THE CRAFTSMAN
Reopening the Narrative to the Art of Production

By
Megan Baker

A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs in partial fulfillment of the requirements for the degree of Master of Architecture

Carleton University
Ottawa, Ontario

© 2017, Megan Baker
Bringing **life** back to the **process** of the **mediums** we use every day.
Acknowledgment

For my Grandma, I would not be the woman I am today without her.

Table of Contents

Introduction

Part 1 - Content
Abstract
Chapter 1 - Site Analysis
  Background of London, Ontario
  Geopolitics and Circulation
  The Story of The Old East Village

Part 2 - Concept
Chapter 2 - The Art of the Craft, Methods of Making
  Ceramics
  Glassblowing
  Looming
Chapter 3 - Linking the Methods to Design

Part 3 - Context
Chapter 5 - The Future of the Old McCormick’s Building
  Overall
  Plans
  Sections
  Elevations
Chapter 5 - The Future of the Old McCormick’s Building

Bibliography
Print
Web
List of Figures
In the Age of Information, the world has been consumed by communication, connecting and linking humans through a transparent reality; the digital realm. It has influenced humanity by morphing the self and creating a new level of identity and existence, but has this change weakened our distinctions and diversity as an individual. In 2017, humans have invented a speed of development that has morphed the individual identity.

What appears to be one of civilizations biggest achievements could correspondingly be one of the major downfalls of humankind. With this effort to create a more economically efficient society, there are consequences. Through evolution of the digital age a new reality has emerged, one less physically complex than its predecessor; a progression that is focused upon an absent form of communication. Yet, as humans this is not something that is believed to inspire us in a positive way. Society is constantly putting economic efficiency over an individual’s physical expression and diversity.

Hierarchy of the physical form is diminishing from society, surrendering to pressures and succumbing to the masses while creating an environment that does not encourage or support individual needs for physical and tactile expression. Humans are not machines and yet we are becoming an extension of our digital devices, reducing our ability to physically express one’s emotions. It is devastatingly sad to think that true physical contact could be replaced by text message and an emoticon. Have we really reduced the expression of happiness down to a smiley face on a screen? This standardization of communication is making everything homogeneous, bland, and lifeless; one could argue that technology is to blame for disconnecting us from the physical world, while calling it “social networking”. Rapidly, we are creating a society where we idealize isolation. Humanity is consumed with virtual reality over actual physical contact. Humans need physical expression and social interaction; one cannot recreate fulfillment of their life on an illuminated screen, it needs to be felt. This digital epidemic is creating a world where physical human expression and communication is, reducing human interaction down to just another machine.
OUR TOOLS SHAPE US

Marshall McLuhan described all human artifacts as an extension of ourselves. The foot is a continuation of the wheel, the eye is now the book, clothing is skin, electricity is the central nervous system, and the ear is the alphabet. Every medium we use causes a displacement or change, altering the way we see the world and ourselves. When one introduces a new tool or "medium" into the world it changes one’s outlook and environment and consequently the way we think and live. If one is going to introduce a new medium it is important that we exhaust the effects of the artifact or tool as a whole.

As humans, we are constantly faced with the goal to be faster, more productive and efficient, but are the machines we are creating paralyzing us and making us lose sight of what is truly beautiful and important in life?

We shape our tools and afterwards our tools shape us.

-Marshall McLuhan
As we have evolved as humans we have invented tools that have changed our way of life and the way we live. Human technology has transformed the way we view, see, and interact with the world around us. This timeline shows a brief overview of the evolution of the human artifact.

Starting with the creation of the Latin Alphabet sometime before 600 BC. The creation of the written word was the first movement away from tribalism in civilization. The Alphabet allows for humans to communicate and vocalize themselves as an individual. The invention of language was a key pivotal moment in human history.

Since 600 BC we have evolved and in the 21st century we place significant importance on speed and efficiency. By developing methods, such as the printing press, daily newspaper, and e-mail, to increase the speed and the efficiency in which a message is heard and received.

Humans have evolved our methods of transportation; from bikes to automobiles to trains to airplanes. The speed of travel we have invented has transformed the way we view the city. No longer does one think about “in between” space. It is simply based upon a destination and event.

Civilization has evolved in terms of entertainment. Marshall McLuhan foresaw in the 1960’s & 1970’s how the media and our entertainment outlets would impact the social condition of the family dynamic. Families used to gather around a fireplace which then evolved into crowding around the radio (invented in 1906, first voice and music signal transmitted over radio waves, became more common use in the 1920s), then television (invented in 1925, but not commonly owned till 1953 in the United States). In the 21st century we now have a cornucopia of entertainment and media outlet options, but there is one thing that is slowly disappearing. It is the need for each other.

The key element that I want to address is how we communicate, and the importance of the tactile connection. From the letter to the telephone to the e-mail and now we have massive social media outlets. We are more connected than ever before, but we are less physically social. We are stripping away the intimacy of how we communicate and truly understand one another. We are underestimating the value and need for physical human contact.
The Digital Identity

In the Age of Information our self-expression is confined to our personal devices.

65 percent of the population are visual learners⁴⁵... but does this medium truly satisfy our needs?
The Digital Identity

The Average Number of Hours Spent Online per Day by Country, January 2016

We are constantly occupied by our devices that they have become an extension of us. We are always connected, yet this digital medium is disconnecting us from our physical environment and personal relationships. Our devices are distracting and disconnecting us from our lives; our tactile memories.
OUR TOOLS SHAPE US

One could blame the Digital Realm as the reason why society has become less physically social...

How will this affect us in the long run?
Human Development in the Digital Age

The 21st century baby has become the newest digital consumer. As soon as they exit their mother’s womb they will be submerged in the digital realm of today’s society. Before they can walk they are being exposed to multiple forms of media through an illuminated screen. In a study done by Statistics Canada the average person spends 3.9 hours per day on their laptop/desktop in Canada. Is this the lifestyle one wants our next generation to grow up with and idealize? Watching their parents on their devices, what kind of social message is this sending to the next generation? If we care little about our own lack of social skills, one should at least allow the future generation to develop some? Angeline Lillard, Psychology Professor at the University of Virginia, discusses in her page, The Immediate Impact of Different Types of Television on Young Children’s Executive Function, how our brains are more effective when we are in a socially interactive environment. These atmospheres stimulate one’s curiosity and exploration but “Because it is possible that excessive childhood involvement with digital media limits children’s social interaction, this could hinder children’s brain development and have negative effects on their overall development.”

Infants respond to the sound of their mother’s voice, to being wrapped in a flannel blanket and rocked to sleep, and in turn we respond with hugs and kisses and silly songs that seem to bring happiness that has no measure. We mark the babies first in their baby books—first smile, first step and first word—all firsts are the beginning of social interaction. But babies watch us very carefully, and by the time they are able to reach out they are holding their parents cell phones, followed by iPods, iPads and laptops. According to a 2011 Common Sense Media Research Study about children’s media use in America, 40 percent of 2-4 year old children are using these devices. This is leading to a toxic cocktail of childhood issues from sleep deprivation to obesity. Perhaps we need to rethink this. When one comes home after a long day at work to have their toddler run into their arms and plant a big wet kiss on their cheek. The toddler missed their loved one. They missed the social interaction and the warm hugs. One needs to be very careful. In the 21st century we need to get a handle on the medium being used, for the fear that children will want to be just like their parents, and their warm hug will dissolve into a text message welcoming you home.
Development in the Built Environment
Development in the Virtual Environment
Maslow’s Hierarchy of Human Need

In 1943, Abraham Maslow created his most notable work—Maslow’s Hierarchy of Human Needs. Over 70 years later these needs have remained consistent, but with a digital twist. In the 21st century we rely on massive internet search engines to do the work for us whether it be looking for a house, finding a job or looking for the best restaurants in town. In order for one to “stay connected” with the outside world one joins a social networking site, like Facebook or Instagram. For self-realization, one shares their knowledge or creativity on their blog or Pinterest account. So it would seem that the digital world has enhanced our lives and made the road to self-realization so much smoother, but has it? When you log onto Facebook and so many “friends” say happy birthday is it really representative of how social you are, or are people just programmed to check whose birthday it is each morning as they log onto their page and respond. Does this really replace a birthday card or visit from a friend that actually remembered your birthday without a Facebook reminder. While digital medium makes our life perhaps simpler, it does not come without a cost. Remember that all those posts made are there forever, the pictures one is tagged in can come back to haunt you, and the information that one thinks is secure is being sold to the highest bidder and potentially causing someone to lose a job or denied a promotion. So, can social media actually pose a risk to our safety? Recently, CNN reported that the CIA can take pictures from your smart television and see all your text messages. The government tells society that this is to keep us safe from terrorists, but something about that just does not make one feel safe. If the government can hack into our social media, then are we not also susceptible to unfriendly hackers who will jeopardize our safety. Have we not heard of wide spread cyber-bullying causing teenagers to take their lives. The effects of digital media are likened to a drug with side effects—in initially it was a good idea, but sometimes those side effects are worse than the disease. I am not sure what we were trying to cure with digital medium, but I am sure that I don’t like the side effects. Back in 1943 Maslow could not have imagined the effect digital media would have on our human needs. Ultimately, we humans need other humans and while machines are here to stay, and can enhance our lives, they can never replace the companionship of other living breathing humans.
Negative Effects of the Digital Medium

MENTAL
- Reduced Attention Span
- Neurosis
- Addiction
- Depression
- Stress
- Isolation
- Loss of Concentration

PHYSICAL
- Obesity
- Loss of Eyesight
- Poor Sleep Habits
- Tendonitis, Tenar Elbow, Computer Wrist
- Less Active
- Back Pain, Fatigue, Sprains

SOCIAL
- Child Development Issues
- Lack of Privacy
- Increase in Cyber Criminals
- Relationship Issues
- Waste of Time
- Adult Content, Inappropriate Online
- Increase in Bullying
- Decrease in Social Bond in the Public Realm
- Chronic Smartphone Stress

NATURE
- Excess Deforestation
- Excess Power Consumption
- Waste, Increased E-waste
- Pollution
- Increase in Travel

Figure 0.12
The Human Need for Stimulation

**Stimulus**, noun - something that incites to action or exertion or quickens action, feeling, thought

As Humans we need this constant stimuli, without this reaction the brain will become bored and eventually depressed.
Digital Isolation

Utopia, a dream, a fantasy, an imaginary place where social conditions, law and government are flawless. In Kevin Lynch’s, Good City Form: Between Heaven and Hell he discusses different kinds of utopian ideals from Paul Scheerbart’s floating city to the superorganism of Paolo Soleri.

One utopia that seems to correlate with the modern-day society more than the rest is the views of Antonio Sant’Elise. In Antonio’s utopia, he writes of a world based upon speed, communication, authority, and energy. In the 21st century we are living in Antonio’s vision, living in a world striving upon mobility and dynamic activity. Post-World War II, we have accelerated the speed of life through the invention of planes, portable computers, and cellphones. No longer is an individual bound by the mediums they use, but with this mobility one has created a world where humans have become less mobile. Anything can be accessed with the click of a button; millennials have become consumed with this accessibility, that these devices have become a part of the new generation. A virtual gateway connecting us to the outside world. Creating a way of life where isolation is socially acceptable, but does this truly compliment the hierarchy of human need?

It seems that we need to go back to the ideals of Wright where one isn’t obsessed with private greed and accessibility. We need a movement back to the artists of Morris, allowing for a rebirth of the craftsman. In the digital world, we live in a conflicting position where one is completely connected though the digital medium, yet we are completely disconnected within the function of how the digital medium operates. One isn’t meant to know the mechanics of the digital medium, they are designed in an inaccessible manner. One is only meant to see and know the end resolute of this medium, an illuminated database. The definition of the craftsman has completely transformed within the digital age. It seems as if the mediums we use every day have more control over us then we do over them.


Abstract

Project Description

The Craftsman, an identity based upon the intimate bond between the body, the mind, and the material. This thesis is a celebration of the craftsman in an effort to bring back the importance of engaging in the narrative of the object.

Through the exploration of ceramics, glass work, and textiles, this thesis is a proposal that’s purpose is to mend the importance of the tactile process of making. Designing for a centralized, embodied energy to create a tactile playground that highlights the art of production through the redevelopment of the vacant McCormick’s Factory located in the heart of the Old East Village in London, Ontario. This thesis creates a space where one can learn, explore, and be stimulated by the spirit of the craftsman’s process; inspiring methods of making, while at the same time bringing new life to a building that was once a source of pride for the community.

QUESTION

Is it possible to bring back the spirit of tactility behind the methods of making?
London, Ontario is currently the 11th largest city in Canada by population, and the 5th largest city in Ontario (Census 2016). It is located approximately half way between Toronto and Windsor.

In 1901, Sir John Carling, Tory MP for Ontario described the development of London as being primarily based upon 3 key events; the designation of the court and administration in 1826, the arrival of the military garrison in 1838, and the arrival of the railways in 1853. This is the foundation of London, but it has evolved since then. Leading London’s evolution is their innovative expertise in Information Technology.

Although London has a large area it is still recognized for maintaining an intimate community, known for their creative entrepreneurs, educators and city builders. London also has an established rural connection largely due to its proximity to Canada’s farm belt, creating easy access to local produce for further small business development.

8300 BC: Aboriginal settlements resided in the London region.
1793: John Graves Simcoe and his party first viewed the main forks of the Thames River (The Forks). He proposed this site to be the capital of the province.
1796: Chippewa Indians sold The Forks to the Provincial Government.
1800: The District of London was proclaimed.
1826: City of London was founded. Provincial Bill was passed designating the forks of the Thames as the administrative and legal centre of the London District. Establishing the court and administration in London.
1838: Arrival of the military garrison.
1845: London Fire: A fifth of the city was destroyed in one day. London was mainly constructed of wood at the time, which lead to 5 million dollars of damage, destroying 150 buildings and nearly 30 acres of land.
1853: Arrival of the railway.
1855: London was incorporated as a “city” (10,000 or more residents)
1867: Confederation of Canada.
1874: East London was developed; the industrial centre of London.
1878: Western University was founded (03.07.1878)
1883: 1st London flood: Killing 17 people (12.07.1883)
1890: South London was developed, including Wortley Village.
1937: 2nd London flood: Destroying 1000 houses and 50 million dollars of damage to West London (26.04.1937)
1953: Fanshawe Dam on the North Thames was constructed to control flooding.
1961: North London was developed, this includes Broughdale, Byron and Masonville, adding 60,000 people and more than doubling its area. After this development, suburban growth accelerated as London grew outward in all directions, this included Westmount, Gakridge, Whitchells, Pond Mills, White Oaks and Stonybrook.
1967: Fanshawe College was founded.
The London Community

Demographics
Population: 426,200 (July 2016)\(^{22}\)

London’s population has increased 20.94% since 2006.\(^23\) As you can see from the population pyramid that most the population is between the ages of 15 to 55, making the majority of the demographic of working age. This is currently a healthy population, but this could lead to issues in the future. The population will start to age and retire all at once, creating a significant drop in the work force and consequently force an increase in taxes. The dependency load will increase, creating more stress on the younger generation. To counteract this future development the birth rate or the work force will need to increase.\(^{24}\)

The London Economy

Employment
Unemployment Rate: 5.5% (FEB. 2017)\(^25\)
Minimum Wage: $11.40/hr (OCT. 2016)\(^26\)

According to a study published by Dr. Kerr of The London Poverty Research Centre at King’s College in London, Ontario. London has been in a virtual holding pattern with regards to employment for the past decade. In his study, he states that London’s population has grown at a moderate rate (8.8%, or by over 30,000), over the last decade (2001-2011), but the employment opportunities in London haven’t kept up, increasing by 1.1%.\(^27\) In addition, the Statistics Canada Labour Force Survey revealed that in the London CMA (Central Metropolitan Area) the number of full time jobs available in London in 2015 was lower than a full decade earlier, at 197,400 jobs relative to 202,800 jobs in 2005, for a loss of 5,400 full time jobs over the decade.\(^28\)
The London Economy

Background

As mentioned previously, the arrival of the railways, military garrison and the establishment of the courts were the key factors that played a major role in the founding of London. London is currently known for their innovation in Health Care, technology, and education.29

Health Care

London is one of Ontario’s major cancer research centers and boasts a particular strength in developing medical imaging technology.30 The city is home to the Lawson Health Research Institute, Robarts Research Institute and the Centre for Imaging Technology Commercialization. Life science and biotechnology research is the source of $1.5 billion in economic activity for the city annually.31 London is also known for the discovery of insulin and birth control.

Technology Industry

The technology industry is one of London’s most thriving communities; there are currently 300 firms and 8000 employees working in the technology field in London.32 Some of the more groundbreaking companies are Arcane and The London Roundhouse Project, which is home to Ellipsis Digital. As recent as October 1, London welcomed yet another tech based company, the British Columbia based Bron Media has opened a location in London’s downtown core. Kapil Lakhotia, President and CEO of the London Economic Development Corporation stated, “Over 2000 digital creative jobs have been added to our economy over the last 2 years”.33

Education

London is home to Western University and Fanshawe College. Western was founded in 1878, the university is known for Western’s Ivey Business School and their award winning faculty and staff. Located throughout London is the campus of Fanshawe College. Fanshawe is known for their wide variety of programs. In June of 2016, Fanshawe completed construction on a new facility called the Canadian Centre for Product Validation (CCPV). The building conducts testing for electrical, mechanical, performance, environmental and thermal produces. This is the only facility of its kind in Canada.

Fanshawe also plays an important role in providing re-skilling and skill upgrading opportunities for mature learners through the design and delivery of custom training for federally and provincially sponsored trainees, community organizations, sectoral training councils and private sector employers in the business, health, industrial and services sectors.34
The Site- The Old East Village

Location
The Old East Village (OEV) is located in East London, bound by Adelaide Street North and Ashland Avenue.

Boyle Memorial Community Centre
The Old East Village (OEV) hasn’t always been a community with the best reputation, but there has been a consistent effort to revitalize the area with an emphasis on bringing people back to the community and embracing their local shops. The Boyle Memorial Community Centre was established in the Old East Village in 1979 and their new facility was completely in April of 2011. This recreational facility is used for programs such as art classes, yoga, soccer, fencing, after school program, older adults’ euchre and other community activities.

The Community

Local Businesses
The OEV is filled with local artisan shops along Dundas Street. The majority of these businesses being locally owned and putting a primary focus on the Canadian economy. Businesses such as Artisan Bakery, Illbury and Goose, 10Eighteen Coffee Bar, For You Clothing Co. and The Been Garden have emerged to promote local shopping. There are also workshop related shops that are putting importance on craftsmanship and wanting to spread their knowledge into the community. These workshop spaces include: All About Cheese, London Clay Art Centre, The Bus Stop, Forest City Sport & Social Club, and Anderson Craft Ales.

The Western Fair Market
The Western Fair Farmers Market is the place to be on a Saturday in London. A lot of the local businesses in the area start out with a booth at the Market, and have grown into permanent shops in the area. This Market has over 90 vendors currently located at the Market and is full of local farmers, artists and craftsman. Some of the booths include: Beads By Bel, Aroma Scents, Butcher’s Blend, Christine’s Creative Designs, Coyote’s Run Estate Winery, Downie Street Bakehouse, Eggs “R” Us, Goodah at the Market, Old East Vinyl Hub, and Wendy the Potter.
The Site - The Old McCormick’s Building

Location

The Old McCormick’s building is located at 1156 Dundas Street. The original heritage building contains almost 10 acres of floor space and is on a 12 acre lot. This area is currently going through the development process since being purchased by Sierra Construction in 2014.

The Sunshine Palace

Architectural Significance

Before the McCormick’s building was constructed in 1914, Thomas McCormick Jr. spent years travelling; visiting over 100 candy and biscuit factories in the United States and Europe in search of finding the most innovative designed strategies and features for a modern industrial design. After these observations, London architectural firm Watt and Blackwell then designed the facility. When the facility was finally completed it was the largest, most modern, and sanitary factory of its kind in North America. The building was designed with safety in mind. The building features the early works of the Kahn System, designing the building with fireproof, steel reinforced concrete.37

In an era where sweat shops were common, the McCormick family took pride in their employee’s wellbeing by offering them on-site amenities for their comfort and enjoyment. These amenities included a large dining hall, rest rooms, medical facilities, a library, gymnasium, and locker room. There was also a tennis court, bowling green, croquet grounds and baseball diamond located on the outside of the building as well.38

The McCormick’s building was given the name “The Sunshine Palace” because 68% of building’s exterior skin was glazing.39 This allowed for the building to be well ventilated and allowed for sunshine to flood the interior of the factory, which was proven to increase employee productivity and overall happiness. Another factor that contributed to this nickname was the McCormick’s white terra cotta tile exterior. The building was constructed using red bricks then cladded over with terra cotta tile in the front and sides of the building, leaving the brick on the rear of the building exposed.40 This building was 1 of only 2 buildings in London to use this material. McCormick’s chose this extravagant material as a marketing strategy. They wanted this modern industrial building to highlight how clean white and hygienic, “our new snow white Sunshine biscuit and candy factory” was. The interior of the building was then finished with hardwood floors and some white enamel terra cotta tile, these shiny surfaces allowed for the sunlight to be optimized and really display the McCormick’s hygienic atmosphere.41

The McCormick’s Building was designed with 3 entrances, one public and two employee entrances. The center entrance was the public entrance with two recessed employee entrances on either side of the main entrance canopy. The McCormick Family was very proud of their new facility and they wanted to encourage the community to come visit the factory to see how innovative they were for the time. The plant was designed with long corridors with glass partitions to allow the public to view the plant operations without entering the rooms. Balconies on the second floor allowed visitors a view of the oven room. The building consists of a basement, 4 floors and penthouse office suite on the fifth floor right above the main entrance. The factory was separated into 3 wings; the west and center wings contained the production area and warehouse portion of the building. The east wing contained the bakeshop where all the ovens were kept. Originally, this wing was covered in skylights but those were then removed and replaced with a solid hipped roof.42 The gaps between were designed to be able to fit railcars onto rail sidings for shipping and receiving. These gaps also allowed for more sunlight to come into the building, and keep the factory well ventilated.
HISTORY OF McCORMICK’S

Timeline

The following timeline is a brief history of the old McCormick’s building in London, Ontario. The building is located at 1156 Dundas Street.

1849
Thomas McCormick emigrated from Ireland.

1850
Opens a Biscuit & Candy shop on Clarence Street [5 employees].

1858

1875
Now 100 employees.

1906
McCormicks

1912
429 employees. Considers move to Montreal, but City of London buys existing building and gives them tax incentives to remain and locate their new plant on the Dundas Street East location. At the same time CPR and Grand Trunk Rail create transfer line to facilitate rail service to industries locating in the East end location.

1913

1914

1926
Great Depression takes a toll on the company.

1930

McCormick opens new plant. Plant places importance on employee’s well-being including baseball diamond, tennis court, bowling green, gym, library and locker rooms in design. Shortly after its opening it was producing 135,000 lbs of candy and 100,000 pounds of soda biscuits per day. During busy season as many as 800 employees.

Prior to WWI, Government stated increased concern with the purity of Hygienic Manufacturing process. Thomas Jr. McCormick travels facilities around the world to gain knowledge and with Blackwell designs a plant that was considered “one of the finest and most sanitary factories in N. America”. The building was constructed of fireproof reinforced concrete, and finished with white enamel terra cotta tiles. [Image of Thomas J. McCormick, 1926]
Culinary Food of Montreal acquires McCormick's.

1967

1300 employees.

1952 employees.

1937

Last remaining son and existing President of plant, Frank McCormick dies.

1930 McCormick is sold to George Weston Ltd. Frank stays on as President.

McCormick's purchases competitor DS Perrin and Company Ltd.

The McCormick's Plant closes for good. Beta Brands Limited goes out of business, putting 292 people out of work.

2006

2012

2003

Beta Brands Inc. changes its name to Beta Brand Limited.

1997

Beta Brands Inc. purchases McCormick's.
As the McCormick's Factory grew throughout the years, so did the building. Unfortunately, after the McCormick's Building changed ownership, and the family left the industry, the McCormick's building went through some unflattering changes; filling the light wells and using cheap metal siding instead of the McCormick's iconic terra cotta tile, taking some of the sunshine from the Sunshine Palace.

City of London sells McCormick building to **Sierra Construction** for $1.
The current development that is being proposed covers 5.3 hectares of the 1156 Dundas Street site. The Proposal includes 43 townhouses, 384-463 apartments and 60,200 ft. of office space. In the existing building 1914 McCormick’s Factory there will be 4 storeys of office space, covering the east wing. On the west and center wing, there will be 4-6 storeys of apartments. Within the 384-463 apartments being proposed, 80-175 of the units will be for seniors. The most common complaint from the community is that the proposed development lacks green park space.
Endnotes


27 Kerr, Don, Dr., and Department of Sociology King's University College at Western. “Placing Recent Employment Data Into Context.” Total Employment for the Census Metropolitan Area (CMA) of London (2015): 10. Web. 1 Apr 2017


CHAPTER 2 -
THE ART OF THE CRAFT
METHODS OF MAKING
INTRODUCTION

Background

Computers are transforming the architectural image of the 21st century, creating a machine of translation through the digital medium. This influence is impacting the human life drastically, by transforming the way we communicate and interact on a social level, and in the way we generate the architectural image and the methods of production in the 21st century. Is this a real step forward, or are we diminishing the integrity of the physical body-space identity in architecture? Society needs to evaluate the significance of the mediums we are using and take control over them because they are currently manipulating and regulating humans in the 21st century. In the Age of Information, we need to bring back the forgotten craftsman or we risk losing the intimate body, mind, and space connection to architecture that has made architecture a craft recognizable through the centuries because architectural drawings were not simply drawn lines on paper. Architectural drawing is an exploration of the cognitive experience, connecting the way one acts within the built environment by creating an experiment, an opportunity for something to be lived.1 As architects we are master builders. Our drawings are the product of one’s imagination, vision and expression of one’s physical self. This information is compiled to create an architectural drawing that is not only a destination to design, but a journey to discovery.

One should question if the control and hastiness of the digital medium that architects are currently using in professional practice are truly elevating the field of architecture. Is this epidemic deteriorating the integrity of the art and production that is encompassed within architecture? To answer this, we need to explore the environment we live in now and the tools that have been granted to us to ‘make our lives better’, as nothing is more powerful than the physical self and the craftsman.

This thesis is an exploration behind the methods of making by reopening the narrative of the craftsman and displaying how the knowledge of the craftsman can be transformed in architecture. The methods of making that are being explored are ceramic, glassblowing and looming. First, the process of how these mediums are made will be discussed then, how these methods can be transformed into architecture. The main objective of this exercise is to demonstrate how the tactile relationship can inspire the world around us and knowing these methods can lead to a world of creation and exploration.
Methods of Making - The Process

Brief Background

There is evidence that the art of ceramics started as early as 24,000 BC\(^2\). Ceramic figurines were created for ceremonial purposes. The process of creating pottery using the centrifugal force of the wheel has been suggested to have started as early as 6000 BCE to about 2400 BCE\(^3\). Many scholars suggest that the first incident of the pottery wheel was first developed by Mesopotamia, although Egypt and China have also shown indication of using this method as well. Archeologist have found a stone pottery wheel found in the Mesopotamian city of Ur that has been estimated to date back to 3000 BCE. In the early civilization of the Bronze Age, the use of the pottery wheel had become widespread.\(^4\)

Kneading

The first step to creating a bowl is the kneading of the clay. This process is used to compress the clay particles together and get rid of any air pockets. This is the first step to aligning the particles in the clay. The method used below is called “ram head wedging”.

Throwing

The purpose of throwing a bowl is to utilize the centrifugal force of the wheel to create a perfect symmetrical piece by centering and shaping the clay.

Steps to Throwing

1. Throw the ball of clay onto the center of a clean dry pottery wheel
2. Centre the clay onto the wheel, until the clay feels uniform on the wheel.
3. Start digging into the clay creating a V-shape.
4. Start opening up the floor of your bowl, making sure that you don’t dig down too far.
5. Raise the walls of your bowl by squeezing the clay and slowly pulling the walls up.
6. Continue to collar up the walls of the piece until it has reached the desired height, making sure that the walls of your piece are uniform.
7. Slow down the wheel. Then gradually collar out the walls of the bowl.
8. Take the cutting wire and cut off the bowl, holding the wire close to the wheel.
Methods of Making - The Process

CERAMICS

Trimming

Trimming is a technique that is practiced after the thrown piece has dried and become less "plastic". After throwing a piece you must wrap it to keep the piece moist (spray with water if needed), so the clay can still be manipulated. The process of trimming is used to eliminate imperfections from the piece and reduce the weight or thickness of the piece. Production potters or master potters don’t always practice trimming because they have thrown the piece perfectly.

Bisque Firing

After the piece is trimmed and molded into the desired shape, the piece is then bisque fired. The time it takes to fire a piece depends upon the size and thickness of the piece. For a small bowl or mug, typical bisque firing takes 8 hours and reaches temperatures up to 1850 degrees Fahrenheit. The piece takes 24 hours to cool down fully after leaving the kiln. During this process, the piece will shrink up to approximately 15%, as seen below.

Glazing

Glazing your piece is the process of applying a finish to the bisque fired piece. This technique can be used for decorative purposes or to create a seal so the piece can be food safe. After the glaze is applied and cleaned off the bottom, the piece is fired for 8 hours and reaches temperatures up to 2200 degrees Fahrenheit, and takes 24 hours to cool down. During the firing process the glaze reacts differently depending on the chemical make-up of the glaze and the combination of glazes that are applied to the piece. The transformation of the glazes while they are being fired is drastic, as you can see below.
During the investigative and experimental process of pottery I learned the basic valuable methods of throwing and hand building. Some of the key elements of this process that I am going to highlight and translate through design are the elements of centering, the use of plastic memory, scale, and glazing.

Centering

When you are throwing, and centering the clay this is the intimate connection with the clay. Then you are making anything with clay that is going to be fired that main objective is compress and align the platelets of the clay, or else the piece will crack or break.

Centering is the act of finding balance and harmony with the body, the clay and the wheel. It is important that the craftsman is calm, balanced and steady. The process of how one centers the piece varies depending upon how the potter feel most comfortable, this is largely influenced by potter’s hand size and movements where one feels contented. This is a very independent exercise and can take years to fully master.

Plastic Memory

When the clay is still wet and at a consistency where it is ready to be thrown, it is in its most plastic state. Clay is a medium that is not very forgiving because every movement you make with the clay is remembered. Making it hard to thrown larger piece because if you make a mistake in the beginning it will then be amplified as you collar out the piece.

Scale

When the clay goes through a bisque firing is shrinks up to 15% this doesn’t seem like much but it can really transform the result of the piece. I found the change of start and extraction of moisture from the piece fascinating.

Glazing

The process of glazing is the art of applying a fragile layer of powdered glass. The process of applying the glaze to the clay body can be done in a variety of ways, such as dipping the piece into the glaze or painting the glaze on. When one is glazing you need to be cautious of over glazing and the the glaze mixture must be stirred throughly to achieve a consistent result.
Methods of Making - The Process

Glassblowing

Brief Background

The invention of glassblowing techniques as we recognize it was invented in 50 B.C.E. by the Phoenicians on the Syro-Palestinian coast. Methods of glass production started in 1500 B.C.E. by Ancient Egypt and Mesopotamia. Many of the methods they practiced stemmed from the knowledge they gained from working with clay and other metals. Below is a brief series of steps that show you how to create a paper weight.

Gather and Maver the Glass

When you are practice glassblowing the main aspect to remember is to always keep the pipe turning to keep the piece on center while you are shaping. This is important so one can maintain control over the piece and not let it fall off the metal pipe. The first step to making a glass paper weight is to dip the metal pipe into the glass furnace and make your first gather. After this, one moves their pipe over to the maver, a metal table. One mavers (rotates their piece of glass along the table) their piece on the maver allowing the first gather of glass to shape and cool. After the piece of glass is cooled, it goes back into the glass furnace for a second gather and the process is repeated.

Adding Colour to Glass

Adding Glass Colour

The first step to adding colour to glass is to hover your piece of glass in the furnace to increase the temperature of the glass. After the glass is back to a molten temperature, it is taken over to where the colour is laid out. The hot piece of glass is rolled over the coloured glass, allowing it to melt into the piece.

Shaping the Glass

After the coloured glass is added, the piece one then goes to the work bench. This is where all the blending of colour and shaping of the glass happens. To blend the colours in the piece you first go back to the furnace to get a good heat. Then one goes to the bench and starts pinching and twisting the piece of glass with metal pliers. To add air pockets into the piece one pokes with the metal poke.

Final Gather and Shaping

After the piece has been shaped and blended, it goes back to the furnace for the last gather, and the final maver of the piece. Once cooled, it goes back to the furnace for a good heat, then heads back to the work bench to shape the piece of glass with a block.
Methods of Making - The Process

Glassblowing

Shaping and Finishing

After the piece of glass is molded in the block, the metal jack is used to create a break line. For this example, a heart was being made so the ball of glass was then flattened with a graphite paddle; the paddle is made up of graphite because glass doesn’t stick to it. Then, using the force of gravity, the crevice of the heart is made. Finally, after another good heat in the furnace, the tweezers are used to pull the bottom of the heart. After you finish shaping the piece, you grab the piece with tongs, tap the rod and the finished piece will break off.

Kiln

After the piece is broken off a blow torch is used to smooth the broken edge, and the piece of glass is put into the kiln at 1000 degrees Fahrenheit to set. It is left in the kiln to cool down slowly and evenly, so the piece does not break. The piece is in the kiln for 10 hours to allow it to come down to room temperature. When the piece is taken out of the kiln, if there is still a mark where the rod used to be it can be polished down so it becomes less noticeable.

The Final Product

Throughout the process of making the piece, I was inspired by each transformation. The colours continued to change at each stage of production as I interacted with the medium shaping it while allowing the glass to naturally move the colours and created the final piece. You can see the transformations in colour below.
While briefly learning the fundamentals of glassblowing, I found a lot of inspiration that could be translated into design. The elements that I am focusing on that are featured in the design are progression of colour within the piece as it is being formed, heated, cooled and manipulated. The body movement that is needed throughout the process in order to keep the strength and integrity of the piece. Finally, the movement and use of tension and is used to manipulate the shape of the piece.

Centering

Centering is the process of turning the steel rod. During this process the glass is constantly in motion, constantly falling. It is important to recognize the weight and heat of your piece so one can maintain the proper speed of rotation. This process holds the same importance as it does in pottery, but with glassblowing it is a much more collaborative exercise. You are constantly depending upon your assistant, from opening and closing the furnace to assisting with the passing of tools. The art of glassblowing can be dangerous because of the high temperatures. Having an assistant is necessary for a glassblower of any skill level.

Colour

As you are working with the glass and watching the glass take shape, you are constantly reheating it. It is difficult to identify exactly what the result will be when you are working with a variety of colours. I found this process to be a hidden beauty behind the process, an instance in the glass process that should be celebrated.
Methods of Making - The Process

LOOMING

Brief Background

A Loom is a machine used to weave a textile material. The art of looming has been practiced since 4400 B.C.E. The following process below will be describing how to warp and weave a scarf using the Ashford SampleIt Loom.

Parts of the Loom

The Diagram below label the parts of the Ashford SampleIt Loom, that will be referenced as the rest of the process is explained.

Threading and Wrapping the Loom

1. The first step to threading a loom is to clamp the loom to the table and clamp the warping peg to the other end. This length will be the length of your piece.
2. Next is to tie yarn to the back warp stick and thread the yarn through each slot on the reed.
3. Pull the yarn down the table and warp the yarn around the warping peg. Sit the ball of yarn on the floor behind the loom. Continue this process for every slot in the reed.
4. Take a piece of strap yarn and tie the ends of the scarf by the back peg. Then cut all the looms that are wrapped around the warping peg.
5. Have someone hold the warp ends that you just cut and turn the back handle towards you until the back warp stick goes around the roller once.
6. Insert pieces of cardboard to separate each rotation as you are turning the roller.
7. Stop when the tie is at the front of the loom. Remove the tie. Do not wind any further! Unclamp the loom.
8. Loosely group each piece of yarn into groups of 6. Then starting with the middle, working outwards evenly. Tie each group to the front warp stick.
9. Make sure all groups are at the same tightness, then tie a half bow knot to secure the threads.
10. There are 2 weaving positions. First lift the reed into the up-weaving position. Insert a cardboard warp stick into the shed. Slide it to the front of the loom.
11. Change the reed to the down weaving position. Insert a cardboard warp stick into the shed. Slide it to the front of the loom.
Methods of Making- The Process

Weaving

1. Wind the weft yarn onto the shuttle.
2. Change the reed to the up-weaving position. Take the shuttle and pass it through the shed.
3. Use the reed to gently push the first row of weaving up to the cardboard warp stick.
4. Put the reed into the down weaving position. Use your fingers to place the end thread into the shed.
5. Pass the shuttle through the down shed. Use the reed to gently push the second row into place. Then pass the shuttle through the up position. Continue this plain pattern till you have reached your desired length.
6. When you reach the end, leave enough warp for your fringe. Cut the weft yarn and leave the end out. Cut the warp yarns along the back warp stick. Take care not to cut the warp stick ties.
7. Release the front pawl and unwind the weaving from the front roller. Undo the knots on the front warp stick and remove the work from the loom. Take out the cardboard warp sticks.
8. Lay your work on the table and tie the ends in groups of four. Use overhand knots or twist with the Ashford Fringe Twister. Darn the end of the weft thread into your work using a wool needle.

Finishing

After one has finished removing the piece from the loom and tying all the ends, it is recommended that you wash the piece. Washing the piece will even out the tension throughout the final product and tighten up any loose ends.
Endnotes


10. Ashford Handicrafts Limited. 16-26. Web. 1 Apr. 2017

11. Ashford Handicrafts Limited. Web. 1 Apr. 2017
CHAPTER 3 - LINKING THE METHODS
THE INSPIRATION
INTRODUCTION

The Digital Influence

Over the last century, the creation of the architectural drawing has transformed dramatically. Creating a method of production where one is constantly translating the architectural image by inputting data into a Building Information Modeling software. This digital influence has impacted the human life and production radically; offices that were once full of draftsman can now operate with less than a quarter of the staff, producing an architectural drawing set in a fraction of the time. Is this a real step forward, or are we diminishing the integrity of the physical body-space identity in architecture. Society needs to evaluate the significance of the mediums we are using and regain control over them because they are currently manipulating and regulating humans in the 21st century. In the Age of Information, one needs to be constantly reminded of the craftsman, artist and architects that came before us. If we fail to return to our roots, we risk losing the intimate body, mind, and space connection to architecture that has made it a craft recognizable through the centuries. Richard Sennett discusses in his book The Craftsman how "CAD, computer assisted design" can be abused. Describing the process of hand drawing as an in depth visual analysis where one "gets to know the site in a way that is not possible with the computer", he then goes on to describe this course of development as not nostalgia, but as an observation that,...addresses what gets lost mentally when screen work replaces physical drawings. As in other visual practices, architectural sketches are often pictures of possibility; in the process of crystallizing and refining them by hand, the designer proceeds just as a tennis player or musician does, gets deeply involved in it, matures thinking about it. The site, as this architect observes, "becomes ingrained in the mind." [40]

Architectural drawings are not simply drawn lines on paper. Architectural drawing is an exploration of the cognitive experience, connecting the way one acts within the built environment by creating an experiment, an opportunity for something to be lived. As architects, we are master builders. Our drawings are the product of one’s imagination, and vision. This information is compiled to create an architectural drawing that is not only a destination to design, but a journey to discovery. One should question whether the control and hastiness of the digital medium that architects are currently using in professional practice is truly elevating the field of architecture. Is this epidemic deteriorating the integrity of the art and production that is encompassed within architecture? To answer this, we need to explore the environment we live in now and the tools that have been granted to us to ‘make our lives better’.

In his book The Craftsman, Richard Sennett acknowledges that the modern material world could not exist without CAD, but that he too has reservations.

"In architectural work, however, this necessary technology also poses dangers of misuse. Unlike a physical model, the screen model can be quickly lengthened, shrunk, or broken into parts. Sophisticated applications of CAD model the effects on a structure of the changing light, wind, or seasonal temperature change." [39]

The problem behind these mediums is they are meant to have this complete, holistic, organized approach to architecture but they restrict and control one’s movement; they cannot touch, feel, smell or sense any of the true tactile spiritual connections to the space. The large issue here is these simulations can be a poor substitute for tactile experience. Computerized design leaves the architect with no connection to his materials. As Richard Sennett describes the tactile memory of drawing one’s chosen material through the illustration of the brick, "Drawing in bricks by hand, tedious though the process is, prompts the designer to think about their materiality, to engage with their solidity as against the blank, unmarked space on paper of a window." [4] When a hatch is instantly added, as with a digital design, the architect has little time to think about the consequences or advantages made by that instant addition. Each piece of the design can become less significant if one gives into the accessibility of the digital medium. Sennett then goes on to discuss the main issue that needs to be stressed in the relationship between the architectural image and the modern computer program,

"The issue—I want to stress—is more complicated than hand versus machine. Modern computer programs can indeed learn from their experience in an expanding fashion, because algorithms are rewritten through data feedback. The problem, as Victor Weisskopf says, is that people may let the machines do this learning, the person serving as a passive witness to and consumer of..."
Pallasmaa describes the tools one uses as guides to control one’s actions and thoughts in specific ways; the connection between the medium one is using and one’s self is significant. This connection is the essence of the union of the hand, tool, and mind. In order to become a true craftsman one needs to embody the mediums they are using. “All materials have their own unwritten laws. You should never violate the material you’re working with. The designer’s purpose is to be in harmony with the material.”

This outcome will be strongly based upon the quality of the material and its ability to connect with the craftsman throughout the process of making. Pallasmaa then goes on to discuss how a craftsman sees this intimate connection and then, knowing his material fully, he is able to invent and create his work. In the manufacturing industry, when materials are mass produced, the process of knowing your material is disconnected and seems inconvenient to change. Pallasmaa continues to dissect the digital medium further discussing how the computer has “broken the sensual tactile connection between imagination and the object of design.” This connection is strongly based upon the quality of the material and its ability to connect with the craftsman throughout the process of making. This process is no longer present within the constraints of the interface of the digital software we use in architecture today.

Marco Frascari separates the process of architecture into four categories: typography, photography, chirography and oral. Typography means the use of computer technology, and chirography the use of drawing tools and materials. In the contemporary world of architecture, tools and representation have evolved to create our present condition. Marco believed that the evolution of the typography environment is eliminating the sense of material play in architecture. Computers are limiting the imagination of the architect and they have been recognized to be a very harmful addition to the realm of architectural representation.

The digital influence is impacting our lives every day. It could be said that the perspective that media theorist, Marshall McLuhan had in the 60’s and 70’s is even more relevant today. Although McLuhan was very misunderstood for his time, his theories are very much present in today’s society and should be brought to the forefront. McLuhan believed that every human artifact and tool that man created was an extension of the human body, stating, “We shape our tools, then our tools shape us.” This statement has proven to be very true in our world of architectural software programming. We have changed the way we draw; translating our sketches and drawings into a restricted maze. Daniel Willis referred to the process of trying to navigate through a computer program in an architecture situation as being similar to the sensation of being trapped in a labyrinth.

Digital Production

The digital medium has revolutionized the way we build in the 21st century. Architects can work more efficiently than ever before, but have they broken under the pressure and sacrificed the quality of the built form in order to be cost effective and time efficient.

In Peter Gay’s book Modernism, he discusses the evolution of the machine in the 19th century. As the 19th century increasingly became an age of machinery, architects were compelled to take a stand. More and more, mechanical devises were replacing unaided human power, and not in factories alone. The typewriter, the transatlantic cable, the fast train, the elevator, the automobile, the vacuum cleaner, and in building materials like concrete and steel that made window walls possible, changed life in the factory, the office and the home forever. What had once been the product of laborious (and expensive) manual fabrication was more and more being fashioned in large quantities, and far more cheaply. The question remained whether this revolution was a curse or a blessing. There were plausible arguments on both sides.

Peter Gay questions the revolution and this as something worthy of consideration. In the 21st Century, we are constantly searching for ways to reduce our work hours to make our lives more efficient. We are obsessed with the tools and machines that we believe make our lives easier; but does this really improve our quality of life? Just because one has the tools to create an easier life, that doesn’t automatically equate to success and happiness in life. It could be said that the human artifacts, tools and machines of the 21st century have been weeding out the need for a once valued skill set within human civilization.

In the technologically advanced world we weigh the time it takes to build something versus the quality of the resultant product. The common thread through all industries seems to be that manual...
Linking the Process

labour is inefficient and swapping the living, breathing, thinking human with a computerized replacement is a competent and reasonable transition. In the 16th century the artist was one of the valued elements of society, but today the artist is known as a “struggling artist”. Since they rarely receive monetary compensation that is commensurate with the time spent, the profession is appreciated, but not always valued. We have lost the once magical touch of the human hand and replaced it with a web of mass-production. It’s hard to even find a Christmas gift for someone that is made in Canada. But the tables may be turning as we begin to evaluate our needs and return to traditional values. Pallasmaa also refers to this topic in his book The Thinking Hand: Existential and Embodied Wisdom in Architecture, The tradition of craftsmanship is clearly gaining increasing value and appreciation in today’s reality of the technological world, mechanical production, and the regrettable loss of the touch of the human hand in our mechanically mass-produced products and environments. (51)15

It should also be noted that, the art of making from the craftsman’s perspective was not solely based upon the expression of an individual with a particular destination. The making of these objects was also a shared experience; one meant to have with others. The craftsman’s gift of experience was passed on to further generations of knowledge16, like learning how to make all the special homemade baked goods with your Grandmother. Not only was the apple pie delicious, but the experience created memories that would last forever because of their physical and emotional connection. Making pastry will always bring you back to the tactile memories of Grandmother dancing around the kitchen while she was teaching you to feel the pastry, and not mix it, to properly create her signature flaky crust. Communication over the computer is just a transfer of information, there is no tactile memory that brings you back to that certain space and moment in time that you loved or hated; one is essentially talking into a void. The most important element of the tactile memory is that you felt something that you can hold onto. “Craftsmanship arises from manual skill, training and experience.”17

This thesis is inspired by, The Arts and Crafts Movement, but with an added element of the digital influence in the 21st century. William Morris believed in displaying the truth behind the materials one was using and to celebrate its individual qualities. He believed in the knowledge of the craftsman as a valuable celebration of creativity. He wasn’t against the technology of the machine itself, but against the resistance of the machine and the homogeneous magnanimity of the industrial revolution.18 He scorned the degradation of the craftsman into a mindless inhumane robot working along an assembly line doing small restricted simple tasks in poor conditions. Unfortunately, the systems that Morris loathed are still practiced today, but now there is a new threat in the work force. We have created digital machines; difficult to comprehend, made to be “user friendly”, yet they are inaccessible and unpredictable.19 The digital influence has created a work environment that is isolated and immobile. This thesis is a movement away from the controlled computerized translation of the object, to create a celebration of the tactile spirit and memory of the process and craft of the built form. Richard Sennett stated in the Craftsman, “Abuses of CAD illustrate how, when the head and the hand are separate, it is the head that suffers. Computer-assisted design might serve as an emblem of a large challenge faced by modern society: how to think like craftsmen in making good use of technology. “Embodied knowledge” is a currently fashionable phrase in the social sciences, but “thinking like a craftsman” is more than a state of mind; it has a sharp social edge.”20 We need to place more value on the process of architecture because it is here that a design is built, layer by layer, being attentive to our materials and aware of our emotional connection to each element of the design. This thesis is a movement away from the controlled computerized translation of the object, embracing the tactile spirit and celebrating the Craftsman, the process, and craft of the built form.
Linking the Process

Transforming the Methods

The Design

This thesis is based upon the craftsman: the Potter, the Glass Blower, and the Weaver, these are the craftsman that are incorporated into this thesis. I chose to explore and investigate the mediums of clay, glass, and textiles to be used as inspiration for the refabricating of the old McCormick’s Candy and Biscuit Factory in London Ontario.
Endnotes

7. Sennett, Richard. 44. Print.
16. Pallasmaa, Juhani. 52.
17. Pallasmaa, Juhani. 52.
CHAPTER 4 - DESIGN PROPOSAL
THE FUTURE OF McCORMICK’S
The Design

Level 1

Legends
- Circulation Cores
- Residential
- Residential Community Space
- Residential Garbage Area
- Gallery/Market Space
- Commercial
- Food and Beverage Area
- Workshops
- Shipping and Receiving
- Future Development - Phase 2
- Future Development - Phase 3
- Bathrooms
- Underground Parking
- Storage
The Design

Reflected Ceiling Plan

Interior Views

Level 1 - Reflected Ceiling Plan

West Wing Gallery Area

Reception Area and Gallery

Ceramic Studio

Glassblowing Studio

Design Studio
The Design

Section

SECTION 1: MAIN GALLERY
The Design

Section

Section 2: North Side of Building
The Design

Elevations

South Elevation
The Design

Elevations

West Elevation
The Design

Elevations

East Elevation
The Design

Exterior Views
CHAPTER 5 - Postscript
Reflect & Rethink
The dissertation process has allowed me to tap into a spirit that craftsmen have always possessed and from which I have always been inspired. The arts and crafts movement was never against progress or the use of machines—the craftsmen were the original innovators. Going through the steps of each new craft that I did gave me a new appreciation for the methods of making and the relationship between materials and how they can affect the dwellers of a space. The McCormick’s building was the result of months of planning and careful consideration. It was not built just to function as a biscuit factory but to be a meeting place for not only work but also for community. Transforming this building will create a hybrid relationship between the building materials and the methods of making. The design center in the space will draw people together to make tiles and replace broken window while bringing new life to the McCormick’s building and the surrounding community. The making of craft is just the beginning of a process that will embrace the steps that were taking by the McCormick family to build the sunshine palace. I personally have become so inspired by how materials transform in front of you, as you work with them and they take on a personality of their own able to enhance your space as well as function to hold your coffee or keep you warm. Going forward I know this will motivate me to focus more on the steps to design and the evolution that takes place within the building process. If I could change the design at all from my final plan it would be to actually make the pieces of the building by hand perhaps changing the look to embrace the culture of the people of the community but ultimately to have McCormick’s functional again is my end goal. Right now the broken window and vacant spaces are painting a picture of a community that does not care and that is so wrong. The people are my true inspiration and they want their space back. I am so excited to return to the old east village and talk to the vendors and see new ones. The arts and crafts movement is alive and well here and the Old East Village will be a hub of innovation and creative genius in the future. The McCormick’s building will be a centre for the movement back to the methods of making as it is remade itself. I can almost smell the biscuits baking.
EXTERIOR VIEWS

VIEW FROM DUNDAS STREET
Bibliography

Print


Web


"Motion Picture (sound Film)." Motion Picture (sound Film) - New World Encyclopedia. N.p., n.d. Web. 03 Apr. 2017.


Kerr, Don, Dr., and Department of Sociology King’s University College at Western. “Placing Recent Employment Data Into Context.” Total Employment for the Census Metropolitan Area (CMA) of London (2015). 10. Web. 1 Apr. 2017


Bibliography


<table>
<thead>
<tr>
<th>Figure List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>0.01- Image by author</td>
</tr>
<tr>
<td>0.02- Image by author</td>
</tr>
<tr>
<td>0.03- Image by author</td>
</tr>
<tr>
<td>0.04- Image by author</td>
</tr>
<tr>
<td>0.05- Image by author</td>
</tr>
<tr>
<td>0.07- Image by author</td>
</tr>
<tr>
<td>0.08- Image by author</td>
</tr>
<tr>
<td>0.14- Image by author</td>
</tr>
</tbody>
</table>

**Chapter 1**

| 1.01- Image by author |
| 1.02- Image by author |
| 1.03- Image by author |
| 1.04- Image by author |
| 1.12- Image edited by author based up data collected from - Kerr, Don, Dr., and Department of Sociology King’s University College at Western. “Placing Recent Employment Data Into Context.” Total Employment for the Census Metropolitan Area (CMA) of London (2015): 10. Web. 1 Apr. 2017. |


1.22- Image by author

1.23- Image by author


1.31- Image by author


1.38- Image by author

1.39- Image by author

1.40- Image by author


Figure List

1.50- Image by author
1.52- Image by author
1.53- Image by author
1.54- Image by author
1.55- Image by author
1.56- Image by author
1.57- Image by author
1.58- Image by author
1.59- Image by author
1.62- Image by author

Chapter 2

2.01- Throwing Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.02- Image by author
2.03- Kneading Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.04- Kneading Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.05- Kneading Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.06- Kneading Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.07- Image by author
2.08- Throwing Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.09- Throwing Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.10- Throwing Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.11- Throwing Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.12- Throwing Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.13- Trimming Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.14- Trimming Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.15- Trimming Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.16- Trimming Clay, Ottawa, Ontario. Personal photograph by author. 2017
2.17- Bisque Firing, Ottawa, Ontario. Personal photograph by author. 2017
2.18- Bisque Firing, Ottawa, Ontario. Personal photograph by author. 2017
2.19- Bisque Firing, Ottawa, Ontario. Personal photograph by author. 2017
2.20- Bisque Firing, Ottawa, Ontario. Personal photograph by author. 2017
2.21- Image by author
2.22- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.23- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.24- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.25- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.26- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.27- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.28- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.29- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.30- Glazing, Ottawa, Ontario. Personal photograph by author. 2017
2.31- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.32- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.33- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.34- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.35- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.36- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.37- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.38- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.39- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.40- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.41- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.42- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.43- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.44- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.45- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
Figure List

2.46- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.47- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.48- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.49- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.50- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.51- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017
2.52- Glassblowing, Ottawa, Ontario. Personal photograph by author. 2017


In chapters 3, 4 and 5 all images are created by the author.