The Mobile Farmer's Market Project: An Architectural Musing on Farm-to-Table Distribution

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The mototeria of the 1920's, a grocery store in a truck, brought goods and foods closer to the shopper in the most literal way conceivable. This ostensible convenience ultimately failed as a business model; it was too expensive compared with home delivery of groceries from a main store. More successful business models of home delivery service operated as a function separate from storage, sale or production. Grocery delivery was organized by independent middlemen (Mayo, p.97). This project takes on the challenge of the mototeria where it left off: to design a direct connection between the production and consumption of locally grown organic produce.

Together with eighteen third-year architecture students, I organized a project to help the local food bank, The South Plains Food Bank (SPFB), in Lubbock, Texas with a Mobile Farmer's Market Stand. By applying their talents and skill, the students created a new means of transport for the food bank so that the farm could reach the tables of low income families in West Texas. The project attempted to integrate the triad of environmental, social and economic considerations. It will be argued that the project brings attention to the subject of distribution and moreover, that distribution and distribution networks play a vital role in the establishment of the sustainable rationale.

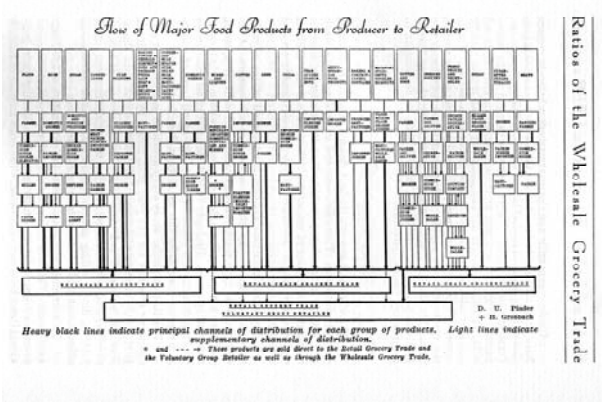
Mototeria, W. K. Hutchenson Company, Arlington, Massachusetts, 1928 (From William J. Baxter, *Chain Store Distribution and Management*

For several years the South Plains Food Bank (SPFB) in Lubbock, Texas, had been successful in implementing their dry good distribution with a farm orchard and garden program on 6 acres of organic lands in Lubbock, Texas. The SPFB's original goals of meeting the community's food-security needs expanded to include vital programs that offered new after-school and weekend opportunities for at-risk teen-aged youth by working the land and helping to produce organic fruits and vegetables. These goods could then be distributed to the underserved community members who were unable to travel easily to markets that stocked organic produce. Travelling great distances is often a reality in West Texas and the

lack of adequate means of mass transportation exacerbated the need to distribute fresh produce; the SPFB required a user-friendly, portable, market stand on wheels.

The trailer was to distribute relatively perishable, unfrozen organic produce. Many of the low income families who would benefit would rely on the Mobile Farmer's Market Stand as their sole supplier of fresh produce. These families were often also recipients of canned goods at the local food bank. Dry and canned goods made up the majority of their food supply and had not expanded as to include perishable, much less organic, produce. Storage and cooling of the produce is taken as premise for the trailer's practical function. The trailer is loaded at the South Plains Food Bank's farm and is towed on a daily basis to the city's neighborhoods. As a result, important social interaction is fostered; the distribution of produce creates layers of interrelated activities that have encouraged and involved many of the community members: at-risk teens (loading and distributing), farmers (managers, producers), college students (designing and building), and low income and elderly residents (participant farmers and produce recipients).

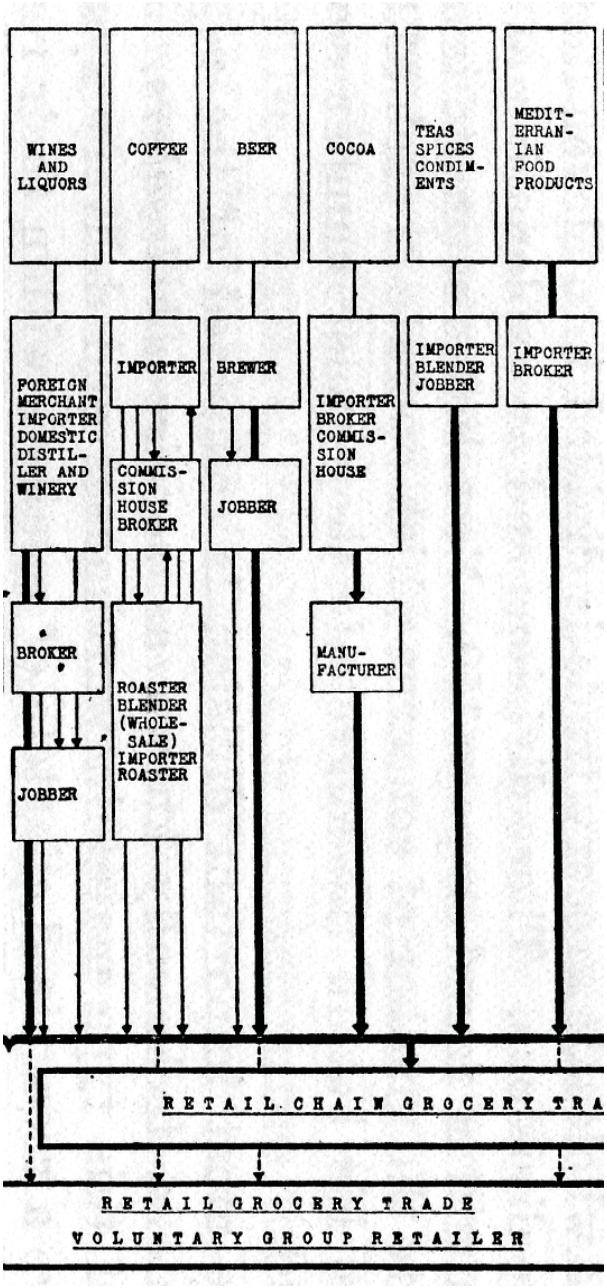
In the design process, students were asked to take careful consideration of the materials they planned to engage. The final material choices for fabrication reflected an increasingly precisely defined problem statement. For example: (1: Oak pallets were disassembled, planed, sanded and the planks reused as the trailer's cladding. In the materials research phase, it was discovered that West Texas is one of the largest holding areas for second hand pallets (2: For its lightness and resistance to corrosion, aluminum was chosen as structural framing for a retractable shade canopy (3 Recycled parachute fabric was utilized. The fabric was used as thin membrane for the roof. The trailer needed to shade both produce as well as the people working the stand in the sun and heat.



The farm operated locally by the SPFB services the organic produce needs of the community defined by a 30 mile radius. The farm operates with an educational goal in that it offers work opportunities for at-risk teens. The social program that supported the Mobile Farmer's Market Trailer consisted of 16 high school-aged students who worked on the farm during the growing season and who delivered produce during the harvest season, often to members of their own communities. The College of Architecture students who worked to build the trailer were often at the farm and met with the teens and discussed their previous experience on the farm. In a reciprocal manner, the college students became role models to the teens. Over the time that they collaborated, the two groups' discussions reached subjects such as social respon-

sibilities, manual and technical skills, and ways to work for the benefit of the community.

Food distribution can be seen as a crucial link in an economic continuum which links production and consumption. Scientist Ernst Haeckel coined the word "Oecologie" in 1866, the descendant of the modern "ecology":



> "Haeckel derived the new label from the same root found in the older word "economy": the Greek *oikos*, referring originally to the family household and its daily operations and maintenance. Before the advent of the modern political economy, men assumed that national economic affairs could be conceived of as merely extensions of the housekeeper's budget and larder. Likewise, in Oecologie, Haeckel suggests that the living organisms of the Earth constitute the single economic unit resembling a household or family dwelling intimately together, in conflict as well as in mutual aid." (Worster, p.192)

In essence, ecology was invented as a term to describe "the relations of living organism to the external world" not merely to describe the living organisms themselves. With an emphasis on interdependence, the historical appearance of the word "ecology" brings with it a meaning that may be important to our development of "sustainability." As a result, a consideration of the entire process, from farm to table, was required to identify the problem itself, and led the team to develop the Mobile Farmer's Market Stand.

Rather than allow the focus of the project to reside in materials or fabrication of the trailer alone, an emphasis was made on the potential ability of this mobile architecture to make the transportation of produce not just conspicuous, but somehow a designed connection between producer and consumer. Donald Worster comments on prevalent, contemporary interpretations of Haeckel's "Oecologie":

> "But most important here is that interdependence today almost always gets reduced to economic terms. Cooperation is defined, and absorbed, by the functions of production and consumption-that is all we mean by social integration, and all we have time for." (Worster, p.293)

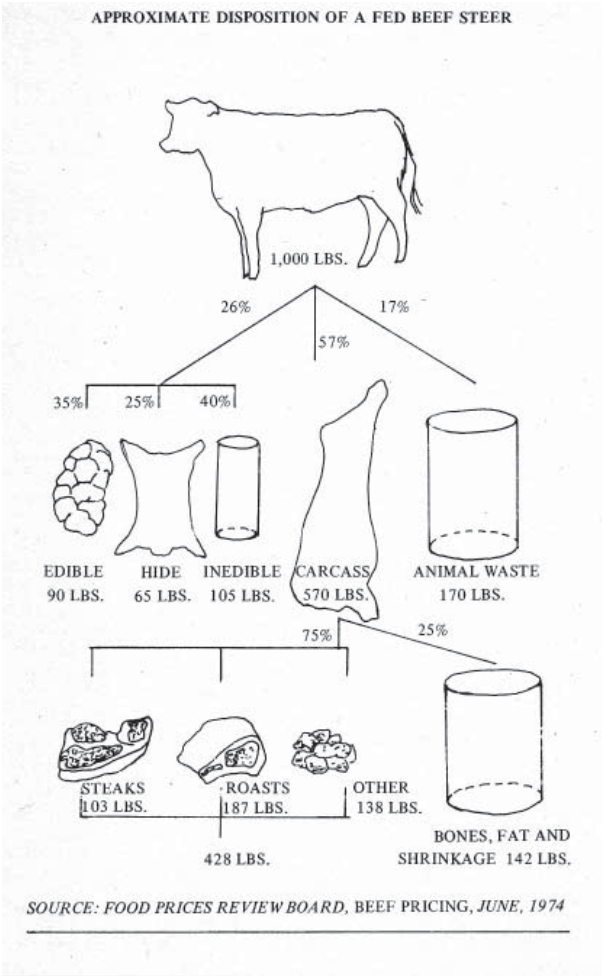
Sustainability represents a challenge to architecture to rethink what is essential to building. A central thrust of sustainability is the imperative to pare down materials and to take considerations such as embodied energy and ecological footprint in careful consideration. Yet the discourse on sustainability regarding foods tends to focus on either characteristics of production (organic, "fair trade") or aspects of consumption (packaging, recycling, percentage of profit donated by producer, etc.). The mobile farmer's market trailer project understands these concerns as secondary aspects and instead concentrates on an acknowledgement of

the connection between growing and consuming, i.e. the notion of distribution, as a thing in itself, worthy of design attention. The Mobile Farmer's Market Stand is based in an argument that innovation within the distribution process can act as an additional, crucial part of the discourse on sustainability.

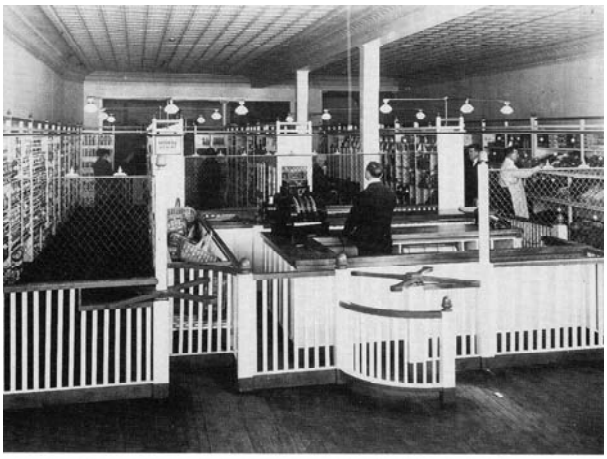
The means by which produce is distributed is essentially unrecognizable to us, an invisible yet widespread phenomenon. Much like the foam trays and plastic wrap which purvey beef in grocery stores, distribution of produce has no face. In fact, there is a structural similarity between the anonymous container of food and its equally anonymous means of distribution; we are as incapable of connecting "beef" to "cow" as we are of recognizing farm product distribution networks. A simple cause is the inevitable, almost nonexistent connection we have to farms in our daily lives. More important, though, is our inability to connect the dots between production and consumption.

A brief recollection of some of the events crucial to the history of the grocery store reminds us that our detachment from farm products developed as a consequence of economic innovations around the turn of the 20th Century. Clarence Saunder's Piggly Wiggly stores, of which the first opened in Memphis Tennessee in 1916, aimed to move shoppers past shelves stacked with as many products as possible. Aisles were configured so that a singular circulation path through the store ensured maximum and uniform exposure.

The phenomenon of an increased emphasis on packaging as a means to sell accompanied this innovation and became an important, lasting result (Beniger, p. 334). The Great Atlantic and Pacific Tea Company, known as A&P, expanded from a chain of 1,000 stores in 1915 to an empire of 15,000 stores by 1929 (Beniger, p. 340). Central to its success was the business strategy of "cash and carry," an experience well known today but one which differed from the norm in the early twentieth century in that no credit and no deliveries would be considered. Thus the transport of farm goods became effectively sealed from the consumer experience.



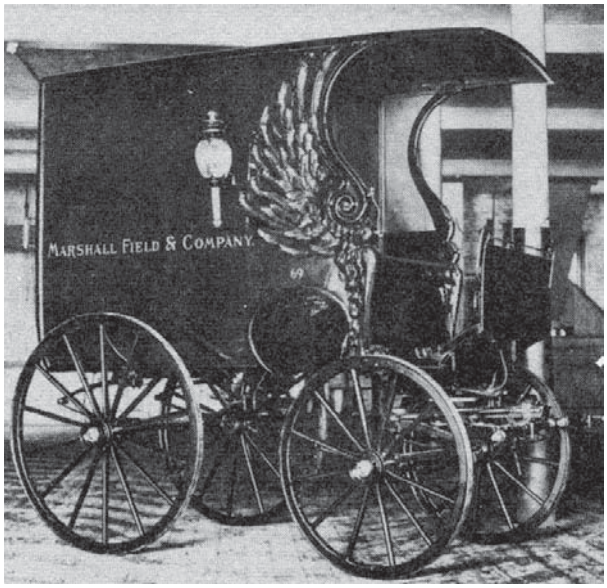
The development of local grocery stores and the eventual appearance of the chain store worked (albeit unwittingly and undirected) towards eliminating the recognition of the processes that connected the goods to the consumer's grasp while controlling the process to create cash-based exchange. The cooperation that is required to bring goods to the household would seem to need to allow for human consideration and interaction, yet this history demonstrates that the social roles of



Clarence Saunders Patented Piggly Wiggly Store, 1916 (Courtesy of the Food Marketing Institute)

the networks are strictly edited for a "cash and carry" shorthand. Delivery, the "in between" of distribution, ceases to be an identifiable component in the economy of food. Our images of the milkman or postman are vestiges of the tradition in which delivery is considered a necessary component.

In the second decade of the 1900's, the wholesale grocery industry tended to limit its distribution accounts to a geographical area defined by a radius of 50-75 miles (Foulke, p.158). The delivery trucks that carried perishable items to families were not only means of transport but also functioned as mobile advertisement. Marshall Field and Company wielded a battalion of delivery trucks that brought goods directly to the homes



while at the same time broadcasting visual trademarks, contact information and logos.

The emergence of chain stores brought much larger distribution networks. We may understand that before the expansion of the networks, the limited distribution area constituted a vital social component.

During their undergraduate training, architecture students do not often have the satisfying moments of being able to provide design skills to the neediest of the community's members. The design of the trailer became an opportune moment to create a project small enough to complete in a semester but complex enough to furnish the basis for a multilayered design investigation and construction project which engaged the immediate community. The students were able to create a trailer that was more than a carrier of produce; they created an object that functioned truly like a community table bringing conversations related to farming, organic foods, reasons for healthful eating, construction, and recyclable materials.

The market stand project allowed the architecture students to use their skills and talents towards providing for the community in the direct need for food delivery. The architecture students served as role models and friends for the teen aged youths involved with the SPFB farm. The SPFB, unlike their modest storage and office buildings, was able to have an extension of their operations be represented in a well crafted and executed small architecture that travelled the city. This piece of urban furniture is a construction that creates a

lively conversation about the role of provider and receiver. In the built artefact, the disarming qualities of familiar materials (oak, aluminium, nylon) coupled with thoughtful details create a local iconic trailer for the South Plains Food Bank and embody the SPFB's efforts to bring the farm and its produce closer to those community members in need. And yet, the Trailer's most important contribution lies in the innovative distribution network which it annunciates and gives form to rather than the specific materials and methods of which it is made. The trailer connects staging and loading with in-person local delivery of produce; the project attempts to annunciate the "in between".

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