

Dishes of New Orleans

by Virginia San Fratello

The premise of this architecture studio was to find new forms through the use of traditional materials and means of making as they align with the technologically advanced methods of production today. Product designers and architects increasingly use 3 dimensional modeling applications to design, for mass production, building components, and products. They also sometimes fabricate prototypes for testing but very rarely does the CAD/CAM rapid prototype become the finely and digitally crafted final product in itself as it is intended to in this studio. Additionally, through the combination of traditions with digital media, the final digital and CAD/CAM products become cultural and contextual. They become intimate, site specific vessels of memory, tactility, and life.

For years architects have been designing tea and coffee piazzas, memory containers and vessels that not only mimic architectural forms but have also used the design of objects to explore new techniques and materials that might make for a more modern or efficient method of production. Architects and designers in the German *werkbund*, for example, saw the potential of mass-production, and wanted to work with the new industries to establish a reputation for high quality manufactured goods and believed that this lay in fundamental product design rather than decoration. Because ornament did not fit in with industrial productions, designers needed to produce smooth forms reduced to their essential function. The *werkbund* advocated the hands-on approach to design teaching and instituted training

workshops that would teach the students to actually make things as well as design them. This new teaching method encompassed two main innovations. For the first time, handcraft was introduced into a Fine Arts institution and secondly, the Bauhaus introduced their 'preliminary' course which was all encompassing in terms of design. Its primary aim was to remove incoming students' preconceptions about art and design, directing them instead to start from scratch.

First year architecture graduate students at Clemson University have also been asked to remove all of their assumptions about what it means to prepare a meal, the ritual of dining, and the process of dish design? What do we create when we set the table? Additionally, students were asked to explore digital craft, new materials and fabrication techniques that are new to the late 20th and early 21st century. Students were asked to use 3D modeling software, 3D printers; CNC routers, and laser cutters to not only design their dishes but to actually make them.

There is a long history of dishes being designed to suit very specific foods, cultures, cooking techniques and even specific buildings. For example, the tagines, jabenas, fondue pots, oil and vinegar cruets, tea balls are all only suitable for one particular use or dish but many people find them indispensable as they are a part of their daily ritual. The specificity of their task also makes the design of them very specific and unique, not generic like a platter or a bowl. These dishes often reflect the

traditions of a culture or region. Unlike the Bauhaus, which was searching for a kind of universal product that everyone could afford and have in their own modern home, we were searching for a design that was specific to a region and culture but we wanted to use the new digital craft to make it. The tools of digital craft, the CNC router, the 3DS printer, and the laser cutter allow us not to be concerned with mass production but to use technology to produce incredibly precise and inexpensive custom pieces out of precious materials that we otherwise would not have been able to do ourselves.

Students were asked to choose a food (entrée, dessert, aperitif, appetizer, etc.) that is a part of the New Orleans regional cuisine (old or new) and design a new dish for consuming the chosen food item. The new dish should subvert traditional ways of presenting and consuming the food item(s) and should instead hyper assert or amplify the functions associated with the cooking, storing, serving, eating and disposing of the food. The new dish should elaborate the preparation and consumption and simultaneously be a desirable mechanism of architecture. Students were asked to consider how smelling, seeing, and tasting become intertwined with the device to aid in the ingestion of the food and how the device is oriented towards the body, to consider the dish a performative space for food. Additionally, cultural practices associated with eating or drinking were considered. What is the site in which that food is regionally consumed. For example: Is it mobile? Is it shared?

Case Studies

GUMBO DISHES:

The folding of cultures and traditions that created gumbo inspired the bowls' form, fabrication process, and materials. French bouillabaisse, African okra ("gumbo"), Spanish peppers, German sausage, and Native American file powder are some of the elements that combined in Louisiana to become what is now gumbo. As a result of many influences there are hundreds of variations, which require versatility in serving and consuming. The rice and gumbo bowls have been separated to allow each individual to create their own combination, as well as sit in different positions depending on how they are

being used (filling, passing, or pouring). The serving dishes can also be used in different orientations depending on the consistency of the recipe. Two layers of veneer fold around each other to create the bowls. The birch interior is wrapped in a mahogany veneer, reflecting how African traditions folded into New Orleans culture.

The dishes were modeled in **form•Z**, then unfolded using the Unfold tool to create templates. The templates were used to cut and score the materials on a laser cutter, allowing the layers to align and the bowls to interlock (Figures 1 and 2).

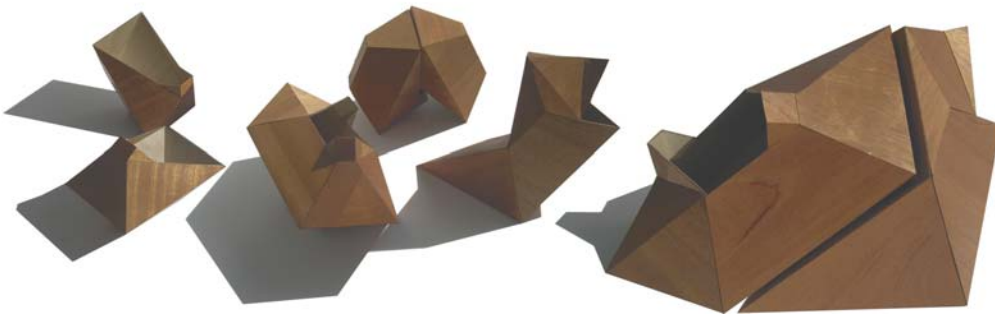


Figure 1: Gumbo set

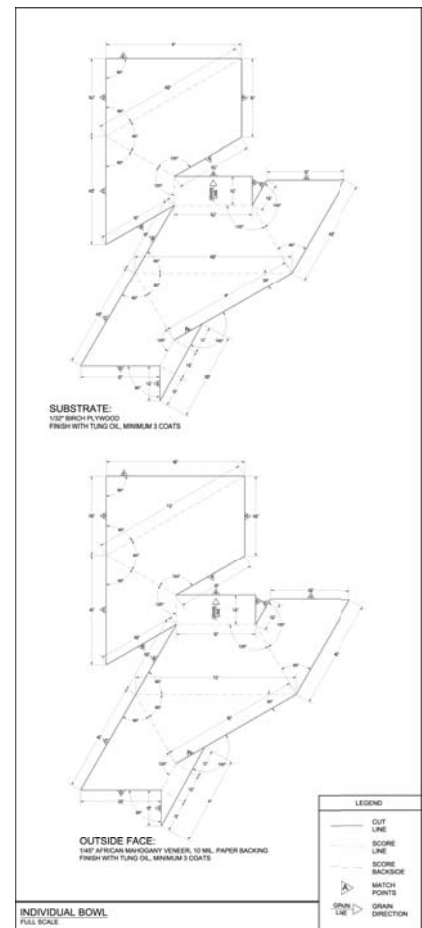


Figure 2: Unfolding

BRONZE BREAD PUDDING DISH:

The creation of these dishes was built around measurement, specifically time, temperature, volume of ingredients and product usage. The final design included a central mixing and cooking well, with four outer measurement chambers for the ingredients of bread pudding. A water well was also included as a measurement of cooking time through evaporation. A second nesting dish was designed in a similar fashion for use as a pan for cooking a bourbon sauce. The sauce would then be poured over the bread pudding before serving (Figure 3).

form•Z was used as a modeling program throughout the design process. Casting molds were created using a Z-Corp Z310 rapid prototype printer with Z-Cast as a medium. Once molds were created, the final product was cast in bronze. Bronze was chosen as the casting material secondary to its properties of heat conduction. Another primary element of bronze includes its alteration over time with usage, reflecting again the primary concept of measurement over time.



Figure 3: Bronze Bread Pudding Bowl by Tim Takacs.

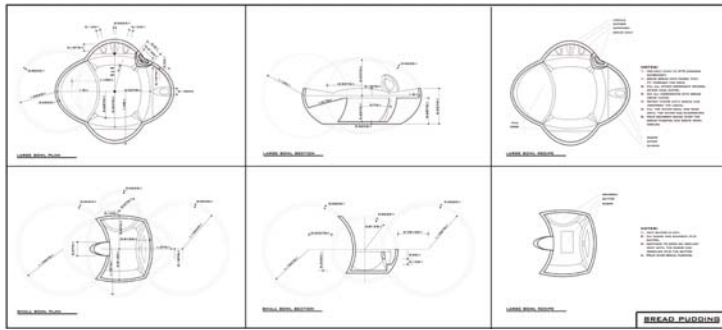


Figure 4:
Drawings of the Bowl.

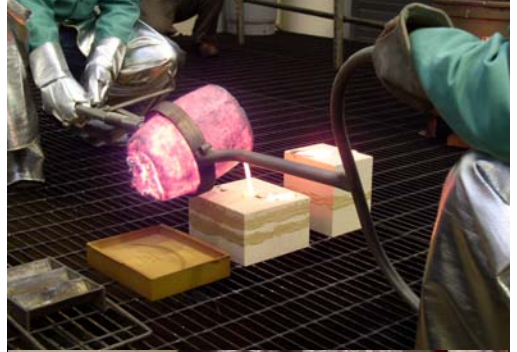


Figure 5: Jambalaya Dish
by Jeremy Hughes.

flitch for her dishes, she researched and tested different not toxic adhesives and developed a system of easy assembly that was executed in studio. The design studio as workshop model has been with us off and on for over 100 years and it is irreplaceable as a method of learning. The tools are changing, hence the nature of the designed object is changing. The Bauhaus had a dream that we would all have access to industrially produced well designed goods and we do. The teapot designed by Michael Graves, commissioned by Alessi, sells at Target for around \$30.00 dollars. Designers of the 21st century see the potential for every design studio, and perhaps every home, to have access to a 3D printer where we will be able to print the utensil that fits our hand perfectly or the dish that holds our favorite combination of jambalaya.

Through the execution of this project students learned to model with **form•Z**, to use the laser cutter, 3D printer, and CNC router to make finished products not just representations in the form of renderings or models. For the mahogany gumbo dishes, the student actually went to the wood supplier and selected the veneer



Figure 8: Making the Dishes.

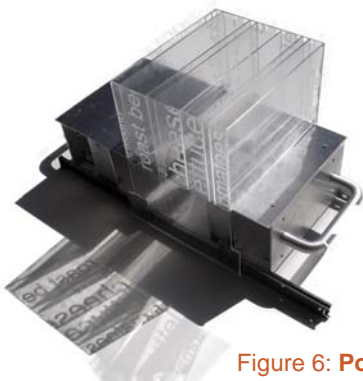


Figure 6: Poboy Machine
by Jason Mabraten.



Figure 7: Sugar Cane Dish
by Jane Ann Bolin.



Figure 9: Crepe Plate
by Lee Henderson.

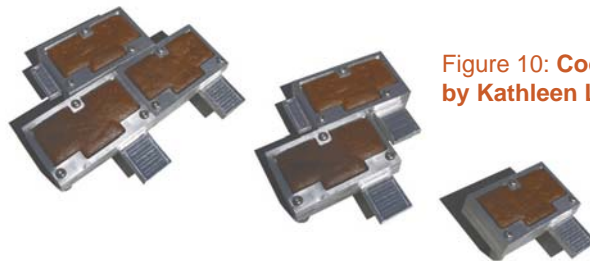


Figure 10: Cookie Formwork
by Kathleen Lily.



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