Culinary Topology:
Rethinking the Parking Lot Threshold at the Montreal Hospital

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Abstract

The parking lot is the arrival area for many people entering the hospital. It is a space of transition between their world and the world of the hospital. It is a critical threshold. This space has an opportunity to become something more than a featureless utilitarian space for cars, it could offer an integrated experience of 'threshold'. This thesis uses culinary theory as an architectural tool to redefine the parking lot as 'threshold'. Cuisine will offer a metaphorical design language as well as a methodology that will act as interlocutor in the design process of rethinking the arrival space between car and hospital.

Cooking is an appropriate guide for this process - it is an act which transforms raw materials through acts of combinations, manipulations and deformations toward a delightful end. Three cooking elements: blanching, sauce and soufflé are used to transform the physical elements of the underground entry threshold at the hospital with an aim to make the experience more appropriate as a gateway between sickness and health.

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Chapter 1 - Introduction

Culinary theory as an architectural tool for exploration has been explored by several theorists, specifically Peter Collins and Marco Frascari. Peter Collins was an architectural theorist and professor of architecture at McGill University from 1956 to 1981. His 1965 book, *Changing Ideals in Modern Architecture*, explores the influences of art and science on architectural theory. Collins expresses modern architecture through a gastronomical analogy of cuisine. Marco Frascari was an Italian architect, architectural theorist and director at Carleton University from 2005 to 2013. His 1991 two essays, *Taste in Architecture* and *Canadian Cosmopoiesis: Meditations on Cuisine and Architecture*, discusses architecture through cuisine. Frascari explains design principles through the understanding of food and culture. For the purpose of this thesis, culinary theory is explored through Collins' analogy of cuisine in architecture and Frascari's design understanding of food and culture.

Beyond Taste

The process of designing for the human body is a design for the senses, made apparent through Frascari's explanation of the loss of sensory experience in a Cartesian world-view. The 'Cartesian world' can be enhanced by the 'sensual world' through Collins explanation of taste in the theoretical approach of art:

*"...Classical recipes for **haute cuisine**, and the criterion of both was that the results should be widely enjoyed. Not just enjoyed by other architects and other chefs, or by the editors of the **Almanack des Gourmets and Architecture Francaise**, but by all persons of cultivated taste. Now this very word 'cultivated' implies that taste can not only be trained but should be trained according to certain universally accepted standards. If those who teach the arts do not believe in such standards, or if they*

*claim that they are still searching for such standards, it is clear that whatever the merits of their instruction, they are concerned essentially with fashion, not with taste.”*¹

Here Collins frames ‘taste’ as the ideology of design expression – an idea which sits in contrast to the standardization of design or fashion. Culinary theory helps us design with a comprehension of the ‘sensual world’; a sensorial expression of a spatial experience through the body in tactility and taste.

Defining “Culinary”

Marco Frascari compares the experience of architectural spaces with the experience of tasting by looking at ‘taste’ as an important sensory moment. Defining ‘taste’ as a sensory moment shows a powerful understanding of an alternative form of cuisine that is not limited by the spatial boundaries of the kitchen. The scholarly, literary, and industrial domain of cuisine becomes a form of cultural expression. Cuisine in architecture as cultural expression is explained by Frascari as follows:

*“Phenomenological language games do not necessarily reflect linguistic or geographical boundaries, but rather enrich the taste of knowledge. The key terms under scrutiny in the specific game joined here are “taste” and its related intellectual “pleasure”. The latter begins in the tactile origin of taste and culminates in the interwoven ramifications of architectural and culinary realms of knowledge.”*²

Frascari discusses the evolution of taste as a sensory experience. He sees the moment of consuming as the most important part of the ‘tasting’ process:

“Rather than valuing what we ingest after the fact, we taste and in so doing we hedonically respond as the evaluative component of our tasting experience. The activity of architectural imagination

¹ Collins, Peter. *Changing Ideals in Modern Architecture. 1750-1950*, 2nd ed. Montreal: McGill-Queen’s University Press, 1998. P 169

² Horwitz, Jamie and Singley, Paulette. *Eating Architecture*. Cambridge Massachusetts: MIT Press, 2004. P.192

*partakes of the same pursuit of sensuous estimative instincts, since it is the transmuting of terrestrial materials into edifices.”*³

Frascari redefines cuisine into a concept where the definition of taste is no longer “the sensation of flavor perceived in the mouth and throat on contact with a substance”⁴ but expands the definition to “have experience of taste”⁵. Frascari’s definition focuses on the overall importance of human interaction and consciousness from sensory experiences.

The Etymology of Taste

Humans understand the world through the perspective of their senses. The visual, auditory, tactile and gustatory senses consist of the sensory input that dictates an understanding of the environment. In Western culture, the visual and auditory senses are predominantly valued. In the *Nicomachean Ethics*, Aristotle expresses the sense of taste as the least important of the human sensory input by relating taste to mere nutrition and growth; an experience “plainly shared with horse and cattle and all kinds of animals.”⁶ However, the etymological definition of the word ‘taste’ in Latin, *sapor*, expresses the understanding of the sense of taste as ‘to know by experience’⁷. This understanding of knowledge is further expressed by the etymological understanding of taste by Isidore of Seville⁸ (Frascari’s translated text):

³ Frascari, Marco. *Canadian Cosmopoiesis: Meditations on Cuisine and Architecture*. Cuizine: The Journal of Canadian Food Cultures. Volume1, Issue2, 2009 (<http://id.erudit.org.proxy.library.carleton.ca/iderudit/037852ar>) p. 3

⁴ Horwitz, Jamie and Singley, Paulette. *Eating Architecture*. Cambridge Massachusetts: MIT Press, 2004. P.192

⁵ (Dictionaries n.d.)

⁶ Peters, F.H.. *The Nicomachean Ethics of Aristotle*. London, Trubner & Co. Ltd, 1906 p.15

⁷ Etymology of taste (v.) Sense of "to know by experience" is from 1520s. Related: Tasted; tasting. , Etymology Dictionary. Online Etymology Dictionaries, s.v. “taste” access May 2018. <https://www.etymonline.com/word/>

⁸ The passage is a Translation of “Sapiens dictus a sapore; qui sicut gustus apatus est ad discretionem saporis ciborn, sic sapiens ad dinoscentiam rerum atque causarum; quod unumquodque dinoscat, at sensu vertiat discernat.” (Isidore of Seville, *Divi Isidori Hispalensis Episcopi Etymologiarum sive Originum Libri XX*. Ed W.M. Lindsay [seventh century; Universidad Complutense de Madrid, digitized By Google]) P.264

“The word sapines (a wise man) is said to be derived from the word sapor (taste) for just as the sense of taste is able to discern the flavors of different food, so too is the wise man able to discern objects and their causes since he recognizes each one as distinct and is able to judge them with an instinct for truth.”⁹

We can also compare the understanding of senses with Kenneth Frampton’s interpretation of the ‘the labile body’. Frampton compares the visual verse to the tactile experience of the body. In his words, this built environment is experienced through:

“The intensity of light, darkness, heat and cold, feeling of humidity, the aroma of material; the almost palpable presence of masonry as the body senses its own confinement; the momentum of an induced gait, and relative inertia of the body traverses the floor; the echoing resonances of our own footfall.”¹⁰

Kenneth Frampton in *The Anti-Aesthetic* and Isidore of Seville both express the importance of the tactile experience of space. The understanding of ‘taste’ in cuisine then can be understood as the quest for knowledge through the experience of the senses. Architectural expression is not limited to the experience of the visual and auditory; tactile and gustatory senses are equally important experiences used to express architectural design. ‘Taste’ as a design parameter when engaged metaphorically becomes a design aid. The ‘taste’ of architecture is defined as the sensory experience of architecture and its making.

⁹ Horwitz, Jamie and Singley, Paulette. *Eating Architecture*. Cambridge Massachusetts: MIT Press, 2004. P.193

¹⁰ Frampton, Kenneth. Cf. *The Anti-Aesthetic: Towards a critical regionalism*, Hal Foster Washington: Bay Press, 1983. p.28

Chapter 2 - McGill University Hospital Center: Site Exploration

Every building has a point of entry which defines the limits of one space and another - a threshold. The physical manifestation of a threshold is often 'a strip of wood or stone forming the bottom of a doorway and this threshold is crossed in entering a house or room.'¹¹ The expanded definition, 'a point of entry or beginning'¹², expands the idea that a threshold is also a zone that leads towards entry. The threshold to many modern buildings is often not the front entrance, nor the drop-off zone, it is in many instances the parking lot. For the purposes of this investigation, the entry sequences to the new Montreal Hospital will serve as the site including the pathways that people take between their car and the hospital (Figure 1 highlighted in orange).

Figure 1 - Site travel mapping

The axonometric drawing describes the four modes of movement towards the new hospital: train, metro, car and walking. The orange dotted lines delineate the arrival patterns of commuters. The illustration illuminates a concentration of pedestrian traffic passing through the parking lot area. The main arrival point and drop off zone is highlighted in orange. The images bubbles denote services (see index).

¹¹ Oxford Dictionary. Oxford Dictionaries, s.v. "topoplogy" access November2018.
<https://en.oxforddictionaries.com/>

¹² Ibid

Brief History of the MUHC

McGill University Hospital Center, MUHC¹³ was founded from the merging of five Montreal hospitals: the Montreal General Hospital, the Royal Victoria Hospital, the Montreal Children's Hospital, the Montreal Neurological Hospital and Institute, and the Montreal Chest Institute. The aim of the merger was to consolidate the resources, research and activities for a modern academic healthcare center for the benefit of all Quebecers. The healthcare complex is located on the site of the former CP Rail Glen Yard in the residential neighborhood of Notre-Dame-de-Grâce. Its location is ideal for emergency response units and ambulance traffic as it is located on the intersecting node of the Turcot interchange. The main roads surrounding the site are Rue St. Jacques, Boulevard Decarie and Autoroute Ville-Marie.

Completed in 2015, MUHC provides accessible amenities and services and consolidated health care built on a unique site. With landscaping covering the parking lot, the exterior of the hospital sits level to the grading of the main street. In an unusual design move, the main entry of the hospital is accessed underground via the Metro connection and through the parking lot. (Figure 2)

Figure 2 - Site

¹³ MUSC: McGill University Hospital Center

Site: Culture des Arts at MUHC

Adopted by the Government of Québec in 1961, the policy of integrating art into the architecture and environment of government and public buildings and sites was called *Politique d'intégration des arts à l'architecture et à l'environnement des bâtiments et des sites gouvernementaux et publics*. This policy stipulates that approximately 1% of the total construction budget of a public building or site must be devoted to the integration of a work of art.¹⁴ The public buildings influenced by this policy include hospitals, government buildings and transportation hubs.

The incorporation of art into building offers a synesthetic approach to regional and cultural design. The new Montreal hospital, McGill University Health Center (MUHC) houses many art installations throughout the building. Vendôme Metro¹⁵, the transportation hub connected to this hospital also houses an art work. The art installation viewed by commuters traveling by the Vendôme Metro (Figure 3) consists of a stained-glass window and stainless-steel sculptures by Marcelle Ferron (1981). The window spreads natural light to the platforms, while the sculpture scatters its endless, changing colors across the station's spaces. Reflecting Ferron's metro station artwork, the view of the hospital from the street is a colorful exterior façade facing the landscape (Figure 4) which also features a large dome sculpture called *Havre* (the French word for haven) projecting its concepts towards the hospital environment. The artist suggests the art work expresses "an exploration of the body as a form of architecture, *Havre* is a shelter for the spirit; for the body, it is a place of respite, an apt representation for the hospital environment."¹⁶

¹⁴ Quebec, Culture et Communication. 2018. *Politique d'intégration des arts à l'architecture*. May 24. Accessed June 8, 2018. <https://www.mcc.gouv.qc.ca/?id=59#c33650>.

¹⁵ Vendôme Metro: underground electric trains station of the Montreal transportation system

¹⁶ McGill University Health Center. 2018. *Linda Covit*. Accessed June 8, 2018. <https://muhc.ca/muhc-heritage/page/linda-covit>

Figure 3 - Vendôme Metro Art

Figure 4 - Exterior of Hospital

Parking Lot and Landscape disconnection

The public spaces for the hospital and the art works each take a different approach to engaging the public: both are integrated with the parking structure but the relationship between the walking path and the viewable areas are not connected. The underground walking path/entry to the hospital has no views of the Havre sculpture, implying that the art work is poorly integrated with public engagement as they arrive and leave the hospital. The flow of pedestrians (Figure 5) shown by orange dotted and bold lines indicate that the public entrance fails to intersect with the art.

Figure 5 - Art work disconnected from public

Public Entrance Area

The path commuters take towards the hospital exist in two main areas; the public transportation area and the parking lot area (Figure 6). The commuters traveling by public transportation exit the Vendôme Metro Station¹⁷ and walk through a public corridor. These commuters merge with pedestrians when they enter the parking structure (Figure 7). The corridor walls and surrounding structure are made of industrial cast-in-place concrete walls, columns and parking dividers. Visitors to the hospital walk through the parking corridor where the dedicated pathway floor is painted red leading to the hospital entrance. The main entrance is defined in the drop off zone with yellow painted stripes. These painted floors are how the hospital currently orchestrates the entry sequence to the hospital. This thesis project aims to improve upon this as an architectural experience using cuisine as a guide for the design process.

Figure 6 - Section Pathway

¹⁷ Ibid

Parking Lot Passage

Hospital Connection

Figure 7 - Parking Lot

Chapter 3 - Cuisine as Guide to Design Process

Architecture and Cuisine

Both architecture and cuisine are experienced in the physical environment. The word *culinary* is defined by the Oxford Dictionary as an adjective *of cooking* which is “the practice or skill of preparing taste by combining, mixing, and heating ingredients.”¹⁸ Therefore, we can propose that cuisine is expressed through the act of preparing. *Culinary theory* via Marco Frascari’s understanding of ‘taste’ previously described is understood as ‘to know by experience’ or to know by the practice of making (in both cookery and architecture) including combining, mixing, and heating ingredients.

Cuisine

Cuisine is considered the identity of a person’s culture. It can be taken from the memory of an ingredient, a craving, and/or a desire to make the best taste. The TV series, *Mastering French Cuisine* with Julia Child¹⁹ demonstrates a way to explore the “knowledge” in cooking. Classical French cuisine takes a singular ingredient and makes it – to many of us - the best taste that it could become. The basics of cooking can be understood within a dish. This thesis will consider how the process of understanding cuisine directly informs the process of architectural design and provides a refreshed sensory design exploration.

¹⁸ Definition of culinary (adj.) Latin *culinarius*, from *culina* ‘kitchen’. For cooking The practice or skill of preparing food by combining, mixing, and heating ingredients, Oxford Dictionary. Oxford Dictionaries, s.v. “culinary” access May 2018. <https://en.oxforddictionaries.com/>

¹⁹ Child: Julia Carolyn Child (August 15, 1912 – August 12, 2004) an American chef, author and television personality. She is most known for her book and television program *Mastering the Art of French Cooking*.

Think Like a Cook

If architecture is an expression of design thinking and metaphorical thinking simultaneously, this thesis will express “culinary theory” as the vehicle to embrace them both in the design of a new entrance to the hospital. Architectural design based on this interpretation of “culinary theory” can be drawn out from the fundamentals of a cooking style. The connection to the human body is focused through the lens of Julia Child’s *Mastering the Art of French Cooking* (a North American manifestation of French cuisine). The cuisine practices depicted throughout Child’s book will serve as a base layer or foundation for design drawings as illustrated in Figure 8. The act of drawing over the cooking image serves as a foresight to the project’s design language.

Figure 8 - Think Architecture like a Cook

Chapter 4 - Cooking Elements - Design process

Design Process - View of a Cook

The fundamentals of cuisine are 1) the preparation of ingredients, 2) harmonizing taste combinations and 3) the presentation of a dish. The ideologies in the cooking process reflect a 'style'²⁰ of food. For the purpose of this thesis, *preparing ingredients* will be explored in the process of blanching²¹, *harmonizing taste combinations* will be explored in the process of making a sauce/roux²², and finally *presentation* will be explored in the process of making a soufflé.

The Cook Prepares Architecture

Architecture uses many different materials to create a design and cooks uses many ingredients in to create a dish. The process of defining architectural materials and their use parallels the process of preparing ingredients. While vegetables are an everyday ingredient, the process of blanching locks the vegetable at its peak. Child describes blanching as using a singular ingredient and maximizing all the potential uses.

*"The French are interested in vegetables as food rather than purely nutrient objects valued for their vitamins and minerals. And it is in the realm of green vegetable that the French methods differ most radically from American. The French objective is to produce a cooked green vegetable so green, fresh tasting, and full of flavor that it really can be served as a separate course."*²³

²⁰ Definition of style (n.) A particular procedure by which something is done; a manner or way. Oxford Dictionary. Oxford Dictionaries, s.v. "style" access May 2018. <https://en.oxforddictionaries.com/>

²¹ blanch, blanchir: to plunge food into boiling water and boil until soft or wilted, or partially or fully cooked. Food is also blanched to remove too strong a taste, such as for cabbage, onions or for the removal of the salty, smoky taste of bacon. *Mastering the Art of French Cooking*.

²² roux: In French cooking, the flour and butter, which acts as a thickening agent for sauce, are always slowly cooked before any liquid is added, *Mastering the Art of French Cooking*.

²³ Child, Julia, Simone Beck, and Louisette Bertholle. *Mastering the Art of FRENCH COOKING*. New York: Alfred a Knof, 1964. p.421

When cooks *blanch*²⁴ architecture they identify important features of the space as that must be preserved or “locked in at their peak”. The key features that highlight the spaces in the entry sequence of the MUHC are the stained-glass windows of Vendôme metro and the exterior sculpture the Havre. The architectural blanching process must therefore take the material characteristics of these design elements and maximizes their best qualities. The cook’s result of blanching stained-glass windows and the Havre sculpture create sparkles of coloured glass, a sense of enclosure and gentle curved forms.

The Cook Harmonizes the Taste of Architecture

The element that a cook uses to harmonize²⁵ a dish is the sauce. The sauce naps²⁶ everything together and amplifies the overall dish. In terms of architecture, the physical element that holds things together is the material of the structure. Architectural structural material and the culinary sauce are both enhancing elements. Child describes the essence of a sauce as the enhancing element of a dish:

*“Rich Sauces should be used sparingly, never more than one to a meal. And a sauce should never be considered as a disguise or a mask. Its role is to point up, prolong, and complement the taste of the food it accompanies, to contrast with it, to give variety to its mode of presentation. One of its most useful functions, also, is to make an interesting dish out of something simple and economical, like hard boiled eggs, plain poached fish, canned food or leftovers.”*²⁷

²⁴ blanch: design elements that highlight the space and are important to the area.

²⁵ Definition of harmonize (v.) Make consistent or compatible. Oxford Dictionary. Oxford Dictionaries, s.v. “harmonize” access May 2018. <https://en.oxforddictionaries.com/>

²⁶ Nap, napper: to cover food with sauce which is thick enough to adhere, but supple enough so that the outlines of food are preserved. *Mastering the Art of French Cooking*.

²⁷ Child, Julia, Simone Beck, and Louisette Bertholle. *Mastering the Art of FRENCH COOKING*. New York: Alfred a Knof, 1964. p.54

Child's recipes for sauces describe that they are made from a base liquid²⁸, thickened with roux²⁹, enriched with fat (butter, cream and/or egg yolk) and finished with a dash of seasoning (salt, pepper, herb and/or spice). When a cook thinks about the sauce³⁰ of architecture they identify the key structural material for the building – concrete.

As the architectural 'sauce' of this project, concrete and the manipulation of its ingredients, water, cement and aggregates will be employed to change its characteristics and create a harmonization of elements. The manipulation of the ingredients of concrete will serve to join elements identified from the blanching process including sparkles of coloured glass, sense of enclosure and curved forms. As illustrated in Figure 9, the sparkle of the coloured sauce envelops over and delineates a space connecting the Hauver sculpture above ground to the parking garage below ground.

Figure 9 - Architectural Sauce

²⁸ liquid: In French cooking, the stock, wine and milk, *Mastering the Art of French Cooking*.

²⁹ roux: In French cooking, the flour and butter, which acts as a thickening agent for sauce, are always slowly cooked before any liquid is added, *Mastering the Art of French Cooking*.

³⁰ Sauce: The process where there is enhanced sensorially by joining of space with a design element.

Sauces are made with liquid, thickened with roux, enriched with fat and finished with seasoning. Changing the four ingredients produces different sauce characteristics. Concrete is made from water, cement, and aggregates. A cook would modify a sauce to create different characteristics, for example browning the butter to create a nutty aroma. A cook would treat concrete in the same manner. Illustrated in Figure 10, the experimentation of the aggregates (colored glass) and flexible formwork created concrete that sparkles and follows a curved form.

Figure 10 - Concrete Experimentation

The Cook Presents Architecture

The presentation of a dish is a summary of the cook's knowledge of the ingredients available and the intention of the mouthfeel, taste and experience of a dish. This thesis addresses the concrete parking lot as the underground entry threshold of the hospital that is currently a stark and utilitarian low concrete space. The new threshold will create a voluminous space that incorporates elements of the existing art works around the area. The dish that best incorporated these needs is a soufflé. Child describes the essence of this dessert as:

Site preparation

Every experience of the culinary world is framed from the knowledge of the cook. Recipes are written notes relaying the innate knowledge of the cook regarding 1) the preparation of ingredients, 2) harmonizing taste combinations and 3) the presentation of a dish. The cook preparing architecture will also define the overall context of the site for the work of architecture. As illustrated in Figure 12, the MUHC site will be cut and manipulated into a new form. The space will connect the pedestrians through a gate/threshold into the new building space.

Figure 12 - Site preparation

Chapter 5 - Rethinking the Parking Lot Threshold

SITE PLAN

SECTION

Figure 13 - Site plan and site section

Design element in project

The following illustration creates a table recording the application of culinary theory in the design of a new entry in the parking space of MUHC. The processes of cuisine used to redefine architectural design are reflected in the table Figure 14.

Figure 14 - Culinary Design Table

Cuisine

Blanching

The process of blanching amplifies the ingredient's inherent freshness.

Sauce

The harmonizing element that amplifies the overall dish.

Soufflés

fluffy egg whites that have been infused with a flavour.

Cook interpretation of Architecture

Elements of Importance

Sparkling color
Sense of capture
Curved form

Joining of space

New concrete form

Threshold

Sculpture that celebrates the pathway taken in the parking lot

Manipulation of Architecture – a recipe

Every experience in the culinary world is framed by the knowledge of the chef. The following architectural recipes for the concrete will outline the ingredients, combinations and presentation of the proposed project and present it through a language which creates a connection between architecture and cooking. The language of these recipes is the core expression (cooking theme) of the recipe and the result is a new architectural proposal for the space. As illustrated in Figure 15, ingredients and processes used in the entry threshold redesign include peeling and joining of space and further, the incorporation of new modulated concrete material into a flowing structure.

Figure 15 - Design Element

Recipe: Colored Concrete

- A concrete mixture ratio of 1 part white cement, 3 parts clear glass sand and 3 parts colored broken glass aggregate.
- Colors of the broken glass aggregates to be red, yellow and orange. Color variations are acceptable.
- Cast on site in sections

Recipe: Pre-cast Smooth Concrete

- A concrete mixture ratio of 1 part cement, 3 parts sand, and water for proper hydration.
- The mixture is very fluid and workable. The allows for more bubbles to escape in the vibrating process
- The columns are non-load bearing but must withstand the impact of local traffic (30kn of force).

Recipe: Standard Concrete

- A concrete mixture ratio of 1 part cement, 3 parts sand, and 3 parts aggregates.
- Precast removable box that allows access to electrical components.

Light Detail

- L.E.D. Strip lights on the inside edged of pre-cast column.
- Soft white light

Figure 16 - Column Design Details

The architectural Sauce envelops and creates the outline connecting the Hauver sculpture to the parking garage. As illustrated in Figure 17, the outline of the sparkling concrete harmonizes the Hauver sculpture with the parking garage pedestrian walkway.

Figure 17 - Parking lot Intervention

Cooking a dish is the compilation of ideas to form of a 'dish'. The architectural cooking is thus a soufflé using curving concrete (fluffy egg whites) and design elements from the blanching (flavor) to create a space that becomes an improved threshold to the hospital. As illustrated in Figure 18, the pedestrian walkway is the architectural soufflé which is moulded by the pedestrian pathway.

Figure 18 - Threshold to Hospital

Project statement

Cuisine as an analogical design methodology engaged the French culinary terms *blanch*, *sauce* and *soufflé*. These terms were used to create new architectural elements for a new entry threshold design for the MUHC. Blanching is the identifying and preparation of the elements in a space, the 'sauce' is the connecting of architectural elements and the soufflé is the celebration of space. The parking lot of the hospital now has a re-imagined threshold that connects the people to the main entrance.

Chapter 6 - Culinary Theory in Architecture

Architecture and cuisine together form the basis for a culinary theory whereby architecture consists of the way materials form a space, and cuisine consists of the manipulation of ingredients to create an experience. Cuisine has become the analogy that informs architectural design. Here culinary theory is explored through the architectural theorist Peter Collins' vision of taste (gastronomy) as a part of architectural design. This thinking has been situated in relation to ideas from Marco Frascari and his understanding of the relationship between taste and architecture. Finally, the notion of cuisine as a metaphor for sensory design will be explored through the concept of the etymology of taste. For every architectural project there is a driving theme that dictates a design. These design parameters guide the overall aspects of space and user experiences.

Taste Architecture

Architecture and cuisine both manifest themselves through a creative construction and assemblage of materials. Both architect and chef arrange existing sources and resources to create sensory experiences. In *Changing Ideals in Modern Architecture*, Collins lists four analogies when explaining functional architecture: mechanical, biological, linguistic, and gastronomic.³⁴ However Collins' concept of functional architecture is dismissed in Marco Frascari's research paper, *Canadian Cosmopoiesis: Meditations on Cuisine and Architecture*, where he expresses:

³⁴ Collins, Peter. *Changing ideals in modern architecture*. 1750-1950, 2nd ed. Montreal: McGill-Queen's University Press, 1998. P 167-214

*“The mechanical, biological, and linguistic were well known, although through other terminologies, but the gastronomical introduced a novel approach. In his discussion of the many different launches of modern architecture, Collins locates the modern beginnings of the gastronomical...”*³⁵

This understanding of gastronomic analogy in architecture by Frascari hinges on the term ‘taste’. ‘Taste’ is defined as a sensory connection to a person through experience.³⁶ But the connection of cuisine to architecture is described by Collins as follows:

*“... a hut to shelter an image is refined into a temple, or a meeting house into a cathedral, is the same as that which refines a boiled neck of mutton into cotelettes a Imperiale or a grilled fowl into poulet a la Marengo. 'So essentially is this the case', he continued, ' that if you wish to acquire a knowledge of the true principles of design in architecture you will do better to study the works of Soyer or Mrs. Glass than any or all the writers on architecture from Vitruvius to Pugin.”*³⁷

Frascari argues that Collin’s quote is over-used by architectural theoreticians as ‘revealing of great intuition and rarely analyzed for its critical contents’³⁸. The ‘taste’ of architecture is not only an exploration of cuisine (gastronomy) in terms of architecture, it is also a design process. For every architectural project there is a

³⁵ Frascari, Marco. *Canadian Cosmopoiesis: Meditations on Cuisine and Architecture*. Cuizine: The Journal of Canadian Food Cultures. Volume1, Issue2, 2009 (<http://id.erudit.org.proxy.library.carleton.ca/iderudit/037852ar>) p. 5

³⁶ Definition of taste (v.) Have experience of, Oxford Dictionary. Oxford Dictionaries, s.v. “taste” access May 2018. <https://en.oxforddictionaries.com/>

³⁷ Collins, Peter. *Changing ideals in modern architecture*. 1750-1950, 2nd ed. Montreal: McGill-Queen’s University Press, 1998. P.167

³⁸ (Frascari, Canadian Cosmopoiesis: Meditations on Cuisine and Architecture. Cuizine: The Journal of Canadian Food Cultures. 2009)

driving theme that propels the design. These design parameters guide the overall aspects of space and user experiences. The analogy of 'taste' is the reconciliation of experience in a moment in time.

The Human Experience in Parking lots

The process of designing for the human body can be seen as a design perspective. The parking infrastructure requirements are always thought in a utilitarian manner where the vehicle is the most important aspect of design. This design perspective follows a Cartesian world-view, where design is understood (through Frascari's explanation) as the loss of sensory experience:

*"The world of senses begins in the periphery of our bodies and moves to inner and higher levels of perception. From there, in analogical manner, the senses rule the way we willfully and cleverly act in our world and form the basis for a sated human sapience. People working in the field of Artificial Intelligence and "natural stupidity" are aware of the weird and wonderful contradiction of a cloven Cartesian world."*³⁹

Frascari shows how, in a Cartesian world design process, there is a loss of the 'willful and cleverly acted' physical experience where design favours utility, a specific design intended only for a singular purpose. Frascari contrasts this with a 'sensual world' that is designed for multiple purposes and demonstrates this loss by hinting at "natural stupidity". Hence, we can assume the parking lot was never intended to be anything more than a space for vehicles.

³⁹ Frascari, Marco. Canadian Cosmopoiesis: Meditations on Cuisine and Architecture. *Cuisine: The Journal of Canadian Food Cultures*. Volume1, Issue2, 2009 (<http://id.erudit.org.proxy.library.carleton.ca/iderudit/037852ar>) p. 3

Summary

The aim of this thesis explores culinary theory's relationship to architectural design. This paper considered Collins' 'functional' architectural analogy of 'gastronomy'. It also outlined Frascari analogy of 'gastronomy' with the understanding of the term 'taste' in architecture. Culinary theory explains how to create spaces from 'taste' by connecting the material characteristic of existing art works to create a new threshold space for entry to the hospital. The process of cooking is an appropriate guide because it transforms raw materials through acts of combinations, manipulations and deformations toward a delightful end. The parking lot site allows for an ideal application of culinary theory because it changes the extreme utilitarian space for cars into an integrated experience of art – a sensual experience. This thesis uses culinary theory as an architectural tool to redefine the parking lot as 'threshold'. Cuisine should not just be metaphor for design, but an engaged process of making.

Bibliography

Center, McGill University Health. 2018. *Public Art at the Glen*. Accessed June 8, 2018.

<https://muhc.ca/muhc-heritage/Glenpublicart>.

Collins, Peter. 1998. *Changing ideals in modern architecture*. 2nd. Montreal: McGill-Queen's University Press.

Dictionaries, Oxford. n.d. *Oxford Dictionary*. Accessed May 2018. <https://en.oxforddictionaries.com/>.

Dictionary, Etymology. n.d. *Online Etymology Dictionaries*. Accessed May 2018.

<https://www.etymonline.com/word/>.

Frampton, Kenneth. 1983. *The Anti-Aesthetic: Towards a critical regionalism*. Hal Foster Washington: Bay Press.

Fascari, Marco. 2009. "Canadian Cosmopoiesis: Meditations on Cuisine and Architecture. Cuizine: The Journal of Canadian Food Cultures." Volume 1 (Issue 2): p. 5.

<http://id.erudit.org.proxy.library.carleton.ca/iderudit/037852ar>.

Fascari, Marco. Dec 31 1990. "Monsters of Architecture: Anthropomorphism in Architectural Theory." 176. United states of America: Rowman & Littlefield Publishers.

Jamie Horwitz, Paulette Singley. 2004. "Eating Architecture." 191-203. Cambridge Massachusetts: MIT Press, 2004.

Julia Child, Louisette Bertholle, Simone Beck. n.d. *Mastering the Art of French Cooking*. New York: Alfred A Knof.

Petra Hagen Hagson, Rolf Toyka. 2007. *The Architect, The Cook and The Good Taste*. Basel Bostan Berlin: Birkhauser Verlag AG.

Quebec, Culture et Communication. 2018. *Politique d'intégration des arts à l'architecture*. May 24. Accessed June 8, 2018. <https://www.mcc.gouv.qc.ca/?id=59#c33650>.

STM. 1997-2018. *Vendome Marcelle Ferron*. Accessed June 8, 2018.

http://www.stm.info/en/about/discover_the_stm_its_history/art-metro/list-artworks/vendome-marcelle-ferron.

W.M., Lindsay. Seventh century. *Divi Isidori Hispalensis Episcopi Etymologiarum sive Originum Libri* . XX.

Madrid: Universidad Complutense.

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Appendix: Exploring De-monstrations

Culinary theory is examined through the connection of architecture to cuisine. Marco Frascari's book, *Monsters of Architecture*⁴⁰ served as a guide to rethink the parking lot as a threshold by describing 'monsters'. Monsters are the demonstration of exploration work done for this thesis using concrete and space. The thesis was originally conceived as a guide for using cuisine as a cultural framework for the architectural monster. The process of making and understanding the materials of architecture are cuisine and are best understood through making and creating. Recipes record the 'architectural monster' of this thesis and express the cultural importance of culinary terms ingredients, recipes and cooking.

The Ingredients

Marco Frascari's book: Monster of Architecture discuss how material and space is connected to experience. "Architects can no longer do without the identification of the human body and its elements in the architectural body. This new anthropomorphic practice of the topology between body and building avoids the facile road of isomorphism, isotopy, and metaphoric representations of the past." (p4) Frascari discusses the importance of the human scale (as buildings are design for the occupation of people). The space that evolves from the ingredients are the 'Architectural Monster' or evolution of space in a project. Frascari's monsters redefines the space through the balance of experience, the material conversation, and the amplification of space.

The Recipe

Every experience of the culinary world is framed from the knowledge of the chef. Recipes are written notes, fragments of the knowledge of the chef, including its ingredients, preparation and presentation. The recipe uses language to define the architectural connection to cooking.

The Cooking

The cooking of a dish is a compilation of knowledges. The interpretation of these ideas from Frascari's monsters are expressed in the chapter ingredients. The balance of experience, the material conversation, and the amplification of space are the interpretive elements that start the cooking process. The cooking of ingredients is defined as the compilation of ideas. The cooking is the expression of ideas that are framed by the conditions of the site, monster materiality and architectural form. The key to the idea is cooking, the making of a monster in the architectural sense.

⁴⁰ Frascari, *Monsters of Architecture: Anthropomorphism in Architectural Theory*, 1990