

MArch Final Review Participants – Abstracts and keywords

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Bahman Shafiee

Architectural Interpretation of Kiarostami's Poetic Cinema

Abstract

The Iranian filmmaker Abbas Kiarostami is famous for depicting natural landscapes and Iranian vernacular architecture in his films. These spaces function not only as visual motifs, but also as elements that shape the cinematic spaces of his films, recount the narratives, and foreshadow the plots' conclusions.

This thesis examines five of his films to understand how space is used in visual storytelling and to derive an architectural interpretation from his cinematic spaces. Positioning that a film can be read through spatial experiences, this thesis aims to discuss and deconstruct the spatial composition of Kiarostami's cinematic images, and then re-envision them through an architectural narrative.

I discuss architectural and cinematic spaces in his cinema, as well as the juxtaposition of these elements into a sequential image. Then, through a process that combines architectural design with cinematic framing and editing, I reconstruct and present spaces inspired by Kiarostami's vision of place and space in a series of architectural vignettes.

Through the act of investigating Kiarostami's spatial language in filmmaking, this thesis introduces architectural methodologies as a tool for the analysis of cinematic narratives and concepts. The visualization of these narratives through my own interpretation transcribes Kiarostami's approach to spatial storytelling into architectural place making and design.

Cynthia Tang

Tracing the Last Mile:
Mobility, Urbanization, and the Journey Home in China's Spring Festival Golden
Week

Abstract

Tracing the Last Mile examines representational strategies of traditional Chinese hand scroll paintings to study the impacts of rapid urbanization on the journey home. By spotlighting specific journeys of the Chinese New Year Golden Week migration, and placing human practices and cultural logics at the center of discussion of globalization¹, this thesis endeavor to weave the research of Aihwa Ong, a Malaysian anthropology scholar, with one of China's oldest forms of art—the hand scroll paintings.

Hand scroll paintings dating back to the Ming dynasty are studied on the three criteria of content, technique, and format. First, the sense of hierarchy used to portray content in the scrolls, will be discussed in relation to how we can deploy democratic ways of depicting levels of class within China's evolving social ladder. Secondly, the techniques of scale and perspectival distortion will be analyzed to learn how space and time of the journey can be represented within a static drawing. Thirdly, the handheld format of rolled scrolls will be challenged in order to rethink the performative potential of hand scroll paintings. The culmination of the research will result in the making of a contemporary scroll painting that depicts the journey of a transnational citizen—myself, as it intersects with travellers that represent varying degrees of graduated mobility. By revisiting this artform with current themes related to urbanization and the effects of globalization, Tracing the Last Mile positions the Golden Week journey as an entry point into the rippling, far-reaching effects of globalization.

Dishita Shah

Renewal of Chicago: Through Sustainable Urban Farming Practices and Systems-Thinking.

Chicago is one of the largest cities in United States of America and has a long history as manufacturing hub. However over the last fifty years its role as a manufacturing Centre has declined. This has led to job loss and significant erosion of urban fabric. Today the city of Chicago is seen as two cities. The divide in Chicago is due to both economic and social conditions which in turn are amplified by longstanding forms of institutional racism- legal, economic, political, and social- inequalities which have marginalized communities. These communities become split off from the better resourced neighborhoods. This process is also known as 'Redlining' has resulted in Food deserts where economically disadvantaged neighborhoods do not have access to fresh food produce.

These Food desert has become an underlying cause for these people's chronic health issues and contribute to the decline of both social and urban fabric. This thesis explores the role of urban farming to rehabilitate neglected neighborhoods. Exploring a systemic approach across a range of different scales, this thesis envisions repurposing empty lots in the Westside and Southside of Chicago. The idea is to introduce prototypes of urban farming and sustainable energy production. The scale ranges from single family home lots to industrial lots. The thesis proposes an interdependent approach to development using bio-waste to generate energy. The integration of building systems, social and economic forces leading to urban rehabilitation are the key drivers of this thesis.

Hannah Mete

Port Place Reconsidered: Genius Loci and the Renewal of Port Dalhousie

Port Dalhousie, a neighbourhood of St. Catharines located on the southern shore of Lake Ontario, has in recent years experienced an economic, cultural, and social decline. Once the northern terminus of the Welland Canal, and a popular tourist hotspot, Port Dalhousie has undergone a loss of identity and a lack of vision for the future due to a diminished Genius Loci. This thesis posits that the Port Mansion, originally a hotel and operating as the social focal point for Port Dalhousie throughout its lifetime, represented the physical manifestation of the Genius Loci. With the demolition of this historic building, the Genius Loci was weakened, and man as the agent of this prolific force can no longer be informed by it, resulting in incoherent development proposals and the uncertain future of this place.

In this text, the concept of Genius Loci, defined simply as “the spirit of the place,” is outlined, the historical and physical contexts that Port Dalhousie exists within are illustrated, and the stakeholders connected to the site are identified. All are considered holistically to ultimately propose a re-imagining of the Port Mansion as Port Place; a campus of buildings and a modest park which attempt to reinstate the Genius Loci of Port Dalhousie. By reimagining the Port Mansion as a piece of social infrastructure which engages multiple different demographic groups, the proposal allows the Genius Loci to speak through the actions of the users, therefore restoring its role within the community and securing its advantageous presence into the future.

Jim Shi

Developing Publics in the Suburbs: a closer look at the Mississauga employment lands

The suburbs were never designed to be cities. But as they grow and they begin to take on the position of new urban centres, they need to develop into cities of their own right. However, it is becoming increasingly clear that there is a strong inertia against changes in use and form in the residential fabric, and that the city plans for intensification are producing spaces driven by global forces rather than local needs. Left out of the intensification plans are the employment lands. Once peripheral, these industrial areas have now been outgrown and enveloped. They don't have the space for the massive buildings required for new industry, but also are not as easily commodified as the areas around shopping malls and "community nodes".

And at first glance, it is hard to discern anything of interest but a closer look at the landscape of these mute buildings reveals a strange vitality of civic life. Here, a radical shift is occurring. Programs populate this spatial matrix with seeming randomness -- a body shop neighbours a halal grocer in an industrial unit, taekwondo classes are taught in an office park, a Sunday service begins between two warehouses.

An unplanned public realm is emerging here. This research is focused on further understanding the forces propelling these changes and to testing scenarios, interventions, and methods to imagine ways to nourish, shape, and grow the public and civic form of these places.

Julia Nakanishi

Finding a New Commons: Re-Inhabiting the School in Posturban Japan

Media representations of Japan's dynamic cities belie a growing national phenomenon. Urban migration, a declining birthrate and an aging population have transformed Japan's countryside over the past thirty years. These demographic changes have had a slow but dramatic effect, resulting in socio-economic decline, abandoned buildings and a loss of local cultures across the country. This thesis explores architecture's role in facilitating the preservation of culture and knowledge, education, and community connections to local, rural contexts.

Among the vast number of leftover buildings in Japan's rural areas, the vacant public school is becoming increasingly prevalent due to waning fertility rates. These structures, referred to as *haikō* in Japanese, are imbued with collective memory. In villages needing a revival of public and cultural spaces, schools with existing relationships to the community are potent opportunities for re-use. Using fieldwork consisting of documenting *haikō* in three culturally and geographically distinct sites (Sado Island, Niigata Prefecture, Kamocho region, Tsuyama Municipality, Okayama Prefecture, and Kamiyama Village, Tokushima Prefecture), and ethnographic interviews with community members, the three design projects of the thesis explore how the re-use of *haikō* could generate new rural lifestyles and micro-economies.

The research presents emerging methodologies for designers working in the context of depopulating communities. This concept of "degrowth" poses a challenge for architecture, a profession significantly influenced by the capitalist structures and administrative frameworks of urban areas. In this way, Japan's rural areas, or "the post-urban" are a testing ground for new design processes, programmatic overlaps and plurality in public architecture.

Kathleen Fu

Strangers in the Sky: A Designer's Guide to Tackling Urban Loneliness

Research in cognitive science has revealed that being social is a fundamental component of being happy (Shafique, 2017) and studies have shown that mental health is greatly affected by the spatial and social construct of the built environment (Sullivan & Chang, 106). The contemporary urban dweller in today's society often experience social isolation and loneliness despite living in close proximity to thousands of other people. For those living in high-rises specifically, issues surrounding chronic loneliness are now recognized as a concern to public health (Cacioppo, 2009). People living in high-rises are reported to be more socially isolated, know very few of their neighbours and are generally less embedded in their community (Gifford, 2007). The way we have constructed the built environment today has created increasingly anti-social and hostile spaces, which lends itself to a more negative perception of society as a whole.

This thesis will investigate the spatial conditions that contribute to the relatively new phenomenon of urban loneliness, with a focus on student accommodation buildings. The primary objective of this research is to graphically translate architectural findings based on case studies, readings, and other sources and distilling them into a set of design principles for socialization in high-rise buildings. Guidelines not only create a precedent for future architectural projects and are incredibly important to the practice. This research will identify opportunities to facilitate human connection within urban communities and imagine methods of minimizing the effects of loneliness.

Kobi Logendrarajah

Supplements for Diplomacy

Revisiting the 'South China Sea Marine Park'

Kobi Logendrarajah, University of Waterloo: School of Architecture | 7 Melville St S. Cambridge, ON, Canada N1S 2H4

Supplements for Diplomacy reframes the agency of the built-form in the territorial dispute of the South China Sea. It suggests new tools and governance structures that rethink how the disputed territory can be delineated, offering potential grounds for conflict resolution. It begins with advocating for the shift, from state-centric to non-state-centric processes - specifically resources that support marine species. This thesis revisits a proposal brought forth by researcher *John McManus*, who advocated for transforming the region into a marine park. This proposal calls to organize state and non-state actors in a collective body that acknowledges the region's economic dependency on its ecosystem and biodiversity. By using this proposal as a framework to bridge environmental objectives with state incentives, this thesis illustrates the implementation of the marine park's __planning, governance, and infrastructure. *Supplements for Diplomacy* presents a scalable model that can transition existing occupied islands into environments that serve as spawning grounds for endangered marine species. It relies on the incremental phasing of infrastructure that aims to monitor, build ecological resilience, and to establish a sustainable economy through tourism and revenue from long-term conservation of fish stocks. Through the reprogramming of state-occupied islands, this thesis poses a new relationship we have with the disputed region - one where we take on the role of the steward. Territory is no longer seen as strategic token exploited by the state, rather it consists of large moving systems involving nutrient flows and tidal patterns that serve the overlooked stakeholders of the South China Sea.

Leo (Ao) Liu

DYNAMIC VISUALIZATIONS

Developing a Framework for Crowd-Based Simulations

Since its conception in the 1960s, digital computation has experienced both exponential growth in power and reduction in cost. With so much computational data and an ever-increasing accessibility to intelligent objects, the potential for integrating such technologies within architectural systems becomes increasingly viable. Today, dynamic architecture is emerging across the world; it is inevitable that computation will be integrated within the infrastructures of our cities.

As these new forms of dynamic architecture becomes increasingly commonplace, the static medium of architectural visualization is no longer satisfactory for representing and visualizing these dynamic spaces, let alone the human interactions within them. Occupancy within a space is inherently dynamic and becomes even more so with the introduction of these new forms of architecture. This in turn challenges our conventional means of visualizing spaces both in design and communication. To fully represent dynamic architecture, the visualization must be dynamic as well. As such, current single image rendering methods within existing pipelines becomes inadequate in portraying both the spatial and occupancy dynamics of the space.

This thesis aims to mitigate these shortcomings by investigating the creation of a crowd simulation tool to facilitate a foundation for a more efficient visualization framework. This explores how one can utilize current technologies to not only better represent responsive architecture but also to optimize existing visualization methodologies. By using an interdisciplinary approach that brings together architecture, computer science, and game design, it becomes possible to establish a more powerful, flexible, and efficient workflow in creating architectural visualizations.

Luke Kimmerer

Building Big: Spanning Urban Infrastructure

This thesis addresses the issue of urban fracture caused by transport infrastructure, through the design of a large-scale building that can support multiple functions with robust structural spans, as well as opportunities for the transient modification or enhancement of its spaces.

The site of this exploration is a critical junction in Toronto, where Dufferin Street crosses over the Gardiner Expressway and CNR (Canadian National Railway) corridor. It is the only location in the city where the transport combination of rail and automotive can be described as being “trenched” together. Exhibition Place (south adjacent) and Liberty Village (north adjacent) are among the most contentious areas in the city in terms of their architectural and urban character. The former carries the weight of a rich history in showcase and innovation. The latter has undergone extensive redevelopment in-line with creativity-focused urban policy.

The design reacts to the enormity of the fracture, which bisects the city from its waterfront, by embracing a need for large span with the spirit of an inhabitable bridge and elevated promenade. Evolving from mid to late twentieth century discussions about Megastructure, this thesis examines the idea of ‘building big’. It will also touch on the notion of public-private-partnerships, posit about the influence that large-scale civic, commercial, and recreational facilities might have on urban communities, and explore scale-determined tectonic and construction logics.

Maighdlyn Hadley

Hurry up and Wait:

A spatial proposal for urban stress relief

In the midst of rising urban density and its projected impacts on infrastructure and city dwellers alike, the importance of understanding the effects of built space on our biology and mental well-being is becoming essential to responsible spatial design. This thesis synthesizes the lessons of current environmental psychology theory and mixed-methods biometric research into an analytical framework focusing on architectural factors of scale, lighting, social organization, materiality, visual complexity, and enclosure, which is then used to analyse an existing transit terminal and propose a reimagined space for waiting. An identification of waiting rooms as high-opportunity areas within existing urban infrastructures led to the choice of Toronto Coach Terminal as a site to test the framework and to assess the value of restorative waiting environments. The subsequent design exploration takes the form of an open-ended kit of parts which creates seating areas and enclosures through a systems of frames, connectors and panels to promote psycho-physiological restoration for a variety of users. Topics of framework development and user testing methodologies are addressed in an attempt to make disciplinary boundaries more porous and to co-solve questions with spatial implications using all available resources. Since both waiting and stress impact city dwellers more severely and the world is becoming increasingly urbanized, better access to and more seamless integration of restorative environments in the incidental spaces of the public realm would play a role in the management of stress at a population level.

Meghan Taylor

Brewing A New Community: Redefining local industrial manufacturing within a city

The effects of globalization echo in former factory cities, in their depleted industrial landscapes and their abandoned buildings, creating a disconnect between people, their identities, their communities, and their cities. The purpose of this thesis is to consider how the craft brewery industry is serving as a catalyst for urban change by creating new opportunities to bring people together in post-industrial neighbourhoods. By examining contemporary social needs of the consumer and questioning how a collective hybrid industrial space can create a dialogue between the community and small scale manufacturers, craft breweries today are trying to find a balance between production and social programmatic designs. They are redefining the industrial typology as something more than a factory, but a space of social and cultural production. Through the framework of neolocalism, a new sense of belonging and collaboration can be established through the shared collective identity of place, history and space. This idea is explored through the design of a brewery in the former Dominion Textiles Woolens & Worsted Mill in Hespeler, ON. The purpose of the design is to explore how experiential consumption within an industrial artifact promotes the craft of local manufacturing, increases awareness of the surrounding agricultural economies, and creates a new form of tourism for the region.

Nina Wang

Re-drawing the Line: Explorations of Reimagined Spatial Organization in Conflicted Interspecies Territories

Swarms of semi-wild, semi-tame Sika deer roam freely in both the primeval forested mountains and urbanized coastal town of Miyajima island. Rising deer populations and mass tourism has blurred the boundaries between human and deer territories, resulting in landscapes of intense interspecies frictions leading to declined deer health, human injuries, and degraded landscapes. Urgently, we must invent new ways of knowing and interacting with these non-human animals with whom we share a common habitat. This thesis asks: rather than pets or pests - could we recognize the deer as neighbours and co-inhabitants? How might we achieve this new perception of - and relationship to - the deer, through architectural and landscape interventions? A series of site functions and typologies are explored, testing methods of separation, stratification, coupling, and integration, in order to shift the human-deer balance of each site in sync with the seasonal flux of territorial needs. The explorations offer strategies for imagining alternate ways of interspecies living post-anthropocene.

Pegah Jafari

Let the Child Be

Children, Play & Space

Childhood is a time of vulnerability, unknowns, and vast potential. Children's environments should be sensitive to these qualities. This thesis is an investigation of outdoor play environments for children. Its focus is the design of environments that encourage playful attitudes that enrich the process of children's development.

In the past, children played freely outdoors and explored natural environments. With the growth of urban living, playgrounds emerged in cities as places for children to play. Today's conventional playgrounds are not responsive to the child's needs to experience the unknown, imagination, and creativity. In these playgrounds, use is predetermined, and activities are imposed, hence they do not enhance children's rich sense of curiosity and playfulness.

Friedrich Froebel argued that play is the highest stage of the child's development. This thesis studies play and its role in the child's healthy development by exploring the characteristics of natural and built environments for play. The design of an outdoor play area is intended for children aged two and a half to six years old, when play has a crucial role in physical, cognitive, social and emotional development.

The thesis is sited in suburban Toronto, adjacent to a preschool childcare facility. It uses topography and natural elements, and investigates strategies to integrate them with built elements. It also investigates the values of free roaming versus safety in the early childhood experience. The goal of this thesis is the design of an outdoor play environment that will enable children to regain their sense of freedom of movement and exploration through play.

Symon Tiansay

Title:

Housing for an Emerging Middle Class

This thesis proposes a housing strategy for an emerging middle class of people who work in the Business Process Outsourcing (BPO) Industry in Manila, Philippines. Available housing stock for this demographic primarily consists of dormitories located in the outskirts of Metro Manila's many central business districts (also called Global Cities). These Global Cities are a result of a transforming economy catalysed by two major acts by the Philippine Government: the sale of large parcels of raw military lands to private developers, and the creation of Special Economic Zones. The first act has created an image of prosperity for the Philippines, while the second act has allowed the BPO Industry to flourish, employing many recent university graduates.

Although the BPO Worker is employed in the Global City, they cannot afford to live there as development is catered to foreign investors, wealthy individuals, and multinational corporations. While an affordable housing crisis has existed in Metro Manila since World War 2, a growing percentage of the population will eventually be propelled into the middle class as the BPO Industry continues to provide new employment, creating a demand for housing.

Forecasting the eventual decommissioning of Camp Aguinaldo, the Headquarters of the Armed Forces of the Philippines, this thesis re-thinks the planning and redevelopment of military bases in Manila, through the prioritisation of housing for this particular demographic. The proposed building incorporates housing for young families, as well as dormitory units that could be converted for other occupant types in the future.

Timothy Baker

Burrowing through the Edifice

Following a process of formal and craft explorations this thesis uses the lines, tracings, and voids of various forest pests, specifically woodboring beetles and their fungal symbionts, as a way of evoking Donna Haraway's *Chthulucene*. Events like the rapid expansion of the mountain pine beetle's range and the various invasions of alien beetles, are processes that humans have become fundamentally complicit in. Part of their destructive impact is the creation of large amounts of fascinating material that can be used to represent the complicated web of larger systems that has resulted in these conditions. Starting from the source of the material produced by the beetles and how they have become bundled up in the many spiraling outwards impacts of the climate crisis this work studies the affective qualities of the boring beetle and how it might be used to represent the anxieties of the climate crisis era. Through working with these materials, scaling up and transforming their forms and experimenting with what they might create at different scales this thesis hopes to provide creative ways of 'staying with the trouble'.

Vani Gopalkrishna

Empowering User Participation through Technological mediation
Rethinking Citizen Agency in the Quayside Public Realm

The idea of public space has moved from a critique to an orthodoxy, embraced by most stakeholders as an important part of urban development. The last few decades has produced a particular landscape of projects engaging with a set of urban tools coupled with digital and information technology that expands, augments and alters the public and social interactions in the urban space. Information and matter, code and space collapse into a new system, and mediated spaces have become an architectural problem.

From this conceptual context, the thesis looks at the role of urban tools devised as a set of assemblage rather than objects or installations, more relevant to the experience of the public realm; as they function independently and collectively and through mediated technologies foster relationships between the user and the environment.

Critiquing on the current trends in techno-centric smart city proposals, the research is contextualised in evaluating the participatory visions proposed in the Sidewalk Labs' owned Quayside project in Toronto. To do so, the research builds an understanding of the fundamental concepts of user participation and technological mediation through an analysis of the 1960's Fun palace project. And then traces its contemporary relevance by re-interpreting the key concepts in relevance to the Quayside fabric, that elevates the project up in its participatory ambitions.

The interventions employ a range of user-technology associations that opens up the possibility to render varied social settings relevant to the cultural context of the technology informed contemporary society, which hitherto would be impossible.

Vantar Angardi

När: Constructing a Sensory Space

This thesis presents a work that contemplates, designs, and materializes the notion of “public personal space”. Modern society often leaves us alienated from ourselves and the world.

Experience is what we use to demonstrate an abstraction – “putting something to the test.” It is a situation we face, but also knowledge we acquire through contact. När is a designer-gatherer’s attempt to reproduce this trajectory and to describe how this interaction between the mind and the world, negative or positive, provides us with new information, leaves a mark, and helps us in our journey.

När is a sensory concentration pod meant to be placed in dynamic public spaces to provide a moment to disconnect. It is a private personal space to meditate, nap, have a private conversation, or write an email. The shape resembles a womb, echoing a sense of security and warmth. The pod, although ever-evolving; aims to provide comfort while being environmentally conscious. Thus, the main components of the pod are felt and recycled plywood. The initial users of the pod will be students of the School of Architecture. It aims to change the stage of school, especially during “deadline season”, by eliminating awkward naps at desks and cries in the washroom stalls.

This thesis tells its’ story from concept to production.