Urban_Growth: Urban agriculture as a means for food accessibility, education, aesthetics, and health.

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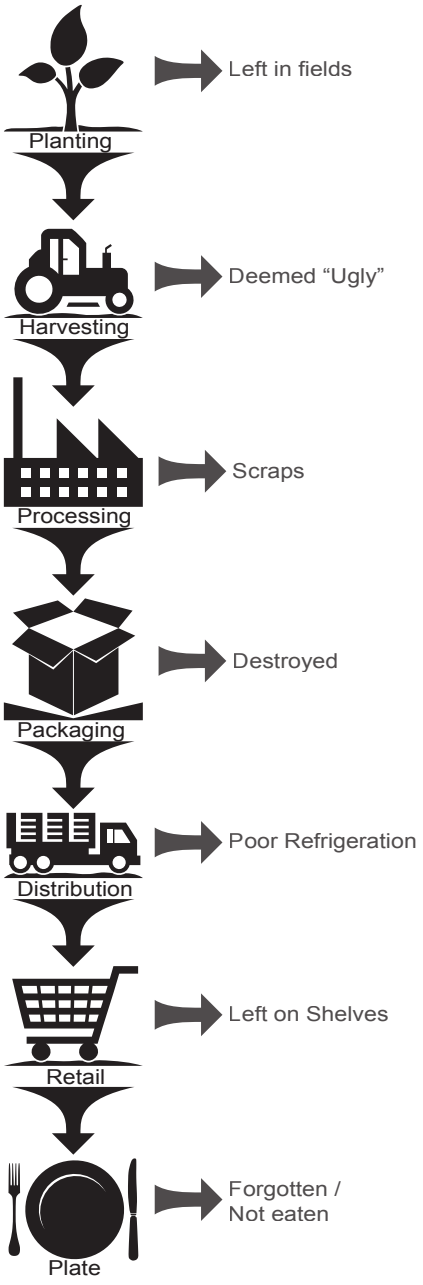
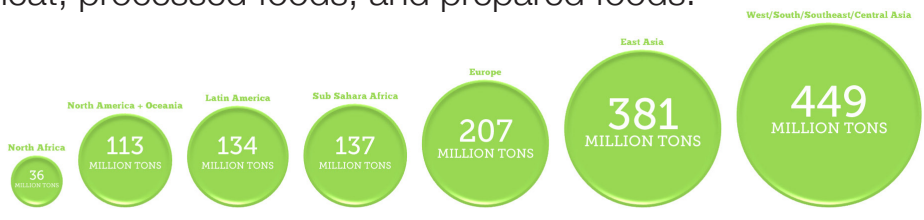
Subject // Food is one of humanity's most basic needs. As modern conveniences and industrialization evolve, our fundamental connection to our food and environment has deteriorated, creating a culture of cheap and processed food and alienating people from the landscapes that sustain them. The consequences to our health has been very apparent, with rising obesity rates and other associated diseases. In order to engage the community it is important to align aesthetics, ecology, and health.

The food industry is extremely wasteful. Millions of tons of food is thrown away, often for very petty reason. Food that is deemed un-aesthetically acceptable is thrown out by farmers for grocers. Mismanaged food is forgotten in refrigeration by grocers or by consumers and good food is thrown away by consumers over cultural misconceptions about its freshness.

All this happens while millions of Americans, especially in low socioeconomic regions, have inadequate access to healthy and fresh food. Markets, with an interest in profitability, do not facilitate development in low-income areas, resulting in a void in nutritional food retailers. As a result, the only food retailers in many inner cities are gas stations, convenience stores, drugstores, and liquor stores, offering primarily highly processed foods with little to no fresh meat and produce. Food access is only half the issue. Many people in low-income areas also grew up impoverished, resulting in the lack of knowledge regarding proper nutrition and food management (food selection and storage, preparation, and diet.) Studies have shown that impoverished families spend upward of 37% of their income on food, with the bulk of their purchases being meat, processed foods, and prepared foods.





Statement // We can reduce our waste while providing access to healthful food, and it can be done in an more economical way. The technology is there, what is necessary is the infrastructure, knowledge, and cultural motivation.

How can architecture play a role?

The key is to shorten the amount of steps in food production. Every step between the plant and the plate increases waste, energy, and cost. Although the popularity of personal gardening has greatly increased of the last few years, less than 30% of Americans keep a garden with even fewer growing food within their gardens. Personal gardens are very beneficial, first and foremost they connect the gardener to the environment, their food and their health. For an especially productive gardener, they can produce a net income along with personal food, very beneficial in poor communities.

What are the possibilities of reintroducing the garden as the next kitchen appliance?

Can a small garden space be a standard aspect of an American kitchen? We have refrigerators, stoves, sinks, dishwashers, yet a window garden is not standard. Various D.I.Y. window gardens are commonly posted on blogs and environmental news sources, but commercial products and even common knowledge are not common.

"The physical and social qualities of garden participation awaken the senses and stimulate a range of responses that influence interpersonal processes (learning, affirming, expressive experiences) and social relationships that are supportive of positive health-related behaviors and overall health."

Process // This semester I plan to do begin with food industry research, and move forward with proof of concept design which can relate to my studio's discourse.

1. Research // Researching the food industry.
   From planting the seeds to clearing the plates, the food industry is a complex system. What is truly required to feed a person? a family? a city? a nation? the world? Where are the greatest inefficiencies and wastes within the industry? My research will start with global food patterns, from there, I will narrow down my focus, eventually looking at potential target cities: New York, Pittsburgh, Boston.
2. Proof of Concept // Design as a tool to research
   Along with continued more specific research, I will use similar project goals with Hal Hayes's studio to work on a proof on concept project. Food on the commercial scale: How can environmental improvements be made to a commercial restaurant kitchen?

3. Reevaluation // What was learned from the proof of concept?
A study of the proof of concept and evaluation of how the ideas can start to change scale and fit different programs. What changes as the scale changes?

4. New Research // What do I still not know?
Although I will have been researching throughout. This is a good way to start off the spring semester. What did I learn during the reevaluation? What new problems do I need to solve? Preparation for second proof of concept.

5. New Proof of Concept // Assembling my knowledge into design.
This proof of concept is to explore environmental improvements to a residential kitchen and to explore issue of health and food distribution on an individual and community scale. The current thought point me toward a program of a community center, within an impoverish neighborhood, with educational kitchen implementing my environmental improvements and other community resources.

Timeline // Over Fall 2013 and Spring 2014

Sept // Research
Oct // Research / proof of concept
Nov // Proof of concept
Dec // First proof of concept presentation
Break // Reevaluation
Jan // New Research
Feb // New Research / second proof of concept
Mar // Second proof of concept
Apr // Second proof of concept
May // Second proof of concept presentation

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Pictures //

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