ARCH 384: COMPETITION ELECTIVE Final Essay

Sean Maciel 20342872

Paris Market Lab

As a mixed-use culinary school and restaurant, ArchMedium's Paris Market Lab competition presents an opportunity for a wide-ranging investigation. With its combination of its program, a site in the midst of the St. Germain district of Paris, and the philosophy of a new type of cooking forming the basis of the design requirement, the realm of precedent for this project is quite extensive. With this essay, I intend to explore the requirements of this competition and the directions we followed in its execution. Of particular focus is the planometric and sectional organization of large restaurants and cooking schools; the decisions made when designing the facade; and the use of engineered, 'artificial' materials in order to better reflect the nature of "modernist cuisine".

The Paris Market Lab invited proposals for a new restaurant to double as a culinary school for the new form of cooking known as Modernist Cuisine, located immediately west of the Marche St. Germain- currently consisting of mostly boutiques and small restaurants, though some of it does remain a fresh market. The program requirements are intentionally tight, necessitating an effective and efficient use of space serving multiple programs throughout the day¹. This is naturally resolved through pairing multiple sets of program that simply don't coexist in a normal scheduled day- for instance, the lecture hall serves its purpose for the school during the day, but at night that space would find better use as one of the dining salons. Further, the restaurants kitchens are easily repurposed as culinary classrooms during the day. This changing program and priority provides an organizational strategy, as well as an interesting dynamic for the students within the school.

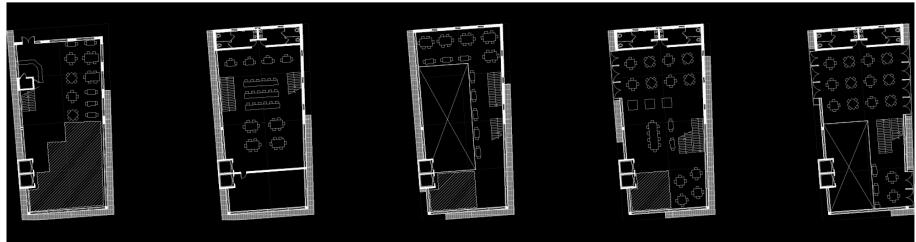


Illustration 1: Floor plans in ascending order from left to right.

KITCHEN

One of the major issues was the design of several large salons throughout the building. Space requirements outlined 3 dining areas, each approximately the size of the maximum floor plate allowed on the site². Thus, the organizational relationship of the salons and the kitchen spaces becomes a particularly significant challenge for several reasons. Practically speaking, the kitchen and the salon are ideally placed directly beside each other for ease of service. Further, however, there is justification for putting the kitchen in clear sight of the salon space. In a facility that openly doubles as a culinary school, exposing the kitchen space emphasizes the act of cooking, bringing it to centre stage as though it were a performance. The solution to these issues came twofold: the placement of multiple kitchens along the south facade next to individual dining rooms, and the use of mezzanines within these separate dining rooms, to maximize dining room floor space and kitchen adjacency while still clearly presenting them towards every dining room, as well outwards towards the street.

The idea of visually opening kitchen space towards public or dining space is one with strong precedent. In the upper dining space of Diller Scofidio + Renfro's Hypar Pavilion at Lincoln Centre in New York City, the centrally-located kitchen is enclosed in glass, as shown in Illustrations 1 and 2 and is at least partially visible not only from most angles within the main dining hall, but also from the surrounding street and public square.

At the Centre for Hospitality and Culinary Arts in Toronto, Ontario, designed by Gow Hastings Architects, the kitchen classrooms are exposed towards the street, as seen in illustration 3. The firm describes the exposed cooking labs as demonstrating "the changing profile of the culinary industry, by... glamourizing the preparation of food"³. Like the previous example, this is an interesting inversion of the traditional kitchen placement. Pedestrians on the sidewalk are given a position of interesting privilege in this case- a hierarchy not normally presented. However, the main issue with such clear exposure at street level is the possibility for distractions. In an academic situation, being able to see everyone who walks by may begin to affect negatively those inside, if such a clear view is given in both directions. In fact, we chose to conceal the educational spaces during the day, a fact which will which will be discussed later on.



Illustration 2: The exposed central kitchen



Illustration 3: The kitchen is visible from outside (centre right)



Illustration 4: The Culinary Institute's kitchen labs are very open at street level

Located in an otherwise unassuming and vaguely industrial neighbourhood in East Williamsburg, Brooklyn that hardly demands a strong street presence, Roberta's Pizza is an example of exposing the kitchen for different reasons than the previous two sets. As shown in Illustration 5, the kitchen, with featuring a bright red pizza oven, is open at one end of the dining room⁴. Aside from creating a strong focal point for the diners (watching pizza get made is particularly entertaining, in my perspective), the placement of the kitchen makes the relatively constrained customer area feel larger.

To address the practical concerns, we examined the strategy used for serving in the Terzo Piano Restaurant at the Art Institute of Chicago, designed by Dirk Denison Architects. Due to the presence of galleries on the floor below, the restaurant plan had to be laterally stretched out, with a significant separation between the kitchen and the dining areas. In response, a "garde manger" was created nearer to the dining space, where meals would be stored briefly, plated, and then brought to the diners⁵. This is a technique we chose to adapt for our second floor, which featured the greatest distance between the kitchen and the main dining area. We, however, chose to focus specifically on satisfying only the plating process- that is, the process by which the food is arranged artistically on a plate for serving-because such a process provides more visual interest and requires less space.



Illustration 5: View from dining area towards pizza kitchen



Illustration 6: Elevations of the garde manger and other freestanding installations

CUISINE AND MATERIALITY

An important aspect of this project, of course, is its embrace of the nature of modernist cuisine, the culinary realm chosen as the focus of the school and restaurant. Modernist cuisine, occasionally also known as "molecular gastronomy", is an extremely new type of cooking that strives to apply hard science to food preparation. By understanding the processes underlying how food is prepared, and by experimenting with new and unconventional preparation methods, students of modernist cuisine look to explore the possibilities in food looking beyond what is currently considered to be conventional culinary method in order to create unique forms, flavours, and textures. An excellent example of this can be found in what's known as *pea butter*, a substance formed in very small quantities when blended peas are fed through a centrifuge⁶. This substance, essentially a sauce that tastes intensely of peas, is not one with a strong "natural" analogue. On the contrary, it may be seen as downright engineered.

We decided to design analogously to this philosophy in terms of our material palette. The materials we investigated and chose were unconventional materials that have been engineered to subvert some of their "natural" properties. This was expressed externally through the use of architectural steel mesh, which will be discussed in the next section. For spaces in the interior, the decision was made to use LiTraCon, a form of concrete embedded with fiber optics that allows light to transmit through it, transforming solid concrete into something much lighter than normal. LiTraCon blocks would form interior partitions separating the kitchens from customer circulation paths. Carefully placed lighting would cast shadows of kitchen staff onto the wall, creating a focal point for the inhabitants in the hallways and retaining the staff's privacy.

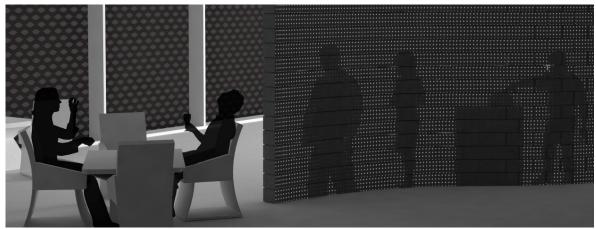


Illustration 9: Rendering of first floor kitchen barrier and dining room



Illustration 7: Pea butter, made of peas blended in a centrifuge



Illustration 8: LiTraCon

FACADE

Several strategies were used in the design of the facade. Further adapting the idea of transformation from the principles of modernist cuisine as outlined in the previous section, the facade was envisioned as a facade wrapped in architectural steel mesh and transforming from a traditionally parisian punched-window masonry facade to a floor-to-ceiling glazing wall. The masonry walls contain the facility services and washrooms, with a facade pattern that mirrors the building located directly across the pedestrian corridor to the north.

The architectural steel mesh, which perpetuates the "engineered" material intent, provide shading and privacy to the classroom spaces- appearing as a solid object from the outside, while still allowing views. As night falls, the screen appears to dissolve and the interior of the building becomes a sort of projection on the exterior, with the south-facing kitchens providing the most dynamic show towards the southern street.

The Hotel Americano, recently opened in New York City, has a similar mesh facade to the one described here. Interestingly, it appears to shift in transparency depending on the viewing angle- to a pedestrian on the same side of the street as the building, it appears to be *Illustration 10: render demonstrating the multiple facade conditions* a smooth, uniform facade. But if the building is viewed from across the road, or from the High Line down the road, the wall's form behind the screen becomes strongly apparent. At night, the curtain walls illuminate the screen from within, rendering the wall more dynamic. This building formed a strong inspiration for the use of the screen in our project.

In conclusion, the manner by which the project developed should hopefully be apparent. The three aspects of the design that formed the main areas of focus- the kitchen/dining salon, the material palette and the facade- were based in clear precedent and conceptual research within the realm of restaurant and otherwise culinary-focused architecture.

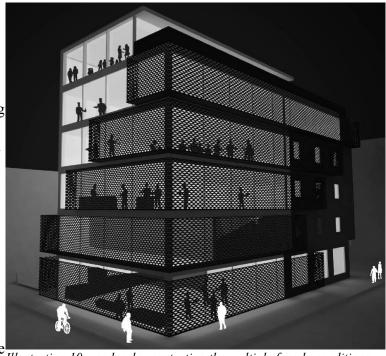




Illustration 11: Rooms illuminate the screen in a diffuse way

Illustration Sources

<u>Illustration 2</u> "Diller Scofidio + Renfro." *Diller Scofidio Renfro*. Diller Scofidio + Renfro. Web. 23 Apr. 2012. http://www.dsrny.com/>.

<u>Illustration 3</u> ibid.

<u>Illustration 4</u> "Educational Program." *GOW HASTINGS ARCHITECTS*. Gow Hastings Architects. Web. 23 Apr. 2012. http://www.gowhastings.com/prog Educational.htm>.

<u>Illustration 5 Park, Youngna.</u> "Camera in the Kitchen: Roberta's." *Gothamist*. Gothamist LLC., 25 Feb. 2008. Web. 23 Apr. 2012. http://gothamist.com/2008/02/25/camera in the k 97.php>.

<u>Illustration 6</u> Minner, Kelly. "ArchDaily: The World's Most Visited Website for Architects." *ArchDaily*. 30 Nov. 2010. Web. 23 Apr. 2012. http://www.archdaily.com/92209/terzo-pianorestaurant-dirk-denison-architects/.

<u>Illustration 7</u> Heimendinger, Scott. "Centrifuged Pea Butter Ravioli." *Seattle Food Geek.* 9 June 2011. Web. 23 Apr. 2012. http://seattlefoodgeek.com/2011/06/the-most-peaness-you-can-pack- in-one-platecentrifuged-pea-butter-ravioli/>.

Illustration 8 "LiTraCon." LiTraCon. Web. 23 Apr. 2012. http://www.litracon.hu/aboutus.php.

Illustration 11 "Chelsea Check-in :: Hotel Americano." *Chelsea Check-in*. 15 Dec. 2011. Web. 23 Apr 2012. < http://www.iintrepidinc.com/iiintrepid/2011/12/15/chelsea-check-in-hotel-americano-new-york.html>.

Bibliography

- "Chelsea Check-in :: Hotel Americano." *Chelsea Check-in*. 15 Dec. 2011. Web. 23 Apr 2012. http://www.iintrepidinc.com/iiintrepid/2011/12/15/chelsea-check-in-hotel-americano-new-york.html.
- "Diller Scofidio + Renfro." *Diller Scofidio Renfro*. Diller Scofidio + Renfro. Web. 23 Apr. 2012. http://www.dsrny.com/>.
- "Educational Program." *GOW HASTINGS ARCHITECTS*. Gow Hastings Architects. Web. 23 Apr. 2012. http://www.gowhastings.com/prog_Educational.htm>.
- Heimendinger, Scott. "Centrifuged Pea Butter Ravioli." *Seattle Food Geek.* 9 June 2011. Web. 23 Apr. 2012. http://seattlefoodgeek.com/2011/06/the-most-peaness-you-can-pack- in-one-platecentrifuged-peabutter-ravioli/>.
- "LiTraCon." LiTraCon. Web. 23 Apr. 2012. http://www.litracon.hu/aboutus.php.
- Minner, Kelly. "ArchDaily: The World's Most Visited Website for Architects." *ArchDaily*. 30 Nov. 2010. Web. 23 Apr. 2012. http://www.archdaily.com/92209/terzo-piano-restaurant-dirk-denison-architects/.
- Park, Youngna. "Camera in the Kitchen: Roberta's." *Gothamist*. Gothamist LLC., 25 Feb. 2008. Web. 23 Apr. 2012. http://gothamist.com/2008/02/25/camera in the k 97.php>.
- "Summary of the Paris Market Lab Competition." *ArchMedium*. ArchMedium. Web. 23 Apr. 2012. http://en.archmedium.com/Concursos/End_PMKTL/Summary.php.

- 1 "Summary of the Paris Market Lab Competition." ArchMedium. Web. 23 Apr. 2012.(http://en.archmedium.com/Concursos/End PMKTL/Summary.php).
- 2 "Summary of the Paris Market Lab Competition." ArchMedium.
- 3 "Educational Program." GOW HASTINGS ARCHITECTS. Gow Hastings Architects. Web. 23 Apr. 2012. (http://www.gowhastings.com/prog_Educational.htm).
- 4 Youngna Park. "Camera in the Kitchen: Roberta's." *Gothamist*. Gothamist LLC., 25 Feb. 2008. Web. 23 Apr. (http://gothamist.com/2008/02/25/camera in the k 97.php).
- 5 Kelly Minner. "ArchDaily" ArchDaily. 30 Nov. 2010. Web. 23 Apr. 2012. (http://www.archdaily.com/92209/terzo-piano-restaurant-dirk-denison-architects/).
- 6 Scott Heimendinger. "Centrifuged Pea Butter Ravioli." *Seattle Food Geek.* 9 June 2011. Web. 23 Apr. 2012. (http://seattlefoodgeek.com/2011/06/the-most-peaness-you-can-pack-in-one-platecentrifuged-pea-butter-ravioli/).
- 7 "LiTraCon." LiTraCon. Web. 23 Apr. 2012. (http://www.litracon.hu/aboutus.php).