



U-SoA FINAL REVIEWS

SPRING '19, 4.24.2019 - 5.01.2019

TABLE OF CONTENTS

5
Message from the Dean

6 - 7
Schedule

8 - 9
Map

10 - 71
Design Reviews

72 - 77
Notes + Sketches

Back Cover
Sponsors + Credits



MESSAGE FROM THE DEAN

Dear Students, Faculty and Guest Critics,

At the end of each term, students, faculty, guest critics and members of the community participate in the U-SoA Annual Final Review, a tradition that has long defined architectural education in North America. The public aspects of the event are essential ingredients, from the spectacle of the work on display to the animated exchanges between students, faculty and jury members. The jury's comments are meant to guide the students in their learning process. They are most valuable when they depart from individual projects to launch a broader discussion of the ideas that animate the school and position it in the ongoing public debate. The U-SoA Annual Final Review demonstrates the relevance of the issues we tackle with our students and showcases the diverse ways in which we engage them.

Rodolphe el-Khoury, Dean
School of Architecture, University of Miami

DAY 1 \ 4.24.19

9AM - 12:30PM pg. 10
ARC 102

Joel Lamere (Coordinator)
Florian Sauter
Germane Barnes
Elizabeth Cronin
Shawna Meyer

12:30 - 4PM pg. 12
ARC 602
RED 660

Joanna Lombard / Veruska Vasconez
Charles Bohl / Steve Nostrand

12:30 - 6:30PM pg. 14
ARC 407-510, 608-609

Rodolphe el-Khoury / Christopher Chung

DAY 2 \ 4.26.19

9AM - 12:30PM pg. 16
ARC 204

Edgar Sarli (Coordinator)
Cynthia Gunadi
Oscar Machado
Najeeb Campbell
Giorgio Antoniazzi

10AM - 6PM pg. 18
ARC 605

Rocco Ceo

1 - 6PM pg. 20
ARC 306, 608

Steven Fett / Christopher Meyer (Coordinators)
Alice Cimring
Carie Penabad
David Trautman
Jose Gelabert-Navia
Juan Calvo
Charles Bohl / Steve Nostrand

2 - 5:30PM pg. 24
ARC 580, 680

Wyn Bradley

6PM
ARC 510, 610

..... pg. 28
Jean-François Lejeune (Coordinator)
Allan Shulman

DAY 3 \ 4.29.19

9AM - 12:00PM pg. 30
ARC 407-510, 608-609

Jaime Correa / Carmen Guerrero

9AM - 12:30PM pg. 32
ARC 407-510, 608-609

Roberto Behar

11 - 12PM pg. 34
ARC 510, 610

Rodolphe el-Khoury

1 - 6PM pg. 36
ARC 407-510, 608-609

Pat Bosch
Frank Martinez

2 - 6PM pg. 40
ARC 407-510, 608-609

Charlotte von Moos

DAY 4 \ 4.30.19

9AM - 6PM pg. 42
ARC 510, 610

Jean-François Lejeune (Coordinator)
Germane Barnes
Victor Deupi
Joel Lamere
Joanna Lombard
Joachim Perez
Florian Sauter
Allan Shulman
Veruska Vasconez

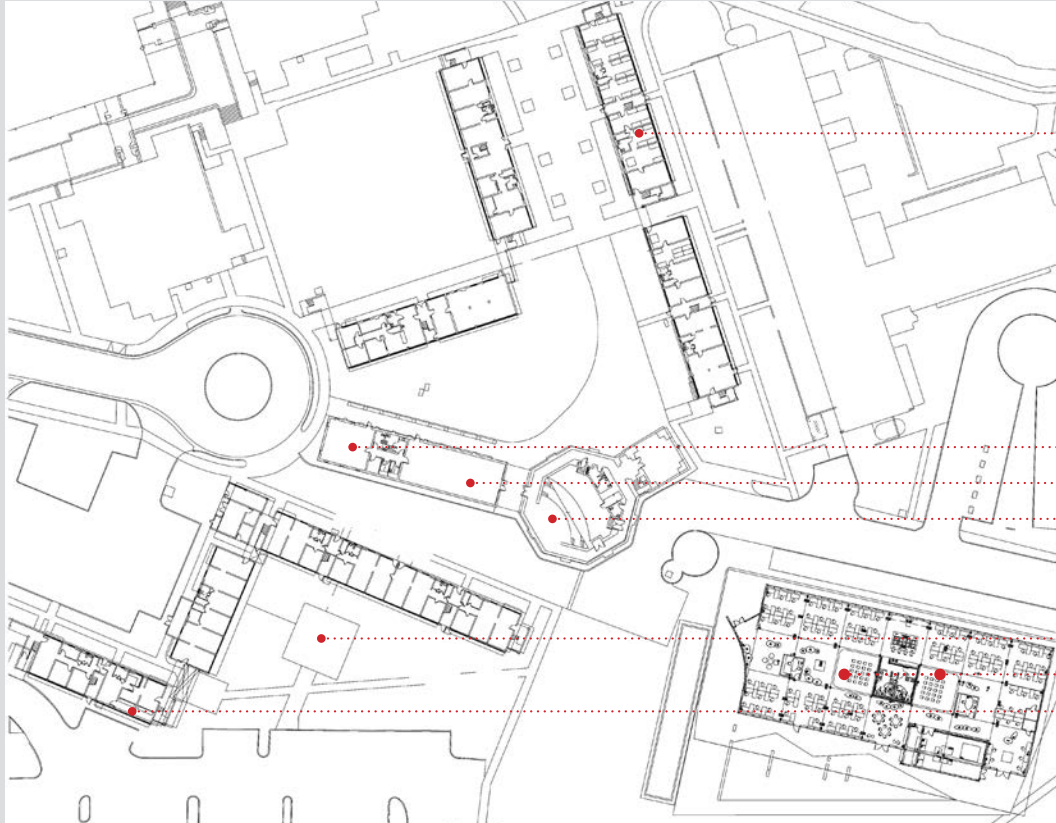
DAY 5 \ 5.01.19

2 - 4PM pg. 70
ARC 510, 610

Jean-François Lejeune (Coordinator)
Joanna Lombard
Elizabeth Plater-Zyberk
Allan Shulman

U-SoA \ UNIVERSITY OF MIAMI SCHOOL OF ARCHITECTURE

1215 - 1223 Theo Dickinson Drive, Coral Gables, Florida 33146



● **49-230 & 49-330** \ BUILDING 49, JURY ROOM 230-330 (SECOND & THIRD LEVELS)

● **RINKER** \ JORGE M. PEREZ ARCHITECTURE CENTER, RINKER CLASSROOM

● **KORACH** \ JORGE M. PEREZ ARCHITECTURE CENTER, KORACH GALLERY

● **GLASGOW** \ JORGE M. PEREZ ARCHITECTURE CENTER, GLASGOW HALL

● **BUILDLAB** \ B.E. & W.R. MILLER BUILDLAB

● **MURPHY A-B** \ THOMAS P. MURPHY DESIGN STUDIO BUILDING, JURY ROOMS A-B

● **VR LAB** \ LAGORCE BUILDING, 2ND FLOOR

STUDIO COURSE

ARC 102: Design Process and the
(New) Commons

DIRECTOR

Carie Penabad, Undergraduate Programs

COORDINATOR

Joel Lamere

FACULTY TEAM

Florian Sauter
Germane Barnes
Elizabeth Cronin
Shawna Meyer

STUDIO DESCRIPTION

ARC 102 builds on the architectural fundamentals explored in ARC 101, with a focus on a diverse set of design processes that include physical model-making, computational tools, and digital media to complement conventional projective drawing. This studio has emphasized process over representation, experimentation over results, and iteration over resolution.

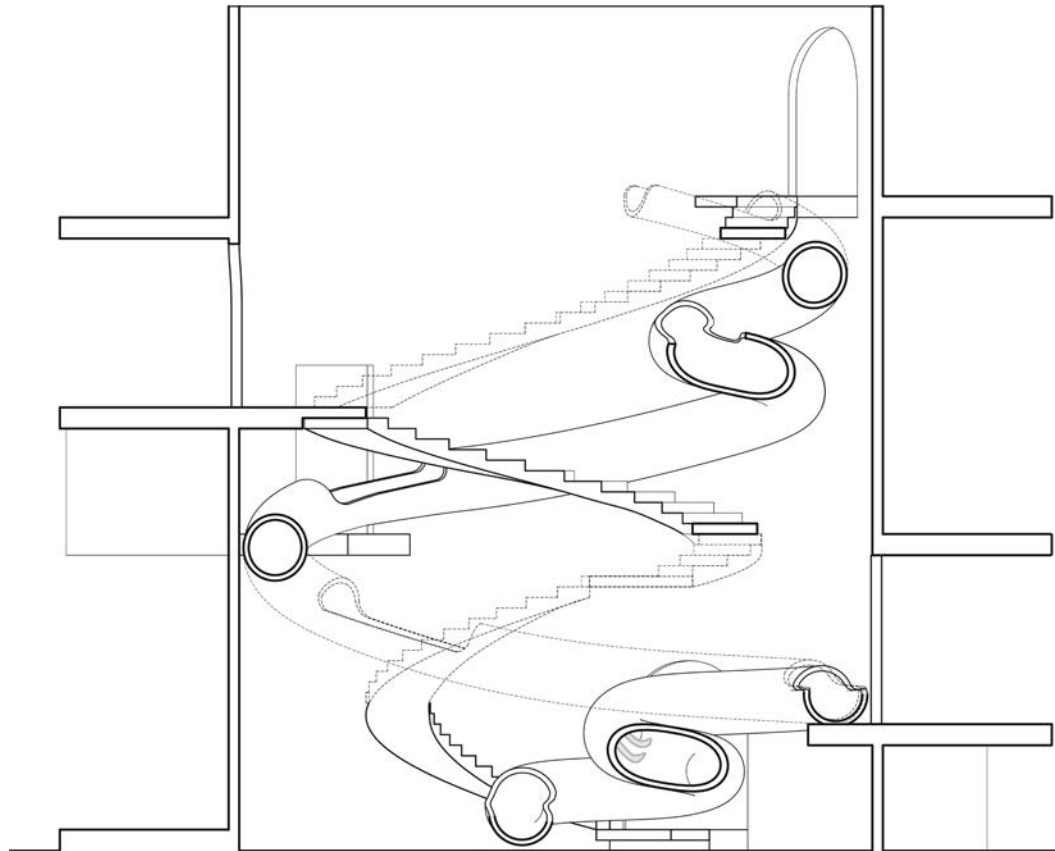
The semester is structured around four design exercises of increasing length. Each exercise examines a single architectural element - wall, stair, room, sequence. Early exercises emphasize rapid production and testing. As the semester progresses, and the exercise length increase, students are expected to invest more deeply into the elaboration of their ideas. The semester is

also broken into two halves. The first focuses on a specific interaction between two people - once through a wall, once by way of vertical circulation, and once in a room. The second part focuses on a final project that integrates the prior three elements into a single architectural sequence for a more complex public.

STUDENTS

Amy Margaret Agne
Abdullatif M. H. H. Alhusaini
Naser B. A. M. Alkandari
Mohammad A. A. A. Alramadan
Sarah H. M. M. H. A. Alturkait
Fahad O. A. S. Alzaid
Ethan John Anderson
Betul Aniker
Giovanna Bentes Queiroz
Crispin Michael Blamphin
Livia Brodie
Vincent Brown
Vanessa De Los Angeles Crespo
Runyu Da
Sophia Elwaw
Paul Fishel
Gianna Rose Florio
Emma Alexandria Gerlach
Amanda Marie Guerrero
Isaiah Terrell Holmes
Afomia Tekalgne Hunde
Nicholas Cameron Ingold
Mahlia Jenkins
Kevin Edward Johnson
Diana Lissette Juarez-Montano
Hope Elizabeth Kenny
Teymour Khoury
Benjamin Michael Klinger
Dominic Andrew Lanctot
Katherine Grace Lesh
Maia Jade Marshall
Ashanni McClam
Christopher Scott Muchow

Emad Hassan M. Munshi
Andrey Alexander Nash
Blake Richard Oliver
Candy Perchik
Miranda Gabrielle Posey
Conor Leo Quigley
Moragan Isabel Rapp
Farha Jalal Reshamwala
Joao Eduardo Llano Ribeiro
Lucas Rosen
Elliot Saeidy
Jayna Lynn Schack
Megan Eleanor Sheehan
Shannon Carmin Stack
Anna Isabel Valdes-Zauner
Anthony Louis Venant
Anan Yu
Abdallah Ayman Ahmed
Mohammed Zaidan
Harrison Phan Hieu Zaye
Zeyu Zhang



STUDIO COURSE

ARC 602, in conjunction with RED 660

DIRECTORS

Elizabeth Plater-Zyberk, Master of Urban Design Program (MUD)

Charles Bohl, Master of Real Estate Development & Urbanism (MRED+U)

FACULTY TEAM

Urban Design

Joanna Lombard
Veruska Vasconez

Real Estate Development + Urbanism

Chuck Bohl
Steve Nostrand
Mark Troen

Law

Jack Winston

Generation Park, McCord

Gonzalo Echeverria
Ryan McCord

STUDIO DESCRIPTION

The Spring 2019 Urban Design Studio explores the challenges of responsive urban infill in two projects: a major redevelopment proposal in Cincinnati, Ohio through the ULI Hines Student Competition; and a new, wellness-focused district in Generation Park, in northeast Houston, Texas. This new district is intended to address the potential

for re-imagining healthcare as an ecosystem of wellness through the development of a community that provides a panorama of opportunities for healthy living and healthcare across the spectrum of life. After a multi-day on-site immersion and workshop, the teams have advanced ideas through a studio-based multi-disciplinary investigation with collaborators from across five disciplines, and with guidance from the leading professionals of the McCord team. The results of this dynamic study are expressed in three proposals for a community at the intersection of health and wellness, economics, real estate, environment, climate, and visionary planning.

STUDENTS**ARCHITECTURE**

Caitlin Smith
Tori Cohen
Tomas Tapias
Junyong Wu

LAW

Richard Amagwula
Theresa Black
Mukiya Post
Catalina Rodriguez

URBAN DESIGN

Carolina Dominguez
Troy Gulec
Laura Stevens
Chao Wang
Yiqing Wang
Tianqi Xu

REAL ESTATE

DEVELOPMENT +
URBANISM
Alexandra Altman
Justen Bittman
Caroline Cozzi
Xiaoyun Jiang
John Ronco

BUSINESS

DJ Mahoney
Liza Perry

CONSTRUCTION MANAGEMENT

Ivanna Jimenez



West Lake at Generation Park, February 2019

STUDIO COURSE

ARC 407-510, 608-609: Spatial Computing in Architecture – a RAD studio based on the Magicverse Platform

FACULTY TEAM

Rodolphe el-Khoury
Christopher Chung
Amy DeDonato
John Day

STUDIO DESCRIPTION

This studio explores spatial and ubiquitous computing in their potential to change the ways we conceive, construct, inhabit and interact with our cities, buildings, and objects of everyday life. We will seek synergies between Mixed Reality (MR) and the Internet of Things (IoT), while using Magic Leap's Magicverse as a platform for spatial computing. Students will consider the following themes of everyday life and how they may be transformed by the new technology: *Learning, Socializing, Health + Wellness, and Productivity*. Particular attention will be given to public spaces and how they may be digitally enhanced to enable new forms of interaction and socialization.

The University of Miami's campus serves as a site for these experiments, providing a laboratory for deploying and testing idea and prototypes of mixed reality and spatial computing. The work will emphasize aspects of higher education and student

experience but the campus will also be considered more broadly, as a microcosm of the Magicverse, Magic Leap's platform for bridging the physical and virtual worlds.

STUDENTS

Saad Alhajri
Jesse Alvarez
Yasmine Benchekroun
Kyle Ferry
Floriana Larche
Jose Mozza Vargas
Dylan Rzepka
Xiangyu Shao
Alexander Underwood
Jiayi Wang
Fuhong Wang
Ashley Zambrano
Yibo Zhang



STUDIO COURSE

ARC 204: Downtown Aquatic Center

DIRECTOR

Carie Penabad, Undergraduate Programs

COORDINATOR

Edgar Sarli

FACULTY TEAM

Cynthia Gunadi
Oscar Machado
Najeeb Campbell
Giorgio Antoniazzi

STUDIO DESCRIPTION

According to the Downtown Development Authority, since the year 2000, the population growth in the area has been of approximately 25% every 5 years. The average age of the residents is 35 years old, and Greater Downtown Miami residents are primarily young professionals. The latest DDA Demographics Report shows that 70% of the residents exercise weekly. Despite the fact that many condominium towers have rooftop pools, and the existence of a small number of public swimming pools, one of the most underserved sports in the area is swimming. Almost all swimming facilities in the area are open to the elements, and in consequence, there are several days of the year when the facilities need to be closed to the public for safety reasons. The project is to design a swimming facility with an envelope that would allow it to function

even during bad weather conditions. The swimming hall does not need to be air-conditioned; rather, it should be naturally ventilated. During bad weather forecasts, it should offer users the same level of safety and comfort as an enclosed space. The site located on the west side NW 2nd Avenue between 1st and 2nd Street, and is composed of six lots property of Miami-Dade County. The designated use under *Miami 21* is CI - Civic Institutional.

STUDENTS

Valentina Eugenia Alfonzo Albornett
Rawan Kh H. M. Alkandari
Nora A. Kh S. Alkhalaf
Andrew Joseph Almeida
Salah Saleh M. Alsharari
Abdullah Yahya A. Alyahya
Timothy Maguire Baker
Jason Tyler Ballantyne
William John Barrett
Ciana Leigh Bello
Gabrielle Boyar
Amanda Blair Brown
Natalie Castillo
Marina Colon
Robin Crowder
Natalie Andrea Cure Garcia
Andre Mega De Mathis
Jackeline Ivonne Del Arca Argueta
Sarah Nicole Ercia
Larah Garcez Biondo
Katya Carmen Garcia
Caitlin Garner
Yufei Huang
Janan A. H. Gh Husain
Florianne Adrien Jacques
Sheinya Wittney Joseph

Cooper William Kaplan
Joshua Kaufman
Emi Kopke
Michael Kundin
Jake Leonard
Mariel Delyn Lindsey
Natalie Marie Lipsey
Alexia Lohken
Thomas Long
Skyler Barton Lowden
Ho Ming Herman Lui
Alexia Marotta
Charlotte Kyra McCabe
Cecilia Debary McCammon
Connor Griffin Murray
Daniel Oh
Jane Wesley Rakow
Samantha Ramos
Spencer Richardson
Gabriel Jean-Paul Soomar
Max Speziani
Haochen Su
James Joseph Tirado
Adam Toum Bencheckroun
Abel Andres Victores
Mackenzie Sky Wilhelm
Reid Kruse Yenor
Weiyi Zheng



Stadtbad Mitte, Berlin, by Heinrich Tessenow

STUDIO COURSE

ARC 605: RISD Nature Lab & Artist House

FACULTY

Rocco Ceo

STUDIO DESCRIPTION

The studio looks at how architectural form is informed by thoughtful consideration of materials and methods of construction. The studio examines a dense urban environment rich in material, stylistic and typological history, providing us with a rare opportunity to be surrounded by excellent examples from just about every period of the history of American Architecture.

The studio also looks at notions of containment, display, and the production of meaning in architecture. Parallel to this work will be the question of how nature is represented in the city through the pursuit of an institutional program in need of identity, on a campus that has traditionally been resistant to the notion of center or conformity. An attempt will be made to look at what constitutes the language of this institution's identity and how it may be addressed in an unprecedented program that mixes public and private space in a historic context.

The studio project involves the design of a unique collection of storage, display and drawing spaces combined with urban housing for visiting faculty at the Rhode

Island School of Design (RISD) in Providence Rhode Island. Notions of sustainability and permanence are often connected to an institutions identity both regionally and globally. A mixed-use program that looks at the preservation and study of nature literally (Nature Lab) with the transitory program of visiting artists housing will test our abilities to balance the requirements of a program that is both static and dynamic involving urban identity through a careful reading of place. Parallel to this effort are consideration of periodic readings on relevant projects on a selection of architects who have written about their work or have had their work critically examined by important figures in the world of design thinking.

STUDENTS

Emily Camejo
Xingyi Huang
Johnny Edward Laderer
Jennifer Lamy
Yingqi Li
Lauren Oates
Peyton Smyth

JURORS

Jonathan Knowles, Professor, RISD
Nick Gelpi, Associate Professor, FIU
Jake Brillhart, Associate Professor, U-SoA
Veruska Vasconez, Lecturer, U-SoA
Dr. Florian Sauter, Lecturer, U-SoA



STUDIO COURSE

ARC 306/608: Architecture Design VI

COORDINATORS

Steve Fett
Christopher Meyer

FACULTY TEAM

Alice Cimring
Carie Penabad
David Trautman
Jose Gelabert-Navia
Juan Calvo

STUDIO DESCRIPTION

"Architecture is too complex for just one person to do it, and I love collaboration." - Richard Rogers in *The Guardian*, July, 2013.

Richard Rogers reminds us of two important points in his quote from *The Guardian*. First, Architecture is a profession that must engage with other disciplines, and second, architects benefit from collaboration. As architectural students, these are important lessons to understand and the studio aims to simulate this reality through the development of three primary skillsets:

1. Research: Understanding of the theoretical and applied research methodologies and practices used during the design process.

2. Integrated Evaluations and Decision - Making Design Process: Ability to demonstrate the skills associated with making integrated

decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

3. Integrative Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

Projects and assignments will focus on the acquisition of the above knowledge by focusing on the integration of building systems, including structural, mechanical, electrical, and plumbing (M.E.P.). The approach will be holistic. Context - both physical and environmental, should be considered when making design decisions.



Centre Pompidou, Paris

STUDENTS**UNDERGRADUATE PROGRAM**

Faris Al Aswad
Maaryam F. Kh J. H. Alanzi
Lulwah Kh J. A. M. Aldamkhi
Mikayla Paris Allen
Maria Claudia Aparicio
Tiffani Banks
Megan Browne
Michael Sean Cannon
Sofia Francisca Contreras Ojeda
Ryan Paul Daniusis
Valeria Vyacheslavna Dimitryuk
Batuhan Dortcelik
Gladys Amelia Espinal Vasquez
Emily Paige Fusilero

Svetlozara Gizdashka
Okan Andrew Has
Clarissa Hellebrand Blasini
Shariq Ishaque
Daniel Bradley Kamb
Sofia A. Kiblsky
Hunter J. Kronk
Alexandra Morgan Kupi
Alexandra Marie Leitch
Gretchen Suzanne Lemon
Stefanie M. Levy
Maria Isabel Lira Adrian
Karlie Ann Lobitz
Malek Waleed M. Matbooli
Jheanelle Christasia Georgian Miller

Daniel Eduardo Morgan Levy
Morgan Christopher O'Brien
Alexandra Maria Remos
Brenda Patrick Riggs
Hannah Lilia Rodriguez
Rebecca Kate Rudner
Olivia Tower Schilling
Madison Taylor Seip
Sofia Karina Silva Cadena
Eduardo A. Ventura
Tanner Wall
Haoran Wang
Yemin Yan
Shimeng Yang

GRADUATE PROGRAM

Baraa Khalid A. Ageel
Andrew Kent Bissell
Celeste Desiano
Alba Quintanilla
Jazzmin Nickole Reid
Liwen Shao
Zeyu Yuan

STUDIO COURSE

RED 660: Urban Infill, Preservation & Mixed Use Development

FACULTY TEAM

Charles Bohl
Steve Nostrand

STUDIO DESCRIPTION

Urban infill and redevelopment practice introduces complexities and opportunities that differ significantly from edge city and greenfield development practice.

This course will build students competencies for infill and redevelopment practice focusing on: barriers and solutions for urban infill development; urban site analysis; mixed-use development; repositioning of urban land, vacant and underutilized properties (including greyfield and brownfield opportunities); long-term land leases; tax incentives, historic preservation, public-private partnerships, business improvement districts, tax increment financing, community (re)development districts, urban parking strategies, urban housing types and mixed-use infill strategies. The team projects will engage RED660 students with students in architecture studios, the Law School LLM program in Real Property Development, and the Construction Management program in collaborative team projects. Sites include: Miller Equipment and Supply, Homestead MXD, Buena Vista, El Portal, Sunny Isles, Office Depot HQ, Coral Way Sears.

STUDENTS

Alexander Stephen Alford, MRED+U
Mazin Hasan A. Alroumi, MRED+U
Alexandra Emily Altman, MRED+U
Justen M. Bittman, MRED+U
Austin John Cassidy, MRED+U
Andrew Clum, BArch
Caroline Edna Cozzi, MRED+U
Alicia Dahdah Sayegh, MRED+U
Celeste Desiano MRED+U, MArch
Karim M. S. EL S. Fayaz, MRED+U
Aaron Joel Hirschl, MRED+U
Xiaoyun Jiang, MRED+U
Sasha Theresa Kayal, MRED+U
Andrew Phillip Lionikis, MRED+U, MArch
Johnny Maghzal, MBA
David Joseph Mahoney, MBA
David Martinez, MRED+U
Francisco Jose Masso, MRED+U
Mitchell Ian Monroe, MRED+U
Jonathan Ovadia, MRED+U
Jesus Alfonso Perez Villamizar, MRED+U
Liza Perry, MBA
John Alphonse Ronco, MRED+U
Or Shai, MRED+U
Burak Sumru, MRED+U
Eleanor Ruth Williams, MRED+U
Laura Zapata Cadavid, MRED+U



STUDIO COURSE

ARC 407-510, 608-609: Upper Level
Architecture Design - Practicum Studio

COORDINATOR

Wyn Bradley

STUDIO DESCRIPTION

University of Miami, School of Architecture has created an immersive experience for highly qualified students to be hosted as interns and research collaborators at the offices of top design leaders. What sets this program apart from a traditional internship? Research. This synergistic collaboration leverages three partners: the enthusiasm, hard work and up to date methods of the student, the wisdom and real-world design agenda of the host office, and the thoughtful academic expertise of faculty.

HOST OFFICES & STUDENTS

Carmen Guerrero Design Studio &
Nicholas Meury

Oppenheim Architecture &
Sarah Alnoman

Perkins + Will &
Lorena Knezevic

[STRANG] Design &
Jingyi Xu

TSAO Design Group &
Racheal Liberman

STUDENTS

Sarah Mashhour A. Alnoman
Lorena Knezevic
Rachael Liberman
Nicholas Meury
Jingyi Xu

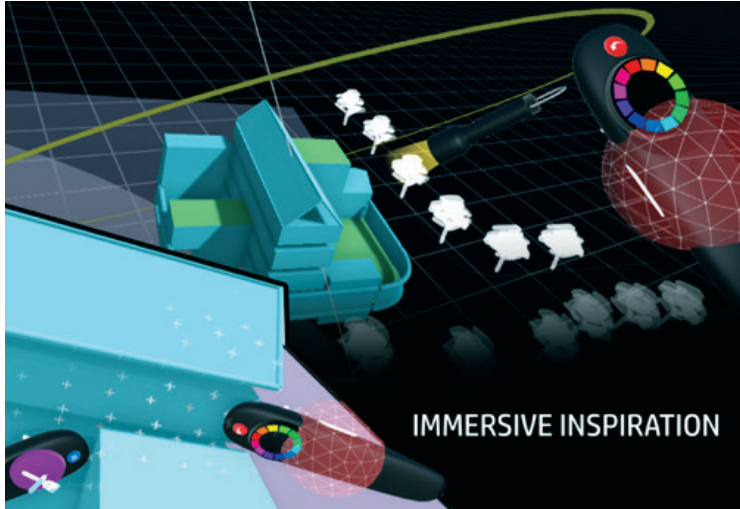
**Nicholas Meury **

TROPICALISM DOWN UNDER
Australia is a large and incredibly diverse continent containing innumerable climates, from hot arid deserts to wet monsoon tropical jungles. This research investigates the unique developments of Australian architecture in the hot and humid regions of the continent, with a focus on the architecture of Glenn Murcutt and the creation of a new kind of national romantic.

Glenn Murcutt, Marie Short House

**Sarah Alnoman **

ARCHITECTURE IN CONTEXT
The research investigates the integration of architecture and context. It studies the applicability of using local context and the natural environment as inspiration for developing successful design concepts and elements. The focus of the research is to define what architects gain by referencing the local environmental context in their designs. Special attention is dedicated to how this relationship is and can be applied in Saudi Arabia.



Lorena Knezevic \

IMMERSIVE INSPIRATION, DESIGNING IN VIRTUAL REALITY

A proposal for a VR-enhanced workflow that gives the designer's intuition agency in the initial design stages while promoting conceptual design clarity. This study focuses on the integration of virtual reality in the initial design charrette phase for clearer communication between the design principal, design leads, and clients. The aim of the research is to give the designer's intuition agency at the start of the process and working with the model at a variety of scales in virtual reality.



Jingyi Xu \

SUSTAINABLE SOLUTIONS, MIAMI RESIDENTIAL MATERIALS + TECHNOLOGIES

How can we usher in sustainable materials and technologies in Miami's residential architecture and construction? Solutions that consider the replacement of current problematic materials, aiming to reduce the construction emissions, will be investigated. Green technologies, which can produce less waste and consume less energy, will be discussed as well.



Rachael Liberman \

SHOPPABLE HOTELS

A Shoppable Hotel is a non-traditional form of retail created by a brand, blending retail and hospitality together in order to create a new experience for people. Its purpose is to deliver a sense of community in a space that can enhance the way consumers live their daily lives by transforming entire hotels into more accessible, interactive showrooms for their brands, and the lifestyles they promise to deliver to guests.

STUDIO COURSE

ARC 510/610: Architecture Thesis
(Undergraduate 5th Year Thesis)

COORDINATOR

Jean-François Lejeune

THESIS ADVISORS

Jean-François Lejeune
Allan Shulman

STUDENT

Andrew Clum

***DELIRIOUS MIAMI:*
A PRO-ACTIVE MANIFESTO FOR AN
EXTRAORDINARY AMERICAN CITY**

Delirious Miami is an unauthorized sequel, a response to Rem Koolhaas' *Delirious New York*. In the same paranoid-critical method of analysis, the sequel accepts the framework of Koolhaas' arguments for development in Western Civilization and builds upon them.

The themes derive from the historic, spatial, and socio-economic analysis of Miami, and can be summarized in a few of the section titles: Before the Days of Sub-Divisions; Guavanormativity and the True Origins of the Sealed Building; Coconuts and Concrete: How to Multiply the Land, Ecological Succession and the Pioneering Spirit; Interama: The Truest Miami Has (N)Ever Been; Form Follows Finance; Case Studies of a Polycentric Metropolis; and The Story of the Pool, Continued.

In addition to the historical narratives explored, *Delirious Miami* attempts to visualize the city in a way that has not been done before, using land values as a basis for renderings of the city inspired by Hugh Ferriss' diagrams of zoning envelopes from the 1920s. *Delirious Miami* is a manifesto for the 21st century metropolis. This metropolis is polycentric, diverse, and powered by the non-native.



STUDIO COURSE

ARC 407-510, 608-609: RECONSTITUTION OF THE COLONIAL SUGARCANE MILL - Design alternatives for "*Ingenios Azucareros*" in the Dominican Republic

FACULTY

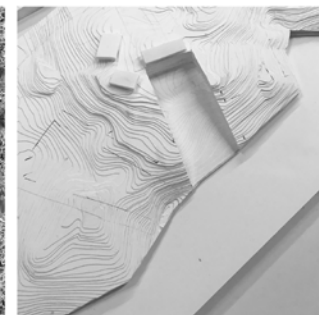
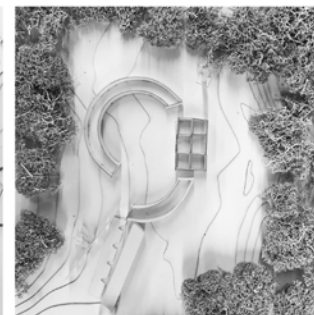
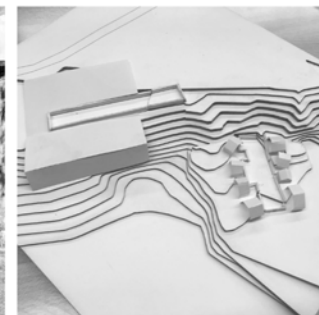
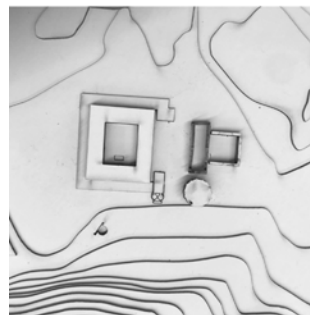
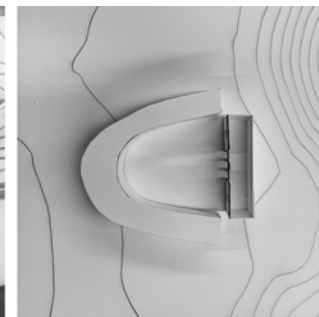
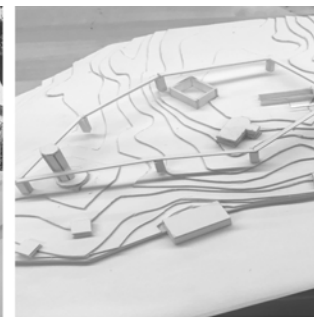
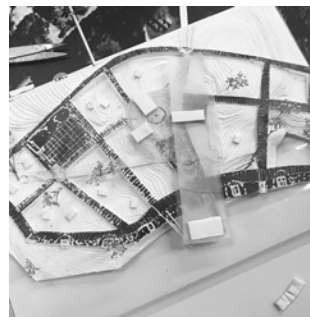
Jaime Correa
Carmen Guerrero

STUDIO DESCRIPTION

A research design studio focused on the retrofit and adaptive reuse of colonial sugarcane mills in the Dominican Republic. Core studio themes are the preservation of heritage sites and the appreciation of the historic landscape in the contemporary discourse of architecture and the city. Following the successes of the Medellin and Mexico studios, students will document relevant historic precedents and heritage structures in-situ and will propose an *imaginarium* of alternatives for the reconstitution of the first industrial structures in the New World. This is a travel sponsored studio in partnership with the Ministry of Culture of the Dominican Republic and the School of Architecture of Universidad Nacional Pedro Henriquez Urena.

STUDENTS

Abdulaziz Alghannam
Laura Beltran
Michael Burke
Daniella Cancel
Catalina Chaves
Luis Delgado
Maxwell Erickson
Andrea Hernandez Torres
David Holmes
Daniella Huen
Olivia Kramer
Israel Martinez
Sol Perchik
Adrianna Rivera
Emily Suarez-Aviles
Andrea Szapiro



STUDIO COURSE

ARC 407-510, 608-609: SKYSCRAPERS -
New York City Studio

FACULTY

Roberto Behar

STUDIO DESCRIPTION

The NEW YORK CITY STUDIO is dedicated to the invention of a new generation of Skyscrapers inspired by the architecture of the city. The project site is a small city block that performs as a hinge between Soho, Tribeca and 6th Avenue. The unique site faces a triangular park that resolves the directional shift of the NYC grid from Soho to Tribeca.

The area performs as a place of encounters of a heterogenous ensemble of architectures, including the classic cast iron and the brick warehouses of Soho and Tribeca and a variety of buildings of diverse architecture quality. The scale of the surrounding industrial fabric suggests the intervention's potential to become a landmark in a neighborhood that is currently undergoing a significant transformation.

Using New York City as laboratory of the vertical city and high urban density, the class tour NYC, and conducted research on classic examples such as The Empire States Building, Chrysler Building, Rockefeller Center, Waldorf Astoria and Seagram Building as well as contemporary interpretations of the city by

Pritzker prize winners Aldo Rossi, Frank Gehry, Herzog de Meuron and Sanna.

STUDENTS

Amanda Arrizabalaga
Yasemin Cetinalp
Christopher D'Amico
Gabriella Feito
Joshua Kleinberg
Julia Murdoch
Juan Ochoa Echeverry
Alyssa Osborn
Robert Soldano
Dylan Starr

JURORS

Abraham Aluicio, FIU
Nick Gelpi, FIU
Rosario Marquardt R & R Studios
Shawna Meyer, U-SoA
Luis Trelles, Trelles, Cabarrocas, Trelles Architects
Dr. Florian Sauter, U-SoA



STUDIO COURSE

ARC 510/610: Architecture Thesis
(Undergraduate 5th Year Thesis)

COORDINATOR

Jean-François Lejeune

THESIS ADVISOR

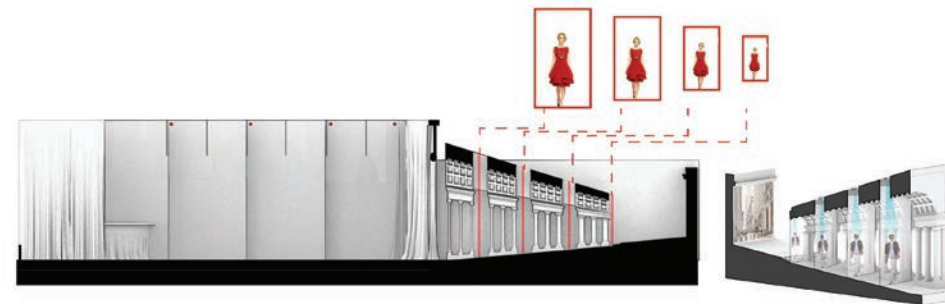
Rodolphe el-Khoury

STUDENT

Lorena Knezevic

**THE ARCHITECTURE OF
AUGMENTED REALITY**

The architectural profession is facing a paradigm shift as the creative process is turning towards computer-aided design methods. Augmented reality (AR) technologies allow architects to visualize models, construction process, and have the potential to impact a visitor's perceived understanding of the space. Erudite understanding of the potentials of this technology in architecture is paramount to both defining the visual language of the upcoming mixed reality world and illuminating more experimental design strategies in which AR can be further integrated into the practice of architecture, from concept to construction. AR technologies affect architecture in the process, presentation, and production of the final built product. They layer visual, auditory or haptic information upon the user's experience of the real-world environment in real-time, giving the illusion that their enhanced surroundings have more sensory input than truly exists. This effect is achieved through projection mapping onto real surfaces, embedded technologies, seen through an intermediary device such as a tablet or through AR glasses.



AR-eye for design

www.ar-eye.com

STUDIO COURSE

ARC 407-510, 608-609: Responsive Architecture - Future Ready Vision for Miami

FACULTY

Pat Bosch

STUDIO DESCRIPTION

Transformational Design rises from the intersection of program, site, climate and culture. This studio will research and develop this intersection to create a future-ready vision for the built environment of Miami. The aim is to speculate on the next generation of buildings, spaces, and places that respond to contemporary challenges. Utilizing advanced technological tools, along- side a humanistic lens, students will be immersed in process of exploration and analysis to pro- duce projects that can influence the Miami community towards an optimistic ideal of our city.

STUDENTS

Ahmed Alanezi
Youssef Alkhamees
Felipe Arias Mmais
Laura Leichtman
Sheng Qian
Flavia Russo
Michaela Senior
Jaime Toro Irizarry
Angela Villada
Julia Zollner



Treo - Somi Station, South Miami, Florida

STUDIO COURSE

ARC 407-510, 608-609: Preservation Studio,
Coral Gables, Florida

FACULTY

Frank Martinez

STUDIO DESCRIPTION

The studio focus on innovative practice, in the preservation of cultural heritage, architectural and urban historic preservation, shall be explored in proposals for the expansion of Coral Gables City Hall. The integration of Architecture and Urban Design, in Theory and Practice, will be a primary goal of the studio.

Lending support and resources to the studio will be the Coral Gables Historic Preservation staff, the Planning Department, the City Architect, the City's Board of Architects (BOA) and the Historic Preservation Board (HPB). This unique team of professionals and academics will give emphasis to: Research, Applied Learning, Presentations & Public Discourse, and Education in Practice.

The architectural projects focus intendeds to address the timeless needs of the present while framing Architecture and the City as a singular investigation. Inquiry, History and Invention will be interwoven in the commitment and pursuit of Excellence in the Built Environment.

The design studio, to share and advance

the project objectives within the broader field of Practice, will mirror the real life experience and processes that architects engage within the field, inclusive of presentations and submittals to the Board of Architects and a special session with the Historic Preservation Board.

STUDENTS

Shuail Alshuail

Nishi Bordia

Siyu Deng

Jacob Gardner

Elsa Hiraldo

Maan Ezmirly

Mario Alecio

Claudia Silva

Ali Tanriyar

Hector Valdivia



STUDIO COURSE

ARC 407-510, 608-609: Babylon II

FACULTY

Charlotte von Moos

STUDIO DESCRIPTION

Only a year after Arquitectonica's first realized project – the Babylon Apartments – won historic designation in 2017, Miami city commissioners have overturned the building's landmark status to pave the way for its demolition. A small-scale structure nestled into the Brickell neighborhood of high-rise-buildings, it contains only 15 apartments – some one-, two-, and three-bedroom units, while each has a terrace with a view to the bay. The apartment block's bright red façade and stepped, ziggurat-inspired shape extruding back into the long and narrow lot instantly made it an icon when it opened its gates in 1981.

As a homage to this seminal housing project in Miami, students are asked to design the Babylon II: based on the expressive volumetric disposition and scale of the original building, they are to propose alternative sites in the neighborhood of Coconut Grove for the placement of the new Babylon, adapting the original design and program to respond to the specificities of the site. The new project ideally manages to have a larger outreach with its program, offering not only housing but potentially also communal program which is currently lacking in Coconut Grove. The

projects, which naturally also integrate a clear response to the landscape and environment, could range from minimal interventions to the complete re-assessment of the original plan.

Altogether, the studio will be a radical investigation into how a highly charged and specifically attuned historical building structure can be used as a prototype to accommodate today's social, programmatic and environmental requirements.

STUDENTS

Moises Abbo
Qiazi Chen
Sixue Chen
Frances Gelbart
Juan Guareschi Mujica
Alexis Guillen
Beltran Lozano Martinez
Pawel Bozyslaw Marjanski
Nathan Morales Gallardo
Mario Ostolaza Guitian
Tianyu Wang



STUDIO COURSE

(1.) ARC 510/610: Architecture Thesis

DIRECTOR

Allan T. Shulman, Graduate Programs

COORDINATOR

Jean-François Lejeune

THESIS ADVISORS

Germane Barnes
Victor Deupi
Joanna Lombard
Joachim Perez
Florian Sauter
Allan Shulman
Veruska Vasconez

STUDIO DESCRIPTION

The Architectural Thesis or Master's Project is a design project conceived of, developed, and defended independently by the individual student that aims at being an original contribution to the field of architecture.

The thesis is a two-semester, 9-credit process that includes a seminar and a design studio led by one or two faculty members. The Thesis must be approved by the ad-hoc faculty in partial fulfillment of the requirements of the Master of Architecture Degree (3-year or 2-year).

STUDENTS

Jessica Abecassis
Sabrina Diala Aboud
Ebraheem Alhusain
Abdulrahman Allam
Mohammed A. M. A. Alsaed
Isabel Maria Alvarez Arzeno
Aigerim Amirova
Evan Bobo
Bryan Pierre Burgos Neacato
Edgar Campes
Juliana Char Garcia
Lorena Knezevic
Konstantina Kritharidou
Mariangeles Lacayo
Melissa Ledezma
Kun Li
Andrew Phillip Lionikis
Kexin Ning
Felipe Ignacio Prellezo
Junkang Shao
Gilda Santana
Gaurja Sood

>> PG. 43

1. ARCHITECTURAL DESIGN THESIS (INDEPENDENT RESEARCH):

The Architectural Design Thesis is an independent design research project on a topic selected and developed by the student. The Design Thesis is an opportunity for each student in the Master of Architecture program to define an individual position with regard to the discipline of architecture.

>> PG. 64

2. DESIGN THESIS RESEARCH STUDIO:

The Research Studio is an opportunity to work in a selected area of design research under the direction of a designated faculty member. Faculty members teaching the research studio establish a general problem or research topic, as well as a project framework. Each student makes specific contributions to a group research effort, and develop individual thesis projects within the topic and project framework.

**STUDENT**

Jessica Abecassis

PROGRAM

Master of Architecture

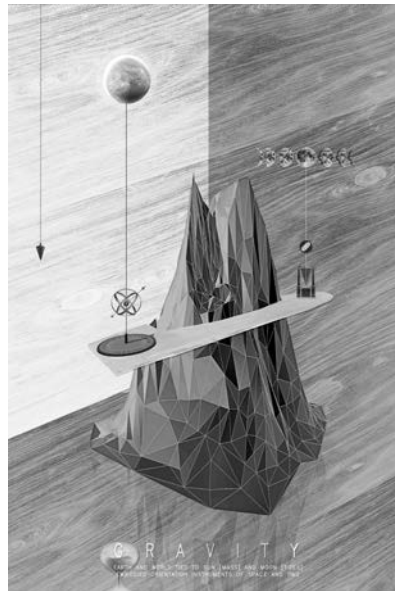
THESIS ADVISOR

Veruska Vasconez

CONNECTED COAST: INFRASTRUCTURE AND IMMIGRATION

Most of Miami's waterfront is privatized and the small portions that allow public access are disconnected by private super-blocks and infrastructure. The thesis explores a section of the coastline adjacent to the Venetian Causeway, and its potential to become an infrastructure for climate change while functioning as an enhanced public promenade. The proposed project will connect two public parks, Museum Park and Margaret Pace Park, with public paths on the water which ideally could be repeated to connect public waterfront areas along the entire coast and create seamless public access to the water. The proposed extension into the Bay will be designed to resist storm surges and enhance the quality of the civic realm, serving as a connected and continuous system.

A new green infrastructure, consisting of a living sea-wall, a dense mangrove strip, seagrass and coral reefs planted along the coast, will work alongside existing hydrological systems to improve flood mitigation. The structure, which will run parallel to the Venetian Causeway, houses an immigration museum that focuses on how the landscape has changed over time with different surges of immigration. The museum adds to the collection of public structures along the Bay and enhances the identity of the area as Miami's cultural center.

**STUDENT**

Sabrina Diala About

PROGRAM

Master of Architecture

THESIS ADVISOR

Florian Sauter

GRAVITY: CONDITIONS AND POSSIBILITIES

So pervasive and unavoidable is gravity that it is often ignored. Architects deal with gravity as an ever-present condition, challenging them to cultivate new possibilities. This thesis seeks to engage in a dialogue with this force, using the natural world as a framework – operating between parameters that affect both the shape of space as well as the flow of time ('spacetime'). In a detailed exploration, the project proposes the extraordinary

Rock of Gibraltar, a gravitational ruin – hollowed internally by downward flows of rainwater and eroded laterally by lunar tides – as a public museum garden for its archaeological finds. Two separate cave systems, one formed by karstic processes and the other by tides, anchor a descent from the belly of the mountain down to the sea. The strategy examines a sequence of public spaces in which interventions mirror a sectional thematic: excavations into the rock's surface draw water from a catchment whereas new 'grounds' are suspended off the rock. From the lake of St. Michael's cave, hewn limestone exhibition chambers are transformed into a polished bridge that occupies the sky holding glassy tidal gardens – linked by water leading to a deck in the sea. The increasing transformation of stone into glass (sand as rock broken by water) forms an analogue both to the archaeological process (the grinding away of sediment) and to the erosive condition of the landscape as a whole. Through a spectrum of conditions embedded within the garden's horizons, the Rock is 're-presented' as a gift to the visitors at the territory's edge.

**STUDENT**

Ebraheem Alhusain

PROGRAM

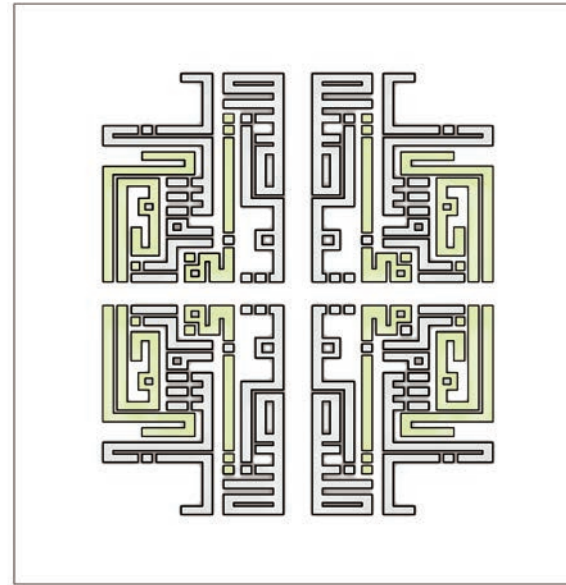
Master of Architecture

THESIS ADVISOR

Allan Shulman

THE CITY BEHIND THE WALL

Kuwait City experienced a radical transformation with the discovery of oil in Kuwait in 1938. Along with economic transformation, oil brought physical upheaval, including tearing down the historic city center; demolishing the city's defensive wall; and implementing new planning and architectural models in all areas of the city. The greenbelt, originally planned to separate the urban core from its expansion, is one legacy of this rapid oil-driven transformation. Symbol of both ambition and failure, this critical space within the city is today a largely empty zone. This thesis will investigate the lost urban fabric of Kuwait City and its former wall, as well as the modernizing forces that created the greenbelt project. It will propose a new plan to redesign a portion of the greenbelt as a first step toward reconstructing a coherent architectural narrative throughout the city. As part of this investigation, the project will study new forms of housing and public space inspired by the pre-oil morphology and typology of the city.



جمال الروشان في تفاصيله |
The beauty of ROSHAN is in its details

STUDENT

Abdulrahman Allam

PROGRAM

Master of Architecture

THESIS ADVISOR

Germane Barnes

RECAPTURING ARCHITECTURAL IDENTITY

Both the residential and commercial architecture in Saudi Arabia have become solid rectangular "boxes with no character." These buildings reflect a growing absence of architectural identity, and they have been lacking passive architectural attributes such as cross ventilation, natural lighting, and other details of functional

identity. Yet, some outstanding historical models remain: one example in Jeddah city is an area in the south side called Al-Balad, Heart Jeddah or Traditional Jeddah. It continues to have very valuable buildings that have fostered a strong sense of identity and demonstrated how specific architectural treatments responded to the environmental conditions and helped control the interior climatic comfort. Of particular architectural importance is the *rowshan* - a large opening in the exterior walls, covered by a combination of wooden strips and decorative screens - that has been used continuously in the past to regulate natural lighting, cross ventilation, and humidity. In 2014, Al-Balad was added to the World Heritage list by UNESCO. This thesis proposes to analyze the historic fabric and buildings in order to develop a potential strategy to recapture architectural identity in modern buildings using cultural forms such as the *rowshan* and other wall cavities.

**STUDENT**

Mohammed A. M. A. A. Alsaeed

PROGRAM

Master of Architecture

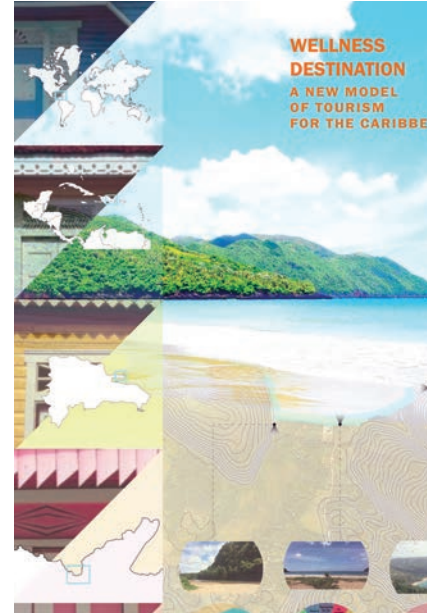
THESIS ADVISOR

Joanna Lombard

HEALTH, WORK AND ARCHITECTURE

According to a 2018 US Environmental Protection Agency report, people spend approximately 90 percent of their time indoors and, over the last decade, a significant

body of research has explored the impact of the built-environment on health and well-being. Furthermore, extensive research has analyzed the relationship between psychological welfare and the design of interior spaces, with studies on light and daylight, access to nature, views of water and greenery, color, ambient sound, as well as ceiling height. Based on this body of research findings, this thesis seeks to develop a commercial project new to the Kuwaiti market. The goal is to provide an alternative to the conventional office building, that serves as a workplace model that fosters health and well-being for the inhabitants, expands opportunities for innovation in the modes and methods of work, and enhances the social fabric of the neighborhood. The workspace design reintroduces traditional Kuwaiti architectural layout features, including the courtyard and the Souq - the historic type of market and workplace - reconfigured in a contemporary context that integrates research on the health effects of the built environment, and at the same time weaves Kuwaiti culture into a new form of workplace urbanism.

**STUDENT**

Isabel María Alvarez Arzeno

PROGRAM

Master of Architecture

THESIS ADVISOR

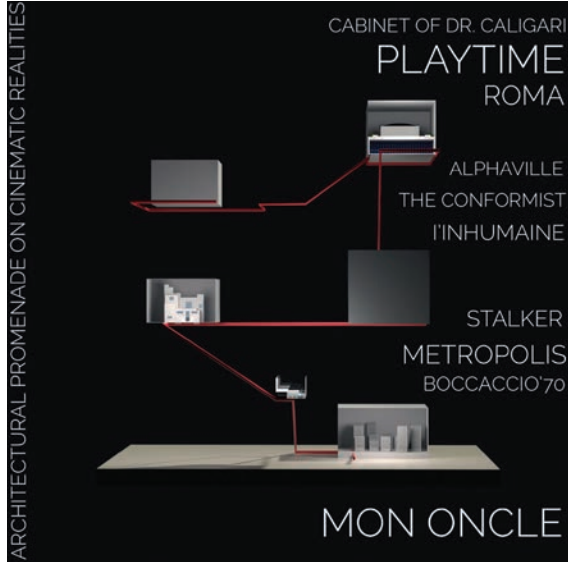
Joanna Lombard

WELLNESS DESTINATION: A NEW MODEL OF TOURISM FOR THE CARIBBEAN

Increased awareness of health determinants among researchers, clinicians and the general public encourage individual and collective responsibility in addressing conditions to support health and advance well-being, expanding from preventing illness to fostering wellness. The marketplace reflects this direction as is evident in

the Global Wellness Institute (GWI) (2018) report of a \$4.2 trillion global market in wellness in 2017. Wellness tourism has emerged as a secondary sector of this market with a share of \$639.4 billion in 2017, and future growth projected to reach \$919.4 billion by 2022. A diverse landscape of wellness hotels has emerged with little consensus regarding key components that would merit the wellness designation.

This thesis, through the design of a wellness destination and community, seeks to explore architectural and planning parameters relevant to the Caribbean region, that could serve to provide the attributes necessary for a complete wellness experience for visitors and residents alike. This work aims to become the foundation for the development of a design tool to assist in the future configuration of this typology, and produce an industry-approved benchmark for best practices.

**STUDENT**

Aigerim Amirova

PROGRAM

Master of Architecture

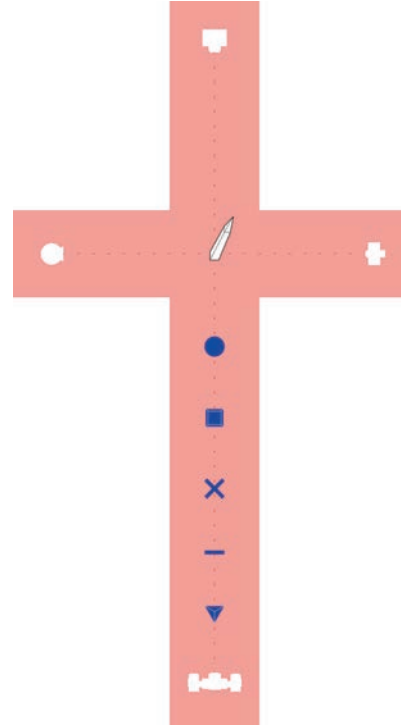
THESIS ADVISOR

Jean-François Lejeune

**ARCHITECTURAL PROMENADE
IN CINEMATIC REALITIES**

Architecture and Cinema share several key properties of the creative process, as both disciplines have the

ability to make us move through space and interact with other art forms and senses. Creating a narrative space in the first place, cinema shows an architecture in use and, to a certain extent, an environment that answers to such notions as lived space or everyday space. In both media, sound, light, surface and scale inform the final user's experience. At the same time, architecture and cinematography are often interconnected; there are movies where architecture and urban space play a main role, hence raising the question of what is influencing what? What kind of architecture is used: existing buildings or created in studio? Is there a dialog between film narrative and its architecture? And most importantly what can architects learn from cinematic architecture? By means of newly created 3D models along with physical ones, this thesis investigates ten architectural promenades in ten selected movies and analyzes how the architecture itself and the way it was filmed produced a series of cinematic realities, ranging from geological to social to self-experiential: *The Cabinet of Dr. Caligari*, *Metropolis*, *l'Inhumaine*, *Boccaccio '70* (*The Temptation of Dr. Antonio*), *Stalker*, *Alphaville*, *Playtime*, *Mon Oncle*, *The Conformist*, and *Roma*.

**STUDENT**

Evan Bobo

PROGRAM

Master of Architecture

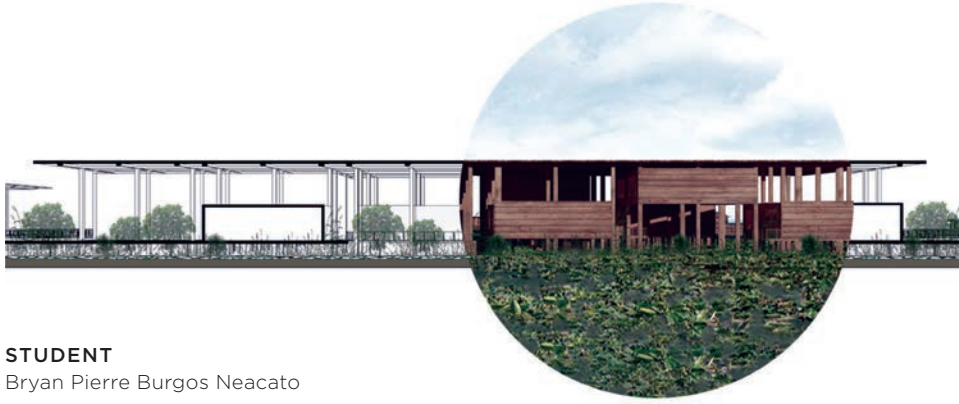
THESIS ADVISOR

Joachim Pérez

RELICS OF THE PRESENT

The monuments and memorials surrounding the National Mall in Washington, D.C. embody the philosophy and ideals of the United States of America – foundational beliefs in freedom, equality, and independence. White pristine facades, durable marble and gneiss structures represent a nation of strength, superiority and optimism. Celebrated figures in our history – those who envisioned a country which promoted empowerment for all, no matter your race, ethnicity or creed – had

buildings erected in their honor, to memorialize their contributions and vision. However, these structures are now outdated representations of our country. My proposal addresses the current condition of our great nation, in the form of a series of interrelated monuments dedicated to national issues. At such colossal scales, each monument will convey the massiveness of each problem in a very authentic way. My monuments are created not with the direct goal of fixing certain issues, but to present physical, tangible manifestations of national problems, with the intent of educating and presenting digestible information to the public on the steps of the U.S. government.

**STUDENT**

Bryan Pierre Burgos Neacato

PROGRAM

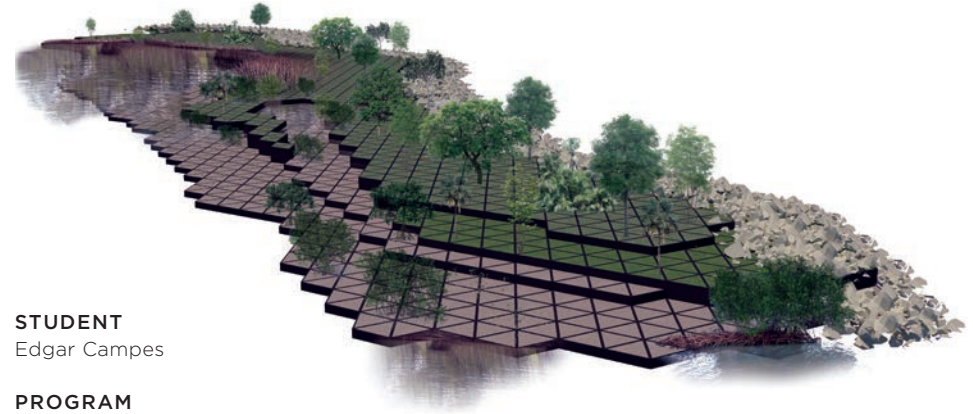
Master of Architecture

THESIS ADVISOR

Veruska Vasconez

RECOVERY RESEARCH LAB

Current conditions associated with sea level rise are increasing the flow of salt water into the fragile balance of fresh and salt water in the Everglades. This thesis proposal for the design of a Recovery Research Lab will serve as a model for a self-contained campus structure that will not draw on the groundwaters that are essential to the unique ecosystem of the Everglades, and will instead rely on a complete water recycling system. The Research campus that includes laboratories, faculty and students housing will implement a series of environmentally responsive initiatives to establish its capacity for off-the-grid operation. It will grow its own food in an organic garden, harvest solar energy and provide 100% recycling of wastewater to drinking water. The Lab's construction system of concrete piles supporting elevated platforms limits ground disturbances and will provide ongoing adjustment to rising water levels as well as seasonal floods. By its methods of construction, its system of off-the-grid management, and its ability to closely monitor the evolution of the Everglades eco-system, the Research campus will inspire the genesis of a more environmentally conscious society.

**STUDENT**

Edgar Campes

PROGRAM

Master of Architecture

THESIS ADVISOR

Germane Barnes

SUBMERGED CITY: AN ADAPTATION TO RISING SEAS

This thesis focuses on rethinking urban landscapes in order to adapt to sea level rise by creating barrier islands to protect coastal areas from erosion and to restore lost land. Focusing on the waterfront area of Brickell, the thesis explores different methods of construction for barrier islands, primarily using recycled material. To support this direction, it analyzes trash materials in the ocean by quantity, toxicity, and time to deteriorate. It also studies different plant species, focusing on the most salt tolerant and requiring the lowest nutritional requirement to be able to survive and thrive on a barrier island while protecting it from erosion.

The islands will be made up of biodegradable units, modular and interlocking, in order to create any shape or size and make the islands programmable for any type of function or use. They will disappear over time, as there is no need for them after the trees have taken root and protect the islands from erosion. Containers with plastic or metal waste will be filled at recycling centers; trees will come from nurseries and be put in place at the site.



THE WAYUU KIDS ARE ALRIGHT! A NEW FLEX SCHOOL FOR A STRUGGLING COMMUNITY

Throughout the world many rural places lack sufficient educational resources. The northeast region of Colombia, where the Wayuu population lives, is such a challenged community, with a scarcity of schools, infrastructure, and access roads. The region is mainly a desert, forcing the children to walk long distances under excessive heat and lack of shade to get to school, which is usually a mediocre space with little services. This thesis proposes a new type of flexible school that can be modified and adapted to the needs of the region. It will provide access to all levels of the population, allowing them to receive a decent education that meets the indispensable needs for an appropriate study environment. The school will educate children and young people, but will offer facilities for a great number of local adults who are illiterate and have the right to acquire the necessary knowledge to be able to take their families forward with dignity. The school will be designed for the village of Uribia, using local construction materials and local labor in order to have a lower environmental impact and generate jobs in the area.

STUDENT

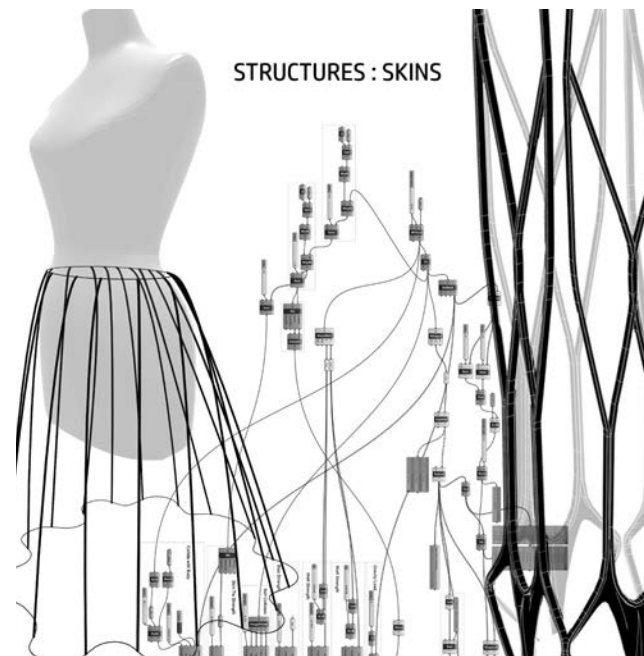
Juliana Char García

PROGRAM

Master of Architecture

THESIS ADVISOR

Victor Deupi



STUDENT

Lorena Knezevic

PROGRAM

Master of Science in
Architecture

THESIS ADVISOR

Joel Lamere

THE SCALABLE RATIO OF STRUCTURES: SKINS

This study proposes a new workflow which allows for an intersection of intuitive and algorithmic design processes by focusing on Grasshopper-based modeling which connects a variety of computer-aided design interfaces: virtual reality, augmented reality, simulation plug-ins, BIM modeling, and computer-aided manufacturing. The aim of this new design process is to re-connect the designer to material-informed decisions for a better integration of functional support and formal expression. Through a parametrically designed model, design-research is equally applicable at the scale of a building or at the scale of wearables. As such, this process is intended to be adaptable to the designer's needs at different scales, so that the system can be enhanced by the knowledge base of many different fields of design.



THE TRANSFORMABLE OBSERVATORY

The term 'Transformable' is used to describe buildings that are being reshaped to respond more effectively to different forces. These forces can be defined by functional, contextual, or environmental changes that can affect the purpose of buildings. Focusing on environmental issues, this thesis will explore the potential of developing a structural mechanism that will be responsive to its context, both within and beyond its boundaries, in the manner of a living organism. The site selected to develop such concept is the Perito Moreno Glacier located at the South Patagonian Icefields in Argentina. The extreme conditions of the area challenge the transformability of a scientific observatory, which will be required to modify its shape according to the glacier's movement. The project will act as a metaphoric representation for vulnerable locations that will be forced to adapt to the effects of climate change. It will inspire future developments to consider their potential for transformation, in order to respond more effectively to the functional, contextual, and/or environmental challenges that may impact their very existence.

STUDENT

Konstantina Kritharidou

PROGRAM

Master of Architecture

THESIS ADVISOR

Jean-François Lejeune

STUDENT

Mariangeles Lacayo

PROGRAM

Master of Architecture

THESIS ADVISOR

Joanna Lombard

ARCHITECTURE, COMMUNITY AND NATURE: EL MOMBACHO, NICARAGUA

This proposal for an eco-resort at the natural reserve of El Mombacho in Nicaragua aims to reconsider current concepts of ecotourism to engage visitors more directly with the people and the landscape. The goal is to design a community which is a microcosm of the artistic, social, and economic activities of this part of the country. Expanding beyond an immersive retreat in nature, this inclusive community will promote the well-being of the visitor, the landscape, and the people who have occupied the area for generations. The site along the slope of the famed volcano, El Mombacho, is adjacent to Lake Cocibolca, one of the



largest inland bodies of water, the colonial town of Granada, and the heritage sites of Zapatera and Ometepe. It hosts several micro-climate zones ranging from the tropical rainforest at its summit, to a dry forest, coffee fields, and cultivated lands at the skirts of the volcano. This thesis seeks to establish an example of sustainable farming, construction and craft, that will support the existing community in a manner that includes visitors in the experience of life upon El Mombacho and provides a restorative engagement that will enhance the well-being of local people, visitors, and place.

**STUDENT**

Melissa Ledezma

PROGRAM

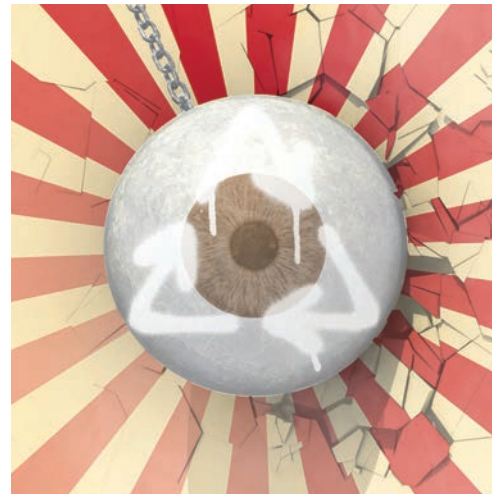
Master of Architecture

THESIS ADVISOR

Victor Deupi

BETWEEN BOTH SIDES: RECONSIDERING BARRIER ARCHITECTURE

"Between Both Sides" is a senior thesis that focuses on the distinction of two worlds on opposite sides of the border that separates the United States and Mexico. The wall is an issue that people have been debating ever since Donald Trump first mentioned it while running for President. It got the attention of people around the United States and had stirred up much controversy and trouble not only within the US, Mexico, but in the world at large. Building a wall to separate both countries would cost billions of dollars, create a less diverse community, and make America's economy weaker. Reconsidering barrier architecture will help the connection of the two sides by turning what is viewed as something negative, disruptive, and obtrusive into a positive and productive icon. This will be achieved in the form of a new border community as well as a new border bridge that will connect Progreso, Texas with Nuevo Progreso, Mexico. In this interpretation, the border crossing will be a space of unity and connection which directly opposes the idea of a physical border as well as the psychological implication of what a "wall" represents.

**STUDENT**

Andrew Philip Lionikis

PROGRAM

Master of Architecture

THESIS ADVISOR

Florian Sauter

MIAMI MATERIAL REUSE CENTER

The United States sends 350 million tons of construction debris into landfills per year; almost 50% of the nation's waste stream. The reuse of demolition materials is increasingly crucial if the national objectives of sustainability and climate control are to be met as planned. This thesis proposes the design of a Miami Material Reuse Center, a state-of-the-art facility which will play a key role in facilitating material reuse in the region. This industrial facility will include spaces for material sorting, restoration, storage, as well as a material showroom. Establishing the Miami Material Reuse Center will help to consolidate existing recycling services into one centralized location. This will reduce material transportation costs, and make reuse easier for the average consumer. The project is located in Doral, Florida, an area known for its assortment of businesses including financial institutions, shops, and industrial facilities. With a prime location on one of the most heavily traveled boulevards, the site offers the opportunity for a bold design which showcases the materials and the unique restoration and reuse process. The project will serve Miami's booming construction industry, promote sustainable building practices, reduce the amount of waste sent to landfills, further the development of the workforce, and help re-activate both the site and surrounding area.

**STUDENT**

Kexin Ning

PROGRAM

Master of Architecture

THESIS ADVISOR

Veruska Vasconez

RUINS OF 1Q84

1Q84, a book written by Japanese writer Haruki Murakami in 2009-10, projects a Tokyo of parallel realities, where a journey triggers subtle but meaningful shifts in time and space. As an interpretation of the novel, my thesis is a narrative and a fantasy architecture project that translates the abstraction of literature into an architectural representation.

It analyzed the perceptions of reality, illusion, memory, and the parallel world in the novel, and formalized them into architecture programs. In a similar fashion to the novel, it creates an alternate Tokyo.

"I always doubt whether the world I exist is a real world. Somewhere in my heart, I feel that there is a world, not what it is now." - Haruki Murakami

What is the relationship between the inner world of a person and the external world in which the body is located? There is an underground world which can be accessed through the consciousness and with training, one can find the path between the worlds. It may be easy to find the entrance, but finding the exit is difficult. Keep self-awareness in the environment, let the dignity of the individual soul emerge, and cast light on it.

**STUDENT**

Felipe Ignacio Prellezo

PROGRAM

Master of Architecture

THESIS ADVISOR

Germane Barnes

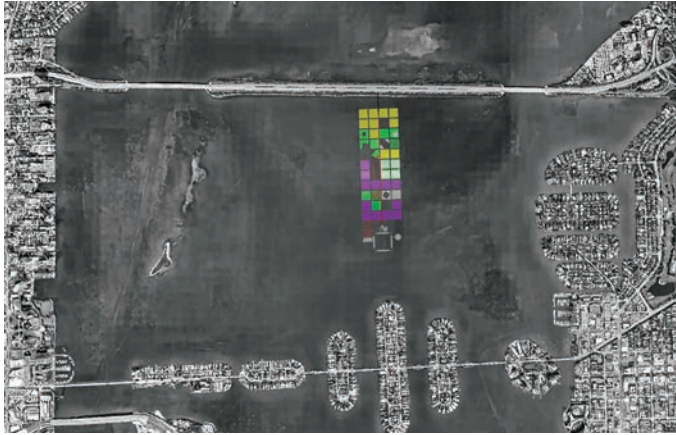
ROOTED IN TOMORROW

A VIABLE FARMING AND HOUSING
PLAN FOR AN UNCEASING FUTURE

ROOTED IN TOMORROW

The world population is projected to increase by more than one billion people within the next 15 years. The urban population is expected to double in the next 40 years, forcing cities to undertake a holistic and sustainable transformation of their model. Overpopulation leads to a state of food insecurity,

which in turn, results in resource-exhaustive agriculture causing irreparable environmental damages. This thesis aims to address these issues. More specifically, how society and planning institutions have failed in responding to sustainably feeding and housing the rapidly increasing population of our urban areas? How can we create denser metropolises that have high urban quality and offer residents a better quality of life? As well as investigate how architecture and urban planning can produce a way of farming to more sustainably feed the rising population.

**STUDENT**

Junkang Shao

PROGRAM

Master of Architecture

THESIS ADVISOR

Allan Shulman

WOOD CONSTRUCTION: A NEW ARTIFICIAL ISLAND ADAPTED TO SEA LEVEL RISE

By 2050, Miami will face severe challenges from sea level rise and hurricane impacts. The city will require building techniques and modes of construction that follow resilient and sustainable design principles. This thesis investigates the problem from two sides. First, it will explore the viability of large-scale timber buildings in tropical coastal areas. As a renewable material, which sequesters carbon in its lifetime, wood has begun to play an increasingly important role in architectural design, with the potential to greatly reducing carbon dioxide emissions. As a good insulating material, wood can effectively prevent heat exchange between the indoor and outdoor, and reduces a building's energy use. Until now, timber has been neglected for large building because of its lower strength, susceptibility to mold, fire resistance, and vulnerability to insect damage. However, recent advancements in wood assembly techniques, like cross-laminated timber construction, have solved most of these shortcomings.

This thesis will also look at the future of low altitude tropical and coastal cities by investigating the idea of building over the water, a concept that, in Miami, has a long history. Using the location of an abandoned island project from this late 1920s, Isola Lolando, the project consists of a wood-built hotel, seeking to adapt to rising sea level with a detailed attention to aesthetics, material, technology, innovation, and sustainability.

**STUDENT**

Gaurja Sood

PROGRAM

Master of Architecture

THESIS ADVISOR

Florian Sauter

Aiding the Elderly, Bridging the Gap

BRIDGING THE GAP

Traditionally, in a country like India, old parents were given the same reverence as is given to a deity. But for the last four or five decades, a change, especially in big cities, has been noticed. Old parents, and particularly single ones, can be seen roaming along streets and roads, with no specific shelter to live in, no regular food to eat, no medical care, and no social support to spend remaining years of their life with peace in mind and dignity. The reasons for this dramatic evolution are many: it may be the children's rude behavior or a situation where the generation gap plays a negative role and parents choose to leave home rather than to compromise with the situation. Hence, this thesis intends to search for a design solution that responds to the needs of the elderly and has the potential to empower them and promote active ageing. The architectural composition can also aid in community development and, in particular, the strengthening of 'weak ties' by offering a platform for a symbiotic intergenerational relationship between the old parents and other generations. Moreover, a harmonious relationship between natural elements and built form is paramount in environments that seek to address the needs of the elderly.



STUDIO COURSE

(2.) ARC 510/610 Graduate Research
Thesis Studio: SPARSE MATTER FOR
CONCENTRATED NATURES - Reimagining
the Chinese Garden through an Exploration
of Materially-Driven Design Processes

RESEARCH STUDIO ADVISOR

Joel Lamere

STUDIO DESCRIPTION

This research studio aims to develop specific materially-driven design techniques, elaborate on their potential outcomes, test them at full-scale, and deploy them as a means to reimagine the Chinese garden in contemporary terms.

As an alternate to the conventional individual thesis project, four students collaborated in the initial stages of their research. Broadly speaking, this work embraces material geometry as a core principle. As digital fabrication and other contemporary tools continue to collapse the distance between drawing and making, architecture must imbue its form-making with the logics of the matter that will constitute it. In particular, the research has focused on three material configurations: inflated films, folded sheets, and networked sticks. Critically, these techniques use minimal means towards maximal ends, suggesting new structural, environmental and atmospheric opportunities in architectural design. Each eschews the wasteful massiveness

of contemporary construction for radical thinness and efficiency.

The traditional Chinese Garden has a long history - replete with cultural content and symbolism - in which all of its elements have a single material language that engenders specific formal outcomes. These four student projects each swap the material origin of a single element with one of the contemporary techniques developed during the research phase. The results include new forms and novel effects, but with the suggestion of much longer histories.

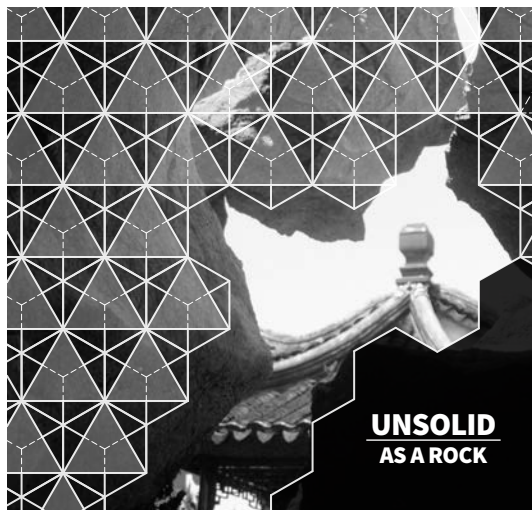
STUDENTS

Xuan Bo

Xiaofan Liu

Liwan Wang

Wei Wang

**STUDENT**

Xuan Bo

PROGRAM

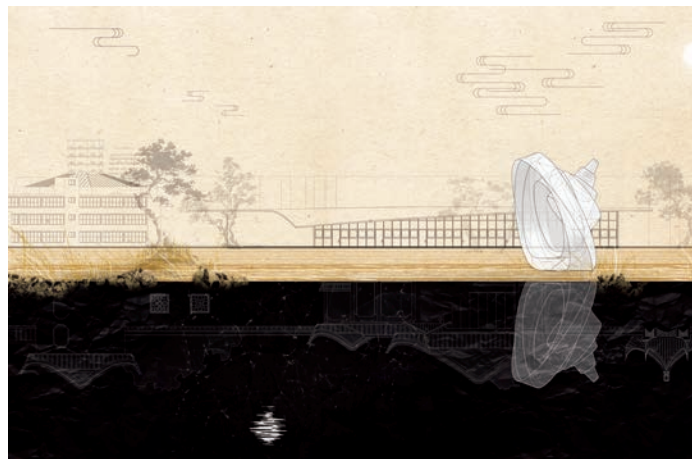
Master of Architecture

THESIS ADVISOR

Joel Lamere

UNSOLID AS A ROCK

This is a rock-replacement project for the reimagined traditional Chinese garden. The philosophy of this project is to build a lightweight and self-supporting architecture with transparency plastic sheets, that brings out a togetherness in its spatial character, structural performance and ornamenting quality. This project involves technologies like computational design and digital fabrication to process the abstractness of the structure. Finally, the rocklike cellular structure will become a poetic art installation with vision and light lyrically entwined in it, and a playful moment which fades into the garden environment. The goal of this project is to solve as many problems as possible in the whole process of design and assembly in three different scales. The small-scale difficulty is transforming sheet material into a rigid 3D geometry with folding technique, which can be the structural cell for an ultralight lattice structure. The middle-scale difficulty is designing the lattice structure which can create a stable structure with the folding cells in architectural scale. The large-scale difficulty is developing a global geometry which potentially can be a tunnel, a stair, and a bridge, which are the three most common uses of rock in the traditional Chinese garden.

**STUDENT**

Xiaofan Liu

PROGRAM

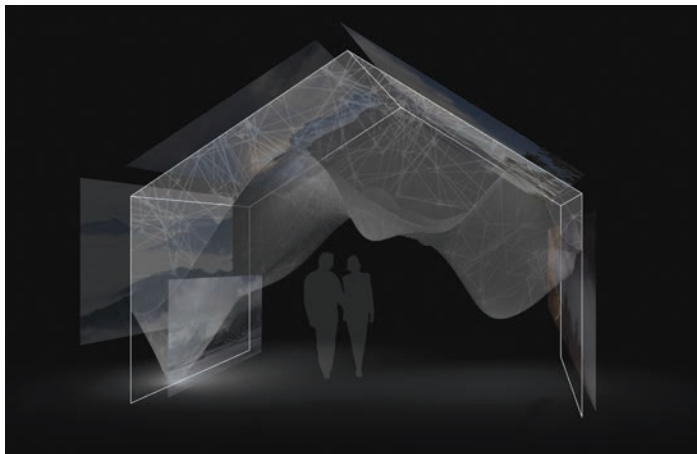
Master of Architecture

THESIS ADVISOR

Joel Lamere

MOON WATER PAVILION

The inspiration for this project comes from moon and water reflection in Chinese poems. They think that no matter how far apart, as long as you look at the moon at the same time, you will connect to each other. And you will never be alone, because the reflection will always be with you. To show this poetic atmosphere, I chose translucent polypropylene sheet material and folded it layer by layer so that the building could cast water-like shadow into the sunshine. In the broken line part, I will use dotted line hole-punching for folding and connection strength, and in seats that need to be loaded, I will use multi-layer and triangular folding to enhance the load-bearing capacity. The most special part of this design is the “moon”. At 10 a.m. on the Mid-Autumn Festival, which symbolizes reunion in China, the sunshine will precisely pass through folded passages, casting a bright spot on the water-like shadow. It will bring the moon on the other side of the earth, to this place, connecting distant family and friends.

**STUDENT**

Liwan Wang

PROGRAM

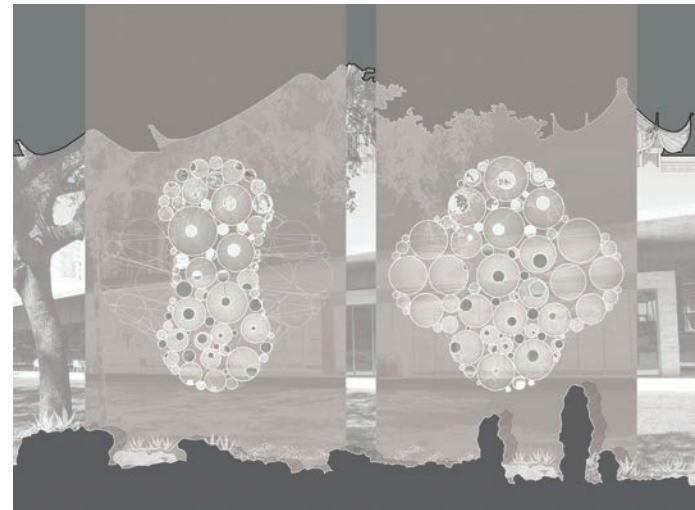
Master of Architecture

THESIS ADVISOR

Joel Lamere

ENFRAMED MOUNTAIN

The concept of the project comes from a famous ancient Chinese poem, which means “my window frames the snow-crowned western mountain scene.” Framed scenery is one of the scenic arts in traditional Chinese garden design. The thesis imagines a kind of new Chinese garden, where the relationship between figure and ground is reversed to provide people with a fresh and different experience from the traditional one. The mountain in the poetry is framed in a gallery by means of the network. When people walk through the gallery, they can enjoy and have a different view of the scene of the mountain. The project uses PETG tubes as material, which, assembled, can make up a tetrahedron - the elementary unit of the project. The shape of the units can vary with different side length and angle. The closer to the surface of the mountain, the smaller the units are. As a result, the topography can be expressed accurately and the material can be saved from the unimportant part.

**STUDENT**

Wei Wang

PROGRAM

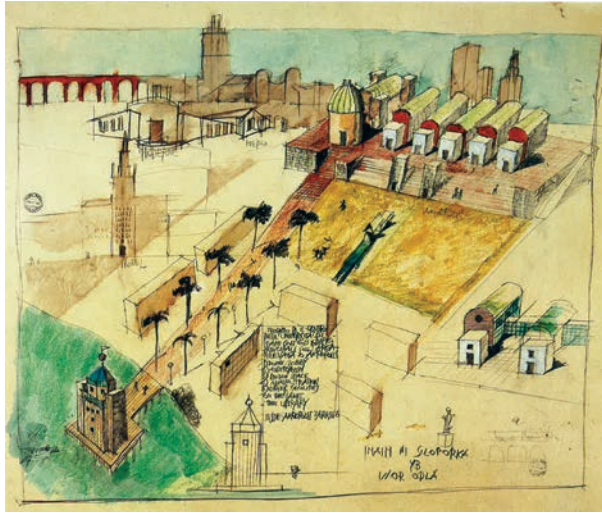
Master of Architecture

THESIS ADVISOR

Joel Lamere

LEAKING VISION:**CREATING WALLS IN A CHINESE GARDEN WITH MATERIAL-DRIVEN EXPERIMENTS OF GEOMETRY, FORM INFLATION, AND CASTING TECHNIQUES**

The Chinese garden is usually enclosed in high walls to be isolated from the outside world. It is not a single wide-open space, but an assemblage of spaces divided by corridors and walls into courts, in which buildings dominate the scenery and attract one's attention. Since the Chinese garden is introversive, it largely depends upon the wall to conceal its beauty, luring the wanderer to a glimpse through a doorway or a tracery. This thesis focuses on walls, which is one of six elements in a Chinese garden, and investigates a new type of wall with spatial passageways, instead of impenetrable linear forms. The project redesigns special sections of walls, with surfaces dotted with tracteries of exquisite patterns, and doorways shaped like a full moon, a vase or a flower petal. Vision is leaked through an ideal makeup geometry in the outline of original figure of opening on walls. Starting by analyzing the function of walls, the method of fabrication produces two types of inflation shapes and combinations. The walls result from casting inflation within one cubic form to display a series of wall pieces.

**STUDENT**

Gilda Santana

PROGRAMMaster of Science in
Architecture**THESIS ADVISORS**Jean-François Lejeune
Allan ShulmanAldo Rossi. First project for the University of
Miami School of Architecture. © UMSOA, 1986.**MAKING AND DEFINING THE SCHOOL OF ARCHITECTURE, 1973-2003:
CONVERSATIONS WITH FACULTY ON RESEARCH, PEDAGOGY, AND MIAMI**

Architecture was first taught at the University of Miami in the 1920s, but the School of Architecture emerged as an independent institution just in the last quarter of the 20th century. The timing was critical: on the one hand, it corresponded with the intellectual agitation of the Postmodern era; on the other hand, its emergence was also linked to the dynamic particularities of its location, climate, and especially the multi-cultural influences of 1980s, a period when Miami was in the process of defining and claiming a distinct hemispheric identity. To an extraordinary degree, its points of focus and its pluralistic pedagogy relate to specifics of time and place. This thesis proposes to map and historicize the realization of the school's development, and posits that the formation of its identity(ies) are both global and local. It will attempt to weave a polyvocal narrative through the lens of an architecture faculty oral history project that was created in an effort to answer the following question: How did the school position itself symbiotically within the context of the last quarter of the 20th century in relation to Miami as the city started to develop an urban identity?

**STUDENT**

Kun Li

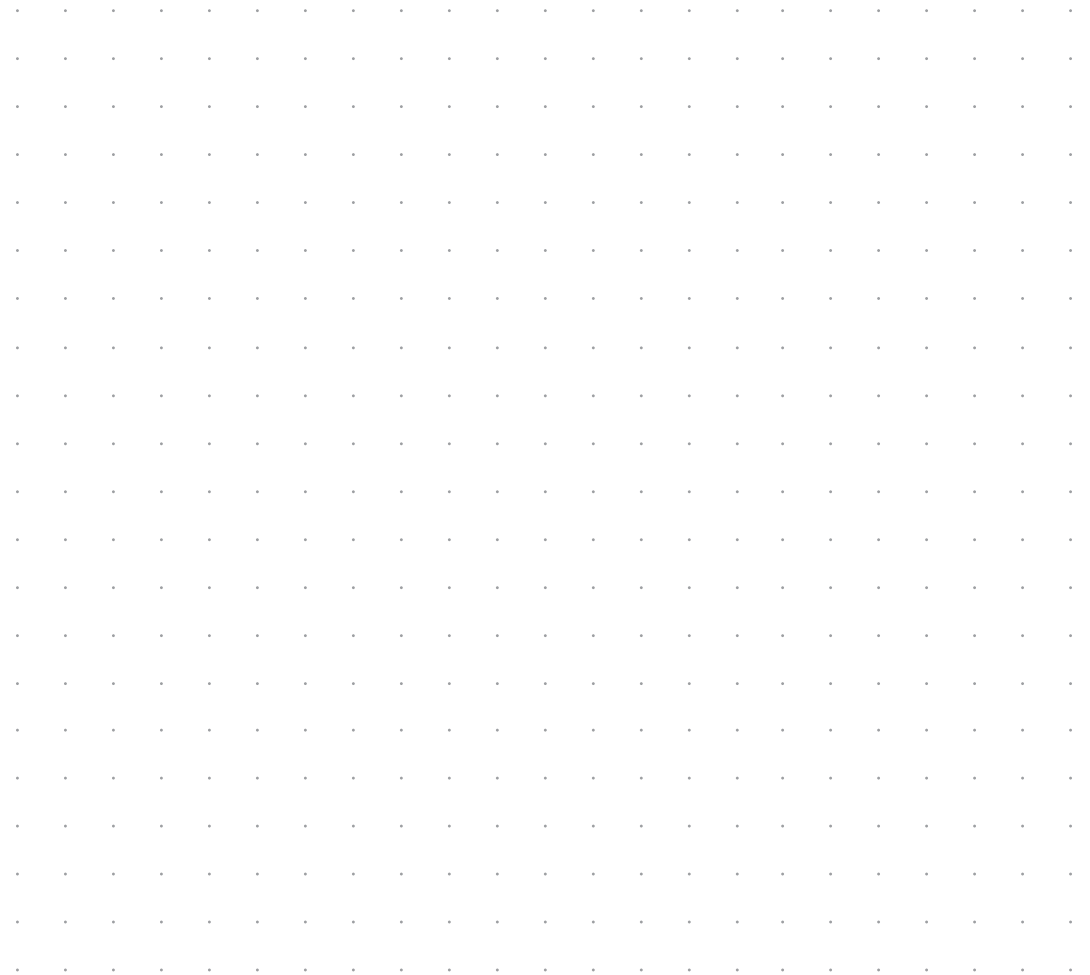
PROGRAM

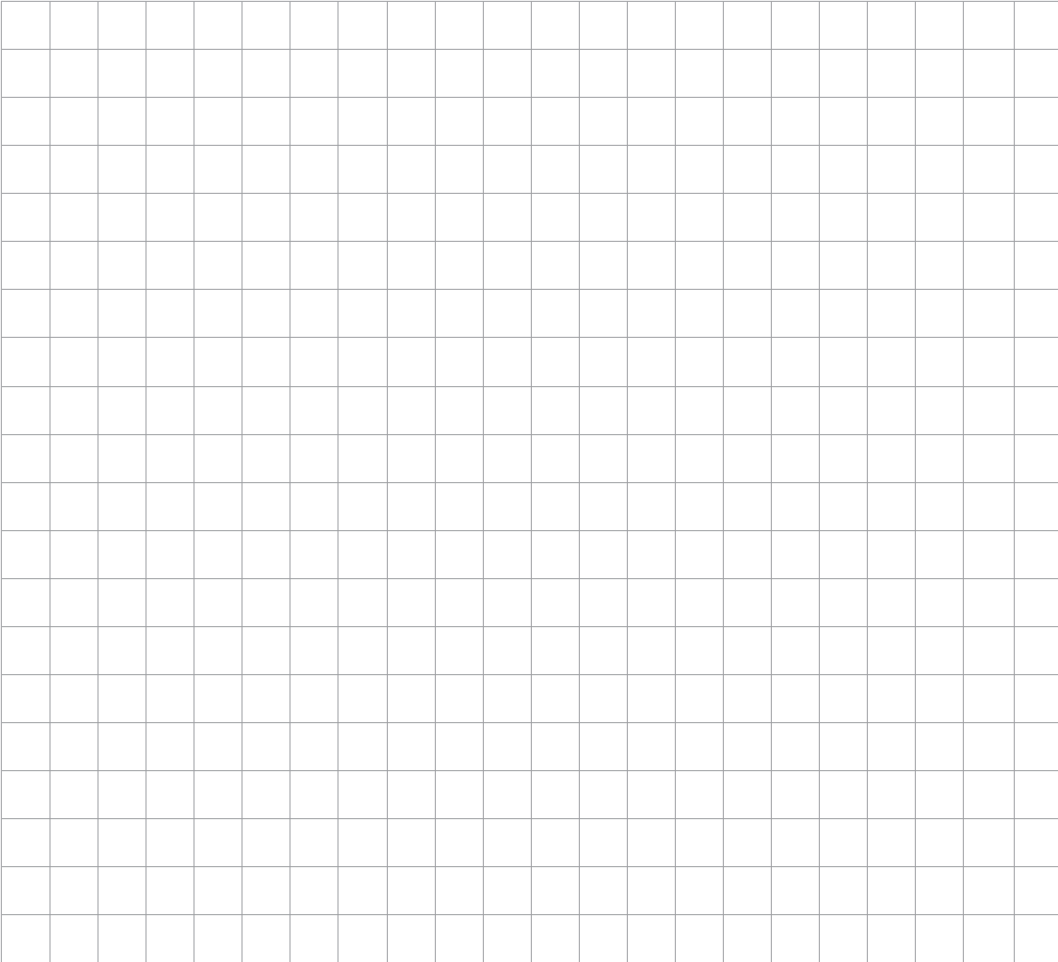
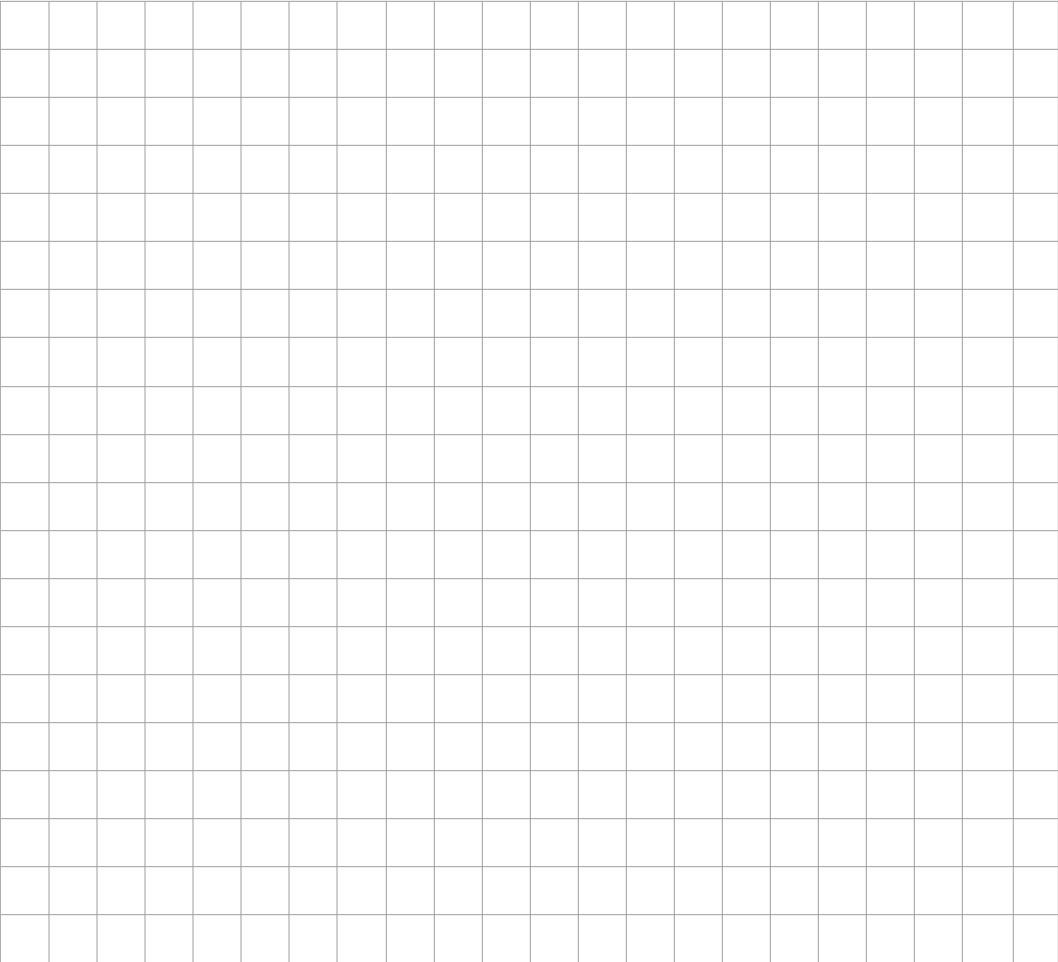
Master of Urban Design

THESIS ADVISORSElizabeth M. Plater-Zyberk
Joanna L. Lombard
Jean-François Lejeune**THE HISTORY OF HOUSING IN THE NORTHEAST AREA OF CHINA (1896-2019):
TAKING QIQIHAR CITY FOR AN EXAMPLE**

Due to the extreme climate, diverse ethnic groups and special historical background, various types of housing have appeared successively in northeast China. The thesis selected Qiqihar, which is a typical city in this area, as an example to chronologically analyze urban morphology, typology, and community forms in the city. The analysis focuses on three specific themes:

- *Introducing the Background.* In terms of historical stages, based on the events that affect the course of China's history and the evolution of housing types, this section of the thesis is divided into three historical periods: 1896-1948, 1949-1978, 1979-2019.
- *Analyzing the Causes.* In parallel with the study of the housing typologies, this section examines the causes of their similarities and differences in relation to politics, economy, society, technology, climate, and culture.
- *Looking to the Future.* After experiencing rapid housing development, the northeast region is currently confronted with the problems of population aging, population loss, and urban shrinkage. Using the existing history, the thesis concludes with speculations on the future of housing development in this part of China.







**SPECIAL THANKS
TO OUR SPONSOR**

Canin Associates
Bill Rammos
Magic Leap
McCord

PHOTOS

Sophia Alexander, U-SoA
Miami in Focus

DESIGN

Ivonne de la Paz, U-SoA



1223 Dickinson Drive
Coral Gables, Florida 33146
arc.miami.edu

