Food Culture in Western Canada: Using Architecture to Define a Local Cuisine Through the Farm to Table Method

by

Caitlin Biggar

Submitted in partial fulfilment of the requirements for the degree of Master of Architecture

at

Dalhousie University Halifax, Nova Scotia March 2015

© Copyright by Caitlin Biggar, 2015

CONTENTS

Abstract	iii
Acknowledgements	iv
Chapter 1: Introduction	1
Thesis Question	1
The Food Industry	1
The Kitchen Today	4
The Historic Prairie Kitchen	6
Chapter 2: Design	12
Farm to Table (Program 1)	12
1. Outdoor Growing	13
2. Indoor Growing	13
3. Coops/Pens	14
4. Slaughter House	15
5. Kitchen	16
6. Restaurant/Eating	17
7. Composting	18
Site-Boyle Street, Edmonton (Program 2)	19
8. Market	20
9. Storage/Hamper + Food Bank	20
Combination Planting	26
Site	34
Form	
Chapter 3: Conclusion	49
Bibliography	51

ABSTRACT

This thesis focuses on food culture in Edmonton, Alberta, and explores how architectural intervention may be informed by the farm-to-table method in order to create a more local cuisine. Edmonton is a city with diverse heritage, not only inhabited by Aboriginals, but a number of British settlers and Eastern Europeans, as well as Chinese. While all of these cultures had implemented their own food traditions within the area, they all had one commonality: the use of local food and local taste. With this thesis, the intent is to research and analyze the current issues of food in the city, and develop a centre in one of the most multicultural regions of Edmonton to serve as a catalyst for a more local food culture once again.

ACKNOWLEDGEMENTS

To my advisor, Christine Macy, and supervisor, Susan Fitzgerald, thank you for your tremendous help and guidance throughout the research and design process of this thesis, and for encouraging confidence within myself and my work. Thank you to Jonathan Mandeville for your input and guidance in the beginning stages of my work.

To my friends Carolyn and Fatima, as well as my the rest of my class, thank you for supporting me and my work over this last year. I would not be where I am today without all of you.

To my friends and family back home, thank you for your love and support not just throughout this last year, but all of my years in post-secondary. Because of you I was able to pursue what I love most.

CHAPTER 1: INTRODUCTION

Thesis Question

How can the farm to table method be promoted in an urban environment through the use of architectural intervention in order to help create a local food culture?

The Food Industry

The food market today is highly globalized, with food products being sold in our grocery stores often coming from provinces and even countries other than our own. While people are becoming more aware of the environmental impact importing food from great distances has caused, an issue often overlooked is how this is affecting local food culture and how it is ultimately diluting these cultures as a whole. Canada particularly has been impacted by the globalization of food supply since the country has a relatively short history of its cuisine, and only became a sovereign country in 1867. While this country, as well as others around the world, are capable of growing a wide variety of foods within their geographic landscape during most seasons of the year, there is still a desire to provide all types of foods throughout all of the seasons even if they are out of season. C.J. Lim touches on this issue in his book *Food City*.

Lim examines a number of North American cities, discussing their current cultural conditions and the foods of these places. These cities are highly diverse, housing a number of different cultures, races and religions—it is what makes these places "affluent and successful" embodying a "modern, liberal democracy."¹ The cultures that make up these cities often have districts, such as China Town, Japan Town, Little Italy or Little Ethiopia. It is in these districts that one may often find the most traditional tastes of these cultures.² In order to satisfy the desire for the exotic tastes from their homeland however, special, non-native ingredients are required to be imported from vast distances to create these authentic meals.³ Today, importing is not only happening with non-native foods, but foods that can be grown in native environments, further explained through the works of Michael Pollan.

3. Ibid.

^{1.} C.J. Lim, Food City (New York: Routledge, 2014), 64.

^{2.} Ibid.



China town, New York; from Little Italy, New York; from "Food Battle District." National Park Service.

"Chinatown and Little Italy Historic for New York's Little Italy." L.A. Times.

One of the main issues Michael Pollan discusses in his book The Omnivore's *Dilemma*, is the globalization of food. While every state and every province is fully capable of growing a fairly diverse range of fruits and vegetables in their area, people still go to a supermarket to buy potatoes from Idaho, oranges from Florida, lemons from Italy, and everything else from everywhere else that is not from the local environment.⁴ Not only does this encourage the one crop stop that each state is facing with the food industry, but



Planetizen.

Corn fields in Iowa; from "Corn Field Iowa." Potato fields in Idaho; from "Idaho, Adventures In Living." Visit Idaho.

it also blurs the changes in seasonality. Although foods are generally unable to withstand this year round growing, society further works against nature to genetically alter products so that they consistently reproduce and stay "fresh", despite the fact they now lack flavour. The food industry has become dominated by larger corporations, and larger farming operations, which in turn has led farmers to transform their formerly diverse farmland

^{4.} Michael Pollan, The Omnivore's Dilemma (New York City: Penguin Press, 2007), 255.

into single commodity production fields since it is preferred to get one kind of vegetable from a few major farms rather than getting the same amount from 100 smaller farms.⁵ No longer are we buying local food from the local farmer, and no longer are people shopping within their local environment. Instead many North Americans drive to large scale, global supermarkets—an issue Carolyn Steel addresses in *Hungry City.*

Carolyn Steel discusses the food market in her text Hungry City, explaining the transformation of the market and how it has altered the way society eats today. She explains how food is slowly becoming less a part of every day culture, but instead becoming something of a "treat" rather than an everyday practice which has resulted in the collapsing of food markets around the world.⁶ Steel also explains how the supermarket has contributed to the near extinction of the local food market within districts and neighbourhoods of the cities we live in. Supermarkets initially did not operate at a human scale—they have been built outside of the city resulting in the vacancy of food within the downtown. As Supermarkets began expanding there was the realization of this need for 'human-scale' food marketing. Because of this, large grocery companies have purchased prime real-estate shops, often in places that were once occupied by smaller local companies, and transformed them into these human-scale markets with globalized foods.⁷ These supermarkets further enhance the issue of how disconnected society is from their food today. Historically, local markets were places with fresh products. The slaughtering of meat happened on site and the vegetables displayed still showed remnants of earth. These places would bring awareness to a city—awareness of what it takes to sustain life. Today this awareness has been severed by the global food market.⁸ Foods are washed, slaughtered and prepared off site, then shipped many kilometres to their destination. A number of western countries have been led to believe that the ways of marketing foods previously were inhumane and unsanitary, however Carolyn Steel states in this text that countries such as India still have these animals roaming the streets with the people--the connection with food could not be more immediate.⁹ This skewed perspective on how food is obtained and imported into

^{5.} Pollan, The Omnivore's Dilemma, 138.

^{6.} Carolyn Steel, *Hungry City: How Food Shapes Our Lives* (London: Chatto & Windus, 2008), 111.

^{7.} Ibid., 112-114.

^{8.} Ibid., 133.

^{9.} Ibid., 117.



Palazzo della Ragione, Padua. Where market and town hall come together at heart of city; from Carolyn Steel's *Hungry City*

Smithfield Market around 1830; from Carolyn Steel's *Hungry City*

cities and markets around the world has in part been due to the invention of refrigeration and the transformation of the average kitchen, bringing me to my next part of my research.

The Kitchen Today

Since this topic is revolving around cuisine and the development of cuisine, it is appropriate to begin researching the kitchen to see what happens in the kitchen today and why it is society began to move away from cooking and preparation methods. Klaus Spechtenhauser incorporates a series of essays in his book *The Kitchen* that describe the transformation of this space from the 1920s onward. All of the essays discuss the constant transformation of the kitchen—this need to make the space more functional and easy for the housewife—a space where she could prepare the meals for her family more quickly and efficiently. With the invention of the refrigerator that the methods of cooking, preserving and preparing have become less important, and in some instances to a point of near non-existence. With the refrigerator one no longer needs to preserve food for the winter months, for instead they can simply place it in the freezer. One no longer has to take multiple trips to the store or market weekly, but instead can take one large trip weekly. One also no longer has to cook since they have the option of purchasing pre-made meals that can be taken out of the freezer at any point in time, placed in a microwave for a few minutes then instantly consumed. Although it has reached the point where one hardly needs to

cook for themselves, there is still this obsession with the idea of cooking. Men and women are constantly bombarded with infomercials on television about the next best cooking accessory and how it is going to make their lives easier. Alice Vollenweider talks about this obsession with watching how food is made -- how there are infomercials telling the average consumer how easy it can be to prepare a meal with their tools, despite showing the process in time-lapse imagery. The wife attempts a dish of asparagus, it is disliked by the family, so she resorts back to the pre-made, pre-packaged.¹⁰ Why? Perhaps because the food that she is making really is tasteless. Not just because she is unaware of how it could be cooked or what it should be served with, but because this asparagus has been picked before it has ripened, for it needed to be packaged and shipped halfway across the world to the supermarket she purchased it from. This asparagus was sprayed with a chemical in order to increase its ripening as soon as it reached its destination-artificial ripening with artificial ingredients. People have become used to consuming foods that do not taste like real food, but instead are modified to taste a way they think it should taste. While this may be the current state of food today, historically the methods of obtaining food were more localized.



Woman shopping at Supermarket; from Spechtenhauser's *The Kitchen*



Employee arranging foods at supermarket; from Spechtenhauser's *The Kitchen*

^{10.} Klaus Spechtenhauser, *The Kitchen* (Berlin: Birkhauser, 2006), 17-19.

The Historic Prairie Kitchen

This research then brought me to analyze the historic prairie kitchen to help understand what foods were naturally grown in the area and how people survived the long, harsh winters. With this, I studied both the aboriginal kitchen as well as the European settler's kitchen.

Since the aboriginals were typically nomadic, their food came entirely off of the land through the methods of hunting and gathering resulting in them consuming entirely traditional foods—foods that are both plant and animal, harvested from the local environment and culturally accepted.¹¹ If the seasons allowed it, they would often grow a small garden. A typical combination of food would be the growing of corn, beans and

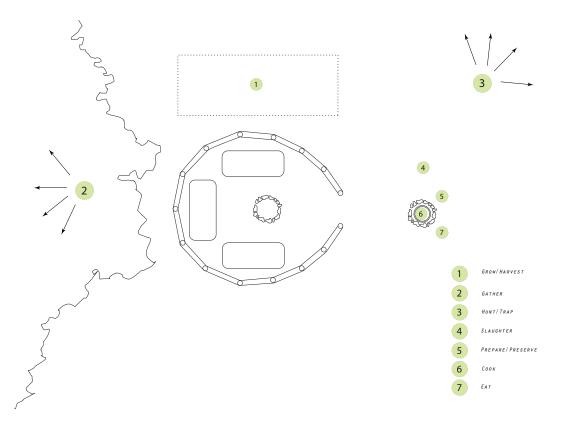


Diagram representing what the aboriginal kitchen was like, and the steps to obtaining and preparing their food

^{11.} Food Safety Network, *Safe Preparation and Storage of Aboriginal Traditional/Country Foods*. National (Vancouver: Collaborating Centre for Environmental Health, 2009), 26.

squash, and were often referred to as the "three sisters" crops. The corn would provide stalks for the beans to grow up on, the beans would provide nitrogen to enrich the soils that the corn and squash also grew in, and the squash grew over and covered the ground

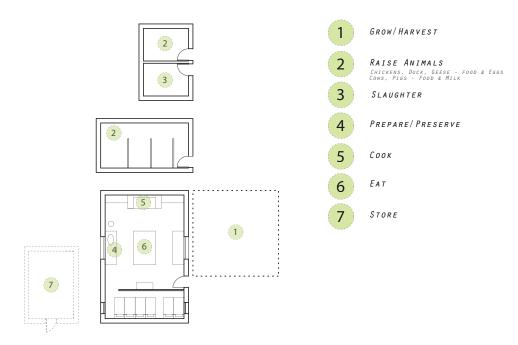


Diagram representing what the European settler kitchen was like, and the steps to obtaining and preparing their food

preventing weeds from coming up but also creating somewhat of a microclimate in keeping the ground moist, requiring less watering of the plants.¹² For hunting and trapping, typical animals such as rabbit, moose, caribou, duck and bison were most popular.

The European settlers, although not native to the land, had a major influence on the food culture that was developing in Western Canada. While they did not hunt like the aboriginals, they would obtain their meat through the raising of animals. Often a cow was present for dairy, chickens for eggs, and a number of other small animals such as duck, goose and rabbit for everyday eating. Smaller animals were typically taken care of, slaughtered, and prepared by the wife. The wife also had a vegetable garden that she would tend to and would pickle, jar, can, and bottle a number of foods during the fall for the

^{12.} Valerie Franca Lacovetta, J. Korinek and Marlene Epp, *Edible Histories Cultural Politics: Towards a Canadian Food History* (Toronto: University of Toronto Press, 2012), 34.

long winter months ahead.¹³ Trading was something that happened consistently amongst the settlers and the aboriginals, and with this a blending of food cultures began.¹⁴

Today in Edmonton the majority of food purchased and consumed is from the supermarkets. While there are more than enough of these to feed the entire city, the food sold is from nearly everywhere else in the world except the city itself. Alberta has had heavy agricultural production since the prairies began to populate, however it has failed to bring its own product to the local supermarkets. Only a few farmers markets, local delicatessens and organic food marts are present within the city for local fare. There is one urban farm (the U of A farm) but this space is strictly for research purposes. With the consistent increase in population, the city continues to stretch its boundaries further from the core, depopulating the downtown but also pushing agriculture further from the city centre.

^{13.} Rosemary Neering, *The Canadian Housewife: An Affectionate History* (North Vancouver: Whitecap Books, 2005), 41.

^{14.} Dorothy Duncan, *Canadians at Table: Food, Fellowship, and Folklore* (Toronto: Dundurn Press, 2006), 123.



Methods of growing food, preserving and preparing for European settlers



Methods of obtaining food, preserving and preparing for Aboriginals



Map showing grocery stores, delicatessens, farmers markets, organic food marts and urban farms.

CHAPTER 2: DESIGN

Farm to Table (Program 1)

Program 1 involves the entire farm to table process and is located on the upper floor of the building. It takes the programs studied from the historic prairie kitchen and expands them to an urban scale taking people through the entire farm to table process. It begins with the farming, both indoor as well as outdoor. These spaces require maximum amount of sunlight from the south east since this sun is best for growing and less intense than the south western sun. The program then flows linearly west, following with the coops and pens, the slaughter spaces, the kitchen and finally the dining. There are two narrative paths that may be taken to view and participate in each step--an outdoor path on the south side and an indoor path along the north side. This method can realistically be applied to any country, province, or state that wishes to bring back farm to table methods in order to create a more local cuisine.

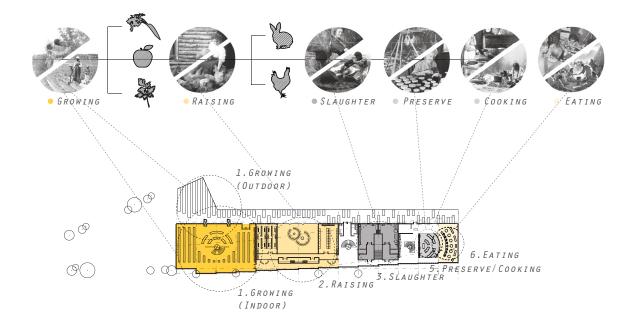


Diagram showing program influenced by the prairie kitchen and its location on the second floor plan

1. Outdoor Growing

Outdoor growing space is important as well as necessary to help people in understanding what can be grown in their city during certain seasons. This program was directly inspired by the prairie kitchens of both the aboriginals as well as the Europeans, for both groups used these methods of obtaining food during the growing seasons in the prairies. The garden is placed on the SE portion of the site since the morning sun is preferred for a number of plant species over the intensive afternoon sun. These planters are found throughout the site, growing up beside the building along the narrative path, growing up the walls of the building, and bleed past the building site to other areas to stitch the building into the site and its surroundings. The linear grid the planters create can also be found throughout parts of the architecture in other pieces of the program.

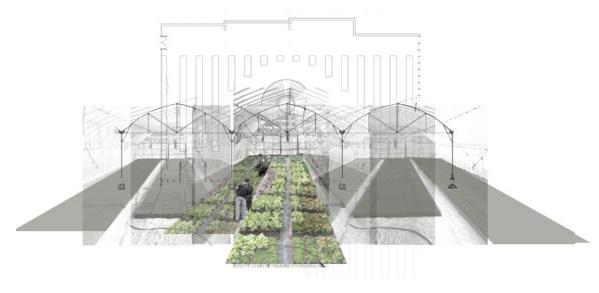


Outdoor growing

2. Indoor Growing

While greenhouses were not initially used by the aboriginals nor the first settlers on the pairies, it is a necessary component for growing if there is to be food supplied all year round. The greenhouse will be placed next to the garden on the SE side of the site since it also will require the maximum amount of sunlight during the daytime. It is angled so that it

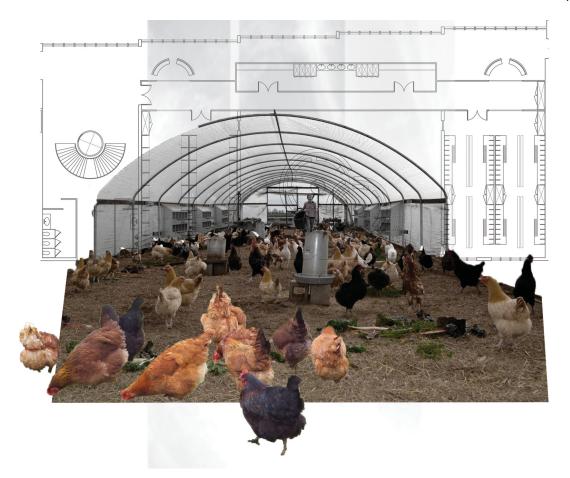
receives the maximum amount sunlight throughout the year, and sets a base for the form of the rest of the building. This space is necessary in a climate such as Edmonton, for not all seasons of the year permit growing of fruits and vegetables.



Indoor growing

3. Coops/Pens

The coops and pens are placed next to the greenhouse on site. Both Europeans as well as the aboriginals hunted, raised and slaughtered their own animals. Women of the European settler kitchen would often raise animals of a smaller, manageable size such as rabbits, ducks, geese and chickens. Within the proposed building, these spaces are divided indoors so that the chickens and rabbits are separated and have their own spaces for sleeping and reproduction, but share outdoor space for roaming. Within the outdoor space are places where people can sit with, interact and feed the animals. There will be glazed openings along the narrative path as well for people to view inside the coops and pens to observe and learn about what takes place in this part of the program.



Coops and pens

4. Slaughterhouse

This space is less physically interactive with the public, but still provides all viewing access so people may watch their food being processed. Historically, slaughtering happened on site of the typical prairie house, done by the same people who raised them, who would also be the ones to consume them. Today the slaughtering process is contained and closed off from view, resulting in inhumane treatment and processing of the animals and further disconnecting society from their food. With this building the space will be divided into two sections, one for the slaughtering of birds and the other for rabbits, since both processes require different types of equipment. Due to health and safety requirements this area would only be viewed by the public, but not an interactive piece of the program for this skill would require more intensive education.



Slaughterhouse

5. Kitchen

Historically, cooking has been a daily act, something typically done by the women of the house. Within this space not only were meals prepared for the day, but preservation of seasonal fruits and vegetables also took place. Women would salt and smoke the recently slaughtered meat, peel and jar the fruits, or pickle the beets and cucumbers. Every ingredient either came from the wild land, was grown in the backyards or purchased from the local market. In this building, people will take the foods that have been grown on site (both plant and animal) and develop seasonal dishes using methods already known to them, but also learning from others. This building is located in a highly multicultural area within Edmonton, so there will be a great deal of dialog between these cultures, their cooking methods and their recipes.



Kitchen

6. Restaurant/Eating

Although initially not a part of the traditional prairie kitchens of both the aboriginals and settlers, the act of eating was highly communal. A family would always end their day together at the table either with each other, or in the company of others from their community. Within the proposed building, the dining area will be a place where people of all classes and social groups will gather after they have created their dishes to eat, socialize, share and learn--technically the last link within the farm to table method. This space is meant to encourage those visiting to take their time and enjoy the company of others. It will be communal, where you sit with those you have cooked with.



Restaurant

7. Composting

While not originally incorporated in the farm to table method, it is the last piece that brings everything back to the farm once again. It will use the left overs from the food, the manure from the animals, the bits of animal that are discarded in the slaughter, and the plants that are unused from the garden. It will be one of the components that will tie this linear program together, placing itself at the points within the system that require it most—the garden/pens, the slaughter house, and the kitchen/restaurant.



Composting

Site-Boyle Street, Edmonton (Program 2)

Program 2 is in reaction to the site and its demographics, and is placed on the main level of the building allowing it to be more accessible and permeable to the local community. The site is nearly vacant of food production and grocery marts. Providing a local market that sells the products grown on site could help in enhancing this idea of local community. The hamper and storage unit also provide for the demographics of the site. A number of residents in the area are of low income or no income. The site attracts a number of homeless as well as addicts partly because of its vacancy, but also due to the location of the Salvation Army Addiction Centre that is directly adjacent to the proposed building. Those with no job or low income jobs could work at this place part time, maintaining the plants, animals and facilities of the building. These people could also partake in running the market and putting together hampers for themselves, their families, and others from the community.

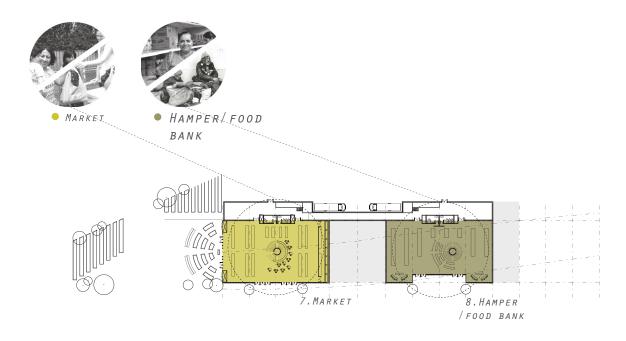


Diagram showing program influenced by the site and its location on the main floor plan

8. Market

The market space acts as a support program. While it is not needed as a part of the farm to table process it provides space for the food that is being produced to be bought and sold within the space. This piece of program is placed on street level and is intended to be highly permeable throughout the seasons. In the summer time this space bleeds out onto the street becoming an indoor/outdoor market and engaging more with the street and public. The space is designed so that the tables follow the linear grid of the planters.



Market

9. Storage/Hamper + Food Bank

This piece of program is in response to the demographic of the site. About 61% of the site's population are considered 'hamper users' since the income of the population is so low. This space will store foods that have been preserved or have not been sold in the market, and can either be purchased from the everyday public or made into hampers for those less fortunate. It would also act as a food-bank, where residents from the rest of the city could donate their own produce, preserves and other foods to help support the

community of Boyle Street. The storage units follow the linear grid of the planters while the gathering space where the public comes together to create these hampers is circular and intimate.



Storage/Food Bank







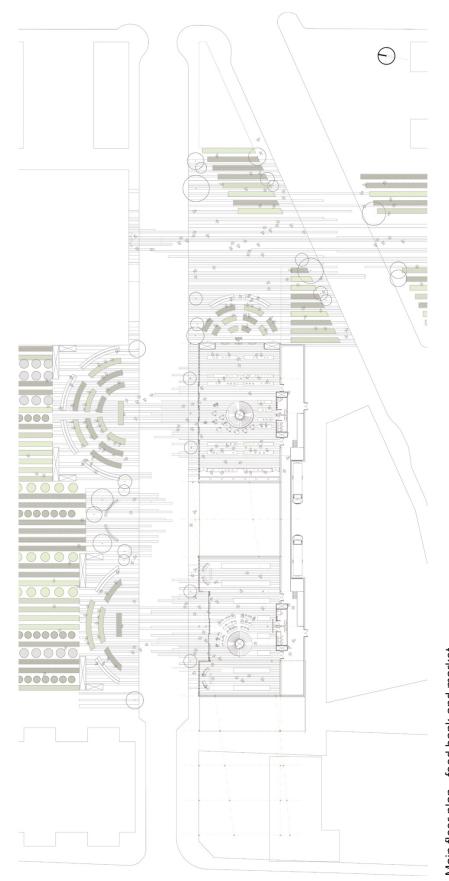
Kitchen



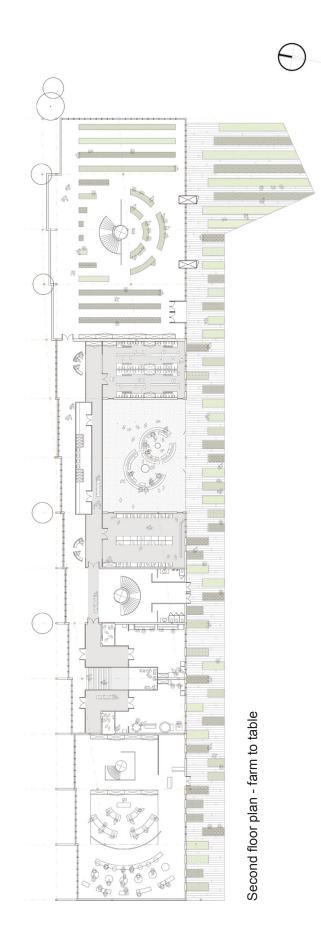
Slaughterhouse



Outdoor space of pens and coops.

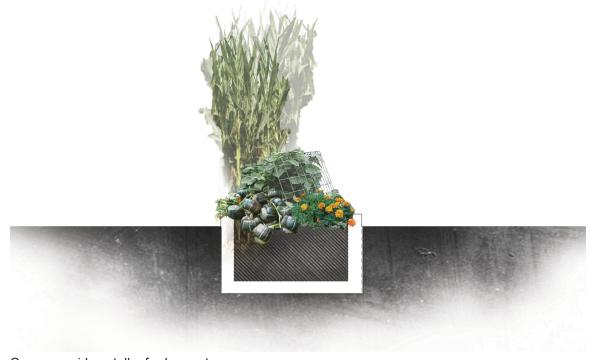






Combination Planting

Each of these individual programs will not only provide spaces of production, but will also provide education. Within these spaces people will be taught what plants can be grown in their region and during what season each plant can be grown in. People will also partake in the seeding, caring and harvesting of their food. Methods such as combination planting will begin to frame growing practices, much like it did with the aboriginals and the three sister crops. Corn, squash and beans were used to support growth—the corn would provide stalks for the beans to grow up on, the beans would supply nitrogen for the soil and the squash would cover the earth, creating somewhat of a microclimate and preventing weeds from sprouting. I have taken this method of combination planting and created a series of planters that can be used throughout my outdoor and indoor growing spaces. These plants are combined so that they reduce the number of pests that generally would target them individually, provide nutrients in the soil to reduce the amount of fertilizers and soil transplanting, but also are combined according to how much sunlight or shade is required for optimum growth.



Corn - provides stalks for beans to grow up Beans - provide nitrogen for soil Squash - covers ground creating micro-climate, preventing weeds from sprouting and keeps soil moist



Dill - attracts beneficial wasps Rosemary - repels cabbage fly



Radishes - leafminers prefer radish leaves over spinach leaves Leeks - require high potash growing environments



Peas + Beans - fix nitrogen in soil for other crops growing in planter Celery + Oregano complement cauliflower



Onion + Parsley + Rosemary - deter carrot rust fly Garlic + Chives - deter other pests due to aromas given off



Eggplant - pairs well with potatoes Beans - repel Colorado beetles that attach both potatoes and eggplant. Also provides nitrogen to soil for other crops.



Tomatoes - release poison that protects against asparagus beetles Parsley + marigold - repel asparagus beetles



Onion + garlic - aromas keep planter pest free, and helps deter red spiders Rhubarb thrives with all brassica plants, so is combined in this pot with both cabbage and broccoli



Celery + cabbage - pair well together, both prefer potash growing environments Potatoes + eggplant - pair well together Horseradish - protects potatoes against bugs and stimulates growth

During the growing seasons, people follow this 'pathway' of agriculture through the narrative beginning on the south east side and ending on the west. They will take part in the growing, may interact with the animals, view the slaughtering process, partake in the preserving of the foods and come together in order to cook, share, educate and eat the foods that have been produced seasonally on this piece of land.

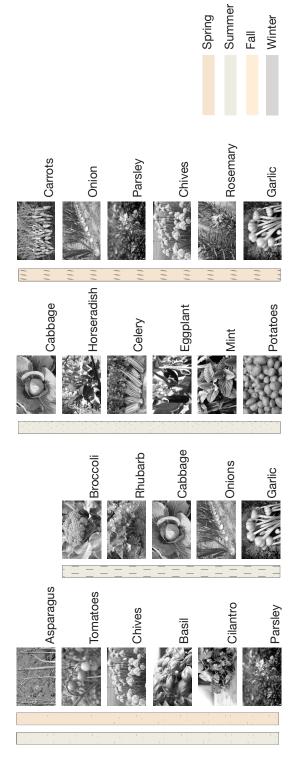


Diagram of combination plants and seasons that are most appropriate for growing.

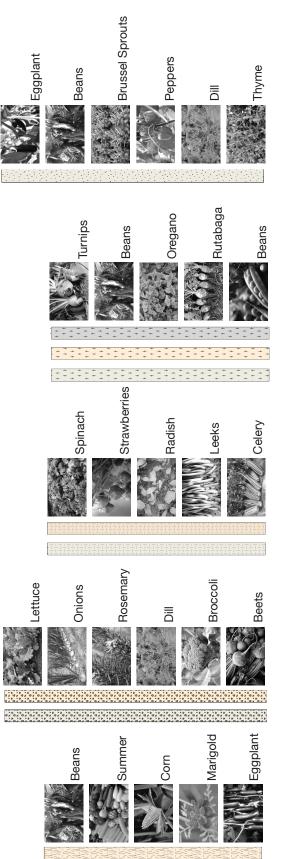
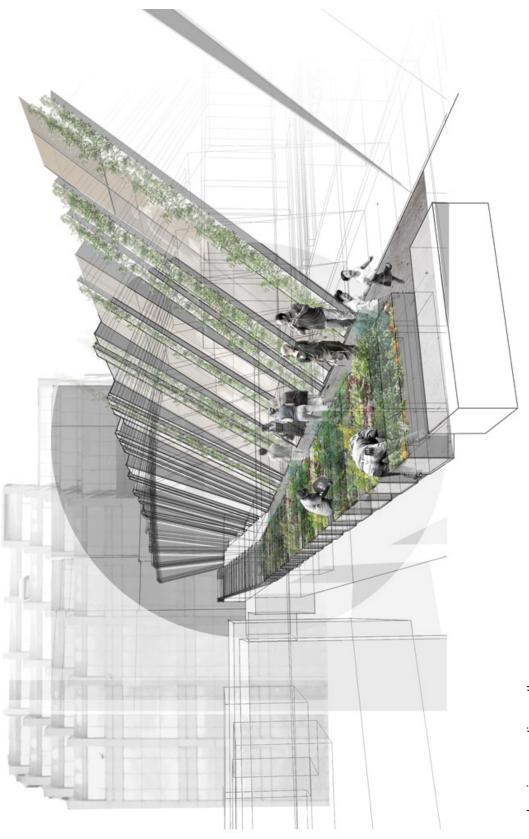


Diagram of combination plants and seasons that are most appropriate for growing.



Drawing showing narrative pathway of agriculture.



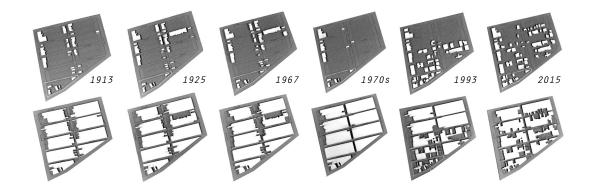
Local foods of Edmonton and growing seasons

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NQV	DĘC
	1	1		1		1	1				L	
Femperature (°C)	-11.7	-8.4	-2.6	-5.5	11.7	15.5	17.5	16.6	11.3	5.6	-4.1	-9.6
Precipitation (mm)	22.5	14.6	16.6	26	49	87.1	91.7	69	43.7	17.9	17.9	20.9
Sunlight (hr)		9.5	12	1,4	1,6	17	1	15	12.5	10.5	8.5	7.5
Sumgni (m)	8	a.5	12	14+	I,O	1/	16.5	qı	14.5	10.5	1	1.0
	1				1		1	1			1	
Vegetables	1		1	1	1	i i			1	1	1	1
• Broccoli	I	1	i.	1							i.	I.
 Asparagus 	I	I.	1	I.			I.	L	I.	I.	I.	I
• Beans												
Cabbage												
 Brussel Sprouts 	011111											I.
• Cucumber											1	
 Rhubarb 	1	I	T	I.	1					1	1	
 Eggplant 	0111111											
• Onions												
 Lettuce 												
 Cauliflower 	T	I										
 Celery 	1	I	T	I.	T	I.	T			I.	I.	I
 Pumpkins 	T	I	T	I	T	I	I	C				1
 Peppers 	4111111									I	I	1
 Tomatoes 	40000									I	L	1
 Winter Squash 			I	I	I.	1	I					
 Corn 	1		I	I	1						I	1
 Summer Squash 	el na							1				
Root Vegetables	T	I.	I.	L	T	I.	I	I	I	I.	L	I
Carrots	Ċ			I.	T	L				-		
 Rutabaga 	Ċ	1		I.	I.	L	T	Ċ	'	1		
 Radishes 	T	I.	1	I.	1				I.	T	T	I.
• Turnips				I.	1	I.	T	<u>i</u>				
• Beets				I.	I.	I.	<u> </u>	1				
 Potatoes 	T	I	T	I.	1	_		1	1		I.	1
	T	I	T	I	I	I	T	I	I	I	I.	I.
Fruit	1		I	1	L		I	1	I		I	1
	1		I	1	1			I	1		I	
 Blackberries 			1								1	
Blueberries												
Saskatoon berries												
Cherries												
Apples Deepherrise			1									
 Raspberries Reserve 					, T							
 Pears Strawberries 							1					
Suawbernes	1	1	1	I		I		1	1			1
Moot	T	I	i.	L	I	L	i i	i.	i i	L	i i	i.
Meat		1				1						
Rabbit												
 Geese Chickens 								,				
Chickens					1	1						

Local foods of Edmonton and growing seasons

Site

Like the three sister crops, this building is also a part of its own support system with the site and the demographics of the site. The area is in Edmonton in a neighbourhood just east of the downtown core called Boyle Street. Historically, downtown was in Boyle but was relocated further west after the construction of the High-level bridge and the parliament building. Since the 1920s this area began to disintegrate, with shops closing and houses vacating. While there have been a number of redevelopment plans for the area, they have ultimately done more harm that good, demolishing a number of what would be historic buildings today.



Models showing construction and deconstruction of the site throughout the years.

The demographic of the site is rich, housing a number of Chinese, Ukrainians, British, Aboriginals and Canadians however, the income of this area is only half that of the average Edmontonian, resulting in a number of hamper users—about 61% higher than the city's average.¹⁵ Crime rates are high, with property crimes being 68% higher than the city's average, and violent crimes being 88% higher.¹⁶ The site is also home to the Salvation Army Addiction Centre, as well as a women's shelter in the Gibson Block building. The only food available on site is a handful of restaurants as well as a small, Asian food mini-mart. Other than this people need to walk 20 minutes or further in either direction to reach a market or grocery store. Because the site is practically vacant of any

¹⁵ City of Edmonton Community Services. *Boyle Street: 2010 Neighborhood Indicators,* accessed February 6, 2015, http://www.edmonton.ca/city_government/documents/PDF/Boyle_Street. pdf.

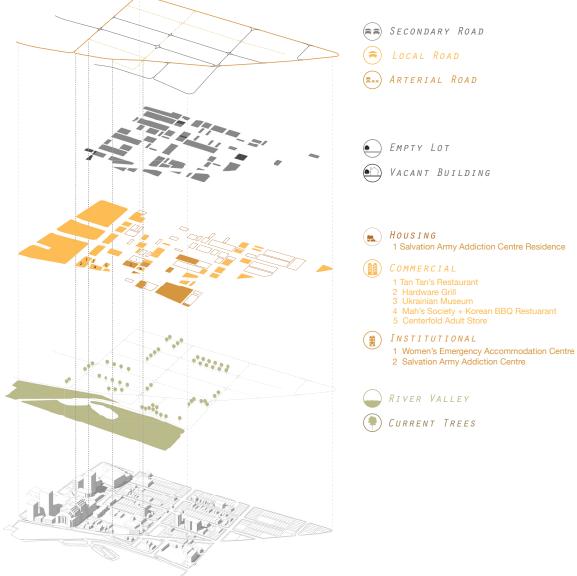


- 1. Salvation Army Addiction Centre
- 2. Gibson Block/Women's Shelter
- 3. Green Papaya Vietnamese Thai Cuisine
- 4. Crystal BBQ
- 5. Mah's Society
- 6. Tavern
- 7. Hardware Grill

food and because the income is low, I have also provided a market as well as a food bank.

The proposed building could be used to help in the revitalization of the site. While it would attract many from around the city, it would be a place where those from the addiction centre and elsewhere on site could go to heal and be a part of a community. They could partake in the same farm-to-table activities, and work in maintaining the facilities of the building. Because the area is highly multicultural, it would be essential for those of the neighbourhood to partake in the communal cooking since Canadian cuisine is made up of a melting pot of cultures. In return, these people would be fed, and would even be supplied with hampers containing food that is produced on site. This hamper would also act as a food bank for the people of the site, collecting donations from the rest of the city.

Besides the demographics, this site offers other benefits for growing. By placing the building on the SW corner of the site you are dealing with two thresholds, one of the downtown core and the other of the North Saskatchewan River. Currently the site is disconnected, walled in and blocked from view from the strip of buildings on 97th Street. The proposed building grows up and over the existing wall, creating height and drawing attention into the area. It is also located next to the river valley, bringing up the green belt through Boyle street area. The emptiness of Boyle comprises mainly of parking lots however, this emptiness allows for potential growth from the proposed building, and could catalyze further growth of other food related systems.

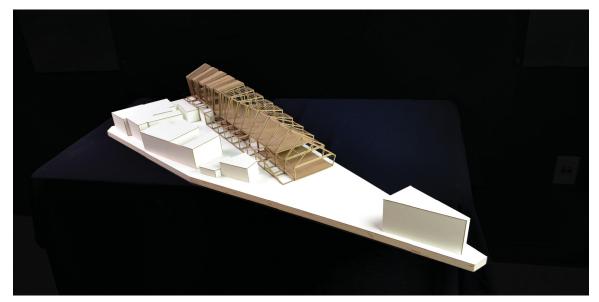


Exploded diagram of site and existing surroundings

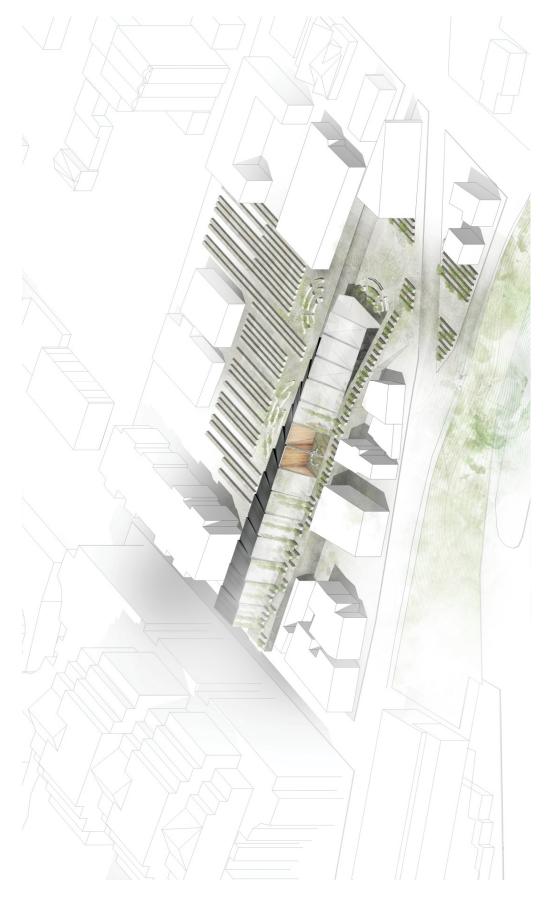


Form

The design of the building as well as cultivation highly revolve around light and the sun. The farm to table method begins on the south east side of the site, for it is the south east sun that is most suitable for growing. The outdoor growing spaces are positioned so that they receive the maximum amount of sunlight year round. Directly adjacent to the outdoor growing area is the greenhouse space that has been angled so that it too receives maximum sunlight throughout all seasons of the year in the city. As the program progresses from the farming to the slaughtering and cooking, the angle and intake of the southern sun becomes less critical, for these programs instead require more northern 'task' lighting. To adjust to this the building begins to rotate to expose a glazed facade on the north side of the building, and also to reduce the intense angle of sunlight coming in on the south side. The planters along the narrative path have also been carried up the side of the building to further shade these programs on the south west side, and also to carry the idea of growing throughout the rest of the building.



Model showing form and structure of the building.



Perspective view from the south.

JUNE 21 DECEMBER 21 12:00/15:00 9:00/18:00 12:00 6:00/21:00 9:00/15:00 Greenhouse Greenhouse 12:00/15:00 9:00/18:00 12:00 6:00/21:00 9:00/15:00 Coops/Pens Coops/Pens 12:00/15:00 9:00/18:00 12:00 6:00/21:00 9:00/15:00 Slaughterhouse Slaughterhouse 12:00/15:00 9:00/18:00 12:00 6:00/21:00 9:00/15:00 Kitchen/Dining Kitchen/Dining

Sun diagrams showing programmatic pieces of building and their angles in response to sunlight.

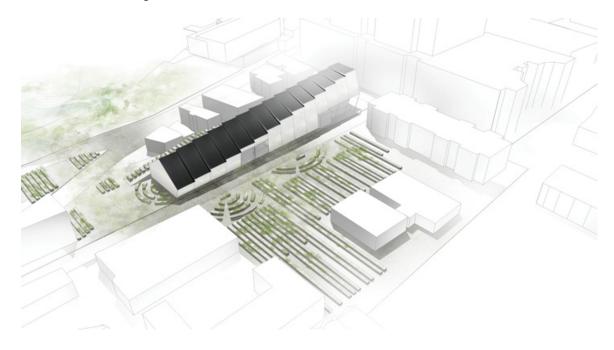


Section looking west showing the angles of the building as well as the connection to the river valley.



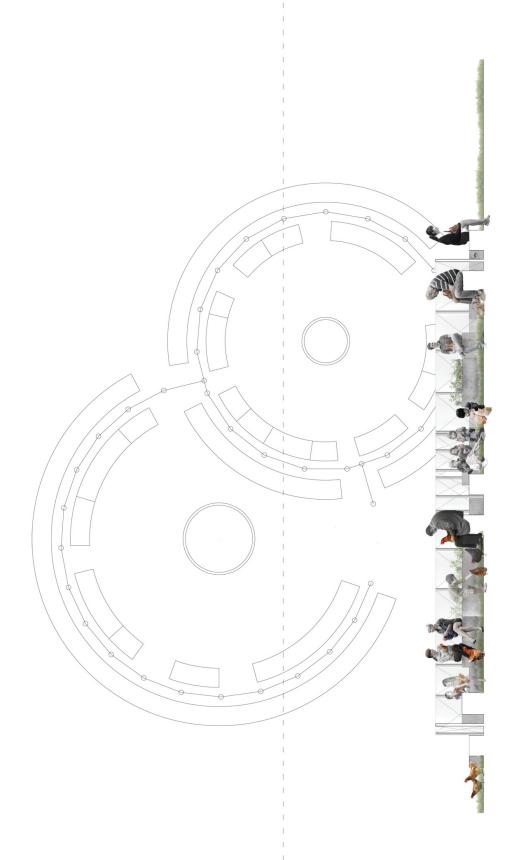
Section looking south, showing the progression of program from the farm (starting on the left) to the table (finishing on the right).

The grid of agriculture weaves itself throughout the site. It carries itself up the side of the building, creating a green wall along spaces that require less sunlight from the south, and continues its way past the site to the north increasing the amount of productive spaces. This green grid also bleeds south of the site crossing streets and carrying into the river valley to help connect this piece of city better to the green corridor. This weaving of the grid both north and south is intended to tie the building into the site, and attract people from its surroundings to the site.

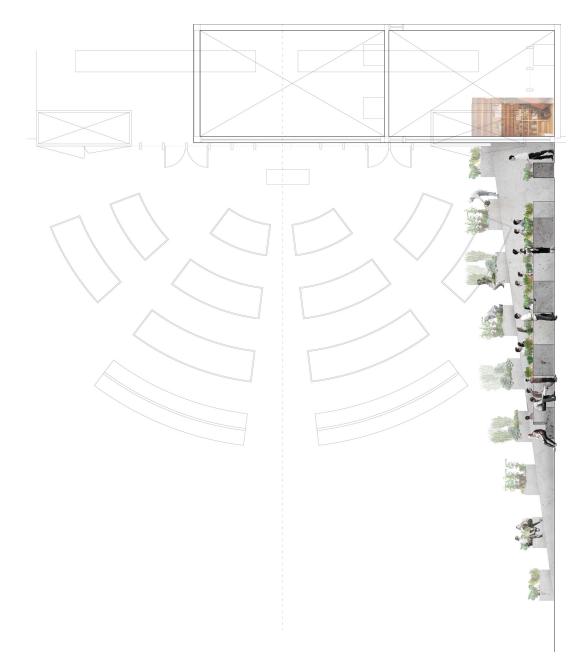


Perspective view of form from the north.

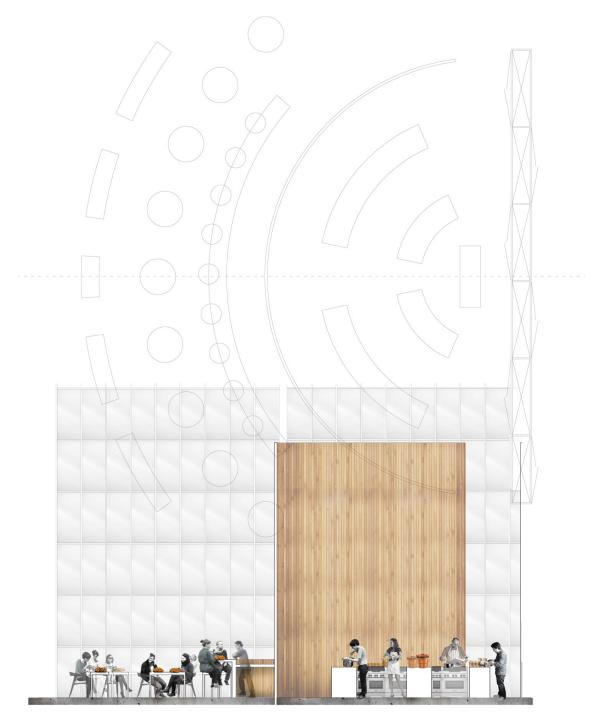
The grid of agriculture also is found within the building itself where it becomes tables for selling in the market, shelves for storing preserved foods in the storage and food bank area, and also becomes food and water troughs within the pens of the chickens and rabbits. This grid of production is broken up by circular areas of gathering and learning to create 'place-making'. These circular spaces found throughout the plans of the building are where people from different classes and cultures come together with a single commonality-food. These spaces are designed to provide hubs of learning and to encourage dialog between the people.



Drawing demonstrating what would take place in the public spaces of the coops and pens.



Drawing showing people gathering to learn about combination planting.



Drawing of people gathering in kitchen and eating area.



Market outside of building on 101a Ave.



Moment of interaction between the rabbit pens and chicken coops.



Looking towards the Gibson Block on 101a Ave.



Across Jasper Avenue, looking towards the river valley.

CHAPTER 3: CONCLUSION

The intent of the thesis is not so much to provide food for the everyday, but instead to educate the community on these methods of producing so that they can themselves apply it to their everyday lives. The building alone does not provide the amount of food needed to support the entire community of Boyle, but provides enough food to be circulated within the space in order to educate people on this farm to table method. While more space would be required for loading and unloading, the idea is that the building could also support the importing of foods from other local farms around the city, and also support a weekly farmers market along 101a Ave. The site is capable of providing further growing space if needed, but could also catalyze other food related programs, turning the area of Boyle Street into a food production hub.

The idea is that this thesis can be used as a farm to table model elsewhere throughout the city, the rest of the prairies, and around the continent. The analysis begins with understanding the history of food within the area, studying what types of food are native to the land (both plant and animal based), as well as what foods could easily flourish in the environmental conditions. Researching the cultures that inhabit the area to understand how they obtained, cultivated, preserved and prepared their food is also necessary in order to derive the farm to table program for the building. The second piece of program is developed out of the site conditions. For this thesis, the site required both a food bank as well as a market in order to cater to the community and its demographics. For other areas however, this program could vary. This piece of program should be placed on the main level so that it is physically permeable and easily accessible to those on site, with the farm to table program being on top to receive maximum sunlight.

Each piece of program from the farm to table method will require different types and amounts of sunlight from either the north, south, east or west. Because of this, the building should be designed so that each program has maximum access to whichever type of sunlight it requires. It is ideal that the program is organized in a linear fashion so that it may guide people clearly through the farm to table process. It is also important that the building be located in an area that provides enough space for growing both indoor as well as outdoor, with these programs always being placed on the south east side of the site in order to receive ample amounts of south eastern sunlight. These growing spaces are crucial in educating people on what foods can be grown in the area during specific seasons of the year. It is important that nearly every piece of program is accessible both visually, as well as physically in order to reconnect those who have been disconnected from the food production chain, bringing back the farm to table method and ultimately working to develop a local cuisine.

BIBLIOGRAPHY

- "Chinatown and Little Italy Historic District." *National Park Service*. Accessed February 27, 2015. http://www.nps.gov/nr/feature/asia/2010/chinatown_little_italy_hd.htm.
- City of Edmonton Community Services. *Boyle Street: 2010 Neighborhood Indicators.* Accessed February 6, 2015. http://www.edmonton.ca/city_government/documents/ PDF/Boyle_Street.pdf.
- "Corn Field Iowa." *Planetizen.* Last modified September 18, 2013. http://www.planetizen. com/node/65203.
- Duncan, Dorothy. *Canadians at Table: Food, Fellowship, and Folklore.* Toronto: Dundurn Press, 2006.
- "Food Battle for New York's Little Italy." *L.A. Times.* Accessed February 27, 2015. http://articles.latimes.com/2011/sep/04/travel/la-tr-littleitaly-20110904.
- Food Safety Network. *Safe Preparation and Storage of Aboriginal Traditional/CountryFoods*. Vancouver: National Collaborating Centre for Environmental Health, 2009.
- Halweil, Brian. *Home Grown: The Case for Local Food in a Global Market.* Danvers: Worldwatch Institute, 2000.
- "Idaho, Adventures In Living." *Visit Idaho.* Accessed February 27, 2015. http://www. visitidaho.org/photos/?subject=Field.
- Lacovetta, Franca, Valerie J. Korinek and Marlene Epp. *Edible Histories Cultural Politics: Towards a Canadian Food History.* Toronto: University of Toronto Press, 2012.
- Lim, C.J. Food City. New York: Routledge, 2014.
- Montanari, Massimo. Food Is Culture. Hoboken: Wiley-Blackwell, 1996.
- Neering, Rosemary. *The Canadian Housewife: An Affectionate History.* North Vancouver: Whitecap Books, 2005.
- Olkowski, Helga, Bill Olkowski, Tom Javits and Farallones Institute. *The Integral Urban House: Self Reliant Living in the City.* Gabriola Island, BC: New Catalyst Books, 2008.
- Pollan, Michael. The Omnivore's Dilemma. New York City: Penguin Press, 2007.
- Spechtenhauser, Klaus. The Kitchen. Berlin: Birkhauser Basel, 2006.
- Steel, Carolyn. *Hungry City: How Food Shapes Our Lives.* London: Chatto & Windus, 2008.