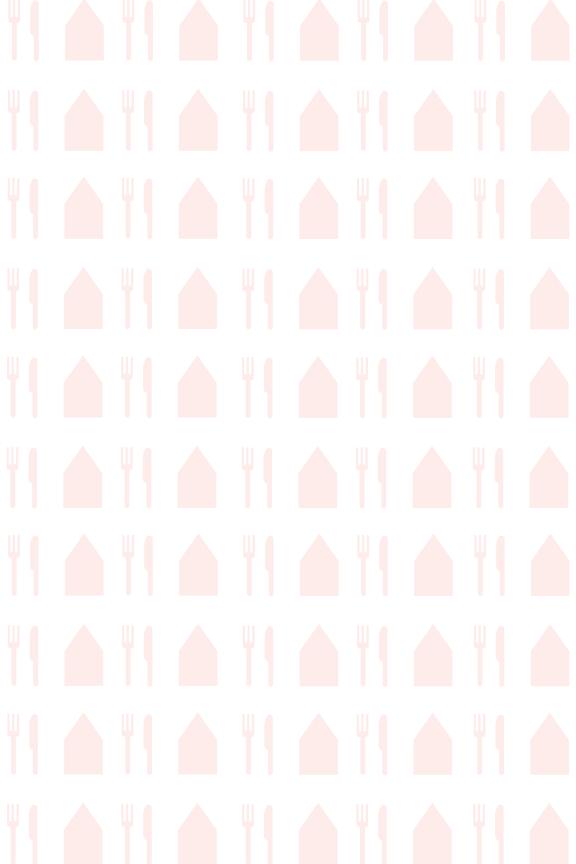
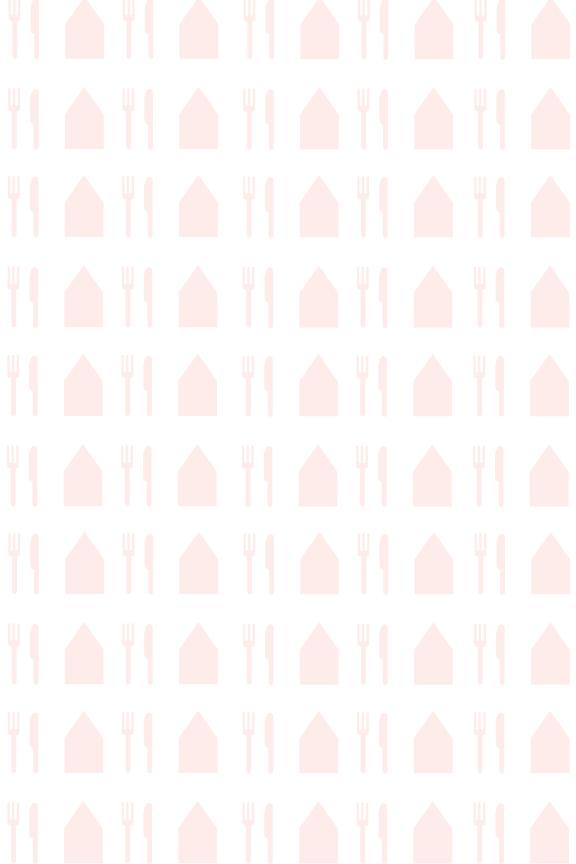
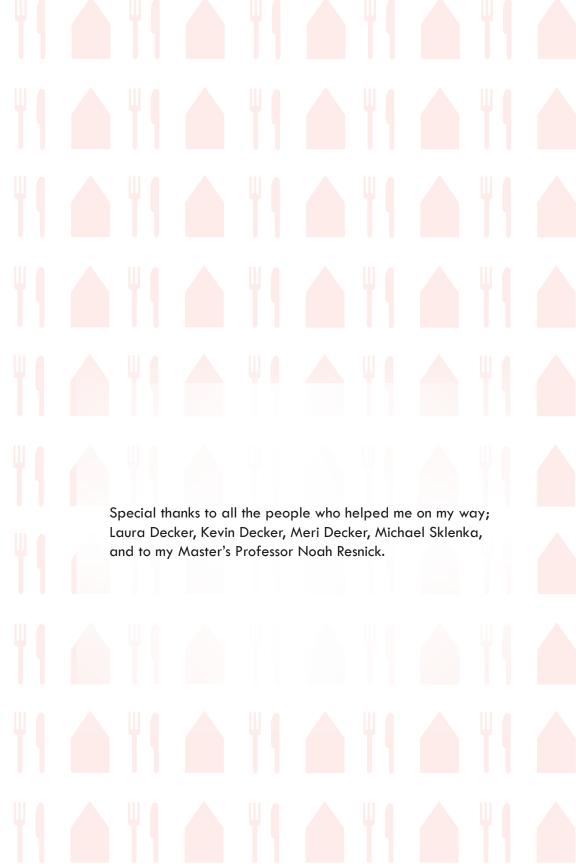


Acquired Tastes







Acquired Tastes

Mollie Decker Masters of Architecture University of Detroit Mercy Professor Noah Resnick



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Abstract

Food and architecture are forever bound together when it comes to man's survival. Today the connection is complicated by culture, industry, standardization, power, and monetary gain; but the connection between food and architecture remains production, strong. The transportation, distribution, serving, and eating of food has forever shaped cities. The architecture and cuisine of the city shape culture and gives them their identity. It is impossible to separate these two major forces in our lives as they continue to adapt to, and create the society we live in today.

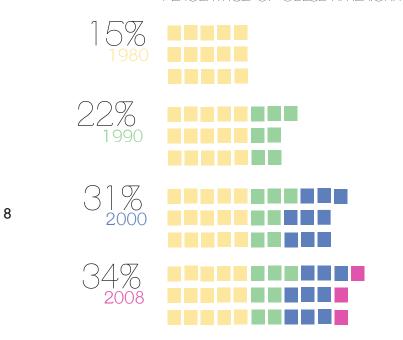
Today, Americans no longer prize food for its natural healing and nourishing qualities. Instead monocultures ramped and the food industry has been over taken by big business. We live in a world where convenience trumps quality and where most people don't know how to make a good meal for themselves. Americans consider cooking a chore and don't realize how rewarding it is to craft a meal from scratch to share with others. The cooking and dining experience is becoming a lost art of sorts. Therefore it becomes important for the future of America for young Americans to learn these basic life skills so that they can care about our the food they eat, and become aware of the problems in our

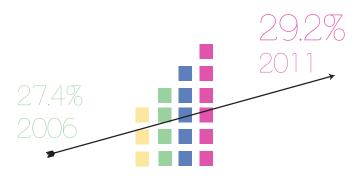
It is important for Americans to reassess the worlds food system, and not simply accept the fait we have been given. Food related diseases are on the rise, and it is no wonder when cheap, high calories, nutrient deficient food is what most people survive on. There are so many food related problems and the first step in creating solutions is to educate people about what they are putting in their own bodies. People have to care about their own nutrition first, and then they will begin to care about the food system as a whole, and how it is affecting all of us.

food system today.

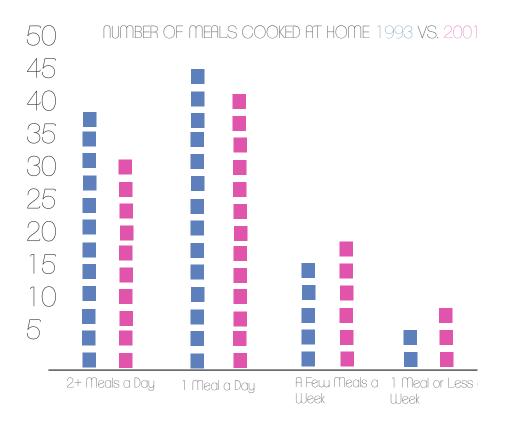
Statistics

PERCENTAGE OF OBESE AMERICANS





PERCENTAGE OF OBESE COLLEGE STUDENTS



College age students/young adults are making food choices on their own for the first time in their lives. With less and less parents teacher their children how to prepare and purchase food, it is even more important that these young people get educated. At this point in their lives they will begin making habits that will last the rest of their lives. It is so important to give them tools so that they can start making healthy food habits.





Mobile Precedents

There are not too many architectural solutions that engage the idea of food education. One successful project situates itself in Rhoon, Netherlands and is designed by Studio Elmo Vermijs. This project focuses on reconnecting people from the city to agriculture and seasonal foods. The architecture is mobile and is situated in both rural areas as well as in the city. As the structure moves around the city it follows the harvest calendar. Different chefs come and engage in cooking that fuses old and new cooking techniques in the wood-burning stove. The structure is based off of old boil houses used to make bread for farmers and locals in the community. Part of what is so striking about this project is how the architecture does what the chefs do which is to strike a balance between modern architecture and old familiar forms.

This mobile kitchen is meant to teach about sustainable cooking as well as breach the gap between the city and the rural areas. The structure is mobile and is transfered via tracker to different areas in and around the city. In the mobile kitchen chefs prepare seasonal and local food using and discovering both new and old cooking methods.

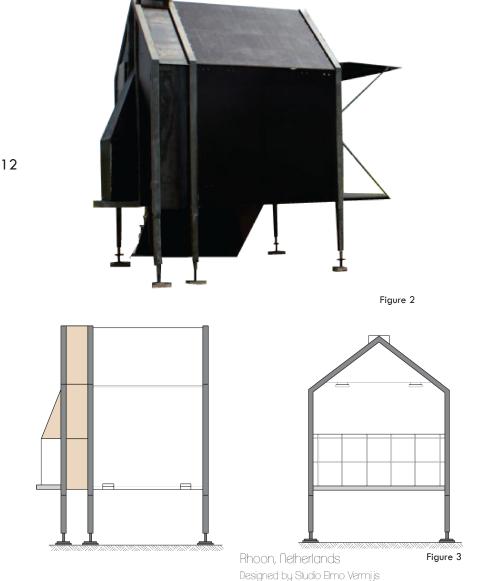




Figure 4

The structure is based off of old boil houses used to make bread for farmers and locals in the community. The structure moves around the city following the harvest calander. The structre creates a connection between the farming/ rural community, as well as creates a connection with the community and the food they eat. The design is a nice meeting of new and old, urban and suburban as does well to create a connection between the locals and their food.



The kitchen is equipt with a wood burning stove that allows chefs to play with old and new cooking techniques.







Figure 7



Arizona Heritage Wagon

Designed by DUST

The Arizona Heritage Wagon seeks to educate Arizonians about their locally grown food, and locally made food products. The project competition design was won by a group called DUST. This project gives locals many ways to interact with the food cart; they can touch and taste local foods and food products, they can read about products as well as talk to an expert in the wagon. The wagon folds up easily into a road safe structure that can be transported with any truck to different locations. The Wagon is transported all around Arizona to different events and celebration and is a fun interactive way for locals to learn about their culture and heritage.



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Food Wagon in Open Position



Arizona Food Wagon has many layers on interactions for locals. This image shows one of the many informational boxes located on the wagon.



Harvard Food Literacy

The final president I took a close look at was the Harvard Food Literacy Project. It was not an architectural project but it is a project that seeks to educate college students about food in various ways. The project changed the school curriculum to allow for classes in all subject areas that have to do with food; environmental economics, the microbiology of food, the body in the age of obesity, History and Politics of the American Obesity Epidemic and so on. The idea is to get students thinking about food in numerous different ways so they realize how important it really is. They also have integrated this educational component into their dining facilities; showing students how to portion control their food and eat a balanced diet. They have cooking classes available to students as well as a variety of other helpful ways to get students interested and informed about all aspects of food. The important thing about this program is that the schools culture changes because of it and it becomes ingrained into students and their everyday lives.



Student learning to shuck an oyster.

Figure 13



Part of the Harvard Literacy project is cooking demonstrations, and classes. These pictures show students watching Chef Barton Seaver cooking sustainable seafood.



Figure 15



The Harvard Food Literacy Program teaches students about all aspects of healthy and sustainable eating including growing and composting food.



Figure 1

23

Good, healthy food takes good, healthy soil. The above picture shows students teaching others how to compost with worms. The below picture shows some beautiful carrots grown, and harvested by students.



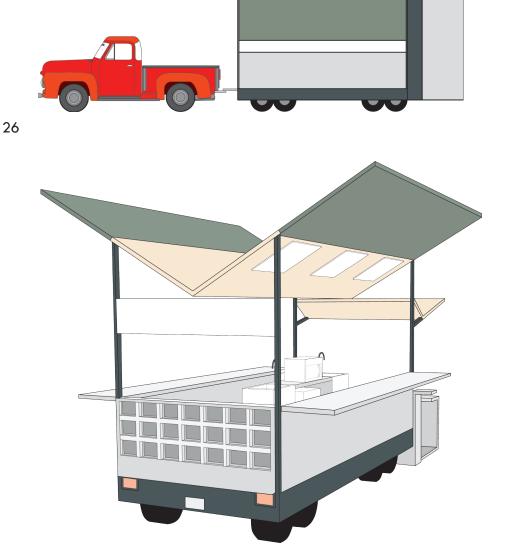
The first phase of this thesis looks to an architectural solution as a way to facilitate education and engagement of young adults. Young adults and more specifically college-aged students were chosen as the demographic for this project because they are at a critical point in their lives. Before entering college most children rely on the food their parents provide for them, and make few food choices themselves. Adults on the other hand are very set in their ways and have either chosen to work cooking into their lifestyle or have chosen not to. College aged students are in special need of education because they are at a point in their lives where they have to make most, if not all of food related decisions by themselves. This is even more important in today's world considering that most parents no longer teach their children how to cook. Without education in this subject it is very likely that college students will make poor choices when given this freedom. Everyone has heard of the freshman fifteen and whether one believes it's an urban legion or not teen obesity is on the rise. For the first time in America children have a lower life expectancy than their parents. This can be changed and informing American's that there is a problem is the first step towards a solution. By educating college student about healthy eating, and sustainable eating they will become more interested in what they consume, and how what they consume shapes them and the world we all live in.

Starting with the idea of education the first phase of this thesis is a mobile architectural solution to engage college students. The mobility allows the architecture to be site-less, and move to and from college campuses or other public sites. The architecture is meant to engage students on many different levels so that students are not intimidated. Students are given the opportunity to watch cooking tutorials, to taste foods, to read and learn about food and cooking, to engage in learning how to cook, as well as many other types of educational interactions. The architecture also engages many different aspects of food, such as basic cooking skills, reading recipes, reading food labels, and learning about sustainable and local foods. The idea is to teach students about how eating healthy can improve their lives, the earth, and the lives of others.

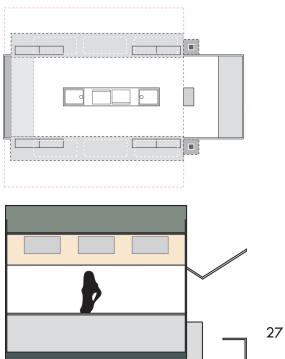
There are multiple food carts that make up the first phase of this thesis. The idea is that each one teaches students something different, but that they maintain consistency in design. All three of the food carts are meant to be mobile and easily closed, opened, closed again and transported to and from different spaces around any college campus. Mobility allows them to be seen by many different types of students that interact with different parts of the campus. The cart can be used in conjunction with one another or separately. The first cart is a cooking food cart with spaces for food demonstrations, recipes to be handed out, food to be tasted and ingredients for cooking to be bought. The idea for this cart, and similarly with the others is to have these different types of interactions so that many different types of students will participate. The second cart is a food store cart that will teach students how to approach choosing foods in a grocery store. There are about 50 different types of pasta sauces in the average grocery store and this can be very overwhelming to someone not use to grocery shopping. This cart will educate these students how to read food labels and decipher which pasta sauce (or other food product) is healthiest and best suited to their tastes. It will also provide healthy snacks and food options to students. The third cart is called the local food cart and it will teach students about local and sustainable foods. It will give students examples of what foods are in season and grow in the region they live in. It will allow them to try these foods and learn about how they help the local economy and what they can cook with them. These carts are meant to be interactive and get students excited to incorporate healthy food and food education into their lives.

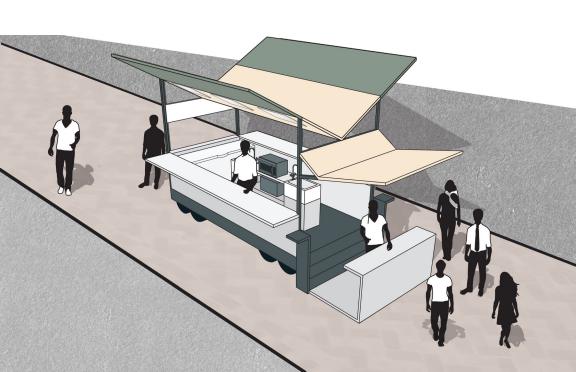
Food Cooking Cart

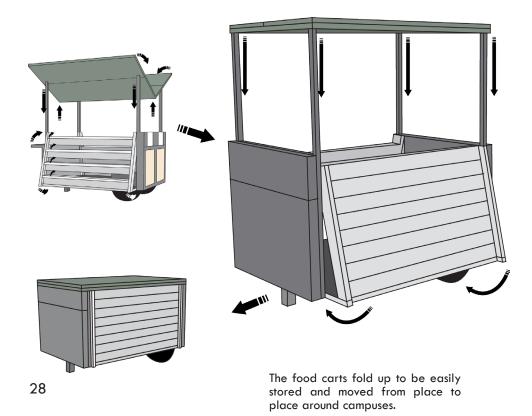
This project creates a transportable architecture installation that can be moved to any campus or area with a high density of young adults. The project will focuses on education and engagement to regain a connection to food and cooking. This project will be a catalyst for other more permanent projects to develop across America.









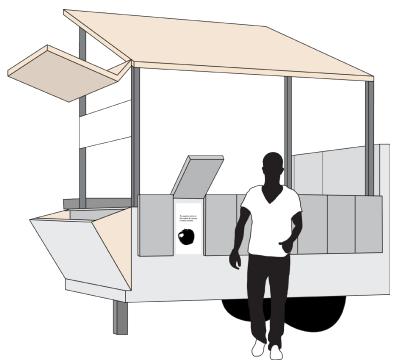




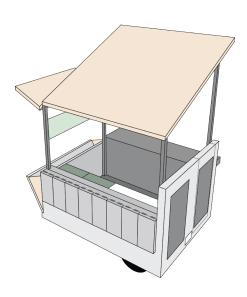
Food Store Cart

The Food Store Cart is meant to address the fact that many young adults have never gone grocery shopping alone. The cart provides many layers of information in an interactive way. The rear of the cart compares the nutritional information and ingredients of two similar food items; helping the viewer to differentiate between healthy and unhealthy packaged foods. This way students can learn to read labels and make good choices when shopping by themselves. The cart also sells healthy food items including snack items and drinks along with packaged items to make meals.





Interactive Panels allow students to test their newly aquired information by reading questions and lifting the panels to find the answer.

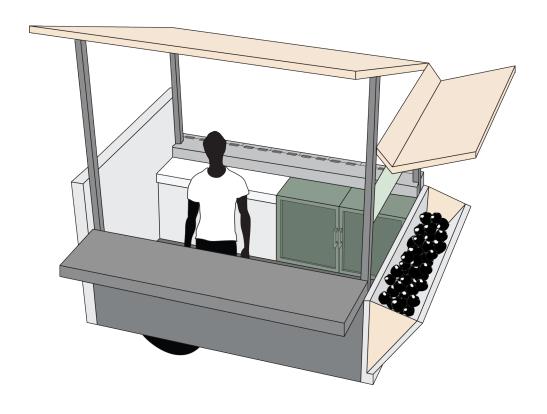


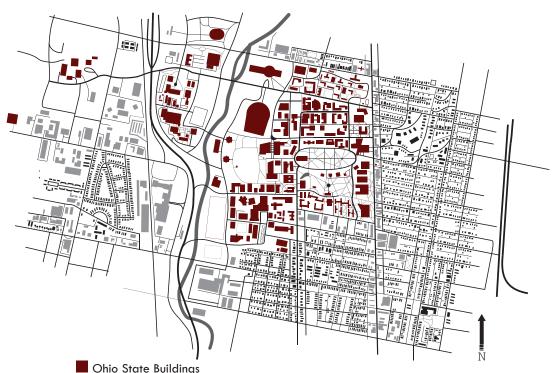
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The structure opens up to allow room to display local produce to be smelled, touched, and consumed.

Local Food Wagon

The Local Food Wagon is used to inform young adults about local food that is grown and produced in their area. Many young people have no idea what foods are avaliable locally, or what foods are in season during different times of the year. This wagon will teach about season local foods and sustainable foods. There is a counter that opens up so that interactions can take place between the educator and the young adults. The counter can also act as a space to serve food, hand out recipe cards or other information about the local food and produce that is being featured.





- Ohio State Buildings
- Olentagey River
- Residential Buildings Commercial Buildings
- Freeways
- Two Lane Roads
- One Way Roads/Alleys
- Walkways

Ohio State Main Campus Map

Ohio State was choosen as the site for further investigation because of its high number of students enrolled. It has the third highest number of students enrolled when looking at all public colleges in America. The school also has a large agricultural program as well as a food activist group called the FIC or Food Innovation Center. Their mission is to improve global quality by inspiring multi-disciplinary sustainable food solutions. Ohio State has the resources and interest to support a more permanent architectural solution to educate young adults about food.

The photos to the right were taken of the main campus of Ohio State University. Starting from the top is the school's Fitness Center which provides students the facility to keep themselves in shape. The second picture is a view of one of the historical buildings right on the main oval of campus. The third is a picture looking down one of the campuses main streets which are all areat streets for pedestrians to walk. The fourth picture is of the main library on the end of the main oval to the west. The library is the central focus of the oval, and an important building for students as well.











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The site is located on the main campus and is surrounded by student residences halls and an athletic facility to the south. The site is within walking distance to bus stops and the main campus hub, as well as High Street the main axcess of the campus. The map above shows the surrounding context to the site. The top map to the right shows locations of parking spaces, and bus stops all within a short distance to the choosen site. The lower map on the right shows possible launch sites for the food wagons and the paths they would take to get there from the site. The bottom image shows a panorama of the site and its surrounding context.

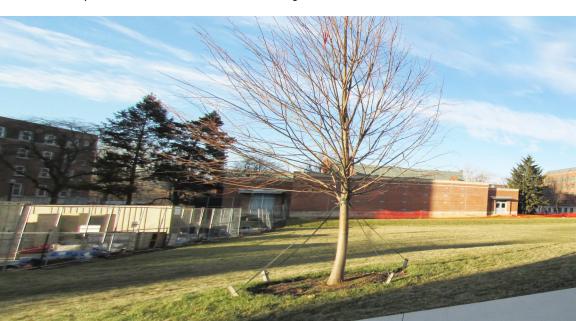






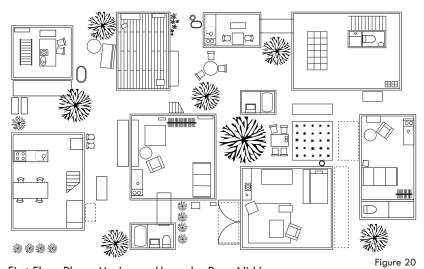




Figure 19

Permanent Architecture Precedents

These precedents look at architecture that has many components and pieces that work as seperate units, but that also work cohesively and flow as one. They look at how different programatic elements can mesh cohesively within one structure/structures. Their is a modular feel to the buildings which lends them to bleed the inside and outside spaces together. The first project is the Moriyama House designed by Tokyo architect Ryue Nishizawa. The project is so interesting because it breaks the house down into little, pavillion like buildings that fit within a larger complex and garden. The cleaness of the white makes the spaces feel so light, and sometimes it is hard to tell what is inside, and what is outside.



First Floor Plan - Moriyama House by Ryue Nishizawa

Moriyama House

The Moriyama House is modular and deconstructive in style. The house is designed to feel like a regular, Tokyo suburban home that is reduced and abstracted into cubes, and smaller rooms over a large green space. This house is a successful example of how pieces can come together to make a cohesive whole. The idea is that the smaller, modular spaces allow for the seperation of functions, while also allowing for lots of light to activate the spaces. Figure 20 shows well the main floor layout and how the differently programed spaces flow together with little passageways and doors through gardens. Figure 21 does well to show how the inside and outside spaces begin to bleed together, as well as to show the wonderful quality of light.





Figure 22

Figure 22 shows a small bathroom module sitting next to larging living space modules that make up the house. It is interesting to note the many scales and how they work together to create such interesting and unique spaces. Figure 23 shows the house looks and feels from the street. It is interesting to point out the more typical suburban homes that can be viewed throught the negative space of the building.

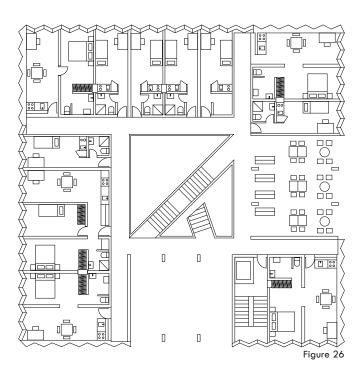




Figure 24

Figure 24 shows an indoor garden space within the home. It shows well the beautiful quality of light within the building, and is another example of how inside and outside begin to bleed together. Figure 25 shows how the building appears at night, with its windows all illuminated. Note the contrast in the lightness of the Moriyama house in comparison to the neighbors.





Student Residence Competition University of Leon Campus

Part of what made this Student Residence by MACA estudio and VIRAI arquitectos so interesting is that is was designed siteless. The buildings modules can easily adjust themselves to work and fit into any campus site. It is considered to be a system of modules rather than a building. The project offers an isotropic system, with its own set of domestic rules, that do not depend on where the modules are located and can respond to many different site conditions. The system fragments the required program into small clusters, instead of one large building. Four blocks of the same size house mixed housing as well as common shared spaces. This arrangement allows the building system to fit to any form of land it may need to fit within. These adaptable modules house 50 dwellings for students.





Figure 28



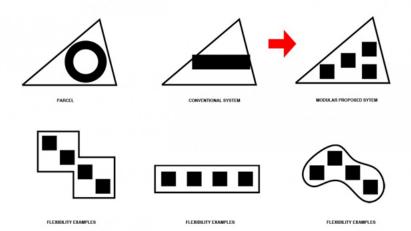


Figure 29

Figure 29 is a diagram explaining the reasoning behind the modular squares versus a conventional type building. The squares can easily adapt to any shaped site as shown in the bottom three diagrams. Figure 28 shows one realistic example of how the buildings can function together and create interesting court yard spaces that students could inhabit with a variety of programatic options. Figure 30 gives a more realistic view into what one of those court yards could feel like when one is approaching it from a human perspective.





HUB 01

Hub 01 is a mobile housing termanal, commissioned by Katho, a Catholic academy in Courtrai and designed by dmvA and Office A3. The idea is based on mobility, personalization of student dorms, and educational design. This completely mobile house has a central kitchen, living and bathroom spaces. The individual student rooms (shown in white) are attached via the yellow connecting device.

Figure 31



The individual rooms are a minimialistic white and are sized at a 6 meters square which is just large enough to provide a bed, toilet and workspace for students who want a quiet space to work.

The main terminal housing the shared spaces is based off the dimensions of a container (244x600) and can be easily moved if needed. The project is challenging the current living conditions of students and looking for a future vision of what living and learning will be like in years to come.





Figure 32

Figure 32 shows the central hub for students with a shared kitchen and dining spaces. It also shows nicely how the yellow passage fits and attaches into the main building hub as well.





Figure 34

Figure 33 shows how the small modular dorm spaces connect with the main "hub" of the building. Figure 34 shows a nice view of how all the spaces work and fit together into one larger building unit.



Permanent Architectural Solution

The final architectural solution implements the idea of the food wagons and the different levels of interaction into a multifunctional educational building. The program includes a cafeteria, a café, a food store, the headquarters of the FIC, cooking classrooms, food labs, lecture classrooms, and a prototype dorm with a shared cooking space. The program is meant to encourage all types of students to become involved on the site; whether they want to have a quick healthy lunch or commit to living in the dorms and completely changing their lifestyle. The first floor of the building works as four separate pavilion like structures that allow for circulation between them. The structures also open up during the day and close down to store the food wagons in front at night. Three of each type of food wagon are stored in front of each of the three front pavilion like buildings at night. In the morning the buildings open up, and launch the wagons out onto various sites around campus. The front three buildings encompass the cafeteria, the café and the food store, which, are the programmatic elements that are open to the public. The building is set back just enough to allow for activity to happen on the front of the site.



The second level of the building is dedicated to providing educational spaces to teach students about food. It has a food lab, two cooking classrooms, and lecture spaces. The idea is to provide a variety of different class types so that food classes having to do with a large variety of subjects can be taught there. The third and final level houses a prototype dorm rooms for 24 students with a shared kitchen and dining facility. It also has a shared roof garden where students can learn to grow their own food to cook with. The student dorms are meant to provide students with a space where they can learn to cook together and create positive food habits. The idea is that as student interest for dorms with shared kitchen facilities grows that the school would then provide more student dorms with kitchens.

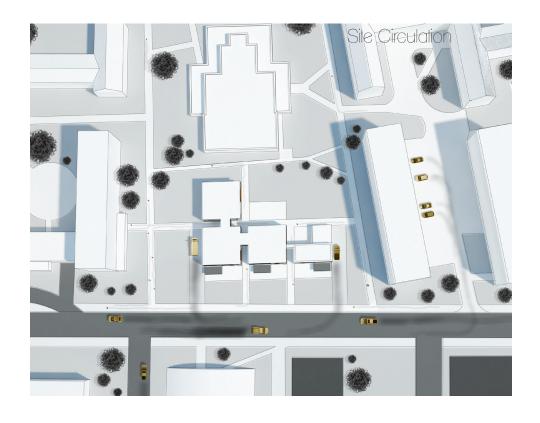


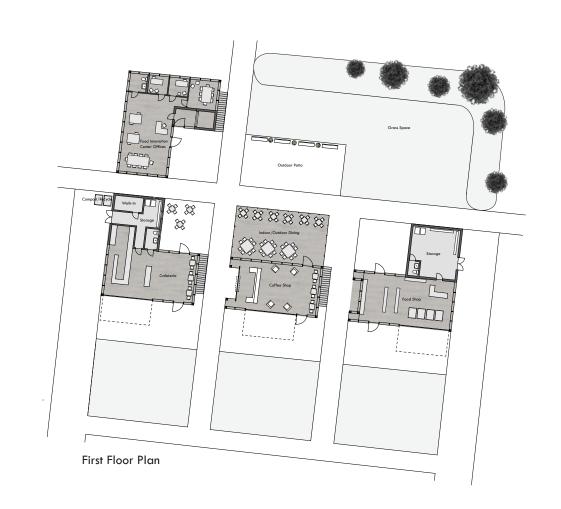


The organization of the program on the site needed to allow for easy pedestrian flow throughout. Many students walk or ride bikes as their main source of public transportation and so the site paths needed to allow for that. The site is also set up in a way to allow for the more public functions to be on the first floor, and more private functions on the second a most private on the third.

The top image to the right is a map showing the public and private spaces on the site. The image on the bottom right shows the circulation throughout the site including pedestrian/ bike paths as well as vehicular unloading driveways. The two driveways are located on the far left and right sides of the site and are used to unload food items needed for the cafeteria, café, and store. The driveways also allow for the food wagons to be loaded and unloaded and launched throughout the campus. The other paths are used for pedestrians and bikes and cut through the site to connect with other existing sidewalks and paths. The pedestrian paths also come together in an outdoor square where events can be held, or students can sit and eat. There is also green space on the site for students to sit, and relax.







The image to the right shows the first floor plan of the site. The first floor works as four separate pavilion like structures. The front three house the cafeteria, café and food store. The cafeteria provides a spot for students to eat healthy meals from fresh foods. They can interact and see the chefs cooking for them in the open kitchen, and students can even participate in food demonstrations as well. The café is a spot for students to pick up a coffee, or tea and learn about fair trade foods and how they can benefit our world. The coffee shop is shown in the image below; and as shown in the image it has two lanes. The first is within the café where customers can get a coffee or tea and sit and enjoy in the exterior green space or indoor seating area. The second lane is for customers in a hurry who can purchase drinks from the express land located outside the shop to go. The idea is that there are multiple ways for students and members of the community to interact with the site. The Food store also has an express lane that like the cooking food wagon allows customers to purchase recipe ingredients to make creating healthy meals easy and fast. The food store will house locally grown foods and produce as well as healthy snacks and meals for students and community members. The final element on the first floor is the FIC or Food Innovation Center Headquarters. The FIC does not have a designated location on campus and being located here will give them access to the cooking classrooms, and lab as well as give them office space to continue to carry out their missions.









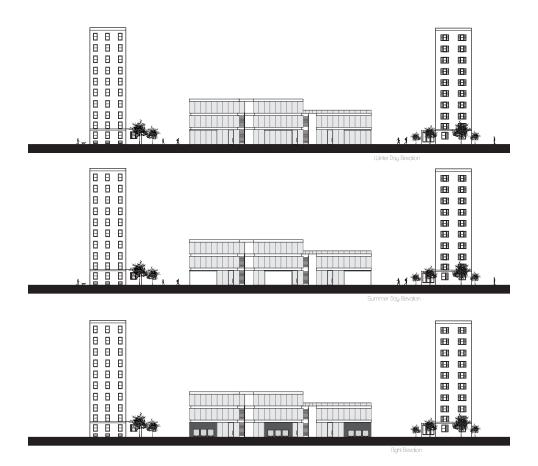




The building is designed to be opened and closed just like the food wagons. During the night the building closes down and the food wagons are stored out in front. During a summer day the building completely opens up during the day. Once the food wagons are launched out onto their various sites across campus the first floor opens up to blend inside and outside spaces. During the winter the building opens up halfway to reveal a full glass façade but stays closed to allow for the spaces to be conditioned. The elevations to the right shows the front façade in its different phases from fully opened to shut down.

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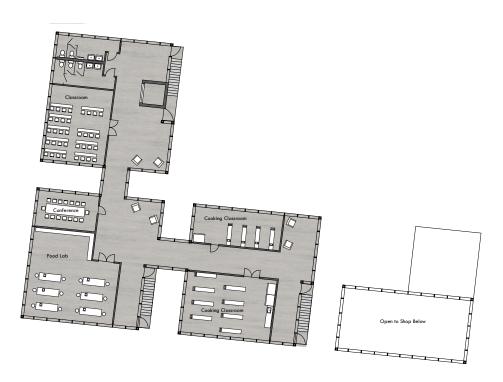
The image at the very bottom right shows a section cut through the building, which shows the double layer glass façade, which helps to keep the building cool in summer and warm during the winter. The section also shows how the paths cut themselves through the building on the first floor.







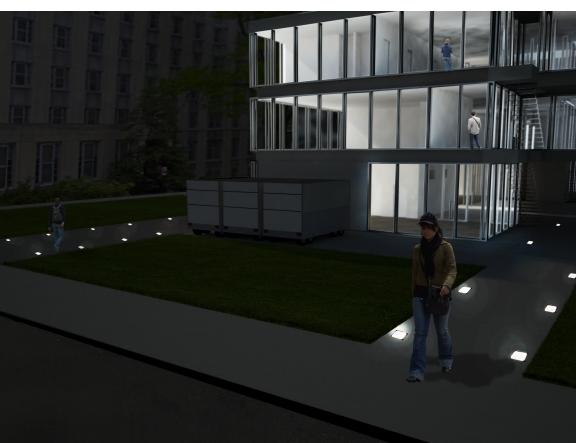




Second

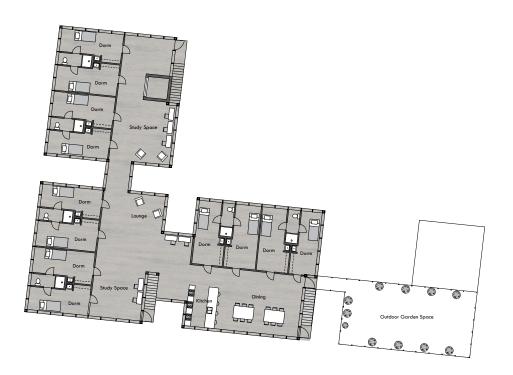
The second floor focuses on the multi-disciplinary education of young adults in food science, cooking, and nutrition. It provides students from all different fields of interest to get educated in all different aspects of food. All students have different interests so it is important to have facilities that can cater to their specific interest, and interest level when it comes to food. These facilities will have classes that teach about food systems, nutrition, gastronomy, the history of food, and skill courses that teach students how to prepare meals for themselves. The floorplan to the left shows the layout of the different educational spaces, as well as the spaces outside of the classrooms that leave room for lounging and socialization.

The rendering below shows how the building looks at night with the food wagons closed up and stored out in front. It is important that the building and paths be well illuminated at night so that students feel safe taking classes anytime of day.









Third Floor Plan

The third floor is made up of 12 dorms that would be shared by 24 college students. The students would have a small, private dorm with a shared bathroom, and then larger community kitchen, dining and study spaces that would be shared by all students. Connecting the dorms with a kitchen would give students the opportunity to share community dinners with one another. Cooking and dining are both social acts and by integrating them into the student's lives it will become a natural part of their lives. Students can take turns preparing dinners together and learn to cook and share recipes with one another. This living situation will teach students how to integrate food preparation into their everyday lives and create positive habits that will benefit them for their entire lives.

The rendering below shows the shared student roof garden that is connected to their shared kitchen space. Students can learn to grow their own food and use it in their dishes. It is also a great social space as well as a private outdoor space.







Conclusion

The final architecture hopes to be provocative enough to drive the Ohio State Campus as well as others to continue to develop spaces and programs to educate young adults about food, and cooking. The best way to fight the problems in our food system is through education, and the formation of good habits. The final solution as well as the food wagons aim to provide young adults with the tools they need to create healthy lives, and a healthy future for America. Acquired Tastes is a way of acknowledging all the issues we have within our food system today. The best way to solve these problems is first through education. Most Americans are very ignorant when it comes to what it means to buy and prepare healthy, sustainable meals and therefore cannot teach their children good food related habits. It is so important that food education begins to work its way into our society to reconnect Americans to a love of food and cooking. This project is only meant to be step two in integrating food education into a campus.

There would optimistically be many more steps taken to integrate food culture into the campus, and surrounding area once more interest was spurred.

It is the hope of this project that all people, not just students can one day be connected or reconnected food and cookina. Like Hippocrates said once "Let food be thy medicine and medicine be thy food." In a world of big business and obesity these words need more than ever to ring true in American's ears. If our food system really is to change then it needs to start with individuals who are willing to make a change and be open to learning about how to make those changes.

Bibliography

Figure 1: "Dutch Mobile Kitchen Aims to Bring the Community Together with Food." Digital Trends. N.p., n.d. Web. 26 Apr. 2013. http://www.digitaltrends.com/lifestyle/dutch-mobile-kitchen-aims-to-bring-the-community-together-with-food/.

Figure 2: IBID

Figure 3: IBID

Figure 4: IBID

Figure 5: IBID

Figure 6: IBID

Figure 7: "Arizona Heritage Food Wagon." Architizer. N.p., n.d. Web. 26 Apr. 2013. http://www.architizer.com/en_us/projects/view/arizona-heritage-food-wagon/36235/.

Figure 8:IBID

Figure 9: IBID

Figure 10: IBID

Figure 11: IBID

Figure 12: IBID

Figure 13: Students with oyster. Photograph by HFLP, 19 June 2012, from Flickr Creative Commons, 8 March 2013. http://www.flickr.com/photos/harvardfoodliteracy/7171436374/in/set-72157629666773512

Fig. 14. Demonstration Cook

Figure 14: Demonstration Cooking. Photograph by HFLP, 19 June 2012, from Flickr Creative Commons, 8 http://www.flickr.com/photos/harvardfoodliteracy/7171436786/in/set-72157629666773512

Figure 15: Fish in pan. Photograph by HFLP, 19 June 2012, from Flickr Creative Commons, 8 March 2013.

http://www.flickr.com/photos/harvardfoodliteracy/7171436966/in/set-72157629666773512

Figure 16: Student with Fruit. Photograph by HFLP, 19 June 2012, from Flickr Creative Commons, 8 March 2013. http://www.flickr.com/photos/harvardfoodliteracy/7872763196/in/set-72157631271539516

Figure 17: Student Composting. Photograph by HFLP, 19 June 2012, from Flickr Creative Commons, 8 March 2013. http://www.flickr.com/photos/harvardfoodliteracy/7872767488/in/set-72157631271539516

Figure 18: Carrots. Photograph by HFLP, 19 June 2012, from Flickr Creative Commons, 8 March 2013. http://www.flickr.com/photos/harvardfoodliteracy/7872768598/in/set-72157631271539516

Figure 19: "Housing Models. Experimentation and Everyday Life :: Moriyama House." Housing Models. Experimentation and Everyday Life :: Moriyama House. N.p., n.d. Web. 26 Apr. 2013. http://www.wohnmodelle.at/index.php?id=83,74,0,0,1,0.

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Figure 20: IBID

Figure 21: IBID

Figure 22: IBID

Figure 23: IBID

Figure 24: IBID

Figure 25: IBID

Figure 26: "Student's Residence on U.L.E Campus / MACA Estudio VIRAI Arquitectos."

ArchDaily. N.p., n.d. Web. 26 Apr. 2013. <a href="http://www.archdaily.com/216303/">http://www.archdaily.com/216303/</a>

students-residence-on-u-l-e-campus-maca-estudio-virai-arquitectos/>.

Figure 27: IBID

Figure 29: IBID
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Figure 31:"DmvA: Hub 01- Mobile Student Housing Terminal." Designboom DmvA Hub 01 Mobile Student Housing Terminal Comments. N.p., n.d. Web. 26 Apr. 2013. http://www.designboom.com/architecture/dmva-hub-01-mobile-student-housing-terminal/.

Figure 32: IBID Figure 33: IBID Figure 34: IBID

Figure 30: IBID

All other images were created by the author.

