

UNIVERSITY
of GUELPH

Master of Landscape Architecture

MLA Thesis Abstracts 2023-2018



**School of Environmental Design and
Rural Development (SEDRD)**

Ontario Agricultural College

2023-2018 Master of Landscape Architecture Thesis Abstracts

Overview

The abstracts in this publication are from the thesis work of students in the Master of Landscape Architecture program at the University of Guelph during the last six years. These abstracts indicate the range of interests and the breadth and depth of research in landscape architecture at Guelph.

All University of Guelph's MLA theses from 2011 onward can be searched through [The Atrium](#) under Thesis & Dissertations, which is the institutional repository hosted by the University of Guelph's McLaughlin Library. Theses prior to 2011 may be available in hard copy and can be borrowed through the MLA Graduate Program Assistant.

Theses can also be obtained through the Government of Canada - [Library and Archives Canada](#) website. You can access and search full text electronic versions of numerous Canadian theses and dissertations and information on copyright or purchasing of a thesis etc., from *Thesis Canada*.

Additional Information

For more information regarding the MLA program in Landscape Architecture, University of Guelph please contact:

Diana Foolen, MLA Graduate Program Assistant. Email: dfoolen@uoguelph.ca

Steven Clarke, MLA Graduate Coordinator. Email: steven.clarke@uoguelph.ca

Landscape Architecture Programs
School of Environmental Design and Rural Development
University of Guelph
Guelph, Ontario N1G 2W1

Additional information regarding the Master of Landscape Architecture at the University of Guelph can be obtained from the following websites:

[School of Environmental Design and Rural Development](#)
[Office of Graduate and Postdoctoral Studies](#)

August 2023

Landscape Architecture Faculty

Landscape Architecture faculty have been recognized within the University of Guelph as well as nationally and internationally for their expertise and strengths in teaching, practice, outreach and research. They bring a variety of education backgrounds and interests that span broad areas of the profession, adding significantly to the richness of the student learning experience at Guelph.

University of Guelph associated graduate faculty, emeritus faculty; and associated professionals and faculty from other university programs and universities contribute as well to the education of students in Landscape Architecture.

[Afshin Ashari](#), Assistant Professor. BCS (Islamic Azad University-IAUCTB); MLA (Toronto).
Email: aashari@uoguelph.ca

[Nadia Amoroso](#), Associate Professor. BLA, MUD (Toronto), PhD (The Bartlett, UCL, London, UK).
Email: nadia.amoroso@uoguelph.ca.

[Steven Clarke](#), Associate Professor. B.Env.D, MLA (Manitoba).
Email: steven.clarke@uoguelph.ca.

[Robert Corry](#), Professor. BLA (Guelph), MLA (Minnesota), PhD (Michigan).
Email: rcorry@uoguelph.ca.

[Martin Holland](#), Associate Professor. BA (Dalhousie), MLA (U. Virginia), PhD (Illinois).
Email: martin.holland@uoguelph.ca.

[Sean Kelly](#), Associate Professor and SEDRD Director. BLA (Guelph), MSc (Guelph).
Email: sean.kelly@uoguelph.ca.

[Karen Landman](#), Professor. BLA (Guelph), MSc (Guelph), PhD (Queen's).
Email: klandman@uoguelph.ca.

[Brendan Stewart](#), Associate Professor. BLA (Guelph), MLA (California-Berkeley).
Email: brendan.stewart@uoguelph.ca.

2023 MLA Abstracts

Adair, Tiffany. [Exploring Plant-Human Relationships Among Indigenous University Students Using a Circle Method](#). MLA Thesis 2023. Advisor: S. Kelly.

Objectified in mainstream society, plants are often undervalued for their essential roles in ecological and human health, undermining efforts to protect their habitat. Traditionally, many Turtle Island Indigenous cultures have views of plants as autonomous beings that are as worthy of respect as any human. Colonialism and climate change have threatened this relationship. What do plant and human relationships look like today amongst Indigenous students at the University of Guelph? A modified sharing circle method was devised for specific, professional use in landscape architecture. This was used to collect stories from participants. Nineteen questions were asked of participants and resulted in a key finding that connection to the land is an essential factor in Indigenous people reclaiming their identity and culture. Plants act as a doorway for this to occur, providing a sense of safety and vital physical, social, emotional, and spiritual health benefits.

Aquino-Chien, Ethan. [Establishing Disc Golf Course Best Practices: The Creation, Application and Evaluation for an Emerging Sport](#). MLA Thesis 2023. Advisor: M.J. Holland.

Disc golf is a low impact sport that offers benefits such as a strengthened sense of community and positive physical and mental health impacts, while using the existing natural landscapes. Given the low cost of entry to the sport, municipalities are incorporating disc golf courses within existing parklands. Landscape architects are being relied on to create and implement these courses; however, the relative newness of the sport has yet produced a consolidated resource. This research identifies disc golf course design best practices and considers the unique conditions of the surrounding landscape. A literature review, design criteria development, design implementation and design evaluations were conducted. The resulting best practices were applied to a design located in London, Ontario and evaluated to assess its appropriateness as an application of best practices. By understanding the multiple requirements of disc golf, municipalities can identify areas appropriate for well-designed courses and realize all their benefits.

DeJong, Everett. [A Design Guideline for Public Urban Greenspace to Foster Stress Reduction](#). MLA Thesis 2023. Advisor: K. Landman.

Research has demonstrated that human wellness is influenced by both nature and nurture. The inherent DNA structure of an individual is determined by nature, but the experience of life stresses can continuously modify one's genetic composition. The emerging field of epigenetics explores how stress hormones affect human cells, where histone proteins regulate gene expression by adjusting their levels. The goal of this thesis is to develop a guideline for landscape architects to design public urban greenspaces that contribute to stress reduction. The research methods included a conceptual literature review and an assessment of the resulting guidelines by key evaluators who have professional experience in the field of health and design. The conceptual review led to a structured design approach. This research expands the knowledge of landscape design by highlighting how urban greenspace can contribute to health benefits.

Diemer, James. [An evaluation of landscape design concepts at the shoreline edge for the proliferation of Manoomin \(Zizania palustris\)](#). MLA Thesis 2023. Advisor: R. Corry.

Manoomin (*Zizania palustris*), also known as wild rice, is a grain native to the Great Lakes Region of North America that sustained Indigenous Peoples for thousands of years until early European settlers arrived. It has rapidly declined since colonization. Manoomin was the core of a healthy diet for Indigenous Peoples and important spiritually as a more-than-human being and included during rituals and ceremonies. The purpose of this study was to determine landscape characteristics that most affect manoomin at shorelines where recreational activities compete with manoomin. Five landscape design concepts with varying landscape characteristics were created based on literature and presented to

manoomin knowledge holders during interviews to identify the characteristics that affect manoomin. Three primary landscape themes emerged from the interviews, access locations, spatial relationships, and fragmentation. The findings suggest how landscape design may increase the proliferation of manoomin along the shoreline with changes to recreational use.

Garwood, Susan. [Ethical Urbanism: Cultivating Compassion to Drive the Development of Sustainable Urban Landscapes](#). MLA Thesis 2023. Advisor: S. Clarke.

Addressing anthropogenic climate change requires grand political, economic, and societal reforms but to make meaningful change, it must start with compassion and the realization it is humanity's ethical duty to do so. By preserving natural features, establishing community, and integrating a sustainable food system, Ethical Urbanism is a new ecological design approach that cultivates compassion for the environment and all living beings to address climate change. Three ecologically driven case studies were examined to mitigate issues that would arise in the development of an ethical community. These lessons then guided the design exploration of a 338-hectare site in Guelph, Ontario. The redevelopment of Guelph's York Lands site establishes a mixed-use mid-density eco-community that provides valuable space for both humans and non-humans in an urban setting. Ethical Urbanism, established in this thesis, rejects the commodification of living beings. It strives to exist not to the detriment of others and the environment.

Jiang, Fan. [Campus planning and design: Strategy for outdoor winter recreation](#). MLA Thesis 2023. Advisor: S. Kelly.

Campus planning as a professional service has been around for four hundred years. Landscape Architects and Urban Designers are the professions that typically prepare campus plans. Campus plans focus on "structures, their surrounding environment, and the gradual execution of the plan over a while" (Turner, p6). However, for winter use, specific attention to outdoor space is limited. As Canadian universities see an increase in international students from different climates to Canada, winter is bleak to some. Potentially, their wellness is challenged; as newcomers that are not familiar with nor readily acclimatized to outdoor winter activity, many tend to remain indoors. Exploring existing campus master plans for universities in the Great Lakes Region reveals the degree and attention specifically for outdoor recreational winter use by students. A campus planning and design guideline provide design and planning professionals with opportunities to integrate winter use into campus environments.

Lawson-Canning, Diana. [Considering Genetic Diversity and Climate Change Adaptation in Native Plant Selection: Decision-Making in Southern Ontario Producers and Users](#). MLA Thesis 2023. Advisor: R. Corry.

Responses to climate change and biodiversity loss increasingly require native plants. Citizens are encouraged to plant natives for habitat and connectivity, yet consideration of plant genetics outside restoration or conservation is largely uninvestigated. How Southern Ontario producers (growers/suppliers) and users (landscape architects/designers) consider genetic diversity and climate adaptation in native plant selection was explored through a survey (N = 128: 51 producers; 77 users). Producing/specifying/using over half natives, and producers, had higher likelihoods of considering genetics important across scales, where users' consideration of genetics was more market motivated. Local adaptation was favoured, with little assisted migration activity; however, only half of producers tracked provenance and most users infrequently asked for provenance. Local genotypes may be prioritized over adaptation planning in plant communities. Better provenance tracking is needed to discern natural population representation and enable strategic provenance-mixing, with greater consideration of genetics by users to ensure native plantings have ecological value.

Livingston, Jenna. [Re-Imagining Agricultural Landscapes: Design Strategies to Improve Ecosystem Services within Non-Crop Habitats](#). MLA Thesis 2023. Advisor: K. Landman.

Ecosystem services, such as soil quality and nutrient cycling, water regulation, pest management, and pollination, are integral to sustaining the health and resilience of agroecosystems. Best management practices (BMPs) in agriculture can enhance ecosystem services without decreasing production; yet, implementing and managing BMPs is challenging for many farmers. This research aims to identify non-crop habitats in agricultural landscapes as valuable resources for ecosystem services and explores how landscape architects could support BMP adoption. After a literature review, a case study of a working farm informed non-crop habitat design opportunities; based on these opportunities, infographics were developed as a communication tool. Results indicate that landscape architects can positively contribute to sustainable and resilient food systems. Restoring non-crop habitats is a land management decision and production practice that, along with crop habitat BMPs, can be used to protect agricultural landscapes from soil degradation, biodiversity loss, habitat fragmentation, and risk to water quality.

Lalonde, Abigail. [Re-Imagining Escapism: The Role of Landscape Architecture in Responsible Cottage Shoreline Design in Muskoka, Ontario](#). MLA Thesis 2022. Advisor: S. Clarke.

In Ontario, second-home tourism has become increasingly popular, such as owning a cabin or cottage by a lake or body of water. Muskoka, Ontario, is an extreme example of a location that showcases rapid waterfront cottage development at a residential scale. The concern regarding increased waterfront development in Muskoka is that it causes ecological fragmentation that impacts the upland, littoral and riparian zones. This thesis explores the tensions between environmentally responsible cottage design practices and the community's social, and recreational needs through the lens of landscape architecture. It utilizes a case study methodology combined with existing literature to establish an adaptable design framework for various shoreline conditions. The study provides landscape-driven solutions particular to the location that fulfills all pillars of responsible design, ultimately creating a guideline for professionals in Muskoka and other cottage landscapes working with similar settings.

Leach, Jacob. [Using an Urban Ecological Novelty Assessment Tool to Better Inform Design and Planning: An Application to Barrie Ontario](#). MLA 2023 Thesis. Advisor: R. Corry.

Human development has placed significant pressures on the environment, causing habitat degradation and loss. Professions, such as landscape architecture, which have a direct hand in how cities are managed and designed are responsible for protecting the environment to the best of their abilities. To do this, landscape architects require methods for reviewing and understanding the ecological makeup of the urban areas they are designing within. This study reviews the current ecological assessment methods present in the literature and identifies a suitable method for widespread use by landscape architects, Urban Ecological Novelty Assessment Tool. Through the combination of Human and Biotic Novelty indices (each created from a combination of citizen science and GIS data) this tool provides an overview of Ecological Novelty across different sites within the City of Barrie. The results provide a method for identifying key areas with ecological significance that can be proactively studied and protected.

Li, Marika. [Designer Robots: An early look at applications for Artificial Intelligence Visualization Software in Landscape Architecture](#). MLA Thesis 2023. Advisor: N. Amoroso.

Due to rapid technological changes, artificial intelligence (AI) driven graphic software appears to be the next frontier in creating digital imagery, though little is known on the potential of artificial intelligence for rendering landscape architecture graphics. The objective of this study is to determine the effectiveness and efficiencies of current Adobe-based rendering techniques, compared with the two major types of AI visualization software (sketch-based and text-based). Professionals were surveyed and asked to evaluate images of similar landscape scenes produced with either traditional methods or AI software. Then, a design experiment with a human-AI hybrid approach was carried out. This study

determined that while AI-based software cannot truly replace visualization methods currently used in education and practice, early adoption has already begun and may profoundly affect the design process.

Lozano, Cara. [From Data to Design: An Exploration and Application of Information Design Principles in Landscape Architecture.](#) **MLA 2023 Thesis. Advisor: N. Amoroso.**

Information design is deeply rooted within human nature, and information graphics are used in nearly every discipline where communication is necessary. Landscape architecture- a profession highly based in collaboration and public input, stands to benefit from good information design throughout its many stages. The purpose of this thesis is to explore and apply contemporary information design principles within landscape architecture. Through analysis of relevant literature, and assessment of post occupancy evaluations of Landscape architecture projects, this study explores the way information can and is presented within the field. It goes further by applying these lessons to existing public life study data for the 2019 temporary plazaPOPS installation in Wexford Heights, Scarborough. 4 information graphics are created as a result, and through discussion and the critique of design application, the design guidelines are revised. This thesis contributes insight towards the creation of successful information design within landscape architecture.

Mokhberi, Seyedeh Sara. [The Use of Persian Garden Elements in Public Green Spaces for Social Interaction Enhancement.](#) **Advisor: K. Landman.**

Public green spaces are considered important urban elements that enhance social interaction. The Persian Garden is among the best examples of public green space and one of the earliest successful examples in the urban landscape. Nowadays, due to the effects of urban development and land use change, researchers are interested in facilitating social interaction in public green spaces. This research aims to determine the possibility of the use of Persian Garden elements in public green spaces to enhance social interaction. A conceptual review of Persian and English literature explaining the Persian Garden characteristics as well as a review of the requirements for supporting social interaction were conducted. The results provide an overview of the Persian Garden characteristics, which are then evaluated for compatibility with social interaction. The research findings can benefit the design community by introducing Persian Garden elements as means to improve social interaction.

Neuhauser, Allison. [Small Remotely Piloted Aircraft Systems in Visual Impact Assessments and Resource Management: Developing Standards for Landscape Architecture.](#) **MLA Thesis 2023. Advisor: S. Kelly.**

RPAS use is increasing with many using RPAS for saving time and money. As more Landscape Architects explore RPAS, it is essential to highlight how RPAS are used to improve Visual Impact Assessments (VIA) and better understand site resources. This research explores how VIA and resource management can be improved using RPAS and the incorporation of standards into a best practices guide. RPAS lead to more accurate inventories and analyses as data are user-controlled. A comparative analysis of RPAS-assisted VIAs and current methods informed a Best Practices Guide for RPAS use in Landscape Architecture, which was reviewed by RPAS and Landscape Architecture industry professionals. This research demonstrates how RPAS collect data for RPAS and Resource Inventory and Analysis compared to present methods and informs standards. The Best Practices Guide increases awareness of RPAS to improve VIAs and other aspects of the Landscape Architecture profession.

Nicholson, Abigail. [A Best Practices Guideline for Healing Gardens: An Analysis of Design Principles, Modern Herbals, and 19th-Century English Asylum Landscapes.](#) **MLA Thesis 2023. Co-Advisors: M.J. Holland and K. Landman.**

Although 19th-century English asylums possess a dreadful history regarding the treatment of their patients, the landscape designs of these institutions provide a learning opportunity for contemporary landscape architects when designing therapeutic garden spaces. By examining two historical asylums that continue to be used as mental health facilities in England today, a design

framework was established to produce a best practice design guideline for creating future healing gardens. This study evaluates and analyzes the institutional landscapes of The Retreat in York and Bethlem Royal Hospital in Beckenham and implements a mixed-method investigation including the use of expert interviews, photographic documentation, journaling, document analysis, an autobiographical ethnography, and case studies. This research provides a best practices guideline for landscape architects to design healing gardens for mental health, with the support of colour theory, the principles of design, and therapeutic garden frameworks.

Resh, Viane. [Best Practices for Equitable Distribution of Urban Tree Canopy Cover](#). MLA Thesis 2023. Advisor: S. Kelly.

Urban forests play a significant role in fostering resilient and healthy cities given the ecological, social, and economic benefits provided to communities. However, not all community members can enjoy these benefits due to uneven distributions of tree canopy cover. Municipalities' urban forest strategies outline symbolic efforts towards inequality, though they do not directly suggest how to address the issue. This research establishes best practices for equitable tree distribution for municipalities that was developed through a literature review, and a spatial and comparative analysis. A first draft of the best practices was reviewed by key informants to develop a finalized best practices guideline. By using best practice recommendations, municipalities can gain insight on the importance of prioritizing equal access to urban forests to support city livability and equitability.

Ross, Casey. [Evaluation and Adaptation of Parkettes for Winter Thermal Comfort in the Context of Highrise Residential Developments](#). MLA Thesis 2023. Advisor: B. Stewart.

As Toronto's high-rise residential developments encroach on low-rise neighbourhoods, they alter the microclimate of the streets and parks below, posing significant challenges to parkettes' thermal comfort due to limited sunlight and wind conditions. This thesis investigates and assesses a small parkette's current winter thermal comfort levels in Yorkville, Toronto, and proposes temporary and permanent interventions to enhance its thermal comfort. This research aims to identify the most effective solutions given the existing conditions, using various methods such as policy and site planning scans, literature reviews, mapping, modelling, simulations, and COMFA analysis. Ultimately, this study yields a guide to evaluating and designing thermally comfortable temporary interventions in the urban spaces of Toronto.

Shortt, Madison. [Transforming Southern Ontario communities through street design: The role of green infrastructure and best practices in landscape architecture](#). MLA Thesis 2023. Advisor: N. Amoroso.

Streets today have been designed to accommodate vehicles and infrastructure, while pedestrians and cyclists are given limited consideration which has negatively shaped the livability and sustainability of our communities. This study identifies how best practices and techniques, specifically green infrastructure and accessibility features, can enhance the livability and sustainability of streets in Southern Ontario. Using case study analysis of successful street design projects, data was collected through questionnaires provided to senior landscape architects with expertise in streetscape design and also through the analysis of relevant literature. The research identifies key landscape architectural practices and techniques within street design that contribute to a thriving community, while also identifying and addressing the needs and difficulties faced by the general public within these streetscapes. These themes contribute to understanding the importance of street design while improving livability and sustainability in communities, with emphasis on using best practices such as green infrastructure and accessibility.

Sobel, Michael. [Understanding Distribution Patterns of Lawn Alternatives in Kingston, Ontario.](#) MLA Thesis 2023. Advisor: B. Stewart.

Residential turfgrass lawns have been associated with wasted water, chemical runoff, increased emissions, and decreased biodiversity. Traditional turfgrass lawns are deeply entrenched in western society's status quo, and has proven difficult to normalize more ecologically sustainable solutions. The research goal of this paper is to understand and interpret distribution patterns of lawn alternatives in Kingston, Ontario. Lawn alternatives were mapped in 10 neighbourhoods. Neighbourhoods were characterised by their distinct spatial types, developmental context, and selected demographics data. Criteria for defining a lawn alternative was synthesized from previous studies. A classification scheme describing the character of lawn alternatives was developed. The inventory maps provide a previously unavailable snapshot of the types and distribution of lawn alternatives in Kingston, Ontario and are intended to assist the development of enhanced policy. This study found correlations between spatial type, developmental context, income, and lawn alternative coverage and character.

Spiller, Manuel. [A Case Study Analysis of the Barefoot Path Spalt as Linear Playscape.](#) MLA Thesis 2023. Advisor: K. Landman.

Trails and playgrounds in urban, sub-urban, and rural contexts serve many different purposes, but generally cater to either children or caregivers. Linear playscapes, or trails with play equipment, consider all generations but are underutilized and understudied. This study identifies performance indicators for, and benefits of, linear playscapes. Data is collected via a case study of a barefoot path in Spalt, Germany, and its linear playscape character is evaluated via interpretive criticism. The research reveals that linear playscape installations are suitable for a large range of projects due to their design versatility, budgetary flexibility, and spatial efficiency. Trail-side play elements may also encourage family interaction and offer recreational value for children and caregivers. Linear playscapes introduce a versatile, family-centric recreation design option that adds value to new and existing trails. Their linear form manages movement through space, offering unique programming and design opportunities.

Xu, Zihan. [An Application of Autism-responsive Landscape Design in Commercial Plaza Space.](#) MLA Thesis 2023. Advisor: S. Clarke.

Contemporary urban landscape design, prioritizes a generalized population, overlooking families and children with autism. Outdoor commercial landscapes in particular are regularly visited but fail to account for the diverse needs of visitors. The aim of this study is to explore and evaluate landscape design strategies for outdoor commercial landscapes that minimize environmental barriers and support diverse needs of children with autism and their families. Following an analysis and synthesis of autism-focused design guideline, a case study of a commercial plaza in Guelph, Ontario was used to assess the design guideline application. Findings showed that there are several issues that need to be addressed in an outdoor commercial environment, including safety risks, sensory stimulation, and lack of legible environment. Finally, this study provides critical reflection for landscape and urban designers to improve outdoor commercial environments in the future to make them more suitable for families and children with autism.

2022 MLA Abstracts

Andrews, Jenny Faye. [Synthesized ecological design recommendations for the optimization of biodiversity on golf courses with an application to southern Ontario.](#) MLA Thesis 2022. Advisor: R. Corry.

Southern Ontario has experienced one of the most substantial extents of land cover change in the world. The main factor driving this is deforestation for both agriculture and urbanization to accommodate Canada's highest population density. Additionally, southern Ontario contains the highest

density of golf courses in Canada. Research has shown that golf courses have the potential to support more biodiversity than other greenspaces, especially in urban landscapes. The literature contains three important bodies of knowledge: landscape scale ecological design guidelines, local scale ecological golf course design guidelines, and amphibian-habitat specific golf course design guidelines. These have not yet been integrated to recommend how golf courses should be designed to optimize biodiversity. The literature will be critiqued, compared, and then synthesized to inform recommendations in support of biodiversity within southern Ontario golf course ecosystems. These recommendations will be communicated through a set of design recommendations and demonstrations using select golf courses.

Canaran, Matthew. [Documenting and Visualizing Sunlight in Toronto's Core](#). MLA Thesis 2022.

Advisors: N. Amoroso and A. Ashari.

This study documents and visualizes the relationships between sunlight, built form, and public life in Toronto's core. Photographs and stop-motion videos document the movement of sunlight and differences in human behaviour in varying sunlight conditions. Maps and diagrams made with Rhino3D/Ladybug visualize the annual sunlight conditions throughout the study area. This research builds upon prior studies and observes a strong relationship between sunlight and public life that changes with the seasons. This paper presents a series of recommendations including the protection, expansion, and intensification of public space in winter's sunlight – especially on pedestrian-oriented shopping streets – and encourages the use of large deciduous trees to regulate sunlight across the seasons. There is a need to act fast since the built form of downtown Toronto is changing rapidly. While this research and its recommendations pertain to Toronto, they can be applied to other cities with similar climates, sunlight conditions, and built forms.

Cameron, Stuart. [Modifying Recreational Trail Design Guidelines to Incorporate GIS: Saskatchewan's Buffalo Pound Provincial Park Case Study](#). MLA Thesis 2022. **Advisor. S. Kelly.**

This research explored how best to incorporate Geographic Information Systems (GIS) into the existing trail industry standard design guidelines. A literature review was used to establish the trail industry standard design guidelines, and then a case study was conducted to determine how best to incorporate GIS. A set of modified guidelines were generated and then reviewed by key informants to create a final set of guidelines. Results indicate that GIS should be used throughout the trail design process but holds particular importance for the Site Inventory Mapping phase where GIS can be used to create slope maps, three-dimensional models, and help mitigate environmental impacts. Conclusions show that GIS has a significant role in trail design and can improve the efficiency of creating maps, collecting data, and accessing data.

Jin, Sonia. [Towards an Analytical Tool to Connect Women in Low-income Neighbourhoods to Utilitarian Cycling Infrastructure in Guelph](#). MLA Thesis 2022. **Advisor: N. Amoroso.**

Cycling is a convenient, and affordable mode of active transportation linked to increased physical and mental health, as well as environmental and socioeconomic benefits. However, cycling represents a marginal mode of commuter transportation in Canada, undertaken primarily by men with high levels of income and education. The factors that deter women in low-income neighbourhoods from engaging in utilitarian cycling are poorly understood. This study employs parametric modeling software Grasshopper to develop an analytical tool capable of generation optimized cycling route recommendations, based on input parameters hypothesized to encourage greater female ridership. To evaluate the parameters, the analytical tool is used to connect a residential low-income neighbourhood in Guelph to utilitarian destinations such as grocery stores, schools, childcare services, and existing cycling networks. The results indicate that more direct routes, greater separation from vehicular traffic, and lower speed limits are required to encourage equitable access to utilitarian cycling.

Kennedy, Alyson. [Health-Promoting Characteristics of Urban Green Spaces in Consideration of Non-Communicable Diseases](#). MLA Thesis 2022. Advisor: S. Kelly.

There is an immediate need within the urban environment to address non-communicable diseases (NCD) and sedentary lifestyles. Evidence in the literature suggests that urban green spaces (UGS) can have a positive effect on people's physical activity, social and mental well-being. The intent of this research is to explore two types of UGS, both located in Georgetown, Ontario: a multipurpose municipally operated community park and a naturalised public trail system. The methods include a review of literature, two walking methods, and a case study analysis. A set of design recommendations will be developed that identify characteristics in the landscapes that promote and encourage physical activity, social and mental well-being. By using the evidence-based design recommendations developed in this study, municipalities may increase their understanding of how to create and maintain reliable environments with stimulating health-promoting characteristics in consideration of NCDs and sedentary lifestyles.

McCain, Lindsey. [Flexible Work Before and After the Pandemic: Telecommuting, Mobility, and Work Arrangements Among Early Career Landscape Architects in the Greater Golden Horseshoe Area](#). MLA Thesis 2022. Advisor: B. Stewart.

The COVID-19 pandemic is changing how landscape architects work, shifting a largely in-person, studio-based job to a work-from-home environment, and challenging longstanding office norms. This period of disruption and reflection has illuminated many perspectives on work, including that returning to pre-pandemic conditions may not be desirable for everyone. This study aims to inform the development of post-pandemic landscape architecture office policies regarding flexible work, commuting and teleworking by investigating conditions before and during the pandemic. Focused on the Greater Golden Horseshoe Area in Southern Ontario, Canada, the study employs semi-structured interviews with early-career landscape architects and managers, and finds that while some in-person office norms remain important, work can also be done well from home. Participants' experiences were also influenced by factors like mobility modes, access to housing, and the job market. These findings led to the development of a list of seven preliminary recommendations to inform future office policy.

Pfeffer, Diana. [Depth of Field: Historic Stereophotography as a Resource for Landscape Researchers](#). MLA Thesis 2022. Advisor: M. Holland.

Stereographs (3D photographs) of urban landscapes enjoyed widespread popularity from 1850 to 1920; though many extant stereographs are available in public archives, these images have seen little use in landscape research. This project aims to explore and theorize relationships between stereographs in order to articulate, in three dimensions, the morphological history of an urban landscape. More than 2250 stereographs of the city of Paris were collected, analyzed, and coded by subject; subjects were then located on a map of the city. Analysis revealed different ways in which stereographs relate to one another, pointing to a novel source of spatial and temporal landscape data; mapping revealed several corridors of the city that had been intensively documented, suggesting that a continuous and uninterrupted experience of the historic city in 3D may be possible. Stereographs were found to have significant latent potential for landscape research, and strategies to realize this potential are proposed.

Shuttle, Steven. [Leading with Landscape: Enhancing the Process for Cultural Landscape Adaptive Reuse in Ontario](#). MLA Thesis 2022. Advisor: B. Stewart.

Ontario's cultural landscapes are evolving places facing challenges of growth and conservation. While other jurisdictions have moved toward more integrated approaches that center cultural landscape conservation within the broader spatial planning process, Ontario's legislative framework and guidance can result in a siloed approach. The goal of this thesis is to critique the current process and suggest next steps for a holistic, integrated, and future-oriented process for the adaptive reuse of post-institutional cultural landscapes in Ontario. This will draw upon other Canadian and international landscape approaches that consider ecological, social, cultural and economic factors. This research uses mixed-

methods including a literature scan, process mapping, an Ontario cultural landscape practitioner focus group, analysis, synthesis, and reflection. This research puts forward recommendations that build on current cultural landscape practice, which are intended to serve as a reference for practitioners in developing their own approaches to adaptive reuse projects that lead with landscape.

Stusek, Jenna. [Beyond the Community Garden: Designing Multifunctional Edible Landscapes in Saskatoon's Public Parks.](#) **MLA Thesis 2022. Advisor: S. Clarke.**

Industrialization and globalization of food systems has disconnected people and their food, leading to a lack of food knowledge and declining food security. Addressing the issues of food security and food knowledge, the goal of this study is to connect the food production capacity of urban agriculture and the design skillset of landscape architecture in a multifunctional way to bring edible landscapes into the public realm. Through GIS mapping, an inventory and suitability analysis of public parks in Saskatoon, Saskatchewan, was completed. Using a 'Research through Designing' methodology, edible landscape concepts were designed for three Saskatoon public parks. The results of the study are summarized into nine transferable design strategies that can be used by landscape architects, municipalities, and organizations to implement edible landscapes beyond community gardens. This study demonstrates that public parks can be multifunctional spaces, providing for food production, recreation, and social cohesion.

Weir, Caitlyn. [Landscape Design Guidelines for Enduring Industrial and Manufacturing Spaces: A case study of the working waterfront of Lunenburg, Nova Scotia.](#) **MLA Thesis 2022. Advisor: K. Landman.**

Since the 19th century, industry has sought to incorporate green space into their landscape, beginning with the factory garden and continuing through to corporate landscapes today. Academic literature does not address best practices for designing industrial and manufacturing landscapes. The goal of this research is to create design guidelines for industrial landscape architecture that will be developed through a literature review and critiqued using key informant questionnaires and a critical case study. The results showed that the design guidelines developed provide a foundation for addressing environmental and social outcomes of industrial landscapes by prompting the designer to reflect about the impacts of their design, and reframing sustainability as enduring to promote active connotations. This research aims to contribute to the quality of life for rural communities that are integrated with industry and build knowledge on best practices for the design of industrial spaces.

Zhuge, Xuejin. [An Exploratory Study of Designing an Evidence-Based Dementia-Friendly Outdoor Environment for an Aging Residential Community in Beijing, China.](#) **MLA Thesis 2022. Advisor: M. Holland.**

This study aimed to understand how people living with dementia interact within an aging community in China and recognize that a dementia-friendly community could promote healthy aging and contribute to social health. The study focused on a senior with dementia's daily activity spaces and networks in the Fangzhuang community in Beijing, employed a mix of qualitative approaches that included procedures for collecting observations of participant's behaviors and testing his spatial cognitive capabilities. This study contributes to creating comprehensive design guidelines and aids in piloting community-based interventions when building a dementia-friendly community. The research demonstrates problematic situations, including unpredictable level changes and obstacles, monolithic layouts, and missing environmental cues. That people with dementia experienced when doing activities. The research concludes by providing corresponding design solutions and a checklist for building a dementia-friendly community in Beijing, China.

2021 MLA Abstracts

Cortes, Tomas. [Resilient street design during the pandemic: The dining district of Guelph, Ontario.](#) **MLA Thesis 2021. Advisor: K. Landman.**

To mitigate the adverse impacts of COVID-19 on the restaurant industry, the City of Guelph, ON created the Dining District (DD) in its downtown. This pilot project closed an intersection to allow restaurants to extend their patios onto the streets, while adhering to social distancing guidelines. The goal of this research is to develop an adaptive and flexible design strategy, as guidance for an improved DD. The methods include a comparison of other municipalities, semi-structured interviews with key informants, and an analysis of street design guidelines. Results were utilized to create a design guidance that outlines design requirements and management strategies for flexible outdoor dining spaces. This research contributes to flexible design knowledge in response to the current pandemic, and to improved downtown streetscapes into the future.

George, Tina. [Evaluating the role of collage as a more effective representation in landscape architecture praxis.](#) **MLA Thesis 2021. Advisor: N. Amoroso.**

Photomontage has evolved from traditional collages to highly photorealistic simulations - the currently preferred style of landscape visual communication. These photorealistic graphics are popular, owing to their ease of interpretation, but limit discourse possibilities and fail to reveal the ideation process. On the other hand, traditional collage is credited with projecting the design process and promoting intelligent discourse. This study helped investigate the efficiencies of using traditional collage representation within current praxis. Literature review focused on the trajectory of landscape architecture graphics brought an understanding to why impressionist, realistic graphics are being used. A case-study analyzes of fifteen graphic representations by landscape architecture practices and the results of a questionnaire that tested for recognition of various graphic styles was used to consolidate information that led to the determination that collage techniques are superior and can be revived to be utilized effectively in praxis.

Gorveatt, Jacob. [A Landscape Circuitry Assessment of Apple Orchard Contributions to Natural Heritage Systems in Grey County, Ontario.](#) **MLA Thesis 2021. Advisor: R. Corry.**

NHS (Natural Heritage Systems) are networks of connected natural features that support ecological functions and species movement. Although agricultural areas are omitted from NHS, some agri-systems, such as apple orchards, have potential perennial vegetation habitat contributions. This research aims to assess how changes to apple orchards can be targeted to contribute to NHS. Three assessments of a subset of Grey County were conducted using landscape circuitry analysis. Resistance values were assigned based on avian species habitat potential. Orchards were analyzed and ranked according to potential contributions. Both targeted (TOC) and non-targeted (LOC) assessments showed circuitry improvements of 0.17 in highest ranked orchards, when compared to baseline conditions (BC). A targeted approach shows a concentrated circuitry response in higher priority orchards but minimal response is less preferable orchards. Prioritizing orchards strategically can efficiently achieve increased habitat connectivity. These assessments identify opportune areas for interventions by landscape architects and environmental planners.

Hughes, James. [Theme Parks: A Model of Best Practice for Streetscape Design.](#) **MLA Thesis 2021. Advisor: M. Holland.**

Internationally cities are acknowledging the importance of improving streetscape design in order to create a more positive pedestrian experience. Improved streetscape design contributes to the creation of a safe, efficient and financially prosperous landscape. This thesis analyzes how theme parks have successfully designed streetscapes, specifically Main Street U.S.A. at Walt Disney World's Magic Kingdom. This theme park streetscape provides a positive experience while supporting, on average, twenty-one million visitors. This work illustrates streetscape techniques employed by theme parks while

answering the question “Are Theme Parks examples of Streetscape design best practices?” This study evaluates streetscape elements found along Main Street U.S.A. and those used throughout the City of Toronto. These streetscape elements are evaluated against the criteria for successful streetscape designs outlined by Allan B. Jacobs in the book *Great Streets*. A streetscape design manual has been developed that consolidates the unique design techniques utilized by theme park streetscapes.

Kauffman, Camille. [Urban Agriculture Contributions to Socio-Ecological Adaptation in the City of Toronto.](#) **MLA Thesis 2021. Advisor: K. Landman.**

Urban agriculture (UA) has been researched in terms of how it contributes to a community’s health, esteem, resilience, bonding and autonomy. It has also been explored in terms of its environmental and ecological benefits. This research digs deeper into the mechanisms of socially-motivated UA operations that also provide ecological benefits to the city – such as increased habitats for wildlife and pollinator-friendly plant species. Through interviews with UA leaders, this research highlights how some Toronto UA operations might contribute to the City’s policy, planning and public space design responses to upcoming climate-related challenges. Socially-motivated UA operations do have the potential to be a positive ecological response to climate change in the City of Toronto.

Khuu, Winona. [Habitat Concept Plan for Parkland Development at 1 Port Street East, Mississauga, ON.](#) **MLA Thesis 2021. Advisor: B. Stewart.**

As Mississauga, ON, redevelops its waterfront’s last brownfield sites into parks or mixed-use developments, protecting and enhancing ecosystems becomes an integral part of this process. This thesis aims to develop a habitat concept plan for the proposed breakwater park constructed on lakefill at 1 Port Street East. Methods include: inventory and analysis of the Port Credit waterfront through background research and observations; investigating the design process and ecological considerations for Lake Ontario waterfronts of similar conditions through case studies and key informant interviews; establishing a program for ecological improvement at the site; and analyzing and visualizing the habitat concept plan. The design proposes an elevated meadow and riparian habitat on the proposed lakefill with specific infrastructures that support wildlife and enhance the existing ecosystem. These results will help inform the eventual design of the site and expand the ecologically-focused design opportunities for waterfront parks with similar conditions.

Kirk, Emma. [Living with Water: The Potential Urban Ghost Spaces have to Address Flood Mitigation in Toronto, Ontario.](#) **MLA Thesis 2021. Advisor: R. Corry.**

Urban ghost spaces have potential to reduce flooding in the Lower East Don Watershed by reducing and delaying stormwater runoff to receiving waterways. Ghost spaces are vacant or derelict space that have prior commercial, industrial, transportation, or residential use, receive semi-regular maintenance, and are unused. Past studies emphasize the importance of metropolitan place-based studies for flood mitigation research and highlight the opportunities vacant space presents. Geographic Information System (GIS) was used to locate 1,863 ghost spaces for Low Impact Development (LID), and a Stormwater Management Model (PC-SWMM) to quantify runoff captured within selected ghost spaces. Within identified ghost spaces stormwater runoff volume was reduced by 85% for 2-year, 5-year, and 10-year rainfall events. A strategic selection of 73 opportune ghost spaces, which focus on retention-based LIDs, reduced runoff by 93%. Defining an interconnected system of ghost spaces demonstrates an opportunity to advance flood mitigation strategies across Toronto, Ontario.

Lu, Natassya. [Motivations Underlying Business Engagement in Enviropreneurial Landscape Initiatives.](#) **MLA Thesis 2021. Advisor: R. Corry.**

Socio-environmental issues are increasingly critical factors in how businesses meet the expectations of their customers. However, business motivations for landscape can be fundamentally different from landscape architecture and might prevent these two fields from collaborating effectively. Three business case studies identify motivations to engage in enviropreneurial landscape initiatives, and

the circumstances in which they arise. Enviropreneurship is understood as the combination of environmental awareness with business activities to shift the basis of economic development towards a more environmentally friendly basis. Findings suggest that while small businesses have greater autonomy over their enviropreneurial decisions and focus on their local community, larger businesses are subject to greater external influences, focusing instead on initiatives that result in quantitative organizational changes. Understanding business motivations and the contextual factors that influence can identify conditions in which the involvement of landscape architects would align businesses with landscape initiatives that result in authentic and meaningful engagement.

Madill, Dominique. [Plant and Wind Relationships of Motion](#). MLA Thesis 2021. Advisor: B. Stewart.

The movement of a plant in the wind reveals simultaneously, through its gesture, a character of aliveness in plants and a material form and force in the air and atmosphere. Wind and plant, force and being, move in tandem. Each entity affects the other in motion, hinting at an even deeper interrelationship that exists between them. This study gives form to the relationship between plants and wind by investigating the gestures in their interactive movement. It takes a posthuman lens to interpret relationships of nonhuman worlds. From video field-recordings, gestures of a variety of plant species have been collected, compared, and analyzed to be interpreted into a series of illustrated forms that express a visual language for wind-blown plants. The result is a small catalogue of movement that tells the story of plant-wind relationships.

Merrett, Joseph. [Assessment of the Ontario Association of Landscape Architects' Climate Change Policies](#). MLA Thesis 2021. Co-Advisors: S. Kelly & D. Guyadeen.

The landscape architecture profession is expected to possess the skillset and knowledge of the environment to mitigate Greenhouse Gas Emissions to minimize the devastating impacts from future climate events on human beings and the natural world. This research assesses the Ontario Association of Landscape Architects' (OALA) approach to integrating climate change in key decision-making policy documents and identifies strengths and gaps to addressing barriers to climate change. A review of grey and scholarly literature was undertaken of the governmental and professional landscape architectural climate-change policies to identify climate change action barriers. This research found that the OALA's policies on climate change may be inadequate in guiding landscape architecture practitioners' conduct towards addressing and overcoming identified barriers to climate change. This study focused on providing the OALA with insights and recommendations to afford a more influential voice in future climate change policy discussions.

Parente, Joseph. [Analyzing Sustainable Development Practices in Greater Toronto Area Urban Parks](#). MLA Thesis 2021. Advisor: B. Stewart.

Urban park landscapes function best under the three pillars of sustainability: economical, environmental, and social. Not only do urban parks relieve stress from urban life, but they also mitigate environmental stresses resulting from the current changing climate conditions. Building on research from 2010, the goal of this study is to investigate whether municipalities in the Greater Toronto Area (GTA) have or have not enhanced sustainable development practices in park planning, design, construction, and management over the last decade. A qualitative study utilizing questionnaires was created based on recent sustainable development guidelines and academic literature. Brampton, Markham, Mississauga, and Vaughan were selected as case studies, as baseline data on this topic was gathered in a 2010 thesis. Park planning professionals in those municipalities responded to questionnaires, and results are analyzed and discussed.

Souza Donato, Cibele Carla. [The Role of Neighbourhood Landscape Characteristics in Facilitating Outdoor Play During the COVID-19 Outbreak](#). MLA Thesis 2021. Advisor: R. Corry.

Children's outdoor activities were significantly impacted by the COVID-19 outbreak in Canada. Children became less active as access to outdoor places where they typically play and exercise was

restricted or denied. This research investigated how changes in outdoor activity of 5-17 year-olds are associated with neighbourhood landscape characteristics. This study uses secondary data on changes in outdoor activities from ParticipACTION and analyzes these changes in relation to four landscape characteristics, one demographic measure, and common places where children spent time outdoors. Results show that living in areas with more landscape features and higher population density is associated with a greater decline in outdoor activities, and children who used neighbourhood trails were more likely to show an increase in outdoor activities during the first wave of COVID-19 in Toronto. This indicates that landscape characteristics support children's physical activity when playgrounds are closed.

Sypkes, Joel. [Engaging Ecologies: A design framework for resilient and immersive bioretention plantings](#). MLA Thesis 2021. Advisor: K. Landman.

The role of bioretention as a site level infrastructure solution to economic and environmental issues associated with urbanization is well understood. Public agencies have developed extensive resources for their design and implementation that are well supported by research. However, the vegetative layer does not receive the same attention as the engineered components within guidance and research, leaving successful implementation up to the skill of individual practitioners. In order to realize the potential bioretention facilities have to integrate nature and city, comprehensive planting design guidance is required. This study begins the process of establishing such guidance, illustrating its potential through the creation of a design guide prototype called GreenKey. It suggests a framework for future planting design research and practice that integrates ecology, horticulture, stormwater engineering, soil science, microbiology and landscape architecture to ensure practitioners are equipped to navigate the complex task of designing resilient and engaging urban bioretention facilities.

Tudo, Maxime Laphong. [Positioning Postmodernism: Instances In Parisian Parks](#). MLA Thesis 2021. Advisor: M. Holland.

In France, a cultivated savoir-faire of landscape design and robust socio-political histories have established parks as not only functional components of urbanism but aesthetic compositions with potent psychological impact. Contemporary Parisian parks are integral to the French lifestyle and their designs openly encourage joy, innovation, and profound meaning. The aim of this thesis is to investigate the intersection of culture and creativity in three contemporary Parisian parks as tied to postmodern theory. An analysis is conducted on the intellectual, historical, and socio-political history of Parc de la Villette, Parc André Citroën, and Parc de Bercy from conception to realization and subsequently synthesized into five central characterizations of the postmodern condition identified by Jean-François Lyotard's in his exhibition: Les Immatériaux. In all, this thesis reveals the phenomenology of French postmodern landscape architectural design to engage the human spirit through underlying cultural referents and history of place.

2021 MLA Abstracts

Balestra, Carly. [Designing for Playfulness: A Heuristic Exploration of Playfulness and Playground Design](#). MLA Thesis 2020. Advisor: S. Kelly.

Playfulness is an experience that emerges from the phenomenon of play. Contemporary play-design research focuses on children and is limited to a construct of play that emphasizes physical activity and physical literacy. This has resulted in play doctrine that perpetuates neoliberal ideals of productivity and idealized body types. This thesis explores playfulness in the play-design process through semi-structured interview with key-informant researchers, designers, planners, facilitators and regulators in the field of play-design, and provides creative considerations to aid designers in the development of more inclusive and playful spaces.

Beech, Kimberley. [Identifying and Promoting Cultural Heritage Landscapes Along the Beaver Valley Section of the Bruce Trail.](#) MLA Thesis 2020. Advisor: N. Perkins; Co-Advisor: S. Kelly.

The Bruce Trail (BT) meanders through the 725 km long Niagara Escarpment corridor that has a long history of human settlement. The Beaver Valley section of the BT is a mosaic of cultural heritage landscapes (CHL) from early settlement farmsteads to iconic apple orchards. At present the BT does not incorporate CHL through trail design although it is important that these landscapes are identified as they provide a deeper connection with the people who shaped this landscape. The goal of this research is to create guidelines that will inform trail designers on how to establish a CHL experience along the Beaver Valley section of the BT. Research methods were informed by the Ontario Heritage Tool Kit which included field observation, key informant interviews, document and online archival review. The results were used to develop CHL guidelines specific to the BV and inform future trail design.

Carville, Skylyssa. [Developing an Inclusive-Design Landscape Audit Tool: Low-Income Single Mothers in Hamilton ON.](#) MLA Thesis 2020. Advisor: B. Stewart.

In Canada today, women make up 50.4% of the population. Yet, the built environment is still not designed for women. Women make up 40% of the working world and according to the World Bank, women spend between 2 to 10 more hours a day than men caring for children, the elderly or the sick. The purpose of this research is to identify problematic conditions faced by women in the urban landscape. Using a neighbourhood landscape audit tool to collect user data during three neighbourhood walks, the tool combines a data collection sheet, photography, a character development reference sheet, specific every day carry items and a series of maps. This research provides urban design recommendations when designing for single mothers, women and a wider inclusion for all participants of the urban environment. Using the right methods which engage a women's daily use of space and perspective, a more inclusive design can be implemented by landscape architects.

Cheeseman, Kendra. [Disability, Walks, and My Neighbourhood: Experiencing the urban environment and climate crisis as a person with dysautonomia.](#) MLA Thesis 2020. Advisor: K. Landman.

One in five Canadians have a disability, yet the built environment remains mostly inaccessible (Morris et al., 2017). The Accessibility for Ontarians with Disabilities Act and other guidelines aim to improve access, particularly for people who use assistive devices. A knowledge gap persists for many sensory disabilities and autonomic disorders. Dysautonomia is a set of conditions that controls the 'automatic' processes of the body, such as heart rate, blood pressure, and temperature regulation (Dysautonomia International, 2019). The lived experiences of a form of dysautonomia, the interrelationships of individual condition, built environment design, and weather conditions are explored in how they contribute to health and wellbeing. Using a walk-along interview method that combines photography, weather data and GIS, the researcher, who has this condition, took six walks through their neighbourhood during different conditions. This research provides preliminary recommendations for designing for dysautonomia and a walk-along interview process for landscape architects.

Chen, Sihao. [Encouraging Interdisciplinary Conversation between Landscape Architecture and Urban Planning Education in North America.](#) MLA Thesis 2020. Advisor: S. Kelly.

In the Anthropocenic era, cities face increasing environmental, social and economic challenges that can be addressed through interdisciplinary efforts from planners and landscape architects. Literature exploring curricular connections between these two disciplines is limited. The purpose of this study is to determine similarities and differences between knowledge areas and requisite skills for the two allied disciplines of urban planning and landscape architecture; to identify appropriate approaches to increase interdisciplinary understanding and effort. The research was conducted through a mixed methods strategy where data from survey reports, literature, online questionnaires and university program curricula were collected. The results were analyzed to identify the differences in the knowledge

and skills acquired by graduates of landscape architecture or urban planning; specific course additions are recommended.

Ganesan, Sita. [Petroleum Fate and Transport Modelling and Its Implications for Landscape-Responsive Design](#). MLA Thesis 2020. Advisor: R. Corry.

Despite investments in clean energy technology and infrastructure, Canada remains a resource-based economy that transports fossil fuels. Most transport is conducted by pipeline, which can cause severe environmental damages because leak detection system sensitivity is low and 15-20% of pipeline leaks go undetected each year. Low impact development (LID) strategies might be applicable to pipeline landscapes to mitigate petroleum leaching to water from small, persistent leaks by incorporating petroleum sorbents with native soils. Petroleum fate and transport models were used to explore the theoretical capacity of a designed sorbent filter soil (SFS) system and to inform design parameters for system construction. Results suggest that design parameters change depending on soil texture, moisture content, and temperature. These designs provide a preliminary framework for landscape architects interested in landscape damage prevention and mitigation that could be applied to areas of concern for petroleum leakage.

Gatta, Massimiliano. [Immaterial Memorials: A Speculative Memorial through Counterpreservation](#). MLA Thesis 2020. Advisor: M. Holland; Co-Advisor: N. Amoroso.

In a highly diverse society such as ours, what kind of urban image might function as a memorial? This thesis explores urban conditions, theories and artistic tendencies that have influenced contemporary memorialization. Interdisciplinary literature reviews and my participation in a memorial competition inform my argument that prescribing a specific method for memory work is ill-advised. Instead, I assert that the purposeful use of ruins can function as one way to integrate conflicting cultural memory into the built environment. The strategy has not received extensive attention in the current literature on memorials, but it has appeared in the domain of architecture as "counterpreservation" to denote the intentional use of architectural decay. Through careful site selection, an urban park in Toronto has been identified where an evolving modernist ruin could be the focal point in a landscape commemorating conflicting narratives.

Guse, Brennan. [A Waterfront Revitalization Strategy for Parry Sound's Post-Industrial Southern Waterfront](#). MLA Thesis 2020. Advisor: B. Stewart; Co-Advisor: K. Landman.

As Parry Sound shifts from an industrial economy to a more tourist-based economy, many of the properties along the southern waterfront have become vacant industrial sites. Although the land along the southern waterfront is now zoned as Marine and Resort Residential, there has been little investment in decades due to concerns about soil contamination and environmental degradation. This research aims to develop a waterfront revitalization strategy for Parry Sound's post-industrial southern waterfront. The methods include an understanding of contemporary landscape practices in master planning, an analysis of similar conditions in other communities and a comprehensive case study of the Town's southern waterfront. Results propose a landscape-based approach using a phased development strategy that will restore the site to the point that it is attractive to development and contributes to community amenity. This will help the Town conceptualize the future of the southern waterfront and bring economic investment and improved environmental quality to the region.

Heaman, Samuel. [Explaining the Impact of Funding on Public Skatepark Design: A Case Study of Skateparks in Hamilton, Ontario](#). MLA Thesis 2020. Advisor: N. Amoroso.

Over the past decade, Hamilton, Ontario has been committed to bringing new and improved skateparks to the city. Some of these projects were funded via the municipal tax base, and others were funded by developer fees. The aim of this study is to determine how support and funding was garnered for these new projects and discern what impact the source of funding has on each project's final design. This study covers three case studies of skateparks within Hamilton and compare their funding and

design to determine how alternative funding impacts public recreational space. Each case includes semi-structured interviews with key informants involved in planning, design and community engagement and secondary analysis of news articles and studies on skateboarding conducted by the City of Hamilton. Findings indicate that funding through developer fees places limits on the location and size of the project, but overall is beneficial from an advocacy standpoint.

Howarth, Samantha. [Humber River Transect: 'Landing' on site through the Canoe Reconnaissance Method, Fieldwork in Landscape Architecture.](#) MLA Thesis 2020. Advisor: B. Stewart.

'Landing' is a physical and intellectual experience that uses intuition and primary research in the field, to form an initial impression of a site. Landscape architects have developed inventory methods; however, the literature indicates a water-based methodology for landscape assessment does not exist. Why is 'landing' through the immersive canoe reconnaissance method, essential to capture and map dynamic relationships, atmospheric qualities, and site particularities to design sustainable water landscapes? The goal is to create a new fieldwork method for inventory that will compliment current practices. The method tested on the Humber River, collects data using AllTrails mapping software, video, photography, audio recordings, data sheets and annotative maps. Synthesis of data through collage deep mapping indicate a value assessment and summary of observations. The method impacts the initial phase of design and aims to inform the entire design process to produce powerful aesthetic experiences that foster stewardship of water resources.

Karafilov, Jessica. [Best Practices for Using Citizen Science in Urban Forest Inventorying.](#) MLA Thesis 2020. Advisor: K. Landman.

Urban trees and forests are an essential component of the urban fabric and provide a range of environmental, social, cultural and economic benefits. Urban tree inventories are conducted for a number of purposes, including providing valuable urban forest data that allows for sustainable management decisions. Involving citizens in scientific enquiries is not a new phenomenon, and there are challenges and benefits to using this model. The goal of this research was to conduct a comparative case study of nine citizen science (CS) urban forest inventory programs to establish a guideline of best practices. This was achieved by analyzing academic and grey literature, and conducting supplementary key informant interviews. The best practices identified can serve as a practical tool for municipalities, NGOs and landscape architects seeking to implement or improve upon existing CS urban forest inventory programs.

Kuhail, Sima. [Place Attachment to the Palestinian Landscape: An Art-based Visual Discourse Analysis.](#) MLA Thesis 2020. Advisor: L. Harder.

Place attachment is a significant affective, cognitive and emotional bond between people and places of significance. Displaced populations draw on their attachment to a place of origin to help them develop attachment to their new places. Currently eight million Palestinians are living in diaspora as they continue to be displaced. Art-based research is an emerging method in place attachment studies. This research aims to construct a visual art-based place attachment narrative of the Palestinian landscape to inform future landscape design interventions for Palestinian communities. A visual discourse analysis method is applied on the content of the "Intimate Terrains" Exhibition in Birzeit, Palestine (2019) to interpret place attachment to the Palestinian landscape as portrayed by Palestinian artists. This research, while specific to Palestine, can be generalized and can be utilized by landscape architects who intend to better understand the communities they design for and who intend to create meaningful places.

Pedersen, Christine. [The Parametric Process: A Strategic Analysis on Digital Design Technology in Landscape Architecture.](#) MLA Thesis 2020. Advisor: N. Amoroso.

Digital design technology is emerging in landscape architecture, however, there is a gap in design education and in practice regarding skills training and knowledge pertaining to digital design

technology. The objective of this study is to investigate the efficiencies of using 'parametric design' for landscape designs and in the practice of landscape architecture. A comparative case study analysis of three landscape architecture practices who utilize parametric design was investigated, along with the creation of a questionnaire that was sent to key informants who specialize in parametric design, was used to evaluate the efficiencies and value of parametric technology. A 3D-model prototype was generated using Rhinoceros (Rhino3D) and Grasshopper to test the 'parametric process' against the 'traditional' analogue design process. This research is intended to determine whether adopting parametric technology into landscape designs can be so efficiently, while also serving as a precedent for further research in design technology.

Sadeghiesfahani, Amirhossein. [The Historical Evolution of the Landscape Architecture Building at the University of Guelph.](#) MLA Thesis 2020. Advisor: N. Perkins.

The University of Guelph Landscape Architecture building is the home of the first landscape architecture program in Canada and has been continuously used since 1969. While many studies have been conducted on the performance of the building, few have examined the evolution of the building over 50 years and how physical change has been affected by the socio-cultural and design milieu. To better explore this, a landscape biography approach was used to understand how the landscape architecture building became what it is today. A comprehensive literature review, archival search, and interviews with key people were used to develop a historical record that was compared with design education movements over five decades. The results are intended to document the history of an outstanding education facility and inform future development.

Todd, Kevin. [The Yorklands in Guelph: Looking to the Future of a Landscape Shaped by Policy and Reform.](#) MLA Thesis 2020. Advisor: M. Holland.

Formerly home of a provincial prison, "the Yorklands" in Guelph, ON, is now a popular, passive green space. Guelph is exploring adjacent intensification, which it must balance with local climate change mitigation, food security, and community goals. This study explores the potential for adaptive-reuse at the Yorklands that would implement urban agriculture to address those goals. A landscape narrative method provides the basis for this by combining archival data, public policy context and site analysis to interpret and highlight the layered past at the Yorklands. Findings highlight the Yorklands' unique history of prison labour (and cultural heritage features), current opportunities within planning policy, and local community stakeholder goals. This research is an example of understanding a historic landscape through the creation of a narrative prior to adaptive-reuse. At the Yorklands, it will provide crucial background for holistic landscape design intervention.

Van Ommen, Alanna. [Re-Connecting Wetlands: How Agricultural Drainage Areas Can Improve Landscape Connectivity in Essex County.](#) MLA Thesis 2020. Advisor: R. Corry.

The Essex County landscape faces pressures including agricultural development and urban expansion. Historically, wetlands have been threatened by habitat loss, fragmentation, and water quality degradation, causing a host of problems for wetland species. This study applies a geospatial landscape analysis and evaluation methodology to propose and assess the design of wetland habitat patterns in order to increase habitat quality and dispersal opportunities for wildlife. An analysis of Essex County's Hillman Creek watershed was conducted using ArcGIS software, identifying locations suitable for supporting wetland restoration design and strengthening a wetland connectivity scheme for the watershed. The scheme was evaluated using network circuitry analysis, illustrating its functional connectivity, especially across southeastern parts of the watershed. Results show how a rigorous landscape analysis informs wetland restoration design at the watershed scale and improves a measure of functional connectivity. The research identifies potential for improving and estimating ecological connectivity through evidence-based landscape architecture.

2019 MLA Abstracts

Blay, Megan. [A Wellness Design Framework for High-rise Housing](#). MLA Thesis. 2019. Advisors: N. Perkins, N. Amoroso

The province of Ontario has for two decades promoted intensification and increased density in urban areas to preserve undeveloped land. One consequence has been high-rise development. This form of residential development, however, may not contribute to health and wellbeing objectives that are central in community design and planning. Consequently, this thesis examined the literature on health and wellness in housing and developed a framework for examining proposed high-rise development in Kingston, Ontario.

Burger, Kira. [A GIS-Informed Designed Landscape Pattern to Increase Urban Food Security and Optimize Ecological Integrity in Ottawa, Canada](#). MLA Thesis. 2019. Advisor: R. Corry.

Proponents of urban food security predict that cities must become more self-reliant in food production. Current planning efforts lack landscape-level analyses to inform siting production in the urban matrix in configurations that optimize production and environmental quality. My research addresses the question: What landscape pattern of urban food production systems will increase food security while optimizing ecological integrity? Using GIS software, I identify 40.0% of urban lands in the City of Ottawa as having cultivation potential and assess the land's capability and suitability to support food production and respond to ecological patterns. Results show how integration of spatial analyses can reconcile food production and ecological integrity goals with 14 diverse production typologies arranged in a context-sensitive designed landscape pattern. This research identifies opportunities and constraints to achieving urban food security and optimum ecological integrity and provides evidence for how landscape design can improve wellbeing and sustainability in cities.

Collis, Brianna. [How alternative landscapes in the boreal forest impact woodland caribou using a model of animal movement, perception and memory](#). MLA Thesis. 2019. Advisor: R. Corry.

The boreal ecotype of woodland caribou, *Rangifer tarandus caribou*, is a threatened species in Canada. Their decline is complex, but cumulative effects of anthropogenic activity - including habitat alteration and loss from economic activities - are implicated. This study investigates how a projection of current trends impacts caribou using alternative landscapes in northern Ontario. Landscapes are compared with an empirically-parameterized individual-based movement model to identify how landscape change impacts boreal woodland caribou. Results indicate that a business-as-usual landscape will continue to negatively impact woodland caribou persistence and population growth, as well as affect how caribou use the landscape with respect to movement and landcover occupation. Neither the existing landscape nor a business-as-usual projection stopped caribou decline, and caribou searched more-disturbed landcover types in the business-as-usual landscape. Results have implications for species conservation, landscape planning, boreal land-use practices, spatial ecology, and applied landscape ecology's role in the recovery of imperilled species.

Damone, Victoria. [An Exploration of University Campus Design Standards for Student Mental Health](#). MLA Thesis. 2019. Advisor: N. Perkins

Mental health and well-being are increasing topics of concern, as one in five Canadians will experience a mental illness. This issue is especially prevalent amongst children and adolescents aged 15-24, making this demographic the most vulnerable. Although there is significant evidence linking the positive connection between the natural environment and mental health, many University Campus Master Plans do not recognize the value in planning for restorative landscapes on campus. This study explores the current Campus Master Plan at the University of Guelph and how the creation of an evaluative toolkit can aid in future planning and design guidelines for restorative spaces. The examination of campus planning policies, post occupancy evaluation and input from key informants

helped to inform and validate the restorative landscape assessment toolkit. It is ultimately intended to determine the restorative and therapeutic value of an environment on campus and subsequently demonstrate both the value of preserving and planning for these spaces on campus.

Freeman, Tamara. [Designing for Therapeutic Care Farms](#). MLA Thesis. 2019. Advisor: K. Landman.

Care farming is the therapeutic use of farming practices to provide health, social or educational care services for a range of groups of vulnerable people. This includes but is not limited to those with mental health problems, people suffering with substance abuse, adults and children with learning disabilities and disaffected youth. Literature on the process of designing for care farms is limited. This research sought to develop care-farm design guidelines for landscape architects. The study identifies and analyzes design-related themes from the academic literature relating to care farms, building on therapeutic landscape literature. The design guidelines are created based on key informant interviews that took place in Ontario in 2019. The final design guidelines can support landscape architects with necessary information to design care farms.

Fudge, Aiden. [Memory, Place & Change: A Landscape Narrative of the Tantramar Marshes](#). MLA Thesis. 2019. Advisors: S. Kelly, B. Stewart.

The Tantramar Marshes are one of the largest contiguous salt marsh ecosystems on North America's Atlantic Coast. The Marshes represent a hybrid landscape of agriculture, cultural artifacts, and transportation and energy infrastructure, marking a cultural and ecological crossroads- an essential bridge of fragile land connecting Nova-Scotia to New Brunswick. Rising sea levels are threatening the Marshes' functions; they are in a vulnerable position with no overarching regulatory protection or adaptive strategy. The goal of this research is the creation of a landscape narrative of the Tantramar Marshes for use as catalyst for future landscape interventions. The landscape narrative method uses archival and secondary source data to interpret existing conditions and predictions of future outcomes, defining distinct epochs of landscape change. This research intends to inform future landscape interventions that seek to respond to the challenges of climate change and shifting land use on the Tantramar Marshes.

McDonald, Kaja. [Exploring the application of environmental communication strategies for landscape architecture](#). MLA Thesis. 2019. Advisor: K. Landman.

Environmental communication (EC) examines how audiences connect to information about the natural environment. EC is interested in strategies that frame information to facilitate improved relationships between humans and nature. The aim of this research is to identify key EC strategies and explore how these strategies can apply to landscape architecture. I developed a concept matrix of key strategies within EC through conducting a literature review. A communications expert assessed the identified concepts to affirm their relevancy. I composed a questionnaire and conducted semi-structured interviews with key informant landscape architects. An analysis of interview responses revealed which EC strategies were commonly used in landscape architecture, and the role ethics played in adopting these strategies. I also identified a need to further translate these concepts into compatible design terminology. Landscape architects equipped with an awareness of EC strategies can use this information to communicate the value of nature to different audiences and strengthen human-nature relationships through design.

Millar, Ashley. [Environmental Needs of People with Parkinson's Disease and their Informal Caregivers: Considerations for Landscape Architects](#). MLA Thesis. 2019. Advisor: N. Perkins.

The built environment lacks the infrastructure people with Parkinson's Disease (PwPD) require navigating it independently. In progressive cases, PwPD require substantial help from their informal caregivers and therefore an unsupportive environment affects both. Surprisingly, there is almost no literature on the environmental needs of PwPD and their caregivers. The goal of this research was to better understand the impact the built environment has on PwPD and how this may influence

caregivers' ability to access respite. Online Parkinson's Disease support group forums were analyzed using NVivo revealing the ways the built environment is a support and a barrier for PwPD and the ways caregivers use their environment during respite. The findings were categorized into themes for consideration by landscape architects. A better understanding of the role the built environment plays in the lives of PwPD and their caregivers allows landscape architects to better design for the needs of this population.

Plato, Courtney. [Effects of Green Streetscape Design on Autonomous Vehicle Navigation.](#) MLA Thesis. 2019. Advisor: R. Corry.

Twentieth century North American streetscapes were auto-oriented, with extensive impervious surfaces, decreasing vegetation, and devoid of desirable pedestrian activity. Emerging public design policies are trying to counteract these negative trends. The advancing technological development of the Autonomous Vehicle (AV) could re-direct the previous momentum of streetscape design, for better or worse. This study aims to explore some of the strategies used to make streetscapes greener, and their interactions with AVs. The goal is to assess whether these "green" strategies help, or hinder, the navigational abilities of the vehicle. Illustrated 2D and 3D dynamic streetscape demonstrations are assessed through online questionnaires distributed to AV experts. Tree canopy coverage is identified as the most concerning element for AV navigation. The results from this study can help landscape architects, urban designers and AV researchers consider how designed elements can lead to safer and more-sustainable streetscapes.

Pope, Carleigh. [Landscape Architecture for Hyper-Diverse Cities.](#) MLA Thesis. 2019. Advisor: K. Landman.

The concept of Hyper-Diversity in the social sciences is used to describe the unprecedented level of diversity in cosmopolitan cities; however, its relationship to landscape architecture has not been explored. The goal of this thesis is to critically evaluate the Tower Renewal Partnership (TRP) program in Toronto, Ontario, through a Hyper-Diversity lens. A Hyper-Diversity Critical Framework was compiled through a systematic review of peer-reviewed literature. Evaluation of the TRP program was carried out by building a case study from the TRP grey literature to which the Framework was applied. The evaluation revealed that the TRP Impact Areas that affect the public and shared spaces of Tower Neighbourhoods met the most criteria of the Framework. Difference is experienced within the public sphere and as such landscape architects should consider Hyper-Diversity and its influence on design.

Vandenbrink, Derek. [Smaller Homes, Bigger Community: Cluster Housing as a Suburban Redevelopment Strategy in Ottawa.](#) MLA Thesis. 2019. Advisors: S. Kelly, B. Stewart.

Suburban detached houses have become unaffordable to own for a portion of the Canadian population. This low-density housing form is associated with increased distrust between neighbours and social isolation. Cottage Style Pocket Neighbourhoods [CSPN] are houses around a common courtyard, promoting community. The cottage size results in a decreased cost. This research explores the feasibility of CSPN as a strategy for the redevelopment Ottawa inner ring suburbs. Case studies of existing CSPN in North American suburbs are compared to Canadian Provincial and Municipal policy and by-laws. Semi-structured interviews with experts from planning, land development, design, and consulting practices are used to analyse the affordability and market of CSPN. The study concludes that CSPN conforms with policy and most by-law requirements, can provide market priced units and that there is a small but growing market for this housing type. CSPN could be a style of housing redevelopment that reimagines the suburbs.

Xing, Ruochen. [An Application of Biophilic City Design Principles to The Jane-Finch Neighbourhood of Toronto.](#) MLA Thesis. 2019. Advisor: R. Corry.

Biophilic cities promote environmental sustainability and people's health and wellbeing, especially where population density is high. The Jane-Finch neighbourhood of Toronto has high

population density and low green space coverage, providing an opportunity to apply biophilic city principles to address the public concerns of limited nature contact opportunities. This thesis will explore how biophilic city principles apply to Jane-Finch, identifying opportunities and challenges to application. Design proposals are created for two land use typologies in Jane-Finch neighbourhood by applying biophilic design principles and discussing when they are most opportune or most challenged. The results show the most challenging site typology is the residential street and the most challenging principle is prospect. The research contributes to understanding the biophilic city concept and its application; the findings provide suggestions on how to transform Toronto into a more biophilic city.

2018 MLA Abstracts

Birks, Elizabeth. [Toronto's Ravine Network: Overcoming the Stigmatization of Ravine Environments Through Design.](#) MLA Thesis. 2018. Advisor: S. Kelly.

Uniquely among North American cities, Toronto possesses an extensive ravine network representing 17% of Toronto's land area. This thesis will examine the underlying reasons for historical ravine stigma and how design can overcome it. This perception is represented by a combination of environmental degradation, perceived risks and undesirable activities or persons. This exploration included key informant interviews, survey of ravine users, site observation with GIS mapping. Ravines are commonly regarded as either unsafe or not user-friendly. Unlike manicured city parks, ravines are irregular, wild and largely hidden and thus potentially misused and underappreciated. This thesis will be built around the premise that with Toronto's growing population and subsequent pressures on available and/or under-utilized lands, ravines will be at increased risk without efforts to ameliorate the effects of associated stigmas. The challenge of overcoming the multiple stigmas associated with ravines can only be achieved through engaged design and policy guidance in conjunction with the involvement of community and education initiatives.

Cooper, Matthew. [Urban Park Street Edges: Enhancing Functionality for the Performance of the 21st Century City.](#) MLA Thesis. 2018. Advisor: S. Kelly; Co-Advisor: B. Stewart.

Parks within the City of Toronto's urban core are currently facing increased public pressure. "The edge zone" of the park, located at the interface of the street and the park interior, represents an underutilized space with potential to provide alternative park functions and increase the overall performative service of urban parks. Cities in the United States and Canada have launched planning initiatives which have strategized numerous design policies aimed to increase park services. These initiatives include improving edge conditions. This study aims to explore, identify and categorize contemporary edge zone typologies, which can inform design solutions for underperforming urban street park edges. A comparative case study analysis was conducted to identify and highlight a series of these typological forms and functions, as well as illuminate the potential benefits these new edge zone design strategies could provide for the urban park.

French, Emily L. [Designing Public Open Space to Support Seismic Resilience: A Systematic Review.](#) MLA Thesis. 2018. Advisor: K. Landman.

In the wake of major earthquakes, public open spaces become hubs for both short-term disaster response efforts and support longer-term recovery needs. At present, few open spaces are actually designed to support these intermittent but critical uses. Currently, there is no consolidated body of knowledge or resource for landscape architects designing for areas of high seismic risk. This thesis identifies ways in which landscape architects can proactively plan and design open space to support seismic resilience. A systematic review of both grey literature and peer-reviewed academic papers was conducted. The results of the systematic review identified ten key themes. These themes contribute to developing a foundation for landscape architecture and allied design disciplines to better incorporate seismic resilience into the planning and design of public open spaces.

Ibey, David. [Evidence-Based Landscape Architecture through Education in North America.](#) MLA Thesis. 2018. Advisor: R. Corry.

In order to understand whether landscape architects are adequately equipped with the skills to apply research findings to solve practical design problems, this study explores research education in landscape architecture curricula. Phased questionnaires were used to acquire general program information from program contacts and then to generate more specific research course information. Graduate programs were more likely to require students to complete at least one research course, however 325 of 706 of all students represented in the sample were required to take a research course. Research coursework responses revealed a significant, positive correlation between difficulty level of instruction and minimum required competency. The relationship between research instruction level, competency, and ability to practice evidence-based landscape architecture is discussed.

Lamirande, Nicole. [An Exploration of Landscape Architects' Perceptions of Trees.](#) MLA Thesis. 2018. Advisor: N. Perkins.

This thesis is an exploration into how trees are perceived by professionals associated with landscape architecture. It is argued that perceptions influence the decisions that we make, therefore the aim of this study was to explore the range of perceptions of notable landscape architects selected for their varied expertise. Fifteen participants across North America were interviewed using a semi-structured interview method. Interview transcripts were analyzed using content analysis and responses were categorized into three themes: influence, perceptions, and action. The results suggest that participants have a wide range of perceptions of trees in their scholarship and practice. Most notably, perceptions ranged from a tree as a tool, to a tree as a living thing, to a tree as something personal. Based on the results of this study, it can be concluded that a range of perceptions of trees may influence professional practice in the planting design decisions that landscape architects make.

Laszczuk, Michal. [Fencerows: Reinforcing Regional Identity in Urban Design.](#) MLA Thesis. 2018. Advisor: C. Paine.

Fencerows constitute dominant visual elements of the historic rural landscape and hold potential to be applied in the design of urban and suburban sites to reinforce regional identity in Southern Ontario. A survey of fencerows was developed through fieldwork resulting in a typology that summarizes the visual and functional characteristics of these linear features. The typology was applied in the design of a high-density development site in Mississauga, Ontario through an interpretive design strategy that translates the functional and visual principles of fencerows into designed planting assemblages. An assessment of the characteristics and feasibility of the designs demonstrates that they contain a series of defining features which reference the principal components of fencerows. Furthermore, the assessment demonstrates that the designs can be adapted in the urban environment in accordance to several municipal and urban design guidelines from the Greater Toronto and Hamilton Area.

Luce-Andreyko, Sarah. [Burning Man: A Guiding Light for Participatory Community Design.](#) MLA Thesis. 2018. Advisor: N. Perkins; Co: Advisor: M. Holland.

Black Rock City, an ephemeral community emerging in the Nevada desert for nine days a year, achieves better place attachment and interactions for its 70,000 participants than permanent landscapes in urban areas designed to serve far larger communities. When people more readily call Burning Man 'home' before they do their home, it becomes the ethical and moral responsibility of designers to understand and learn from this disconnect. The Burning Man event will be given context and used as a precedent informed through: (1) autoethnography of the 2017 burn explored through Randolph Hester's 12 Steps to Community Development, the 10 Principles of Burning Man, and an adapted photovoice journal, and (2) transcribed interviews with two prominent public consultants in

Toronto, and a philosopher at the Burning Man Organization. Perceptions surrounding the practice of community design will be challenged, valuing the capabilities of users, citing Burning Man as catalyst.

Nikota, Katie. [Mycology Applications for Landscape Architecture](#). MLA Thesis. 2018. Advisor: K. Landman.

Recent advancements in mycology have led to revolutionary discoveries of underground fungi that form essential symbiotic relationships with plants, connecting nutrients and communicating between root systems. Knowing how to utilize fungi to our benefit through mycorestoration and mycology applications might allow landscape architects to become ecological balancers for both human and natural environments. There is a lack of understanding of the complex systems of mycology. Bridging this gap between mycologists and landscape architects is essential to create a healthy mycorrhizal network in designed landscapes, especially distressed urban soils. This exploratory research investigates how mycology can be applied within the practice of landscape architecture, in order to propose applications of mycology and mycorestoration techniques, through a review of key literature and key informant interviews. Applications of mycology and mycorestoration in urban environments that contribute to healthier myco networking are proposed.

O'Neill, Stephen. [Measuring Urban Forest Canopy Effects on Stormwater Runoff in Guelph, Ontario](#). MLA Thesis. 2018. Advisor: R. Corry.

Cities are complex and contribute to urban stream degradation due to increased stormwater runoff volumes and velocities and ineffective stormwater management infrastructure. Trees provide measurable benefits to cities including rainfall interception which can decrease stormwater runoff, demonstrating their effectiveness as a stormwater management tool. This study quantifies the effects of urban forest canopy on stormwater runoff to assess proportions of canopy cover required to effectively reduce runoff levels. i-Tree Hydro, a semi-distributed hydrological model, was used to measure hydrologic effects of the City of Guelph's urban forest. Varying proportions of canopy cover were used to compare Guelph's current and potential urban forest. Results show that increasing canopy cover in plantable spaces decreased overall flow within the City, however, runoff over impervious surfaces increased. The findings can inform design decisions related to urban stormwater management and improve urban forest management measures; however, impervious surfaces remain a design challenge.

Purvis, Amy. [A Greenway System Approach to Developing A Linked Amenity Network in Rural Ontario](#). MLA Thesis. 2018. Advisor: S. Kelly.

As rural economies restructure due to a shift in demographic, social, and economic development, communities face significant challenges in promoting and encouraging continued economic growth. Rural communities are implementing tourism-based development strategies, marketing natural resources, culture, and history as amenity for creating tourist destinations. For many, tourism is seasonal and not a stable revitalization strategy. This study explores an integrative approach to greenway system design that supports a purposeful, amenity-linked network and quality of life attributes as a strategy for rural revitalization. A design framework was formulated from secondary data and then applied to a case study site. Key evaluators determined through selection criteria, provided an evaluation of the applied framework and design outcome. Results indicate how the application of an integrative landscape-based approach increases the attractiveness of rural communities to new residents, contributing to a revitalization strategy. Landscape architects can guide the future of rural landscapes towards heightening the quality of place and desirability of rural areas.

Rotzstain, Daniel. [Enhancing Strip Mall Landscapes in Toronto's Inner Suburbs](#). MLA Thesis. 2018. Advisor: K. Landman.

Strip malls are a common form of commercial architecture lining arterial roads in Toronto's inner suburbs. Originally designed to accommodate the automobile, strip malls and the neighborhoods surrounding them are increasingly home to low-income and new immigrant populations who have low

rates of car ownership. With affordable rents, strip malls within walking and transit distance of these communities have become vibrant gathering places, exhibiting characteristics of Oldenburg's "Third Place". However, the landscapes adjacent to strip malls are underutilized, with few amenities for pedestrians, e.g., seating and shade. After recognizing their role as inner suburban Third Places, the aim of this research is to identify and evaluate programs to implement landscape enhancements for pedestrians at strip malls in Toronto. "Landscape enhancements" is defined based on interviews with strip mall patrons, business- and property-owners. Document analysis and interviews with key informants inform an evaluation of the applicability of existing streetscape improvement programs to strip mall landscapes while recommending a new program — plazaPOPS — to address their public-private nature. Results are synthesized into an easy-to-use guidebook that facilitates citizen-initiated strip mall landscape enhancement projects.

Xie, Luozijie. [Urban Heat Islands as Opportunities to Extend the Use of Open Spaces.](#) **MLA Thesis.**

2018. Advisor: R. Corry.

Urban heat islands (UHIs) are a consequence of city design and population growth. Negative impacts of UHIs have been discussed, but the opportunity for UHIs to create thermally comfortable outdoor spaces through their warming effect during cool times has not been studied. By taking advantage of UHI and by using microclimate design principles for increasing outdoor thermal comfort, citizens might use public open spaces under broader weather conditions, including cool springtime and autumn evenings. A public plaza in Toronto was designed using microclimate design principles to enhance outdoor thermal comfort using UHI effects and evaluated for human thermal comfort with the COMFA model. In most locations within the design the thermal comfort increased during cool times, but for a few locations this increased summer heating too. Findings provide new directions for landscape architects suggesting how UHI can be used as an opportunity under certain conditions in city design.

Zakharova, Tatiana. [Place Empathy and Environmental Education.](#) **MLA Thesis. 2018. Advisor: N. Perkins.**

Ministry of Education documents define environmental education as education about, for, and in the environment. But how does formal curriculum actually describe "environment" in different subject areas and what does this say about students' relationship with it? Relying on hermeneutics for foundation and methodology, I analyze and interpret the Ontario Grade 2 and Grade 3 environmental education curriculum and identify themes of damaged connectivity and fear of complexity that can be addressed with place empathy. Having defined place empathy as a cognitive and affective representation process in which an observer simulates another's interpretations of place in order to deepen her understanding of place, and developed a place empathy framework, I identify a number of learning practices which could be used by teachers to engage students in place empathy to encourage, as I hypothesize, deeper understanding of and relationship with place. Ministry of Education documents define environmental education as education about, for, and in the environment. But how does formal curriculum actually describe "environment" in different subject areas and what does this say about students' relationship with it? Relying on hermeneutics for foundation and methodology, I analyze and interpret the Ontario Grade 2 and Grade 3 environmental education curriculum and identify themes of damaged connectivity and fear of complexity that can be addressed with place empathy. Having defined place empathy as a cognitive and affective representation process in which an observer simulates another's interpretations of place in order to deepen her understanding of place, and developed a place empathy framework, I identify a number of learning practices which could be used by teachers to engage students in place empathy to encourage, as I hypothesize, deeper understanding of and relationship with place.