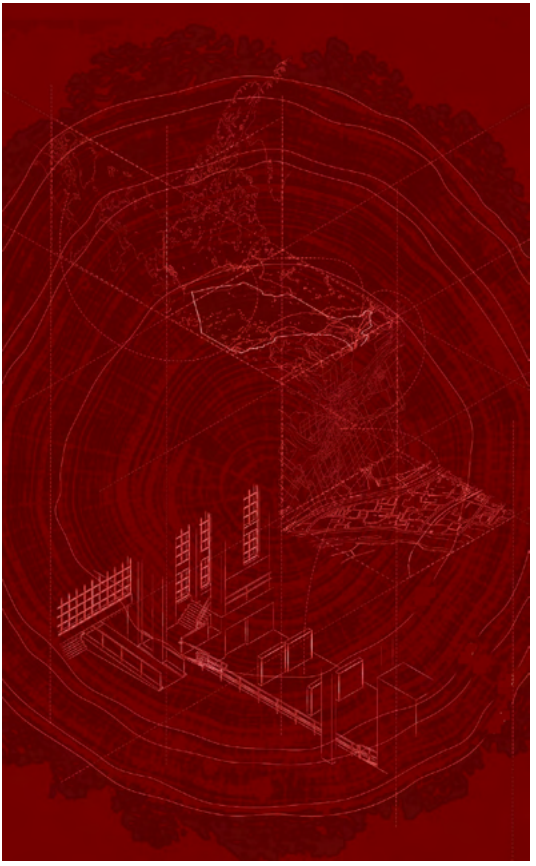
OPEN COLLOQUIUM III

Azrieli School of **Architecture and Urbanism**

Cover Image by Frangiscos Hinoporos I Graphic Design by Sena Kurcenli Koyunlu

OPEN COLLOQUIUM III



2024

Azrieli School of
Architecture and Urbanism
Carleton University

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The Open Colloquia is a series of biennial events featuring work by PhD Candidates and PhD students of the ASAU, CU. The work presented covers a wide range of research areas, and work disseminated through national and international conferences and publications, and/or offers insights into ongoing research conducted in the PhD program.

Critical Respondents:
Dr. Ipek Tureli, Peter Guo-hua Fu School of Architecture, McGill University
Dr. Marcia Feuerstein, School of Architecture, Virginia Tech
Dr. Catherine Bonier, Azrieli School of Architecture and Urbanism, Carleton University

CRITICAL RESPONDENTS 5

DR. IPEK TÜRELI is Associate Professor and Canada Research Chair in Architectures of Spatial Justice (Tier 2) at the Peter Guo-hua Fu School of Architecture at McGill University. Her recent research interests include low-income housing and participatory design, civil protest and urban design, and campus landscapes and race. Her work on campus landscapes has received support from the Social Sciences and Humanities Research Council (SSHRC), Fonds de recherche du Québec – Société et culture (FRQSC), and Canada Foundation for Innovation. She has many publications on visualizations of the city in photography, film, exhibitions, and museums. Her research on Istanbul was awarded several fellowships and grants including that by the Graham Foundation. Her publications include the co-edited book Orienting Istanbul (2010) and authored book Istanbul Open City (2018).

DR. MARCIA F. FEUERSTEIN is an architectural theorist, historian and practitioner. A registered architect, she taught at Virginia Tech as associate professor of Architecture(1996-2023) / VT's Washington Alexandria Architecture Center Masters and PhD programs (2004-2023) and taught at University of Buffalo, Temple University, and U. Penn. Feuerstein studied at Tufts University (B.S.), University at Buffalo (M. Arch) and the University of Pennsylvania (PhD in Architecture, Theory and History)and has been a guest lecturer and reviewer throughout the USA, Canada, and Europe. Her creative work, research, and publications consider architecture through the lens of the body, embodiment, performance, and theater with a focus on artist and performer Oskar Schlemmer. She has also written on women architects, storytelling, performance, and the nature of representations. Her creative works include published and exhibited analytical montages. She has practiced architecture in Buffalo (NY), NYC, and Philadelphia.

DR. CATHERINE BONIER teaches courses in architectural and urban design, research, history, and theory. The foundation of her teaching is the analysis of historical systems and patterns as the basis for creative visualizations to imagine equitable and remediative future cities. Professor Bonier's research spans from historical analysis to futuristic visions, and centers on the shaping of the built environment around water, technology, infrastructural systems, and competing ideas of health and balance. Her prior positions in construction management, mental health counseling, and video game design contribute to her focus on the nexus of evolving technologies, shifting environments, social equity, and urban health. She is co-director and co-founder of the Carleton Urban Research Lab (c-url) with Professor Ozayr Saloojee.

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OPEN COLLOQUIUM SCHEDULE 7

November 5 2024
Azrieli School of Architecture and Urbanism
Barbara A. Humphreys Room

9.00 am	**Opening remarks**, Federica Goffi
	Presentations
9.15 am	**Sena Kurcenli Koyunlu**, PhD Student
9.35 am	**Nicolas Arellano Risopatron**, PhD Candidate
9.55 am	**Ashleigh Abraham**, PhD Student
10.15 am	**Discussion**
10.45 am	**Coffee break**
10.55 am	**Rehab Salama**, PhD Student
11.15 am	**Julie Ivanoff**, PhD Student
11.35 am	**Reem Awad**, PhD Student
11.55 am	**Discussion**
12.25 pm	**Lunch**
1.30 pm	**Ahmed Elsherif**, PhD Student
1.50 pm	**Jenan Ghazal**, PhD Candidate
2.10 pm	**Damiano Aiello**, PhD Candidate
2.30 pm	**Ushma Thakrar**, PhD Student
2.50 pm	**Discussion**
3.30 pm	**Break**
	School wide lectures
4.30 pm	**Dr. Émélie Desrochers-Turgeon**
5.30 pm	**Dr. Rana Abughannam**
6.30 pm	**Dinner,** Barbara A. Humphreys Room

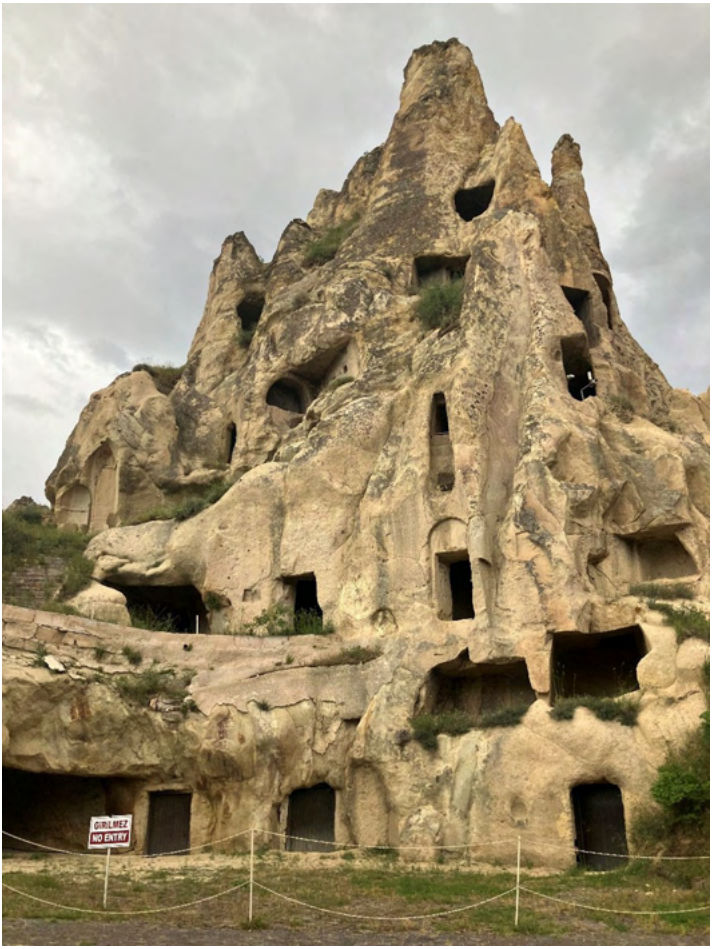

Fig.1 *Kızlar Manastırı*, Nuns Priory at the entrance of the Göreme Open Air Museum.

SENA KURCENLI KOYUNLU
PhD Student

THE REPRESENTATION OF THE ARCHITECTURAL HERITAGE IN THE POST-DIGITAL AGE:
THE CASE OF GÖREME OPEN AIR MUSEUM IN TÜRKIYE

About the Presentation:

This presentation is a chapter of the dissertation.

Every representation is a narrative created by the observer-illustrator, reflecting assumptions and accumulated prior experiences. Starting with the Renaissance, surveying and mapping the built environment has been a central concern, while later Cartesian systems began to be employed to 'refine' their methods through so-called objective representations. As technological innovations emerged in the nineteenth century, new modes of representation—especially photography and videos— deepened the discussions on visual perception and the human-machine-vision relationship.

As different modes of representation have changed—especially with the rise of digital technologies, the boundaries between drawings, photographs, and images have blurred. This shift necessitates re-evaluating how architectural heritage is recorded and represented. John May argues that today, every form of representation—whether drawing, photograph, or other architectural exploration— is digital, and so is data processing.[1] What we inherently perceive as a photograph or drawing is, in fact, an image. Today, we are no longer only collecting static images but processing photographs, measuring drawings and creating point clouds or 3D models.[2] Taking a step further, we create texture maps and materials to imitate and recreate the physical environments.

Considering these innovations, this study investigates the meaning of recording and representing architectural heritage in the post-digital age, focusing on Göreme Open Air Museum in Cappadocia, Türkiye, as a case study. By analyzing the museum's physical conditions and real experience, this study explores the potential of extended reality (XR) technologies and critically assesses their role in heritage data management and representation. Grounding Baudrillard's concept of *hyperreality*,[3] this study aims to rethink the representation of Göreme Open Air Museum—a World Heritage Site (WHS) in the post-digital age.

1 John May, *Signal. Image. Architecture: (Everything Is Already an Image)*. (New York, NY: Columbia Books on Architecture and the City, 2019).
2 Maja Ozvaldic, 'Virtualities of the Visible: The Architecture of Mixed Realities,' in *Architecture, Futurability and the Untimely: On the Unpredictability of the Past*. Edited by Ingrid Mayrhofer-Hufnagl (Bielefeld: Transcript Publishing, 2022), 213–230.
3 Jean Baudrillard, *Simulacra and Simulation*. Translated by Sheila Faria Glaser. (Ann Arbor: University of Michigan Press, 1994).

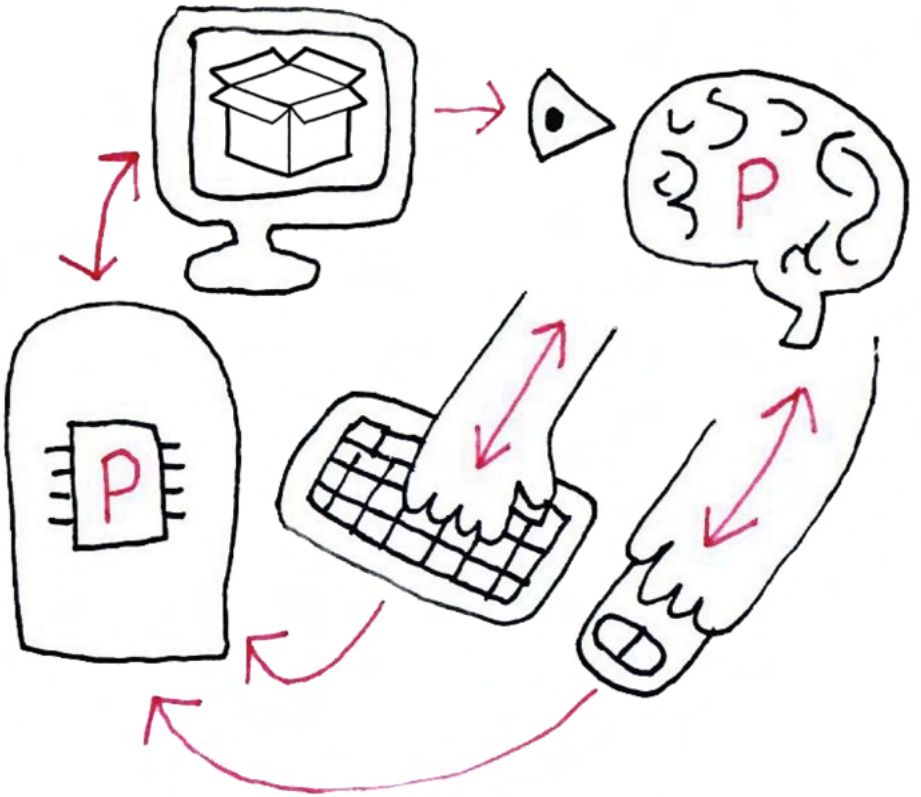

Fig.1 Human computer interaction using open source tools. © Nicolás Arellano Risopatrón.

NICOLÁS ARELLANO RISOPATRÓN
PhD Candidate

DE-BLACKBOXING BIM -
WHY AND HOW SHOULD ARCHITECTS GET BIM OUT OF PROPRIETARY SOFTWARE AND CLOSED FILE FORMATS

This dissertation explores the use of computer coding in the field of architectural representation, and analyses the ways in which coding can impact architecture.

Since the 1970s, when computers became available to architects, this new human-computer relationship became a challenge for architecture in multiple fundamental aspects, such as representation, education, and practice. Half a century later, in the 2020s computers are not only available, but in most cases, indispensable.

The term black box to describe opaque computer processes has been used since the early 1940s. It has its origins in electronic circuits to describe a system that can be understood only in terms of its inputs and outputs, but whose processes are not accessible or even visible to users. To "de-blackbox" is to understand the processes, parts, and connections of the system. The historian Antoine Picon states that "it has become unavoidable to enter into the black box of programming in order to make a truly creative use of the computer."[1]

There are several digital processes of architectural representation, one of the most popular today is Building Information Modeling (BIM). In the last two decades, BIM have become not only a possibility but are sometimes mandated by governments in many countries. For this reason, I argue that it is imperative to understand both its potential and limitations.

Chuck Eastman, one of the fathers of BIM explains in his BIM Handbook that "BIM is not a thing or a type of software but a human activity that ultimately involves broad process changes in construction."[2] Digital objects are coded to describe and represent real-life building components. This facilitates a dialog with the model that was previously not possible. BIM could be defined as a communication and collaboration tool originally created to connect people, processes, and data. However, that is not exactly the way the Architecture, Engineering, and Construction (AEC) industry is using BIM. The status quo is to work with proprietary solutions and closed file formats. There are a few vendors that control the industry, promoting their proprietary file formats. The issue is that when working with closed formats, the whole process becomes a black box.

Two conditions must be met before architects can fully de-blackbox the digital toolbox. Firstly, architects must have a working knowledge of computer programming. Secondly, the source code of the software that they use —the list of human-readable instructions that define a computer program— must be accessible for modification by the user.

This research warns about the obstacles that architects must overcome to benefit from a fruitful relationship between programming and architecture.

Coding has the potential to further expand the current limits of our imagination within BIM. Computers can offer a tremendous contribution to our architectural explorations if we continue to explore innovative research that includes human input with computer logic and processing power to arrive at collaborative solutions.

About the Presentation:

This presentation is an outline of the dissertation.

1Kostas Terzidis, *Algorithmic Architecture* (Netherlands: Taylor & Francis, 2006), VII. Foreword by Antoine Picon: Algorithmic Architecture or the Computer as a Double?
2 Chuck Eastman et al., *BIM Handbook: A Guide to Building Information Modeling for Owners, Designers, Engineers, Contractors, and Facility Managers.* (Germany: Wiley, 2018), 364.

Fig.1 45°25'57.05" N, 73°39'53.68" W
36"x 36" Quilt, made of cotton and reclaimed fabrics.
The quilt serves as a site analysis and draws inspiration from the design and geometry of traditional block patterns commonly used by quiltmakers. These patterns carry a shared language, communicating various oral histories. Each block of the quilt represents a specific location along the Lachine Canal that holds significant value to the community's past, present, and future. The block patterns utilize line, form, and texture extracted from site photographs.

ASHLEIGH ABRAHAM
PhD Student

INTERWOVEN:
EXPLORING ARCHITECTURAL IDEATION THROUGH THE STUDY OF QUILTING

"The quiltmaker's knowledge, skill and imagination unify their practice, for they perform like vernacular builders." [1]

About the Presentation:

This presentation is an outline of the dissertation.

Quilt-making and architecture share numerous parallels, not only in their ability to enact cultural and personal meaning but also in the methods of ideation, design, and construction. As a discipline, it is crucial that we actively seek out and embrace thinking that disrupts conventional perspectives. This is the key to unlocking new possibilities and recognizing the intricacies of social, political, and cultural issues. In doing so, we can foster a design approach that incorporates communities and social groups often overlooked as primary stakeholders in a project. Quilting, in its unique way, challenges traditional perspectives, offering a fresh lens through which to imagine architecture.

The quilt weaves aesthetic, ritual and practical necessities of spiritual life into tangible forms for human use, celebrating the banal and real knowledge. Reflecting on history and heritage, quilting engages in investigating settlement, migration, immigration, and resistance. Often a collective activity it has transformed community engagement, leading to income generation, political organization, and advocacy. The history of quilting in Canada has tremendously diverse cultural representation. The distinctive practices and methods of quiltmakers, characterized by bold and expressive designs, foster the intellectual process of abstraction. The proposed research will examine how quilting can enhance spatial thinking and stimulate architectural discourse through architecture education and critical practice. The research will draw upon theories of material culture, tectonic thinking, and praxis to emphasize marginalized communities in Canada and their engagement with materiality, landscape, and urbanism.

1 William Arnett et al., Gee's Bend : *The Architecture of the Quilt.* (Atlanta: Tinwood Books, 2006).

Fig.1 *The Sabil-Kuttab of Sultan Qaytbay*, the first free-standing sabil-kuttab in Cairo.

REHAB SALAMA
PhD Student

THE METAPHYSICS OF COMPASSION:
AL WAQF AS EXPRESSION OF BARAKAH IN EVERYDAY CAIRO

This research is an exploration of the intersection of the sacred and the everyday within Cairo's urban fabric, with a particular focus on the Islamic perspective that perceives the sacred as ubiquitous and inherent in all aspects of life. Centered around the concept of *barakah*, a divine blessing that flows from the spiritual realm to the material world. The study seeks to unravel the metaphysics of compassion through architecture, investigating how these spaces serve as conduits for the intersection of the sacred and the mundane, creating moments abundant with blessings.

Framed within core Islamic principles, the research aims to define the sacredness of spaces by imbuing them with virtues. These virtues act as spatial merits, constructing imaginative geographies that blur the boundary between myth and reality. The blurring of spatiality, in turn, imparts significance to places, buildings, and landscapes, allowing access to *barakah* through the dissolution of the boundary between the real and the imaginary. The study's primary focus is on everyday architecture falling under the concept of *al-waqf* (Islamic charitable endowment). *Al-waqf*, constituting a significant portion of Egypt's landscape, has historically played a crucial role in shaping Islamic civilization. The work seeks to understand how architecture, especially that of *al-waqf,* can serve as a means to transcend material existence and access the spiritual *barakah*. The study engages with the creation of virtuous spaces, spaces of *fada'il*, and spaces of compassion. In the context of an era marked by social, political, and environmental catastrophe, the research grapples with questions of spatial justice, questioning who benefits from these compassionate spaces, who has access to *barakah*, and how spaces of *awqaf* have transformed over time.

About the Presentation:

Paper presented at the AHRA Student Symposium in May 2024, titled, 'Invisible Actants: undoing, remaking and building-with.

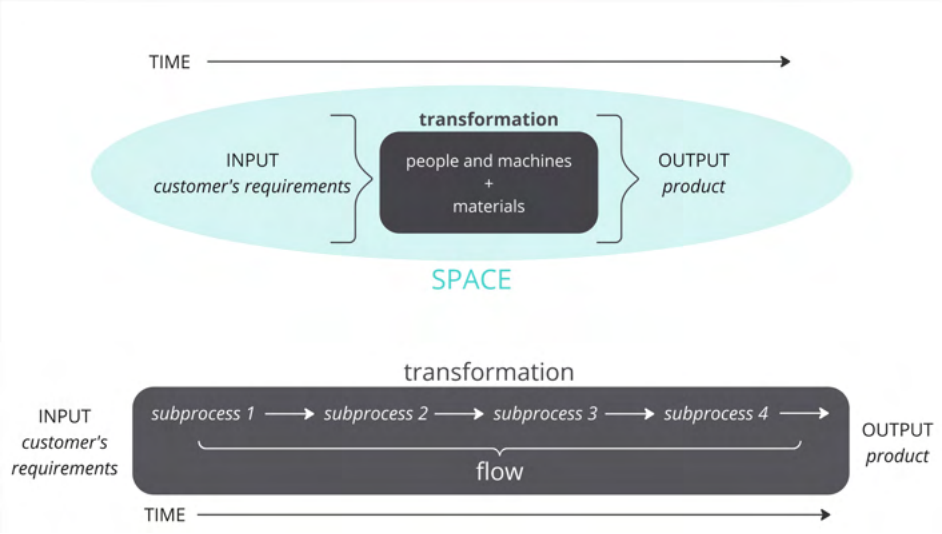

Fig.1 Diagrams of the Transformation-Flow-Value (TFV) theory of production based on research by Lauri Koskela[1]

1 Lauri Koskela, *Application of the New Production Philosophy to Construction*, Technical Report. (Stanford: Stanford University Center for Integrated Facility Engineering, 1992); Lauri Koskela, 'An Exploration towards a Production Theory and Its Application to Construction' (Espoo, Technical Research Centre of Finland, 2000); Lauri Koskela et al., 'The TFV Theory of Production: New Developments', *Proceedings of the 15th Annual Conference of the International Group for Lean Construction (IGLC15)*, (East Lansing, MI: Michigan State University, 2007), 2–12.

JULIE IVANOFF
PhD Student

FROM CARS TO CONSTRUCTION:
LEAN PRODUCTION METHODS FOR THE AEC

In 1992, Lauri Koskela investigated the Toyota production system (TPS) of Just-In-Time, Total Quality Control, lean production, and other similar manufacturing methodologies, which he referred to as the "new production philosophy", that could be applied to construction. Koskela distilled lean production into three key elements that are shared with the construction process— transformation, flow, and value. The goal for driving value, which is implemented in ISO 19650 Organization and Digitization of Information about Buildings and Civil Engineering Works, Including Building Information Modelling (BIM) where the production and use of a BIM model drives value by eliminating waste and maintaining a high-quality product that satisfies the clients' requirements.

Koskela defines production as a conversion process where the input, such as resources, are transformed into an output, a product or asset that holds value. This transformation has subprocesses that sequentially advance towards the final output. The flow between transformation subprocesses needs to function efficiently, removing any activities that do not add value. Koskela critiques TPS for its focus on the transformations without adequately acknowledging the physical flows which impact the entire flow process. Koskela argues that these activities are significant and varied in construction, requiring greater attention for effective management.

My research explores Koskela's investigation of transformation, flow, and value and its intent and application through BIM.

About the Presentation:

This presentation is a chapter of the dissertation.

Fig.1 Infrastructures of suspension and occupation of Palestine.
Collage of images by © Reem Awad, 2018, 2019, and 2023 with images by Motaz Azaiza - Instagram @motaz_azaiza (Oct 26, 2023), Yousef Mema - Instagram @joegaza93 (Jan 25, 2024), Ahmed Kouta - Instagram @princekouta (Apl 5, 2024), Hind Khoudary - Instagram @ hindkhoudary (Apl 27, 2024), Trek Bakri – Facebook (Aug 22, 2021), Al-Jazeera Arabic Live News (July 16, 2024), and Poll Willem Van De (1950).

REEM AWAD
PhD Student

THE TEMPORARY –
A WAY OF LIFE AND AN INSTRUMENT FOR DISPLACEMENT

About the Presentation:

This presentation is an outline of the dissertation.

Architecture has often been characterized as a synonym for permanence—having an immutable essence despite the passing of time.[1] This view may be valid if we see architecture from an imperial perspective. I argue that the characterization of permanence is an illusion manufactured and reserved for the victors of imperial campaigns. While academic and political institutions develop new technologies, techniques, and policies to make architecture more durable, in Palestine, Zionism has been weaponizing those technologies and policies to suspend Palestinians spatially and temporally as a means to transform historical time and enact the erasure of Palestine.

The suspension of Palestinian lives is a form of violence that forbids, delays, complicates mundane actions, undermines preferences, undercuts daily schedules, drives people crazy, and sometimes even kills.[2] I frame the imposed temporariness on Palestinian existence and space(s) as an example of a permanent state of exception, which the Italian philosopher Giorgio Agamben defines as the temporary suspension of the rule of law that replaces the legal system itself.[3] Though Agamben defines the sovereign as the one who decides on the state of exception,[4] the philosopher Adi Ophir argues that "the ultimate principle of sovereignty is not the power to decide on the exception but the power — both authority and capacity—to decide on the end of the temporary and on the temporariness of ends."[5] He notes that temporariness has become a constitutive moment in the structure of the Zionist regime.

My research project defines modes of the Zionist regime's dual instrumentalization of the label 'temporary' for inclusion and exclusion to expand their control, appropriate territory, and conquer more Palestinian land. More importantly, the research investigates how Palestinians act under an imposed state of temporariness and how Palestinian spatial practices shape our conception of the temporary and the legal state of exception.

1 Aldo Rossi. *Architettura Della Città*. Cambridge. (Cambridge, MA: The MIT Press, 1982).
2 Michael Sorkin. 2005. *Against the Wall: Israel's Barrier to Peace*. (New York: New Press, 2005).
3 Giorgio Agamben. *Means without End: Notes on Politics*. New edition. Vol. 20. Theory Out Of Bounds. (Minneapolis: University of Minnesota Press, 2000), IX.
4 Ibid., 4, 9.
5 Adi Ophir. "From Occupy to the Occupation: Indeterminate Temporariness." *Tikkun* 31, no. 4 (2016): 31, 33. https://doi.org/10.1215/08879982-3676864, accessed on October 12, 2024.

Fig.1 A collection of still images as I follow the (yellow) "line" while filming infrastructure of spatial violence - and the male gaze it enables - in Beirut. Photos by the author between 9 February 2022 and 1 March 2023. @ Jenan Ghazal, 2022, 2023.

JENAN GHAZAL
PhD Candidate

WALKING THE LINE
FIELDNOTES ON SPATIAL VIOLENCE

In the aftermath of Beirut's Port explosion on 4 August 2020, the authoritarian security protocols, in place since the Lebanese uprising of 17 October 2019 (the *thawra*), were disrupted in Beirut. Checkpoints were deserted, concrete security posts were abandoned, and metal barriers remained scattered from the blast. I was able to walk in the spaces of the void unnoticed by the military and male gaze. This presentation follows my practice of walking as a Lebanese feminist researcher in Beirut (2018, 2020, 2023). Using photography and cartography, Chapter Four of my dissertation investigates, what I call, the spaces of the void – the prohibited, a(void)ed, and restricted open and public spaces. Checkpoints are material as well as political. They do not operate independently but belong to a network of spatial violence. For twenty years during the Lebanese Civil War (1975-1990), road blocking was deployed by militias to stall, kidnap, and kill people based on their religious and political affiliations. Checkpoints were a familiar reality throughout various political upheavals in Lebanon. During the *thawra*, army and security forces increased the use of roadblocks on the highway between Beirut, the capital, and Trablos (the second largest city in Lebanon and one of the most marginalized) as a repressive measure to stop and search protestors and to deter others from joining unfolding protests in front of the walls of the political center of Beirut. Through and with these other forms of walling, I ask how the practice of walking in Beirut – seeking access to spaces and temporalities and crossing the lines between the spaces of the margins and the center – informs the writing of a dissertation. In transgressing voids and timeframes, the research presents a re-reading of the spatiality of checkpoints as an apparatus for maintaining the state of the "meanwhile" in the country.

About the Presentation:

This presentation is an abstract of the dissertation.

Fig.1 View of the overwhelming dominance of the Augusta-Priolo petrochemical complex along the eastern coast of Sicily, Italy, illustrating the profound impact of industrialization on the region's landscape and environment. © Damiano Aiello, 2024.

DAMIANO AIELLO
PhD Candidate

TOXIC INHERITANCE:
A FRAMEWORK FOR REPARATIVE CONSERVATION

In the twentieth century, the heritage conservation movement gained considerable momentum in the West, leading to practices that appear neutral and objective but ultimately serve the interests of dominant classes. This approach to conservation enforces a hegemonic monocultural narrative that marginalizes and erases the diverse, lived experiences of subaltern communities, thereby deepening social hierarchies and perpetuating colonial legacies.

Recognizing the role that heritage conservation has played in creating fractures within a world shaped by neoliberal systems—deeply embedded in necropolitical logics of extraction, consumption, and colonialism—this research aims to rethink heritage conservation as a critical practice within a planetary reparation framework. To achieve this, I first examine conservation practices that embody this awareness and have effectively challenged and subverted established narratives and power structures through design, planning, advocacy, and activism. Building on these insights, this dissertation analyzes the 'Death Quadrilateral,' a highly industrialized and heavily polluted area in eastern Sicily, Italy, where a silent environmental disaster of incalculable proportions has been unfolding for over half a century. If this toxic production is understood as a monument to social and environmental injustice, how can heritage conservation contribute to the development of sustainable and equitable practices for managing these enduring legacies?

The selection of this case study intentionally transcends the authorized definition of heritage, which often upholds materialistic, commodified, and exclusionary conservation practices rooted in Western norms. This research seeks to establish and consolidate a renewed, inclusive approach to heritage conservation, which I term 'reparative conservation.' I suggest that expanding the scope of conservation to include not just the restoration of artifacts but also the rectification of historical and ongoing wrongs can enrich the methodologies, goals, and ethical foundations of the field.

About the Presentation:

This presentation is an outline of the dissertation.

Fig.1 Alexander Robert Burnett-Hurst, "Spring Mills Improvement Trust Chawl," Bombay, 1925. [1]

1 Alexander Robert Burnett-Hurst, *Labour and Housing in Bombay: A Study in the Economic Conditions of the Wage-Earning Classes in Bombay.* (London, UK: P.S. King and Sons Ltd.), 26.

USHMA THAKRAR
PhD Student

DIRT AND MODERNITY
CLEANING AND SPATIAL (DIS)CONTINUITIES LATE-COLONIAL INDIA

This presentation argues that modernist colonial and nationalist cleaning practices and pollution narratives at the scales of the body, the home, the neighborhood, and the city, were operationalized to create interiors defined by qualitative difference from the exterior, which came to be understood as where dirt, broadly understood, was allowed (and meant) to accumulate. Through this framework, there was a systemic dirtying of the Dalit body and Dalit spaces in India at the turn of the twentieth century and dirt was used as a material through which the Dalit was positioned as outside of modernity and through which the oppression of Dalit was produced and reproduced. This presentation will explore how modernist fears of dirt and contamination shaped urban development during the period and how a divergent Dalit imaginary and relationality to dirt reframes cleaning as emancipatory.

About the Presentation:

Early draft/outline of a chapter for an edited volume on cleaning and interior architecture.

Fig.1 Central Experimental Farm,[1] Dominion Observatory,[2] Aberdeen Pavilion,[3] and Victoria Memorial Museum.[4]

1 Dominion Observatory with the Central Experimental Farm grass plots in the foreground, 1917. Library and Archives Canada, R214-2895-8-E, RG48, Box 228, Acc. 1976-233, neg. 3016, PA-107541, P-229.
2 Central tower of the Canadian Museum of Nature on McLeod Street after its reconstruction. Photo circa 1920s. Canadian Museum of Nature.
3 Central Experimental Farm with the Director's residence next to the CEF offices. Library and Archives Canada, Box 00599C, PA-009862.
4 Lansdowne Park, Ottawa, 1900 with the Aberdeen Pavilion with the sign "Central Canada Exhibition" above its entrance. City of Ottawa Archives, CA007687lan.

ÉMÉLIE DESROCHERS-TURGEON, PhD
Assistant Professor, Dalhousie University, School of Architecture

LAND, SCIENCE AND ARCHITECTURE

POLITICS OF SCALE IN 1856–1939 OTTAWA, CANADA

Settler-colonial regimes of city making in Ottawa have incorporated the built environment to project a liberal, benevolent, and rational government, while concealing their extractivist histories and motives. This dissertation investigates the land representations that shape Ottawa as a settler-state capital, focusing on state scientific institutions like the Dominion Observatory, the Central Experimental Farm, the Geological Survey of Canada, and the Central Canada Exhibition at the turn of the twentieth century. It explores how these institutions relied on the manipulation of scales and the construction of architectural fictions to alter land into configurations of possession.

This dissertation historicizes and problematizes architecture's intertwinement with imperial networks and settler colonial imaginaries through practices of bordering, inventorying, improving, and displaying in Ottawa and Canada. It argues that architectural expertise and centralized government control regimes constructed geographies that organized both human and non-human lives within imperial frameworks. Each chapter focuses on the visual culture of science in Ottawa, particularly the scaled representations employed to project manageable spaces aligned with metrics of possession. By treating scales as both a subject of study and a methodological tool, this work delves into architectural histories of land, emphasizing the agential materialities within these practices.

About the Presentation:

This presentation offers an overview of the doctoral dissertation defended in August 2024.

Fig.1 Al-Qasabah Street in the old city of Hebron. © Rana Abughannam, 2019.

RANA ABUGHANNAM, PhD
Assistant Professor, University of British Columbia, SALA

THE COUNTER-COLONIAL:
THE AGENCY OF ARCHITECTURAL REHABILITATION AS A FORM OF RESISTANCE IN HEBRON, PALESTINE

The old city of Hebron in Palestine presents an extreme condition of a colonized space where historic and religiously significant built heritage is overlapped by Israeli colonial infrastructure, including settlements, checkpoints, watchtowers, and barricades. Hebron's built heritage has become the locus where counter-colonial tactics are deployed in response to the ongoing settler colonial project and where Hebron Rehabilitation Committee (HRC) has responded to the colonial structure through strategies of restoration, reclamation, and emancipatory architectural practice. This thesis proposes the notion of the counter-colonial as a conceptual and mobilizing framework for tactics of resistance against the ongoing settler colonial project. The counter-colonial establishes epistemological, methodological, and interpretive resistance tactics that recognize the setter-colonial project and mobilize within and beyond its limitations through multiple forms and transformations. These tactics are active, indigenous, bottom-up, and constant responses to and against a colonial project. They offer novel, innovative, and alternative processes that reclaim and reinforce Palestinians' agency over their lands, actions, narratives, and existence.

As a counter-colonial research project, this dissertation prioritizes epistemic reconsideration, slow learning, and intimate uncovering, promoting the methods of countering as investigative probing rather than problem-solving. Focusing on HRC's rehabilitation and governance efforts, this thesis underscores three counter-colonial tactics: (1) counter-governance, where the HRC has taken a semi-governmental role to protect and serve the Hebronites, becoming stewards of the site; (2) counter-heritage, where the HRC has employed the UNESCO World Heritage Site designation as a tool to advocate for the Palestinian cause; and (3) counter-evidence, where the HRC's documentation and archival work are presented in legal contexts as proof of Palestinian land ownership. Following an analysis of these tactics, the dissertation concludes that counter-colonial tactics are mobilized through four forms: spatial action, material force, representational process, and symbolic meaning.

About the Presentation:

This presentation offers an overview of the doctoral dissertation defended in April 2024.

30 STUDENT BIOGRAPHIES

AHMED ELSHERIF is a PhD student at the Azrieli School of Architecture & Urbanism. He holds a BFA (2012) from Alexandria University, Egypt, where he worked in academia and research at different universities. He received the Erasmus+ grant (2016) for staff training mobility program – United Kingdom, and was awarded the Fulbright scholarship to pursue his MDesSE (2018) at Iowa State University. Prior to joining Carleton University, Ahmed worked as a teaching assistant in the United States, while pursuing his MFA and MS Arch at Iowa State University. His research interests span the nexus of architecture history, critical theory, and culture.

ASHLEIGH ABRAHAM is a PhD student at Carleton University's Azrieli School of Architecture & Urbanism (ASAU). Ashleigh holds a Bachelor of Architectural Studies and a Master of Architecture. She is an OAA Intern Architect with local and international experience. Her research interests span practice and academia, with a focus on methodologies of architectural design and narratives of marginalized communities and their engagement with materiality, landscape, and urbanism. Ashleigh is also a researcher with the Architecture Action Lab at ASAU and instructs advanced software applications in architecture, sustainable planning and development at Seneca Polytechnic in Toronto.

DAMIANO AIELLO is a licensed Italian building engineer and a PhD candidate at the Azrieli School of Architecture and Urbanism, Carleton University, where he has been researching the intersection between heritage conservation and reparations. Damiano received his Master's Degree in Building Engineering and Architecture from the University of Catania. He is actively involved with Carleton Immersive Media Studio (CIMS), where he contributes to projects focused on digital documentation and storytelling. Before joining Carleton University, Damiano worked as an engineer in Italy and gained multiple research fellowships at the University of Catania and Politecnico di Milano.

ÉMÉLIE DESROCHERS-TURGEON joined the Dalhousie University School of Architecture in early 2024 as an Assistant Professor, teaching architectural history and studio. She previously taught as a contract instructor at Université du Québec à Montréal and Carleton University. Dr. Desrochers-Turgeon defended her dissertation, Land, Science and Architecture: Politics of Scale in 1856–1914 Ottawa, in 2024. She co-edited the book *Architectures of Hiding: Crafting Concealment | Omission | Deception | Erasure | Silence*, with Rana Abughannam, Pallavi Swaranjali, and Federica Goffi, published by Routledge in 2024. She is also involved in projects with the Beyond Extraction collective.

JENAN GHAZAL is a PhD candidate at the Azrieli School of Architecture & Urbanism, involved in historical and contemporary entanglements of architecture, political violence, and the body in urban spaces. She has a BA (2012) and an MA (2014) from the Académie des Beaux-Arts in Lebanon, where she also has professional experience as a licensed architect. Before obtaining a Master of Architectural Studies from Carleton University (2016), Jenan was actively involved with community-based activism and documentation of endangered heritage buildings in her hometown Tripoli, Lebanon. Living in a city in conflict, she has experienced first-hand the destruction inflicted both on and by the built environment while she was in her undergrad-

uate studies in architecture. Inspired by this journey, her doctoral research aims to destabilize traditional assumptions about the dynamics between political violence and architecture in Lebanon. Considering spatial violence as a political (and architectural) practice of oppressing states, she looks at Beirut's specific urban spaces where citizens experienced physical and non-physical violence brought by their immediate built environment. Her work aims to contribute to an understanding of spatial violence in architecture –not as a state of exception but as continuous immanence. She is currently a SSHRC scholar (2020) and is affiliated with the Department of Near and Middle Eastern Civilizations at the University of Toronto.

JULIE IVANOFF is a PhD student at the Azrieli School of Architecture & Urbanism, where she received her Master of Architectural Studies and her Bachelor of Architectural Studies. Between degrees, Julie freelanced as a designer-builder and obtained a Green Architecture certificate at Algonquin College. Julie is a researcher at the Carleton Immersive Media Studio (CIMS), where she led the first phase of the Imagining Canada's Digital Twin project and continues investigating the application of digital twins at regional and national scales. Her research focuses on the life cycle management of built assets through industry foundation classes (IFC) and the relationships between virtual-digital representations and their physical counterparts. Additionally, Julie is an active volunteer in her local community where she advocates for tenants' rights, predominantly the right to housing for marginalized people in Centretown.

NICOLÁS ARELLANO RISOPATRÓN is a PhD candidate at Carleton University (Ottawa) focusing on coding and open-source tools for architects in his research called de-black boxing BIM. He holds a Bachelor's in Architecture from Pontificia Universidad Católica of Chile, specializing in "Systems and Technologies" and is certified in "Developing BIM Projects." He is a research team lead at the Carleton Immersive Media Studio (CIMS), leading Canada's Digital Twin project. He is a Contract Instructor at Carleton University where he teaches coding and open source tools for architects. He is the director of research at the Digital Built National Capital Region (dbNCR).

RANA ABUGHANNAM joined the School of Architecture and Landscape Architecture at the University of British Columbia as an Assistant Professor in August 2023. A registered architect in Palestine and Jordan, she defended her PhD dissertation, The counter-colonial: The agency of architectural rehabilitation as a form of resistance in Hebron, Palestine, in 2024. Her research explores spatial counter-colonial tactics exemplified in Indigenous, bottom-up, and constant practices of resistance against ongoing colonial projects, emphasizing the agency of architectural rehabilitation as a form of resistance. She recently co-edited *Architectures of Hiding: Crafting Concealment | Omission | Deception | Erasure | Silence* with Émélie Desrochers-Turgeon, Pallavi Swaranjali, and Federica Goffi, a publication that delves into the responsibilities of architects in shaping the built environment, examining processes of concealing and unconcealing narratives and imaginaries in architectural spaces.

REEM AWAD is a PhD student and contract instructor at Carleton University's School of Architecture and Urbanism. She is a recipient of the SSHRC Doctoral Fellowship Award (2022-2025). Her doctoral research examines the socio-cultural and spatial-political implications of the temporary, in the colonization of Palestine. Since joining Carleton University in 2017, Reem has taken on various research and teaching roles and responsibilities, including teaching assistant at Carleton University, contract instructor at Algonquin College, and research team lead at Carleton Immersive Media Studio (CIMS). Reem is a licensed architect in Palestine and Jordan, where she practiced (2012-2017). She holds a Master of Architecture degree from Carleton University and a bachelor's in architectural engineering from An-Najah National University, Palestine.

REHAB SALAMA is a PhD student at the Azrieli School of Architecture & Urbanism (ASAU) at Carleton University, where she also received her Master of Architecture (2021) and her Bachelor of Architectural Studies (2018). During her time at Carleton, Rehab has contributed as a Teaching Assistant as well as a Research

Assistant at the Carleton Immersive Media Studio (CIMS), where she specialized in Building Information Modelling (BIM) and Heritage Building Information Modelling (HBIM). Currently, Rehab is a practicing OAA Intern Architect at Moriyama Teshima Architects. Her research investigates the relationship between the sacred and the everyday within the context of Cairo, Egypt, with a particular focus on Islamic cosmology and spaces of compassion.

SENA KURCENLI KOYUNLU is a PhD student at the Azrieli School of Architecture & Urbanism, Carleton University. She is actively involved with Carleton Immersive Media Studio (CIMS), a research lab focused on digitally assisted storytelling and hybrid forms of representation. She obtained her master's degree in the Department of Architecture, Restoration Program from Istanbul Technical University in 2022. Before joining Carleton, Sena had various experiences in the conservation of architectural heritage and was a research team member on archaeological excavations such as Adramytteion Archaeological Excavation and St. Thekla Archaeological Site Survey in Türkiye. Her research interests are concentrated on Cappadocia's rural and cultural landscape, multileveled settlement features, and conservation planning approaches. Her doctoral research centers around architectural narratives, digital representations and heritage data management of the Cappadocian landscape.

USHMA THAKRAR is a PhD student at Carleton University. She holds a Masters in History and Critical Thinking in Architecture from the Architectural Association and a Masters in Urban Planning from Columbia University, as well as a Bachelors in Architectural Studies from Carleton University. Her research, which explores practices of cleaning and space-making, as well as notions of hygiene and the politics of recognition in colonial contexts, has been supported by the Social Sciences and Humanities Research Council of Canada. Previously, she worked as an editor and researcher for the Canadian Centre for Architecture.

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