

Counterfactual Histories and Speculative Immersion:

Exploring the Capabilities of
Unveiling Historical Wrongs
and Institutional
Discrimination

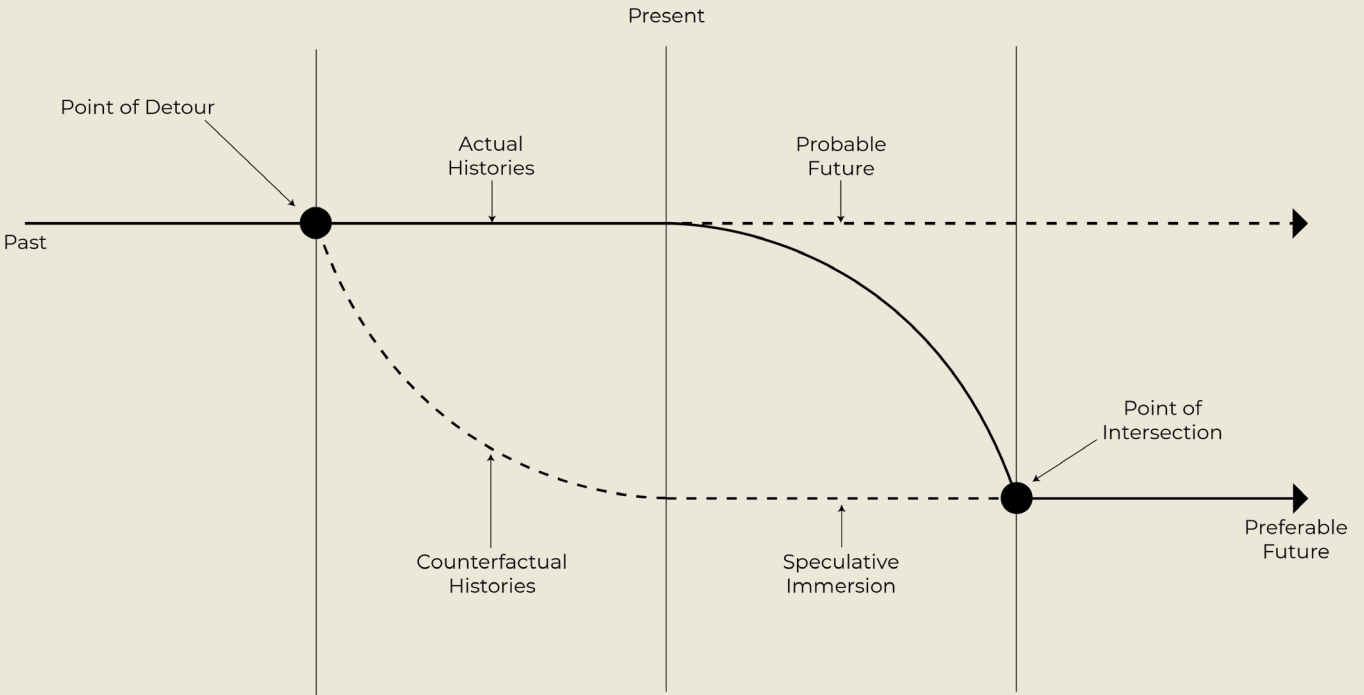
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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF DESIGN

EMILY CARR UNIVERSITY OF ART + DESIGN
2021

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ACKNOWLEDGEMENTS

First, I wish to acknowledge and pay respect to the x^wməθk^wəy^əm (Musqueam), Sk̓w̓x̓wú7mesh (Squamish), and Selil̓witulh (Tsilil-Waututh) Nations as the traditional owners of the unceded territories on which I conducted this research. As a foreigner here, I have not heard the traditional names of these territories. Indigenous people were talked about in the past tense, and all the sufferings they encountered were in the past tense as well. If we keep historicizing their sufferings and ignoring their existence, the rights of Indigenous people will continue to be denied. I would like to take this opportunity to commit myself to the fight against the systemic abuse that has stolen Indigenous people's land and freedom.

I wish to sincerely thank Dr. Garnet Hertz as my supervisor, mentor, and friend for his exceptional generosity. Dr. Hertz has fostered enormous growth in me by assisting with all aspects of my research. Moreover, he also treats me as an equal and with respect, encourages me, challenges me, and provides opportunities for me to create better works. It is immeasurable how much I have learnt from Garnet and I am extremely grateful for having worked with him during my research and the difficult time of COVID.

I also thank my internal reviewer, Professor Craig Badke, for introducing me to the concept of Speculative and Critical Design when I was working as a teaching assistant for his class "Design Futures." Dr. Badke's expertise, leadership, and encouragement have supported my research and the work of this thesis. Having a kind personality and great compassion, Dr. Badke has motivated me to go forward when I doubt my work and myself.

Perhaps the most enormous thank you belongs to Lama Mugabo, a community activist and board member from the Hogan's Alley Society. This thesis would not have existed without Mr. Mugabo's help, advice, and remarkable support. I am tremendously grateful for his time, patience, and valuable inputs to the research.

I give sincere thanks to filmmaker, industry liaison and researcher Alan Goldman as my early career coach and role model. Alan's dedication has been emboldening and empowering me to keep working hard. By continuously searching for opportunities for me and actively giving me referrals, Alan has made me realize I can be and achieve more.

I acknowledge the computer software company, Shapspark, and its co-founder, Wojciech Matyjewicz, for providing me with seed funding to help reduce my financial burden and instead focus on the core tasks of my research. Their generosity has inspired me to help others and give back to the community.

Thanks to the faculty and staff at Emily Carr for guiding me: Steven Lam, Hélène Day Fraser, Katherine Gillieson, Gillian Russell, Kate Armstrong, Keith Shapland. Thanks to my former employer and mentor Sherri Kajiwara from Nikkei National Museum, and many others that have helped me on the journey.

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ABSTRACT

This document incorporates the description of the theoretical and practical foundations of my research and studio practice. I have conducted excavations and inquiries about the injustices that occurred in the lower mainland of British Columbia across the 20th-century related to colonialism, racism and gentrification. The historical events that have been studied are mainly regarding the forced removals of Japanese and African Canadians. The research is involved in applying the critical design methodology of Alternative Histories to support communities that have been historically underrepresented. Alternative Histories are a design methodology proposed by British designer James Auger which proposes that it is useful to re-imagine the past in order to re-engineer the present. Through writing Alternative Histories, constructing architectural models, and utilizing rendering and virtual reality technologies, the final thesis project aims to make audiences reconsider the past ideals and losses of Hogan's Alley, a historic Black community in Vancouver that has been erased due to the construction of Georgia Viaduct, a raised highway that connects East Vancouver with Downtown. This project, unexpectedly, contributes to the negotiation between Hogan's Alley Society and the local government on the removal of the Georgia Viaduct and community reconstruction. Ultimately, my research guides the audience to take a historical detour and brings to the surface the problems of colonialism, racism, and gentrification in Vancouver to attract social attention. Through the research, I aim to ask what the capabilities of Alternative Histories are as a position to unveil historical wrongs and institutional discrimination. In conclusion, the research finds that Auger's alternative histories are actually useful in contemporary design projects.

I. BACKGROUND

1.1 Letter to Readers

This thesis is delivered during the 21st century's worst global pandemic, the most chaotic U.S. presidential election, and countless worldwide protests and unrests. We are in a historical moment where changes need to be made. Institutional discrimination and racism still persist in our society no matter how well the economy progresses. As designers, how we think about our position in this movement is particularly important.

I saw a Dr [Martin Luther] King quote that said; 'The silence of the good people is worse than the brutality of the bad people'. As I advocate that designers must have disciplined empathy, I have explored the effectiveness of design fiction in this thesis to explore the possibility of unveiling historical errors by using Counterfactual Histories and Speculative Immersion as a hybrid method.

The final thesis project, Hogan's Town (2020), uses an alternative history to rebuild the speculative neighbourhood of Hogan's Alley, a predominantly Black community that once existed in Vancouver. Hogan's Town (2020) uses virtual reality technologies and creates an immersive experience to attract widespread attention to the untold historical mistakes.

Being a person of colour, I have several times encountered racism and I always fought back. However, I have observed numerous violent and discriminatory treatments against BIPOC communities during my years in the States, and not everyone has the privilege to fight back or even speak against it.

As an alumnus from Oregon State University, I have spent the most valuable and meaningful years of my life in a city called Corvallis, a college town 80 miles south of Portland. Portland, as being at the forefront in the U.S. in fighting against racism, fascism, and injustice, has profoundly influenced every way of my life. I am firmly standing with the Black Lives Matter movement and I recognize this is not a war between colours/races, this is the war between people and the system.

As an interaction designer and an interior designer, I am working closely with the Hogan's Alley Society and Nikkei National Museum and Cultural Centre to conduct a series of research and design activities to prove that "design fiction" can serve as a powerful tool in this movement. I am encouraging all designers, artists, researchers, and people from all walks of life to utilize this tool to be hopeful, delighting, and calling for changes.

1.2 Methodology

The research methodology adopted for this thesis is primarily inspired by a theoretical exploration known as Alternative Presents and Speculative Futures (Auger, 2010) described by James Auger in 2010. As a part of the speculative design discipline, design fictions often rely on "What if" questions and create provocative frameworks for discussions and debates. This discipline has been widely applied in scopes such as policy making, product design, and social, legal, political or economic issues. In contrast to design fact, design fiction removes constraints that are so entwined with the interest on the market and the real-world problems and helps reimagine a scenario/product to "hack the system" (Auger, 2010). The concept of "lineage", suggested by British designer James Auger, makes it easier to understand how the world we are currently living in became the way it is. By breaking/swerving the lineage, it leaves us with space to be innovative about the Alternative Presents and Speculative Futures (Auger, 2010).

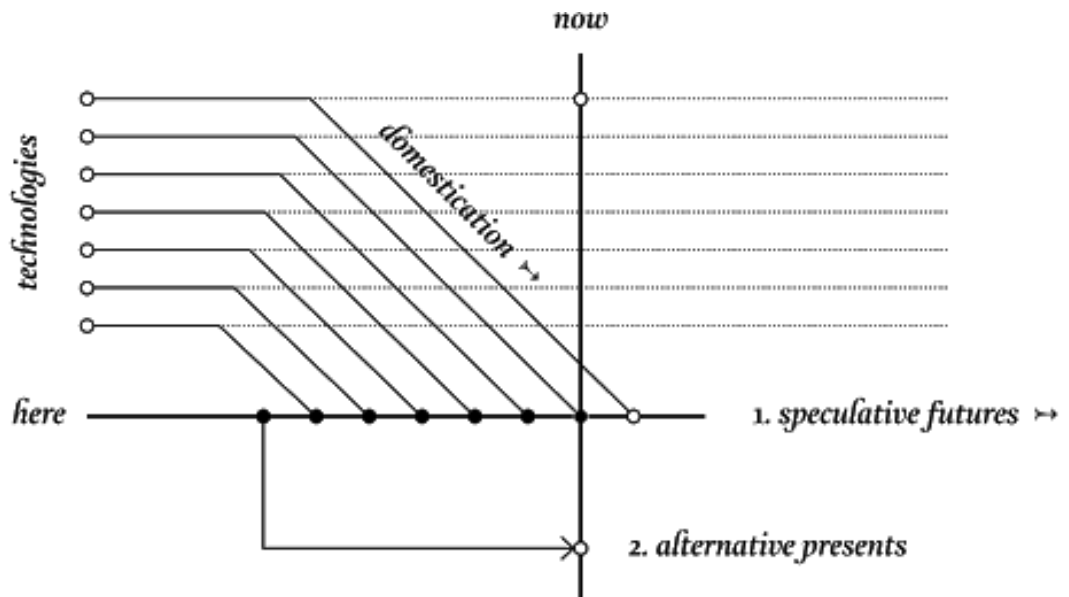


Figure 1: James Auger, *Alternative Presents and Speculative Futures*, 2010. Auger's model of speculative futures.
Copyright clearance pending.

The graph to the left by James Auger summarizes his methodological approach to critical design, specifically how the concepts of ‘alternative presents’ and ‘speculative futures’ work. This graph proposes how designers can use history and the future as tools to expand the potentials of design.

In his paper, Auger summarizes this visualization of the methodology as follows:

“At the origin is here and now—everyday life and real products available on the high street. The lineage of these products can be traced back to when the technology became available to iterate them beyond their existing states. In Figure 1, the technology element on the left hand side represents research and development work, the higher the line the more emergent the technology and the longer and less predictable its route to everyday life. As we move to the right of the diagram and into the future we see that speculative designs exist as projections of the lineage, developed using techniques that focus on contemporary public understanding and desires, extrapolated through imagined developments of an emerging technology. Alternative presents step out of the lineage at some poignant time in the past to re-imagine our technological present. These designs can challenge and question existing cultural, political and manufacturing systems” (Auger, 2013).

According to Auger, alternative presents can be thought of as rewinding history, revising it to be more preferable, and proceeding ahead as if that alternative history actually existed.

1.2.1 Similar Approaches: Design Fictions in the Field of Design

Example Project 1: The Golden Institute (Pohflepp, 2010)

Similar approaches have been used to explore the role of technology and how it influences culture and the environment. In the Golden Institute (Pohflepp, 2010), a Speculative and Critical Design project, German designer Sascha Pohflepp, in creating this project, took a historical detour and explored an alternative past of the US history. The background of this project is set during Jimmy Carter's presidency, numerous clean energy policies were implemented and large tax incentives for the use of solar energy were established. After Carter lost the US Presidential election of 1980, his Republican opponent Ronald Reagan almost instantaneously withdrew the nation's plan on clean energy undertakings.

Pohflepp's alternate history speculates that Jimmy Carter won the election in the second term and the prospect of energy technologies could have taken a completely different path. The Golden Institute (Pohflepp, 2010) reimagines a scenario in which Nevada is a Weather Experimentation Zone where thunderstorms are being artificially seeded to draw electricity from lightning (Pohflepp, 2010). Several design prototypes have been developed and presented throughout the media to encourage the public to rethink the relations between state, environment, and individuals.



Figure 2. Sascha Poflepp, The Golden Institute (2010), Model of a Nevada desert Lightning Harvester based on a Chevrolet El Camino. Copyright clearance pending.

By writing the alternate history, Pohflepp not only examines the energy issue in the past but also opens up capacities for audiences to investigate contemporary environmental issues and how the future is being created. Similar to British designer James Auger's theory of Alternative Presents and Speculative Futures (Auger, 2010), the Golden Institute (Pohflepp, 2010) demonstrates that technology development is often the result of economic interest. However, the paths we take or the choices we make based on economic interests are not deterministic or inevitable. It is important to understand that numerous choices and paths are competing for viability at any given time. However, the final choice we make has a significant impact and has the effect of almost 'locking in' certain ways of being in for a period of time. Though in most countries the capitalist system serves as a driving force in the process of making choices for primarily economic interests instead of social justice. The argument and the rationale in Pohflepp's project are that the current social and technological system doesn't have to always exist like this and there are alternative paths for us to take. The fact that rewriting histories and changing the lineage of certain products or events is politically provocative can help unveil historical wrongs and help seek better design solutions in the future.

Example Project 2: United Micro Kingdoms (2013)

British designers Anthony Dunne and Fiona Raby have conducted a series of explorations of the consequences of highly advanced technological development. One of their exhibitions at the Design Museum, United Micro Kingdoms (2013), presents a speculated nation of The United Micro Kingdoms which contains four experimental zones inhabited by Digitarians, Bioliberals, Anarcho-evolutionists and Communo-nuclearists. Each experimental zone has the freedom to develop its own lifestyle, form its own governance, and choose its own economic model (Dunne, 2013).



Figure 3: Anthony Dunne and Fiona Raby, United Micro Kingdoms, 2010. A model of the electric self-driving digicars. Copyright clearance pending.

Figure 4: James Auger and Jimmy Loizeau, Real Prediction Machines, 2014. Copyright clearance pending.

In particular, one of four experimental zones, the kingdom of the Digitarians, imagines the society where people's lives are dominated by advanced technology and various market forces. In this experimental zone, cars are fully driverless and their movements are controlled by computers. Occupants need to give up their freedom and privacy in return for leisure and convenience. It's important to understand that this speculation is not unrealistic in the actual world. Such contested design casts light on the present-day problems in which big tech companies like Google, Apple and Facebook are making influences in almost all aspects of people's lives.

Example Project 3: Real Prediction Machines (2015)

Real Prediction Machines (2014) is a design project regarding the predictions about human everyday life by analyzing mass accumulated data.

As explained by Auger-Loizeau:

"This project explores how data and algorithms could be reclaimed for personal use - individuals can select a specific event to be predicted such as a domestic argument; the likelihood of ones own death or the chances of a meteor strike. A service provider then determines the necessary data/sensory inputs required for an algorithm to predict the event. The output from the algorithm controls a visual display on the prediction machine, informing the owner if the chosen event is approaching, receding or impending" (Auger-Loizeau, 2014).

This project opens conversations around the possibility of digital data and how design objects help predictions be made tangible. By using Speculative and Critical Design methods, this design reflects contemporary issues of the relationship between humans and digital networked technology.

1.2.2 Methodology: Developing Design Fiction in Socially Relevant Practice

Speculative and Critical Design (termed SCD) are design methodologies that use fictional and speculative design proposals to challenge assumptions and conceptions about the role objects play in everyday life. In other words, this is design work that is much more focused on raising discussion and debate than solving functional design problems. As an experimental design trend, SCD has played a prominent role in contemporary experimental design practices and thinking. SCD is best known through its foremost proponents, Anthony Dunne & Fiona Raby and James Auger.

A core component in the sphere of SCD was the Design Interactions department at the Royal College of Art, which was directed by Dunne from 2005 - 2015. Dunne, Raby and Auger were all at the RCA between 2005 and 2015, and the work and writings coming out of the RCA were pivotal to propelling SCD forward.

However, several critics have pointed out that SCD practices by Royal College of Art academics in London often are oblivious to issues of class and race. For example, Luiza Prado de O. Martins highlights the problems of SCD practitioners and their blindness to their own privilege: “*Speculative Design can only earn its “Critical” name once it leaves its own comfort zone and starts looking beyond privilege, for real*” (Luizaprado, 2017).

Nevertheless, the critique of SCD does not necessarily mean that SCD needs to stay like this. For example, there are elements in this methodology that are particularly beneficial for anti-racism, anti-colonialism efforts though haven't been substantially developed. Therefore, it gives the potential for my research to explore the potential methods that explain this methodology which could be used for that purpose.

In order to become more socially relevant, this methodology needs to be extended. Through this thesis, it will be demonstrated that the methodology of Alternative Presents and Speculative Futures (Auger, 2010) can be used in addressing socially relevant issues.

In Auger's theory, products are given "lineages" to be able to let designers trace back and modify their histories. My research uses the theoretical foundation of this methodology but treats "historical events" as "products" in order to take the historical detour for those events, therefore modify their histories.

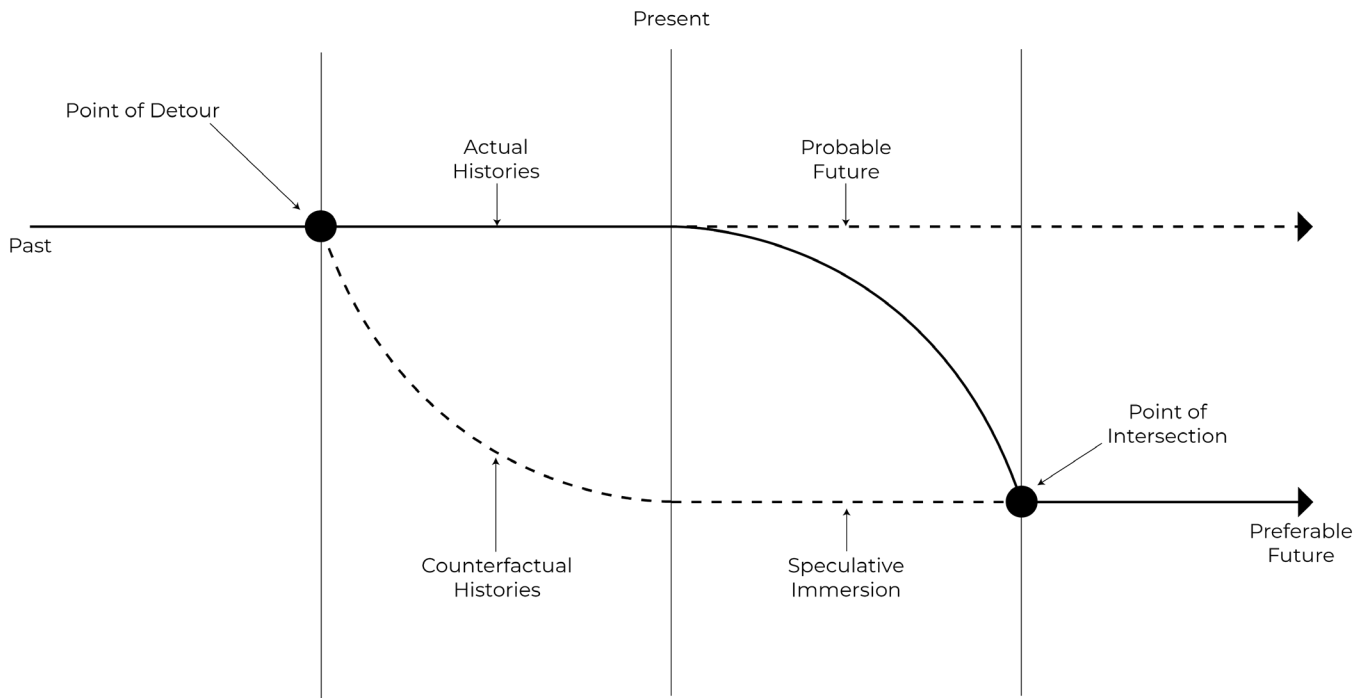


Figure 5: A visual representation of my model of how counterfactual histories turn Probable Future into Preferable Future.

As in Figure 5, time goes from the left all the way to the right. The Point of Detour is where we start to take a different path of the actual histories and reconstruct what is called Counterfactual Histories. Visual representations or tangible objects need to be created based on Counterfactual Histories as Speculative Immersion for the actual world (in the Final Thesis Project, the Hagan's Alley Cultural Centre as a virtual reality interactive platform that can be utilized in the real world). Finally, introduce the design outcome to shareholders to create the Point of Intersection (in the Final Thesis Project, the speculated Cultural Centre has been introduced to the Hagan's Alley Society). Therefore, by actualizing it, the timeline will have the opportunity to go with the Preferable Future instead of the Probable Future.

This process involves conducting time travels (backward) in the actual timeline and creating parallel universes as the fictional timeline. Finally, the research requires the intersecting of both the actual timeline and the fictional timeline for the purpose of unveiling historical wrongs.

An example of intersecting two timelines can be found in 2.2 Final Thesis Project: Hogan's Town (2020). In Hogan's Town (2020), a cultural centre is realized as the result of the alternative timeline where the historical mistake has been addressed and confronted. In the actual timeline where history has not yet addressed its mistake, the cultural centre has not existed. If the cultural centre from the counterfactual history can be utilized in the factual future, it will mean that this methodology has the importance of addressing socially relevant issues and unveiling historical wrongs. This practice brings to light the past injustices and the ways that they are still perpetuated in today's society which unveils hidden stories and raises awareness of the issues to seek actions and public dialogues.

Constructed upon this theory, I developed a hybrid method called Counterfactual Histories and Speculative Immersion to test if the speculative present caused by the alternative past could have a real impact on the actual present. This method is inspired by the concept of quantum entanglement, a physical phenomenon that usually involves two particles separated by a large distance to have unexplained correlations. To see the counterfactual histories as one of the particles and the actual timeline as the other, the concept of this hybrid method will be visualized. In the practice of this method, this thesis exploration contains two different projects: one preliminary project Nikkei Machi (2020), and one final thesis project Hogan's Town (2020).

It is important to state that CSD does not seek to provide solutions to solve the issue directly. This methodology seeks democratic engagement around the issue and recognizes all the complexity involved. Different from activism, it does not direct what to think, what the problem is, or what the action might be. Rather, it engages the stakeholders to think actively about their role and the agency they have in the issue to see it differently and to act.

II. Research and Practice

2.1 Preliminary Research and Design

Preliminary research and design practice have been carried out at the Nikkei National Museum and Cultural Centre, a non-profit organization in Burnaby, British Columbia committed to the preservation and promoting of Japanese Canadian culture. Supervised by Museum Curator Sherri Kajiwara, I, as a Research Assistant, have conducted a series of studies of literature, video, and oral history regarding the lives of Japanese Canadians prior to World War II and their internment during World War II. Additionally, I've built a design prototype of the speculated Japanese community Nikkei Machi (2020) and worked on several design projects including the design of the Nikkei Strawberry Tea packaging, and the museum interior renovations.

The experience at the Nikkei National Museum and Cultural Centre is of great importance to this thesis. By being given contact and access to information about Japanese Canadians living in the lower mainland, this thesis builds a strong foundation toward the study of historical background. Furthermore, the design projects constructed during this Research Assistantship have been an inspiration for the later-day in-depth investigation and the creation of the thesis project Hogan's Town (2020).

2.1.1 The History of Nikkei

The Research has been conducted to study the experience of Nikkei Canadians from early settlement, through internment during World War II, and into the resettlement period. People of Japanese heritage residing in a foreign country are considered as Nikkei. Nikkei Canadians have a long history in Canada since the late 19th century and many early settlements existed in various places throughout the west coast of British Columbia. Due to Japan's attack on Pearl Harbor, the United States declared war on Japan on December 8, 1941. As a result, more than 20000 "*persons of Japanese racial origin*" were forced to vacate their homes and sent to concentration camps in the BC interior with only two days' notice to prepare because the Canadian government concerned that the Nikkei population living in the lower mainland would spy on the Canadian military activities. The story of Nikkei Canadians being forced to vacate their homes was crucial to the research. To this end, I have been fortunate to acquire several valuable books and historical photos through the Nikkei National Museum. In order to thoroughly understand the impact of being forced to leave home, life in the concentration camps, and the return to the original land on Nikkei Canadians in various aspects. I have also obtained various precious oral history video materials from the Nikkei museum of people who experienced the situation at that time. The fragmented materials built a clear story. The study shows that such racist injustices have had a huge impact on the relationship with "home" for Nikkei Canadians. But after being relocated, Nikkei Canadians re-established schools, reformed sports teams, and restarted their community life. The research demonstrated that the notion of "home" had returned when community life resumed in another location (the interior of BC where they had been relocated).

These studies are extremely important to the research and later practices in this thesis. By evolving myself in the learning of these past events, I intend to make the voices of historically underrepresented groups to be heard with the help of the design activities.

2.1.2 A Practice-based Exploration as a Research Assistant

During a search of materials for a packaging design project for Nikkei National Museum and Cultural Centre's new merchandise (a strawberry tea), I discovered numerous precious historical archives and photos. These historical documents bear witness to how the Japanese Canadians, as racial minorities, were forced to vacate their homes and communities and exiled to concentration camps during a particular historical period. This weighed heavily on me and I strongly argue that it is a designer's obligation to use design as a channel to collect histories and commence conversations with the public. Sweden designer Hilda Hellstrom in her short film *The Materiality of a Natural Disaster*, has made a series of food containers out of the soil that could not be cultivated because of the pollution to help people understand the history of the natural disaster. According to Hilda Hellstrom, "*a small piece of the Berlin wall can be used to symbolise and help process a big part of history - and as such it becomes an object loaded with a lot of meaning and emotion*" (Hellstrom, 2018).

My goal was to use the Nikkei Strawberry Tea package design and identity as a small piece of the larger picture of Japanese Canadian history. To accomplish this, a 1927 photograph from the museum's archives was selected for the front: a black-and-white portrait of Japanese farmworkers at Haraga's Strawberry Ranch in Abbotsford, BC. The design is sparse and thoughtful, with the back of the package reading "*Japanese Canadians farmed 80% of strawberries in the Fraser Valley region of British Columbia at the peak before the Second World War*". The design works to raise the audience's awareness of Japanese Canadians before World War II in an informative, poetic and positive way.



Figure 6: A picture of my design for the Nikkei Strawberry Tea package.

Being one of the best-selling merchandise in Nikkei's Museum Shop, this item has generated profits to help fulfill the mission of Nikkei National Museum to honour, preserve, and promote Japanese culture and Japanese Canadian history and heritage for the community. Beyond its market success, the packaging design project carries greater social significance for the local Japanese-Canadian community. The fact that the merchandise has gained success on the market reflects the advantage that provocative design has in terms of the increase of demand, which is a result of the operational and ideological model of a capitalist society. The Strawberry Tea packaging makes a small but productive step in bringing diverse audiences to a point where they can observe and possibly understand colonialism, racial discrimination, and social injustice behind the history of this merchandise, which is also a product of the operational and ideological model of a capitalist society.

For this thesis, this design project plays a guiding role and has laid the theoretical foundations of the methodology I practiced. Showing the historical group portrait of Japanese farmworkers on the packaging of today's commercial product is a blending of history and reality. It is obvious that the strawberry ingredient from the tea of this merchandise is not grown by the farmworkers shown on the packaging, but the design has raised the audience's awareness of that specific period of history. At a more profound level, the design lays the foundations and gives support for interpreting designer Jame Auger's theory of Alternative Presents and Speculative Futures (Auger, 2010) in a socially relevant way.



Figure 7: A rendering picture of my design for the meeting room's interior of the Nikkei National Museum.



Figure 8: A rendering picture of my interior of the design for the education room's interior of the Nikkei National Museum.

To take the task of protecting and promoting Japanese-Canadian culture and traditions to the next level, I redesigned the interior of the Japanese museum to attract more audiences. The entire design process involves the construction of a 3D building model through the original architects Raymond & Jason Moriyama's drawings, redesign of each room's furniture, lightings, and finishes, and generating interior renderings to communicate the final effect. The design process is critical to the development of this thesis and the final thesis project. Because it stimulates discussions regarding the role of architecture and interior design in communicating the significance of socially and culturally relevant issues. And, it develops the beyond-commercial capacity of architecture and interior design in educating and revealing histories. It is worth mentioning that a later project called Nikkei Machi (2020), a speculated Japanese community, was made possible by this process.

2.1.3 A Speculative Japanese Community: Nikkei Machi (2020)

Nikkei Machi (2020) is a speculated Japanese community located in today's Vancouver. The building complex contains a three-story pagoda structure that serves as a community gathering space, a two-story modern Scandinavian house that serves as an art gallery, and a teahouse in the centre location.



Figure 9: A set of 4 rendering pictures of my design of Nikkei Machi (2020).

Supported by wooden columns, the pagoda structure has a unique East Asian style that represents the Japanese culture. The modern Scandinavian house has narrow windows and a contemporary style that represents contemporary western culture. The teahouse made of glass and with a modern lighting design sits perfectly in between the other two buildings. The teahouse has a unique harmonious effect because of its appearance and function which reflects the cultural fusionism of Japan and Canada. The fact that the product of tea originated from Asia is beloved by the British reflects the story of ten of thousands of Japanese-Canadians who crossed the ocean to find their identity and contribute to the new home.

By using computer-aided design and building information modelling software, I constructed this building complex and advanced the complex into 3d visuals by using computer-generated imagery rendering technology. Subsequently, Nikkei Machi (2020) was set to be located near downtown Vancouver to be provocative to the audience and create a visual conflict. The purpose is to make the audience wonder "why is there a Japanese building and a teahouse sitting in the heart of Vancouver?" Step by step, the story behind Nikkei Machi (2020) will be discussed among audiences and the historical wrong can be unveiled.

2.2 Final Thesis Project: Hogan's Town (2020)

The preliminary research and design including a series of explorations and design practices regarding the history of Japanese Canadians were presented to my supervisor Dr. Garnet Hertz. Dr. Hertz's feedback and guidance played a vital role in the consecutive development of this thesis. Firstly, Dr. Hertz introduced me to designer James Auger's methodology of *Alternative Presents and Speculative Futures* (Auger, 2010) which eventually became the theoretical foundation for my research. Secondly, Dr. Hertz pointed out that in the *Nikkei Machi (2020)* project, the speculative Japanese building complex is actually located in a place called Hogan's Alley that once existed in Vancouver's history. Dr. Hertz told me about the history of Hogan's Alley and encouraged me to connect with people from this community. Dr. Hertz's feedback and guidance directly set off the later-day research of this thesis and played an essential role in the creation of the thesis project, *Hogan's Town (2020)*.

2.2.1 Erased History of Hogan's Alley

In 1858 Gov James Douglas, with a Scottish father and a Guyanese mother, was compassionate to the situation of Black people south of the border and brought many Black families to settle in Victoria and Saltspring Island and eventually came to Vancouver. Meanwhile, Black families also arrived in Vancouver from Oklahoma and Halifax. Canadian Pacific Railway was hiring Black people as porters on the trains from Halifax to Vancouver. Due to the racism that predominated in Vancouver, Black families were only allowed to rent near the Railway Terminal. The area eventually became Black Strathcona, and Hogan's Alley was in the heart of that area.

According to the grandmother of rock legend Jimi Hendrix, Nora Hendrix, "*Down in the 200 and 300 block Prior and Union and Keefer is where most all these chicken places were. Mrs. Pryor had a eating place on Keefer and then there was a Mrs. Alexander had one on Union Street and there was Mr. Soldier Williams, he had one that used to be a funeral parlour. Well, there used to be different fellows around down on Prior Street and Keefer Street that had little clubhouses and things like that, years back in the Twenties and Thirties*" (Opening Doors, 61). Hogan's Alley was a vibrant community where people from all racial backgrounds (predominantly black) were living and working.

Around 1970, Hogan's Alley was destroyed because of the construction of the Georgia Viaduct, a raised roadway that connects East Vancouver with downtown. Many Black people were forced to vacate their community and Hogan's Alley was mostly demolished. To this day, virtually no evidence of Hogan's Alley still exists. As a result, much of the cultural heritage of Vancouver's first and last Black neighbourhood has been erased.

After the in-depth studies of relevant historical events, and designing and constructing the initial exploratory design prototypes, Hogan's Town (2020) as the final thesis project is the capstone culmination of this research output. Hogan's Town (2020) is a speculative design package for the Hogan's Alley community that contains a speculative architectural design project and virtual reality cultural centre design project. Constructed from the perspective of an architect and interior designer, the project collects insights from community stakeholders and other audiences by constructing a variety of visualizations and immersive experiences. This helps sculpt the project to be better suited to community needs and to be more critically self-reflective. The creation of the project further explores the core research question: what the capabilities of Counterfactual Histories and Speculative Immersion are as a position to unveil historical wrongs and institutional discrimination.

2.2.2 The Creation Process

Hogan's Town (2020) was inspired by the fictional capital city of Wakanda in Black Panther designed by American product designer Hannah Beachler, and my interest in science fiction, architectural design, and social justice. Through 3D modelling, architectural rendering, and virtual reality methods, the project reconstructed a speculative Hogan's Alley community that has been erased by history and a cultural center that has never been realized.

The methodology used in this project is influenced by the theoretical framework of alternative pasts and speculative futures proposed by British designer James Auger – and I have built on this methodology to give the design outcome more social significance. Auger's methodology emphasizes that by removing constraints of certain historical events linked to real-world problems, we can modify the product lineage and reimagine an alternative scenario of the product for the future. My research uses the theoretical foundation of this methodology but treats historical events as "products" in order to take the historical detour for those events. In this project, the historical event that has been rewritten is the construction of the Georgia Viaduct which led to the demolition of the Hogan's Alley neighbourhood. Hogan's Town (2020) begins by removing the construction of the Georgia Viaduct from history, therefore preserving the Hogan's Alley community in the speculated world of this project.

The creation of Hogan's Town (2020) began with the design and construction of this speculated community. First, I obtained the location information of Hogan's Alley and its surrounding neighbourhoods through Google Earth and captured a one-square-kilometre map around Hogan's Alley as my design template. With computer-aided design software, I made the cityscape editable and processed the map information such as buildings, streets, bridges, tracks, coastlines, et cetera into separate layers. It is worth noting that in the process of transferring map information into architectural drawings, I deliberately simplified the geometric surveying and topography of the map surface in order to make the process of demolishing and reconstructing buildings smoother. Secondly, I transferred the processed architectural drawings that contain location information into building information modelling software. During this procedure, I removed the Georgia Viaduct and built the speculated Hogan's Alley community with a cultural centre that is virtually accessible by the public.

2.2.3 Critical Reflections

The initial manifestation of Hogan's Town (2020) was through architectural renderings. These renderings were presented to the audience and sparked a series of discussions about the history, present, and future of Hogan's Alley.

Hogan's Alley Society

Among these audiences, Lama Mugabo, a community activist and board member from the Hogan's Alley Society, expressed the most interest in this project and was willing to communicate further with me to explore the eventuality of Hogan's Alley. Soon Mugabo became my mentor and helped me understand the challenges and anticipations faced by African-Canadians in history and reality. Mugabo and the Hogan's Alley Association have been committed to fighting for the revitalization of the African-Canadian community in Vancouver, as well as addressing reform issues in urban planning and housing development. Although the plan to remove the Georgia Viaduct has been approved by the City of Vancouver, the Hogan's Alley Association has been working vigorously to negotiate with the government on the community reconstruction and revitalization plan. In this fiercely competitive negotiation, two distinct understandings of "revitalization" were clearly manifested. The Hogan's Alley Society advocates the reconstruction of deprived and displaced African-Canadian communities through remedial measures, including the establishment of affordable housing, retail spaces, cultural center, and daycare center. On the other side, the government takes the interests of developers as its starting point and sells the "communities" as commodities to achieve gentrification. Hogan's Alley is at an important point where conflicting visions of possibility are fighting against each other which eventually could decide how the future of the neighbourhood might look like. We, as the people, must fight back against the unjust treatment of these communities and seek ways to take corrective measures.

As the conversation between Mugabo and I continued, I took the role of a facilitator in the ongoing process of community engagement to move this project forward. Mugabo was invited to several meetings to the virtual cultural centre prototype I constructed and together we envisioned the future outcome of what form this project might take. As the board member of Hogan's Alley Society, Mugabo expressed interest for the organization to utilize the virtual cultural centre as a space for more public engagement. This was a great milestone for my project because it allows the methodology I am implementing in this thesis to be deployed into the real world to serve a role in the community.

During the following conversations, the Hogan's Alley Society actively expressed that they would like to see more African patterns and features in the virtual cultural centre so that this space could act as a symbol of the African culture and heritage. In detail, Ghana Kente patterns and Imigongo style have been utilized in the development of the final version of the space.



Figure 10: A rendering picture of the Hogan's Alley Cultural Centre showing Imigongo style on wall surface.

As of March 2021, this project is in the process of meeting Hogan's Alley Society board members, and we plan on using the virtual cultural centre for both public and private conversations. Publicly, this space can serve as a tool to allow the board members to engage the public to help them advocate their vision of preserving and promoting the culture and history of African Canadians. Privately, board members can use this space to have internal conferences about the vision of Hogan's Alley, and to invite the city and developers for conversations about the challenges they are facing. My hope is that when more people are invited into the virtual cultural centre, the publicity of Hogan's Alley will reach to a higher level so that the underrepresented community stories can be widely disseminated to the local public. Therefore, this can impact the city and developers when finding the balance between justice and profits. Ultimately, the lineage described at the beginning of this thesis would have a better chance of going to the preferable future direction where the history could be remembered instead of the probable future where the historical mistake would be buried forever by capital interests.

Shapespark

Another audience who expressed high interest in this project was Wojciech Matyjewicz, co-founder of Shapespark. Shapespark, which works like a game engine, provides architects and designers with a platform to design and build interactive non-static visualizations of the interiors and buildings. Designers can conduct video conferences and tours with the audience by using Shapespark to create virtual reality spaces. As the reality of the powerful software, the price of Shapespark's subscription is relatively high for common design researchers who are still finishing degrees.

I introduced my research and the final thesis project to Matyjewicz during a networking event and expressed the desire of using Shapspark to explore in-depth the thesis question, as well as the economic challenges of using this software as a graduate student. Matyjewicz expressed strong support for my research and immediately granted me seed sponsorship and a subscription to the program. This move by Matyjewicz surprised me and gave me a preliminary understanding of the thesis question of this project: what the capabilities of Counterfactual Histories and Speculative Immersion are as a position to unveil historical wrongs and institutional discrimination. As a type of software developed to fit the needs for presenting real-estate marketing projects, Shapspark's support for this project made me find the possibility of answering this question. Soon I started the design and construction of the Hogan's Alley speculative Cultural Center. The history and culture of Hogan's Alley have been restored and presented by this project in a virtual reality space. Audiences can visit, explore, and conduct video meetings, as well as use virtual reality equipment to receive more immersive interactive experience. Hogan's Alley, in its absence of a physical location, is now able to use this space to speculate its future possibilities. To a certain extent, this is a kind of magic that designers can use as a political tool to create a promising future.

2.2.4 Conclusion

Hogan's Town (2020) was created during this fierce negotiation and countless social unrest that occurred during 2020. As a designer, I always ask myself what ethical stances we hold as designers in this movement. Such self-reflection can be traced back to the thesis question discussed in this paper – what are the capabilities of Counterfactual Histories and Speculative Immersion as a position to unveil historical wrongs and institutional discrimination? I deem that it is relatively meaningless to answer the thesis question strictly using quantitative research methods. Because in a social movement, the most powerful force often comes accidentally from stories that give people hope. It is in this social movement that Hogan's Town (2020) brings people the dawn of hope through the methodology of speculative design. In today's reality of social unrest, global pandemics, and lockdowns throughout the world, Hogan's Town (2020), as an architectural design project, has devoted itself to the fight for anti-colonialism and anti-racism, and the support for the voices of marginalized groups – and forms the core of the thesis question and this research project.

This thesis uses CSD as a political tool to open up community discussion by highlighting past wrongs and the ways that they are still perpetuated in the present. It also offers different possibilities that take into account a wider range of concerns and interests of potential harms and encourages stakeholders to act differently in the present. Through actions and public dialogues, we can take corrective measures to address historical wrongs and seek ways to prevent similar repetitions of these kinds of paths in the present and future.

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Appendix I

TCPS 2 Core Certificate

PANEL ON
RESEARCH ETHICS

Navigating the ethics of human research

TCPS 2: CORE



Certificate of Completion

This document certifies that

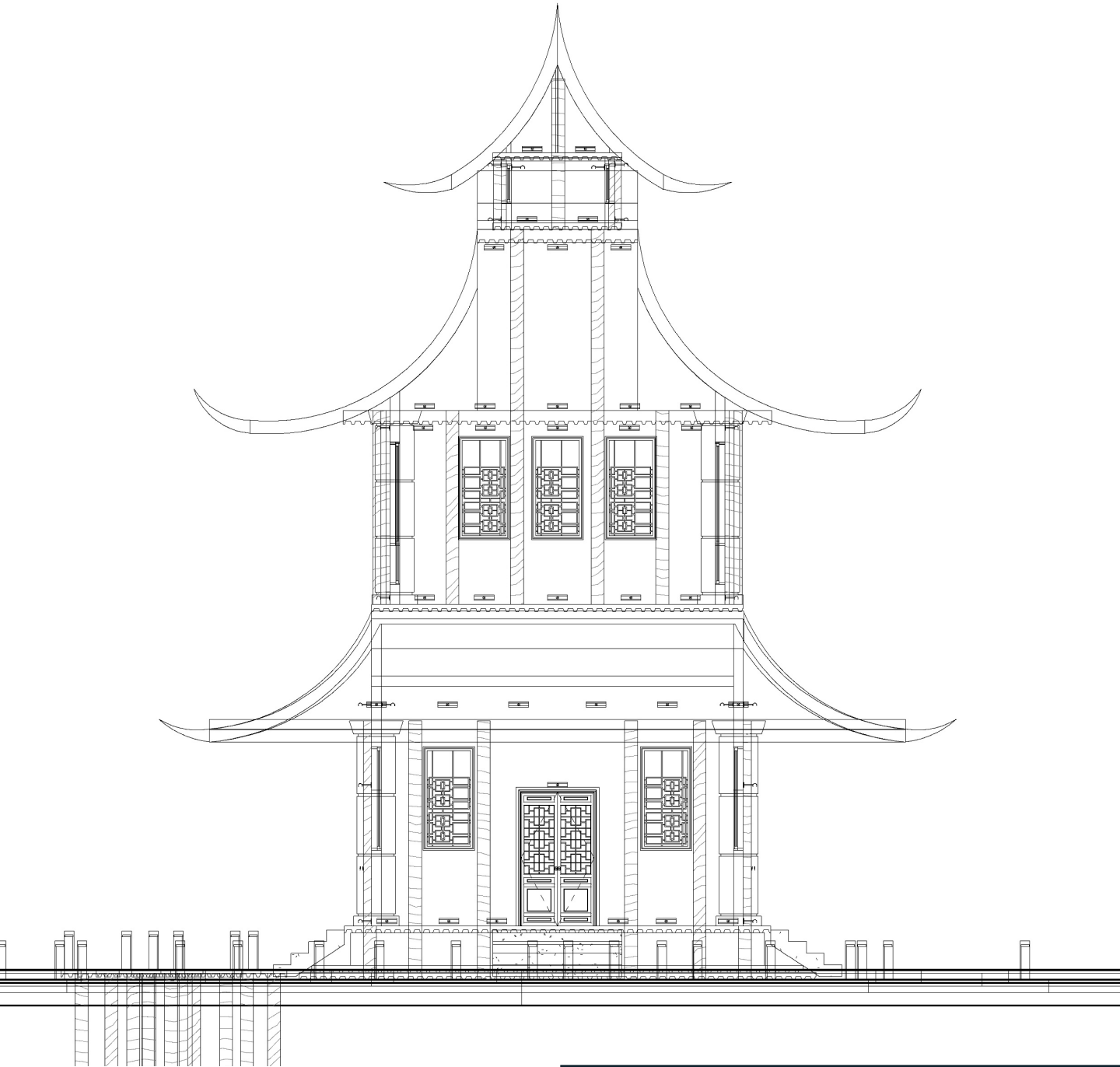
Kaiwen Yang

*has completed the Tri-Council Policy Statement:
Ethical Conduct for Research Involving Humans
Course on Research Ethics (TCPS 2: CORE)*

Date of Issue: **29 January, 2020**

Appendix II Creation Process of Project Nikkei Machi (2020)

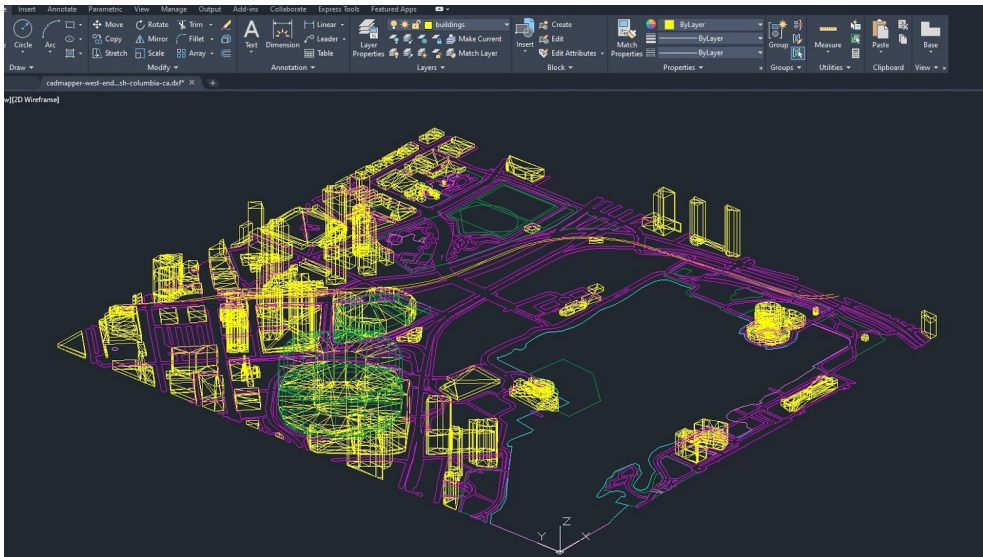
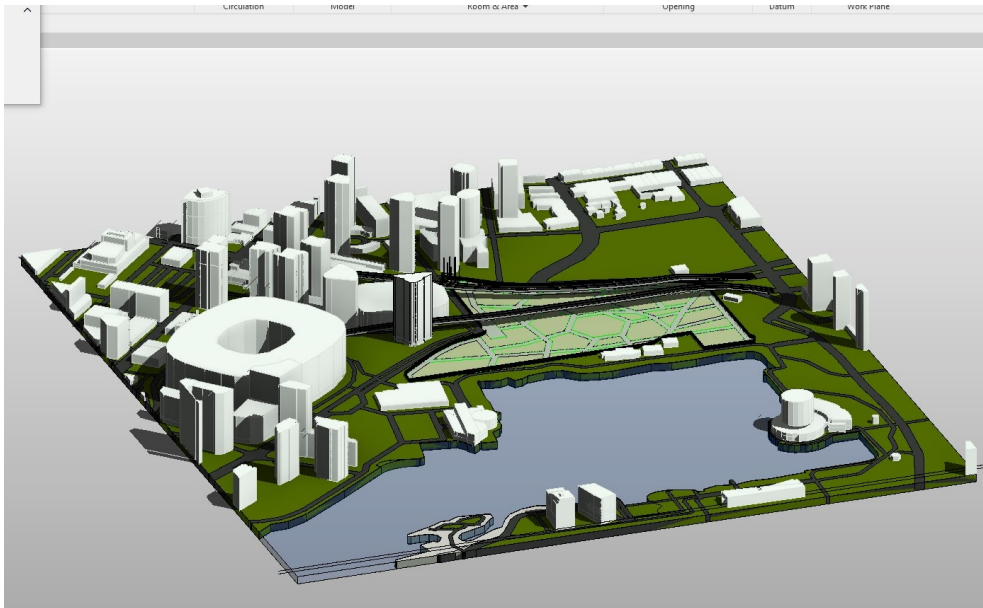
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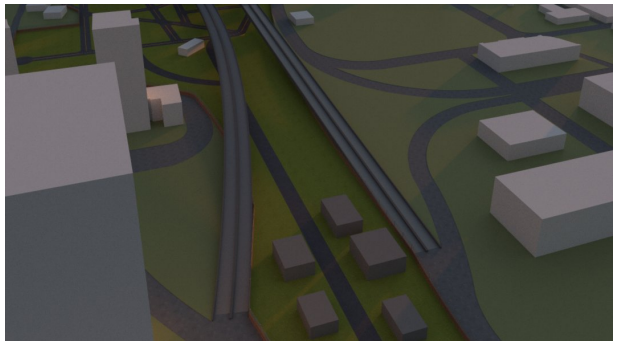
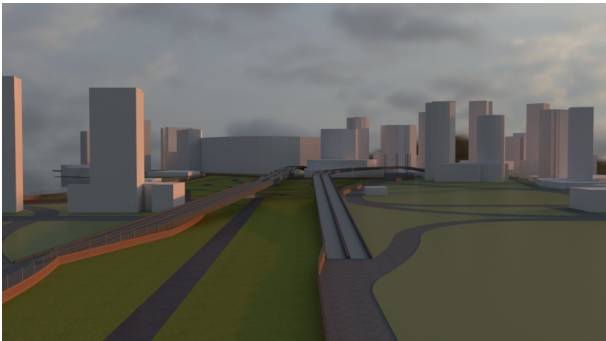
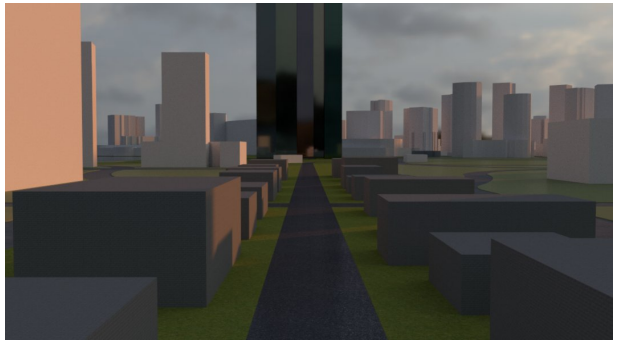
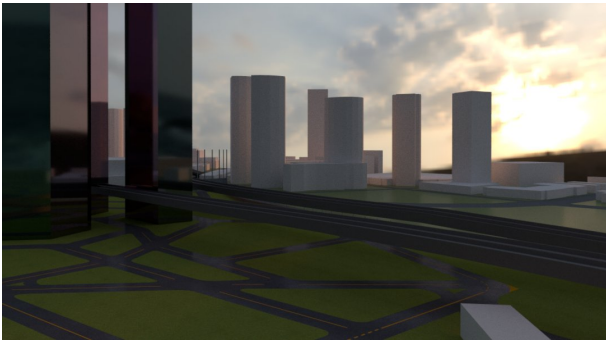
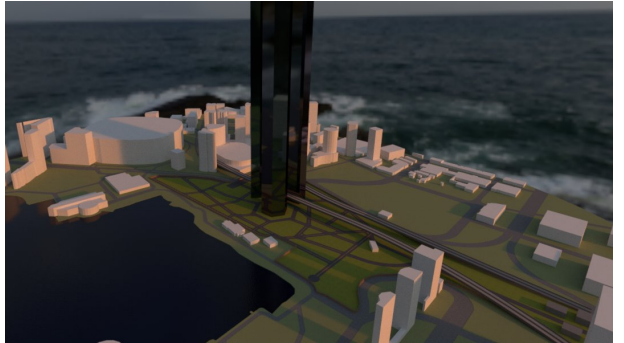
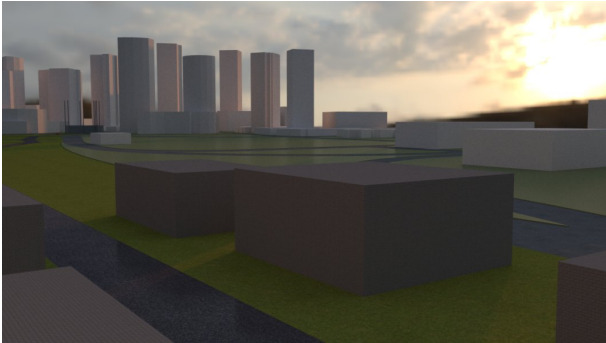
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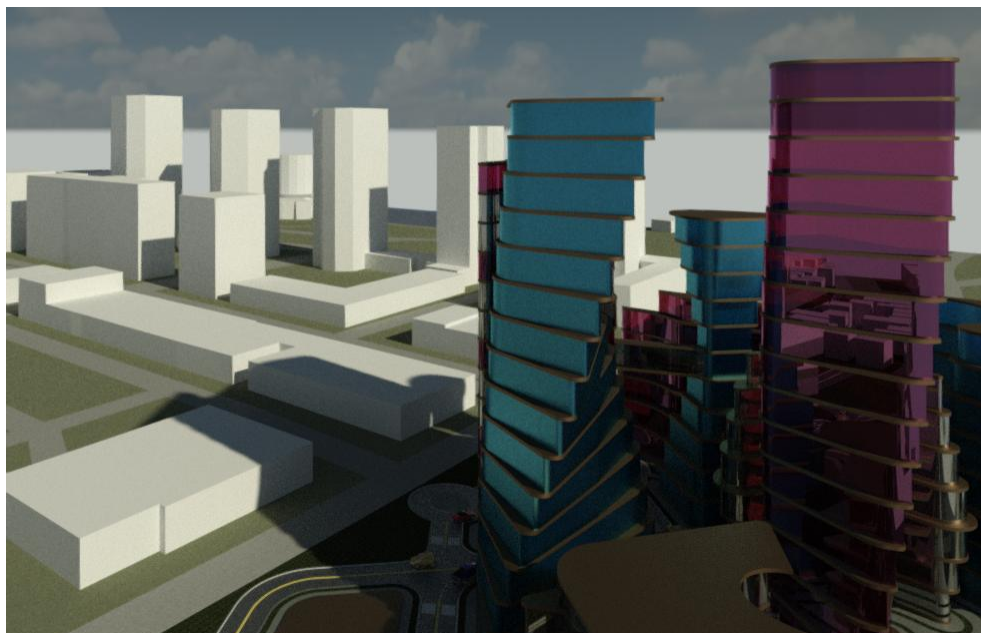
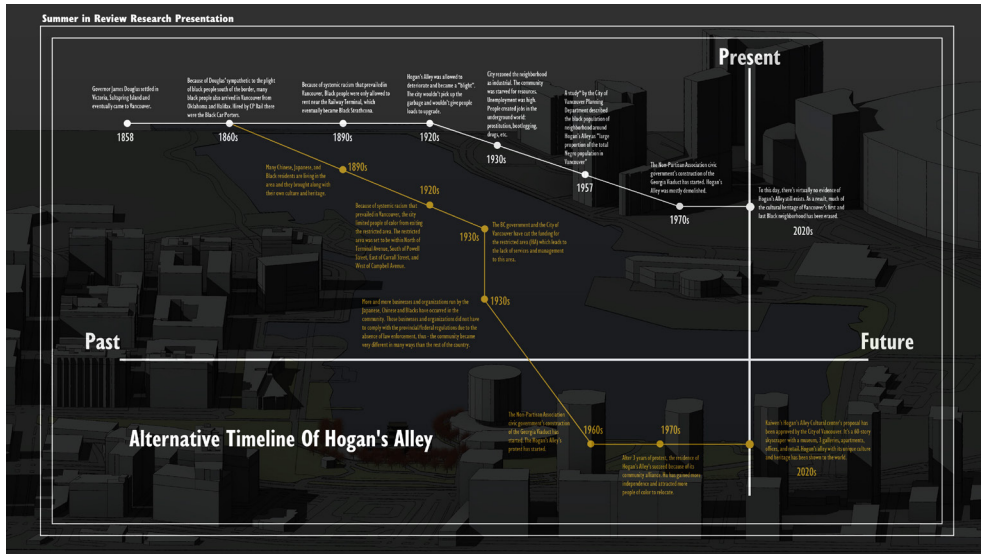
Appendix III Creation Process of Project Hogan's Town (2020) 3D Modelling in Building Information Modelling Software



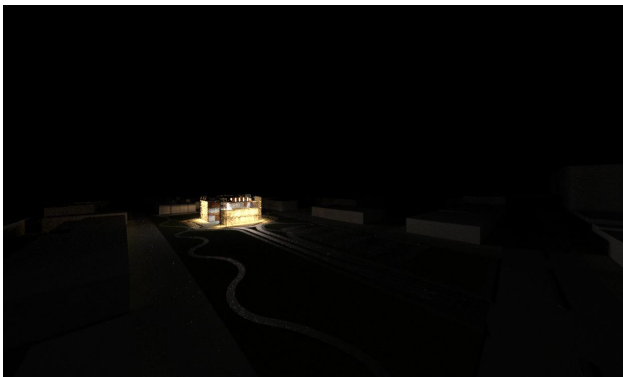
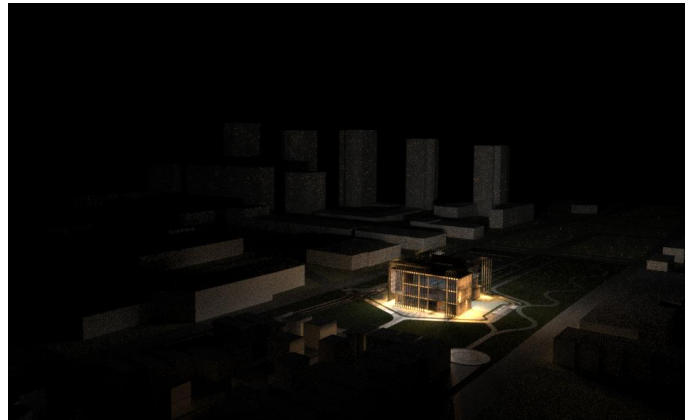
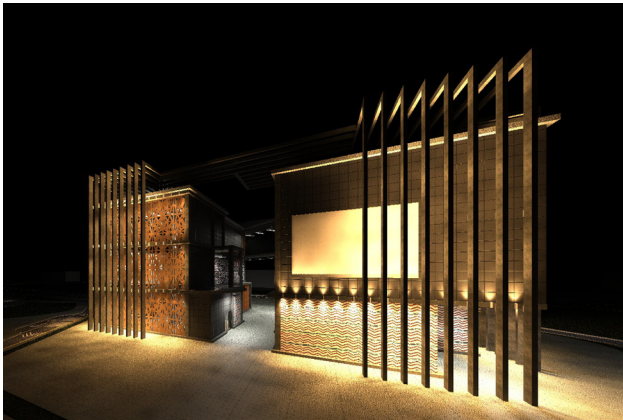
Rendering Pictures of the First Prototype of Hogan's Alley Neighbourhood (with Georgia Viaduct)



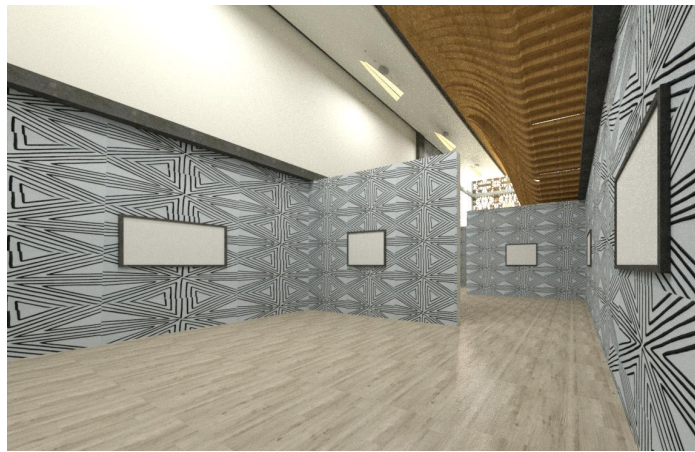
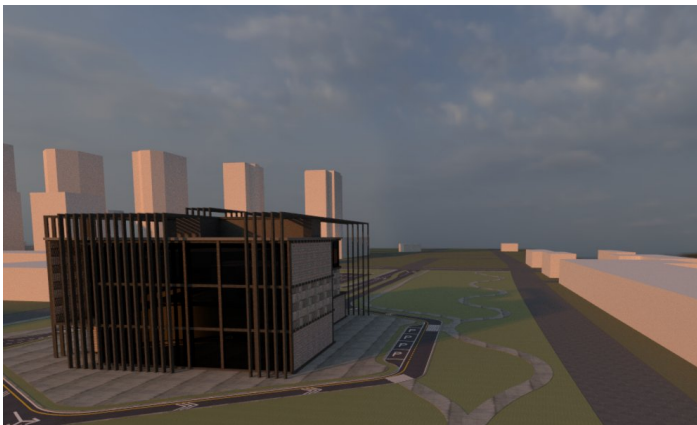
The Alternative Timeline and the Rendering Picture of the Second Prototype of Hogan's Alley Neighbourhood (without Georgia Viaduct)



Rendering Pictures of the Hogan's Alley Cultural Centre



Rendering Pictures of the Hogan's Alley Cultural Centre



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DESIGN, 2021

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