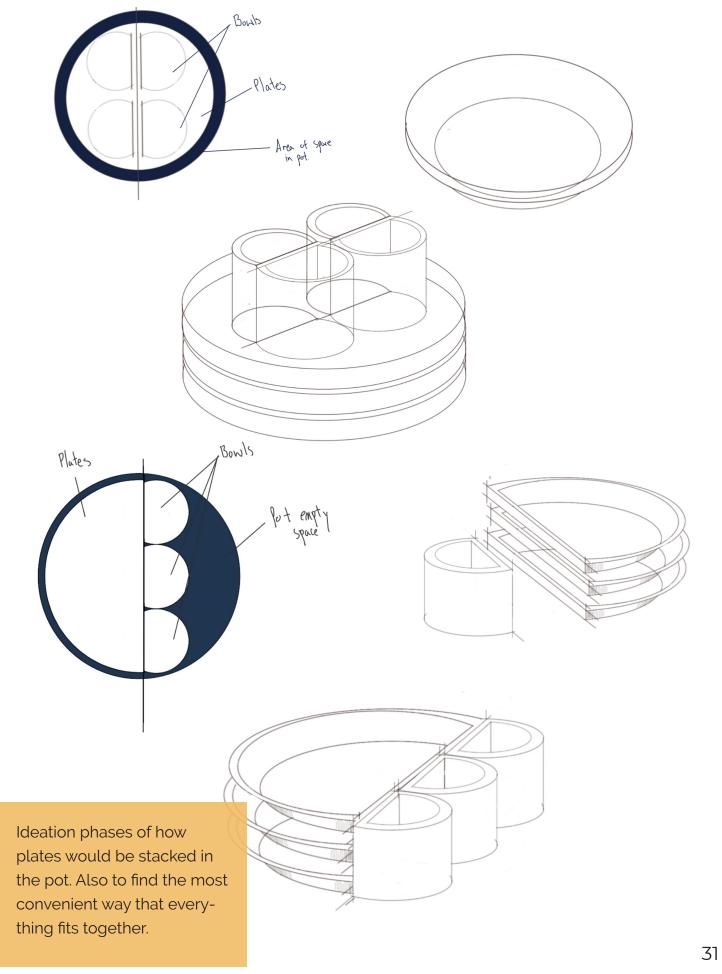


IDEATIONS

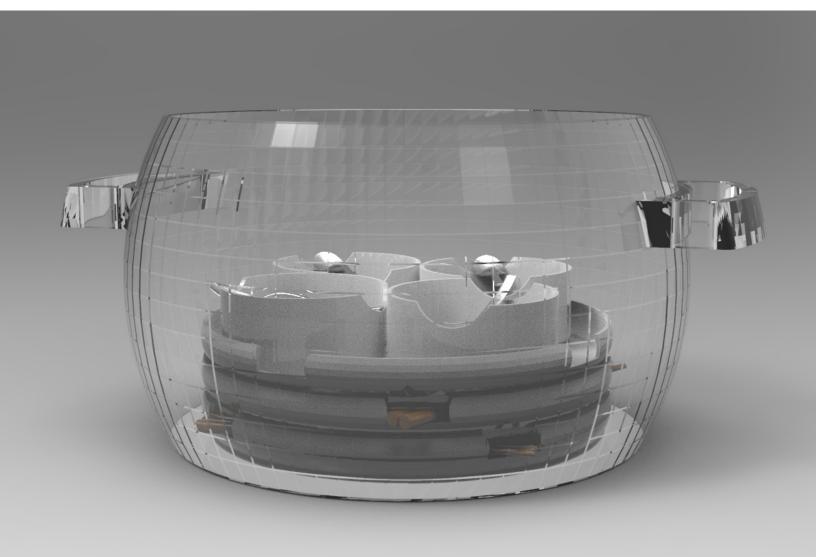
Ideations are important when explaining or going through thoughts in your mind. In this case, ideations were used as a way to depict ideas rapidly which are then later put into prototyping.

Stage 1

Ideating ways of sharing within a personal setting. These sets of ideations were focused on users who were in college or for those who have roommates. Looking at the users and the lack of space that can be occupied for tableware, the concept derives from tableware being stacked together (including chopsticks and spoons) to be within a pot.

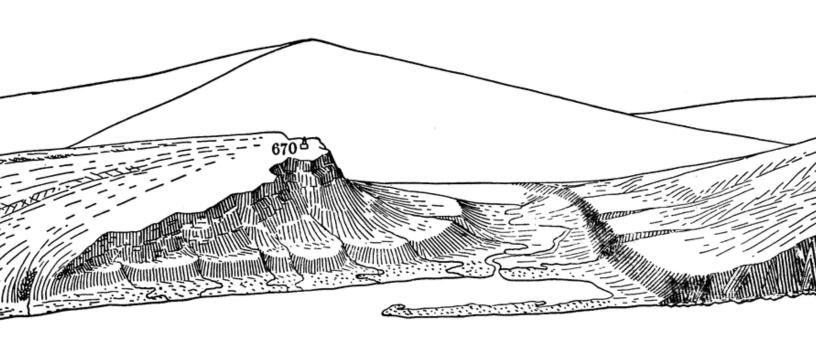


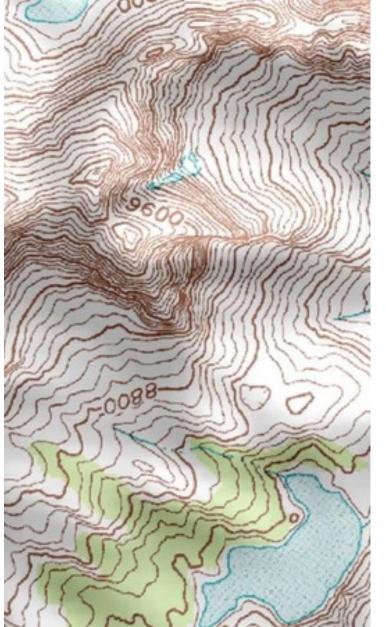






Completed Renderings of the ideations cited above. Done to show form and how the project will be placed within the pot.





Observing Topography

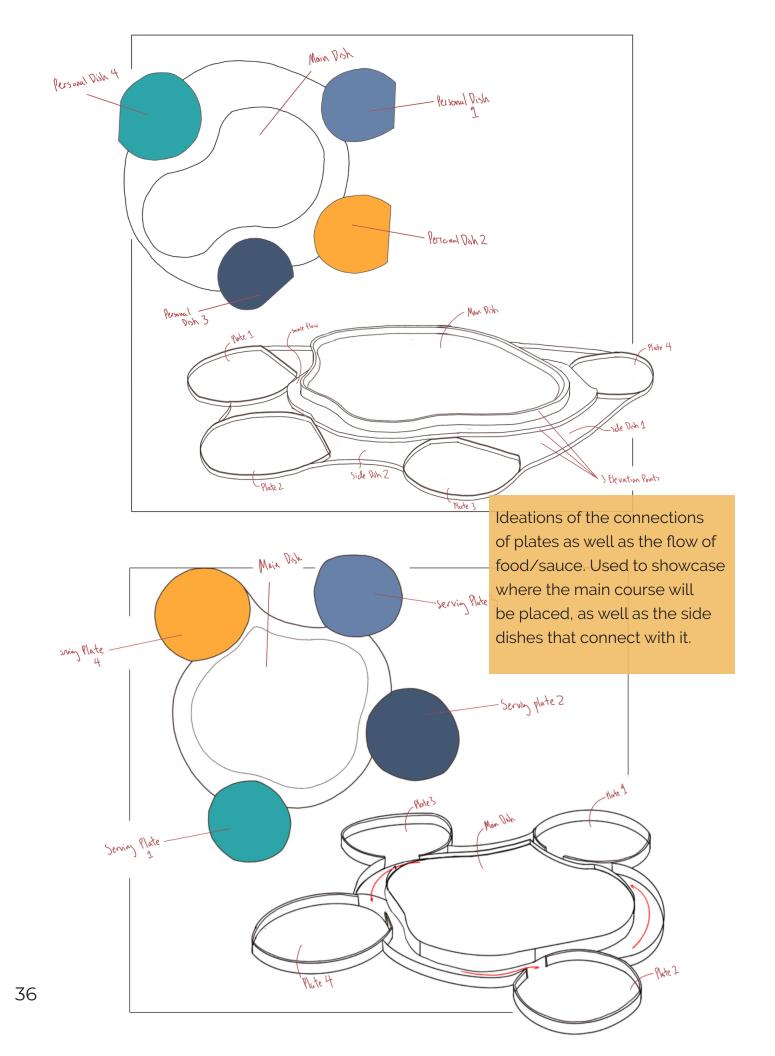
Looking at topography and the ways in how everything in nature is connected was what further developed the project. If everything in nature is connected why can't people be more connected through eating together? Observations of how the river flows and the patterns on the maps translated the meaning of the project to ways in how we can share food. The rivers can be the way the sauce flows in the dish and the certain elevations as well as emphasizing how everything is connected.

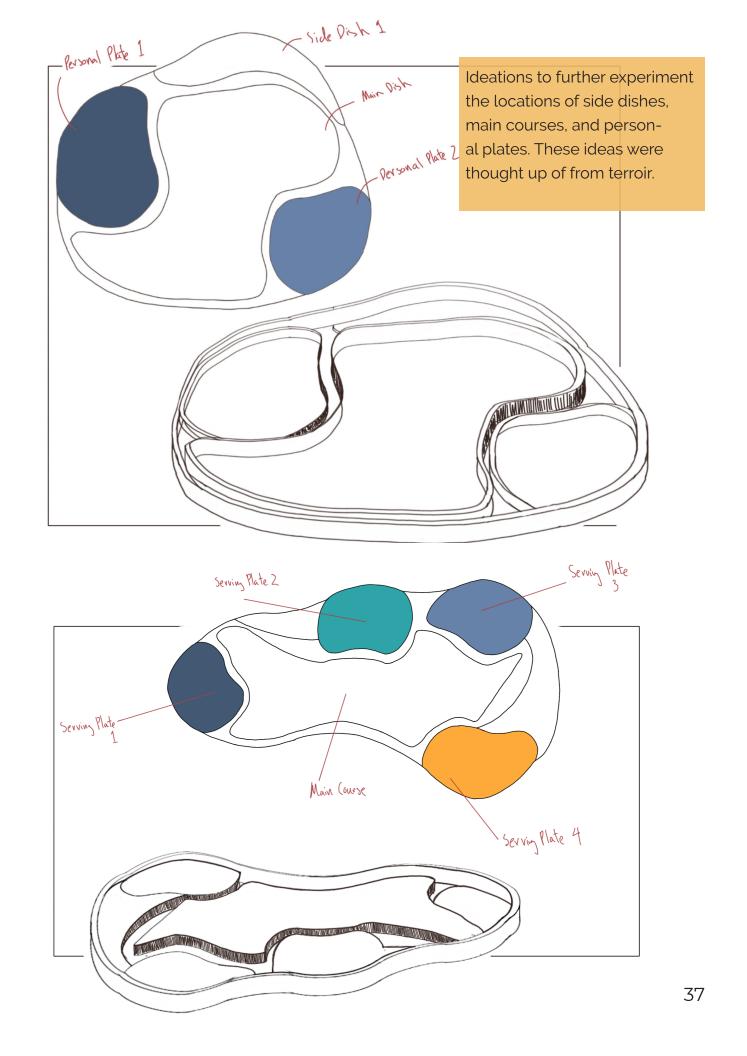
Integrating Terroir

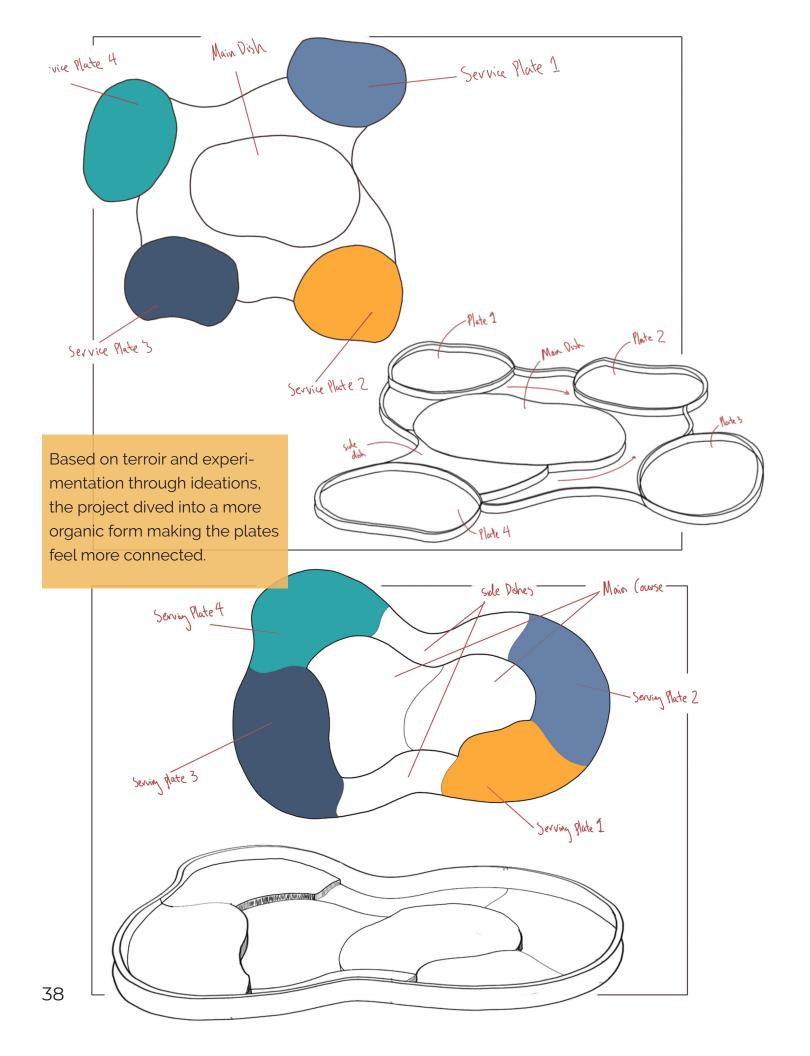
Terroir is a french word describing the environmental factors that can affect a crops specific growth habit. Many factors can affect the crop such as sunlight, soil and climate. Wine is a common crop that uses terroir as the taste of wine is affected based on where the grapes are planted. Viewing the terroirs helped enhance the project further. The multiple locations of the dishes as well as the layering on the plate was inspired through terroir.











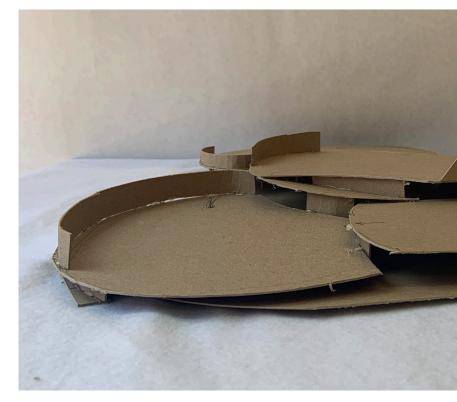


PROTOTYPES

Experimentation of shapes and fluidity. Based on the topography of the mountains, the prototyping phase was used to further explore this idea to show how the prototype will work. Prototyping is also used to highlight the different levels in which the project can be further explored.

Stage 1

Use of chipboard models to show elevations. Using chipboard is to swiftly execute models to showcase the idea of the project. In this stage it was to show how the food is to be moved from plate to plate. The indents and slides are used to highlight this light playfulness of playing with your food. As we are younger we are taught to not play with your food or share your food. While trying to break the customs of not sharing food, why not also break the custom of playing with your food?



Light is also an important factor when it comes to prototyping. When it comes to the first prototype, the significance of the light is to show the depth or height of the project.





Using pink foam to understand how the product will work. The purpose of this model is to be able to test it to see how we react when we are eating on the plate. The form was modeled off one of the ideations. The separate plates are obvious in which way the user is to be sitting around it.





The model has problems in that the shallowness as well as the how the food will sit on the individual plates will be placed. There are chances that the food may fall off the plate as there is not much of a wall and shallowness to the plate.



Testing

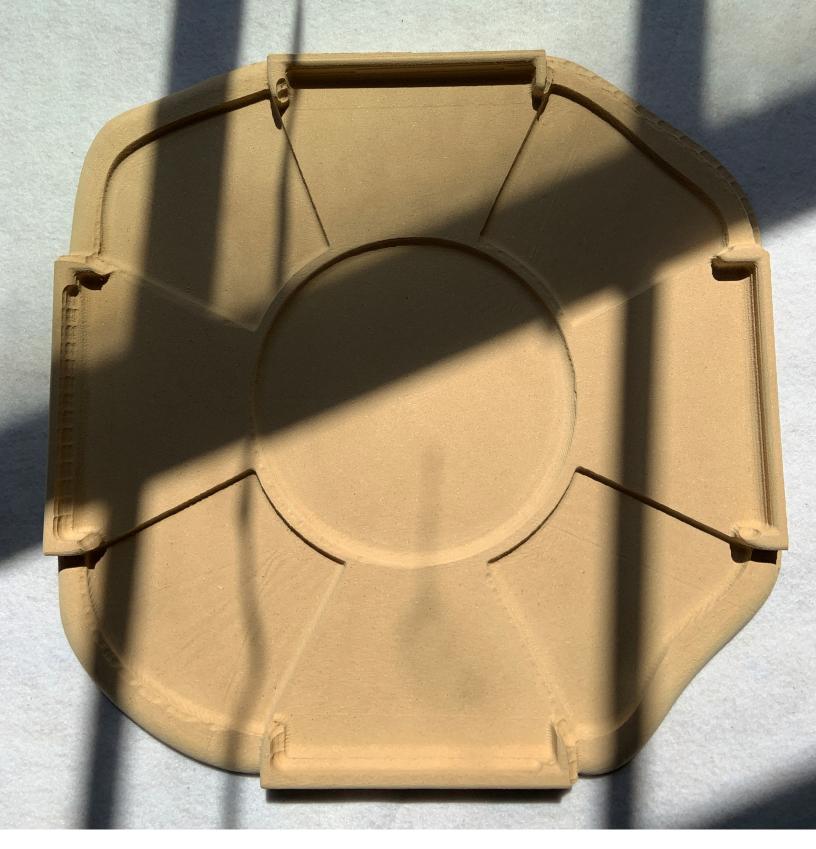
From testing the model, sharing the food with everyone was a unique experience as it felt that everyone was going through the same task of having to track the food back to their own locations. However, many issues arose in which the user would just pick up the food and put it into their location rather than going through the path. Another problem was the flow of sauce was not a significant feature in the product.



Based on the test, rather than having many bumps and curves as well as obvious locations of where the food should be placed, the product would have a more smooth flow from the main dish to the user's plate.

Prototype 3 was first modeled out in Solidworks then CNC to create a form that was based on the previous testing. Rather than having so many flows and movements, the user pushes the food from the main course to their own plate. Furthermore, the side dishes are placed between the user to create a better sense of connection when eating together.





Based on this model, the flaws are the specific walls on the side of the users. This can create a problem as when the user picks up the food they need a way to put the food on their utensils better. The form as well as issues in which it did not have a sense of topography.



Based on the previous model, stage four is fully exploring topography as well as terroir. The locations of where the users eat is less obvious as it flows into the main course and the other users locations. To be able to get the side dishes there is a connection between the other user.



Some problems which were highlighted from this model include the issue of how users will be able to eat from the plate (similar to stage 2). There is a greater connection to topography, however rather than everything feeling random everything felt symmetrical.

Stage 5 was used to explore the locations of the side courses as well as exploring the size of the product. Another factor that was used to explore how the user can be able to consume the food better. There was also a plan to diminish the line in where the user should be seating and what side of the plate they should use. This is so that it correlates back to togetherness.





From the model, I that learned that the randomness of the shapes was easier to trace back to the inspiration of topography. There are more layers in the product that created a bowl like structure which allowed the user to be able to reach the food better. However, as it is for four people, the main course, sides, and dishes for the user felt not big enough.



Stage 6: Final Prototype

Based on the previous models, the scale of this prototype changed. The area for the main course became larger and rather than having the edges to be different in width, it was all the same dimensions. The shape had a better flow to it and the specific locations in which the user eats is not obvious. Specific locations had different depths and rises which also helps keep the reminiscence of topography.



From the final prototype, the final was to be made from baltic plywood, which because of the many layers it has would be able to highlight the curves and bumps that the product has.

Final Stage















Observing how people interacted with the project and the enjoyment they received when they shared food with each other. Showed me the success of this project. It created a way that spread awareness of the significance of sharing a meal with someone, and how we can learn from each other from it.

Users are encouraged to play with their food. The push and pull of food to one another's side of the plate is a way of enacting a sense of connection between the users. When we are eating together with people, we are able to enact conversations and be able to understand one another.

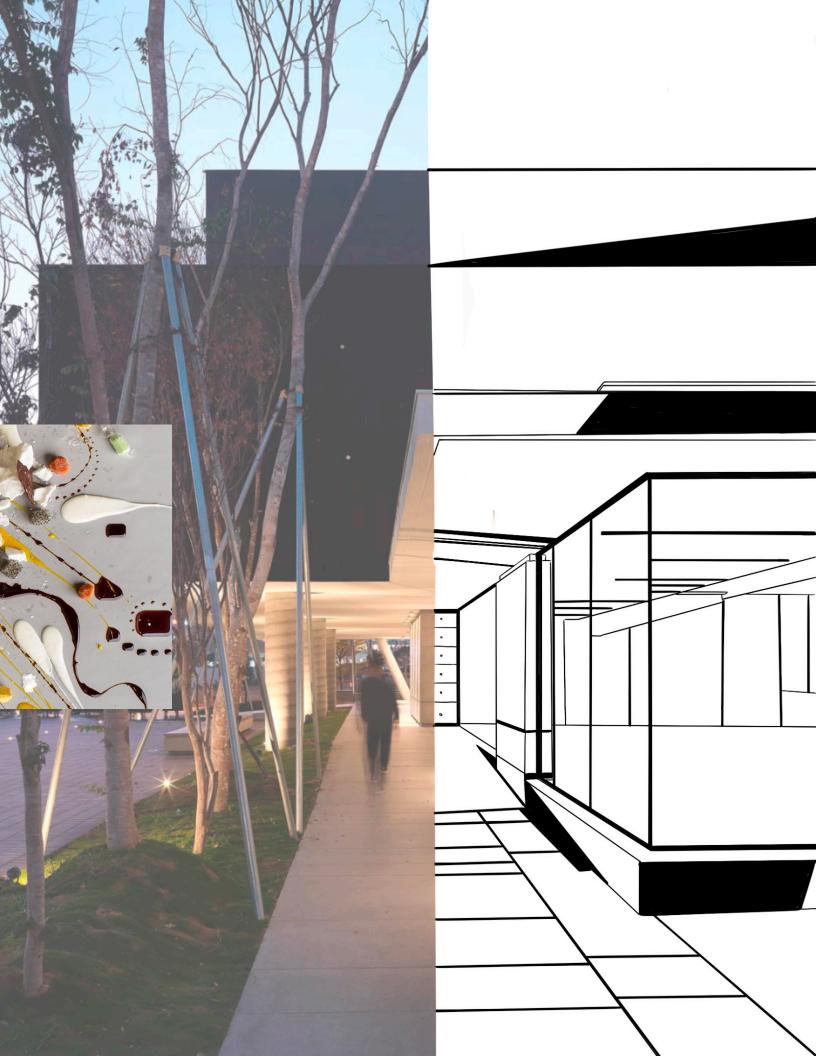


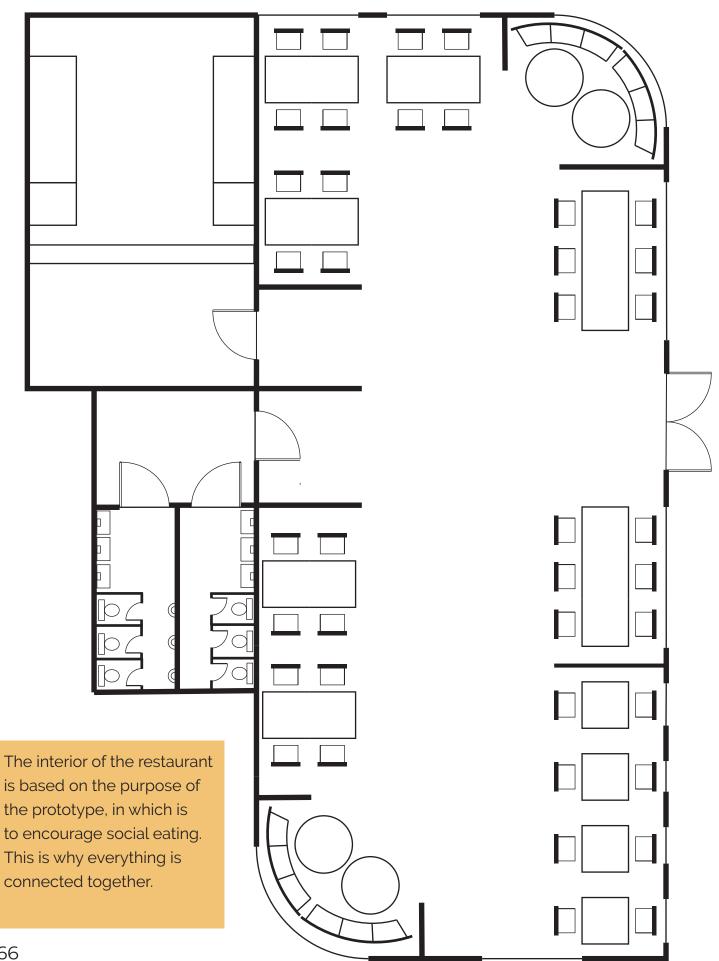


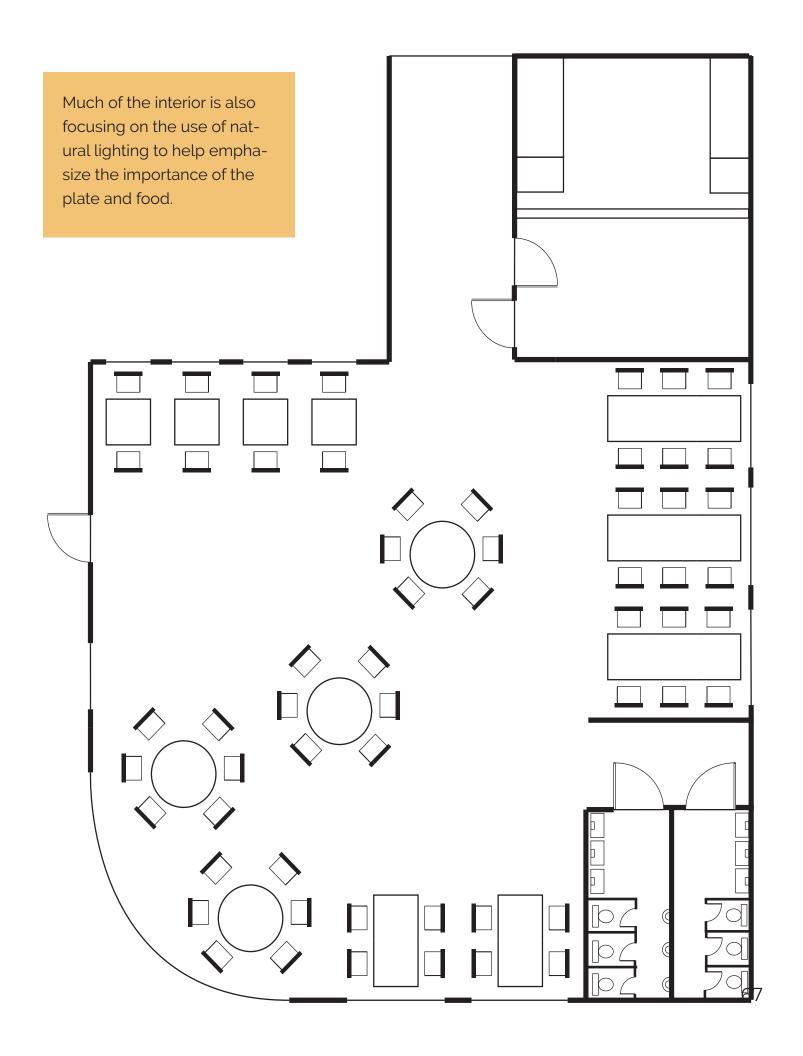
RESTAURANT DESIGN

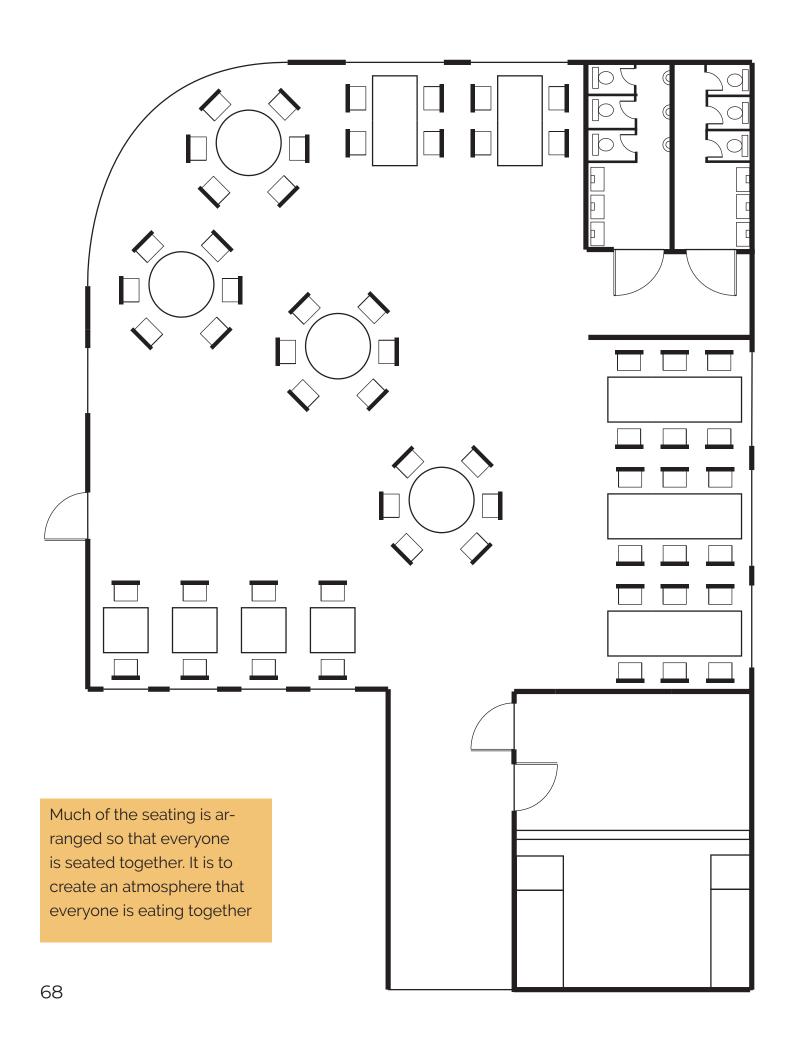
Much of my influences are from Grant Achatz as he creates dishes to give customers a unique dining experience. He creates works of art from food to break common rules of eating, such as "don't play with food". Creating a new way of eating can also be influenced by not only just the food and plating but also the interior of the restaurant as well.









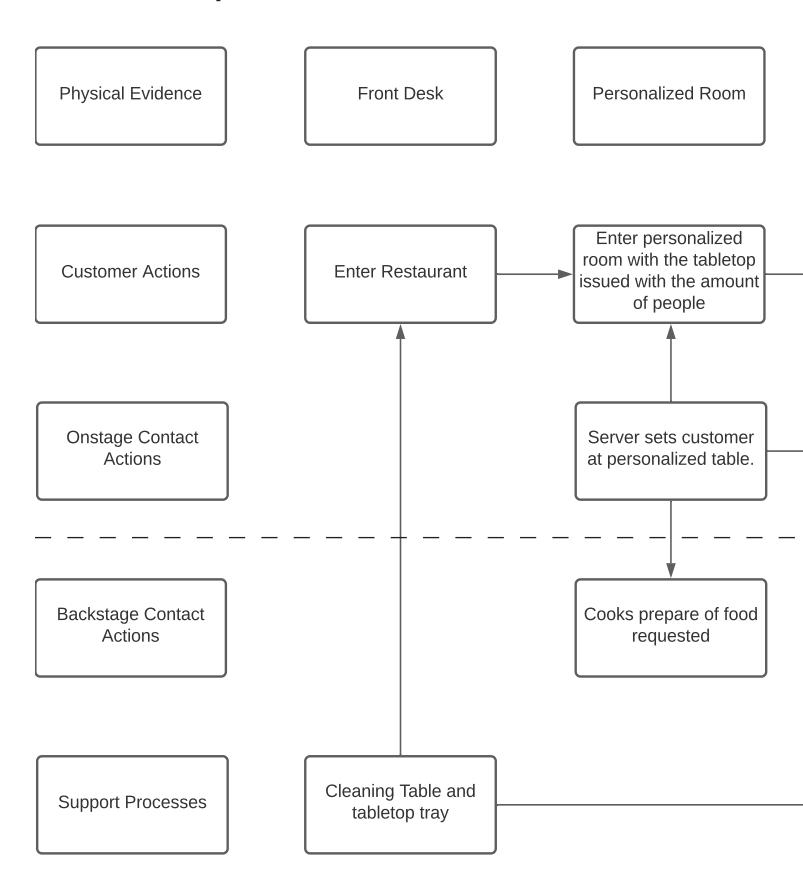


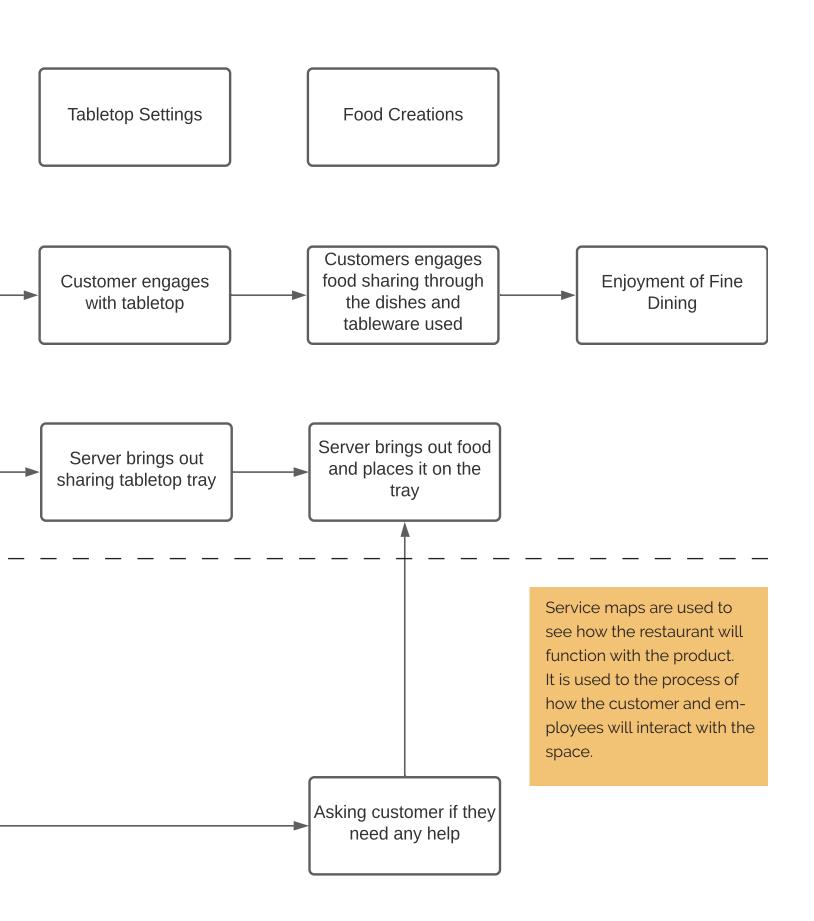






Service Map











References

- Bardone, Ester. "How Sharing a Meal Is About Sharing a Culture." UT Blog,
 UT Institute for Cultural Research and Fine Arts, 23 Dec. 2015, blog.ut.ee/how-sharing-a-meal-is-about-sharing-a-culture/#:~:text=Canadian anthropologist
 Gillian Crowther stresses, being part of a community.
- "The Benefits of Eating Together For Children and Families." HealthLink BC,

 HealthLinkBC, 14 Jan. 2017, www.healthlinkbc.ca/healthy-eating/
 eating-together#:~:text=Health and Social Benefits to,less pop and fried foods.
- "The Benefits of Eating Together For Children and Families." HealthLink BC, 12

 July 2018,https://www.healthlinkbc.ca/healthy-eating/eating-together#:~:tex

 t=Health%20and%20Social%20Benefits%20to,less%20pop%20and%20fried%20foods.
- "Mealtimes and Mental Health." Mental Health Foundation, 14 Aug. 2018, www. mentalhealth.org.uk/a-to-z/m/mealtimes-and-mental-health.
- "Building a Company Culture Through Food." Psychology Today, Sussex Pub lishers, 4 Feb. 2018,https://www.psychologytoday.com/us/blog/ritual-and-the-brain/201802/building-company-culture-through-food#:~:tex t=Psychological%20benefits%20of%20eating%20together&text=Find ings%20show%20that%20a%20child,simple%20act%20of%20eating%20 together.

Ma, Guansheng. "Food, Eating Behavior, and Culture in Chinese Society." Journal Ethnic Foods, No Longer Published by Elsevier, 24 Nov. 2015, www. sciencedirect.com/science/article/pii/S2352618115000657.

"Child Development Basics." Centers for Disease Control and Prevention,

Centers for Disease Control and Prevention, 5 Mar. 2020, www.cdc.gov/ncbddd/child

development/facts.html.

- Elgar, F. J., Craig, W., & Trites, S. J. (2013, April 1). Family Dinners, Communication, and Mental Health in Canadian Adolescents. Retrieved November 16, 2020, from https://www.jahonline.org/article/S1054-139X(12)00317-5/fulltext
- Chemin, Anne. "France Remains Faithful to Food as Meals Continue to Be a Collective Affair |

 French Food and Drink | The Guardian." The Guardian, The Guardian, 4 Apr. 2014, https://

 www.theguardian.com/lifeandstyle/2014/apr/07/france-food-ritual-meal-tradition.
- Family, The Vanier Institute of the. "(Still) Eating Together: The Culture of the Family Meal." The Vanier Institute of the Family / L'Institut Vanier de La Famille, https://vanierinstitute.ca/eating-culture-family-meal/. Accessed 26 Nov. 2020.
- Elgar, F. J., Craig, W., & Trites, S. J. (2013, April 1). Family Dinners, Communication, and Mental Health in Canadian Adolescents. Retrieved November 16, 2020, from https://www.jahonline.org/article/S1054-139X(12)00317-5/fulltext
- Chemin, Anne. "France Remains Faithful to Food as Meals Continue to Be a Collective Affair |

 French Food and Drink | The Guardian." The Guardian, The Guardian, 4 Apr. 2014, https://

 www.theguardian.com/lifeandstyle/2014/apr/07/france-food-ritual-meal-tradition.
- Family, The Vanier Institute of the. "(Still) Eating Together: The Culture of the Family Meal." The Vanier Institute of the Family / L'Institut Vanier de La Famille, https://vanierinstitute.ca/eating-culture-family-meal/. Accessed 26 Nov. 2020.
- Ashkenazi, M., & Jeanne, J. (2000). The essence of Japanese cuisine: an essay on food and culture. Philadelphia: University of Pennsylvania Press.
- Ishikura, Yoko. "Food As A 'Connector' Between People". The Japan Times, 2021, https://www.japantimes.co.jp/opinion/2019/11/12/commentary/japan-commentary/food-connector-people/.
- "Cooking And Eating Together Remain An Irreplaceable Pillar Of The Italian Sociability.". Tus cookany, Cooking Vacations Tuscany, 2021, https://tuscookany.com/blog/the-pleasure-of-eating-together-the-italian-way/.
- Blyth, Lorne. "How Food Plays A Part In An Everyday Italian Lifestyle & Culture". Flavours Holi days, 2021, https://www.flavoursholidays.co.uk/blog/food-in-italian-lifestyle/.