

KNOWING THE EARTH IS FINITE?

FROM DAY ONE?

PLACE THAT DIVERSE CULTURE

PLACE FOR A TEMPORARY COMMUNITY

Alto Abu-Doulet

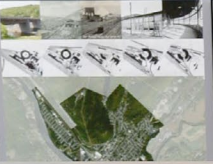
LAYERING CONNECTIONS:

RECLAIMING

ABANDONED POST

INDUSTRIAL

Michael Gossner



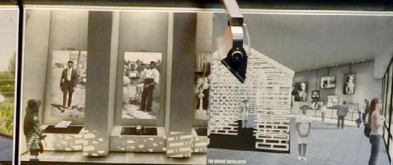
THE CAMPUS



NATURE TRAILS



GARDEN PATHS



MEMORIAL HALL



MEANS SINGLE SEPARATE PLANE IS



## Thesis

*Thesis. (L. - Gk.) L. thesis a thing laid down, a proposition*

These diverse thesis projects culminate not only a year or more of research and analysis, creative-thought and labor-intensive design work, but also many years of challenging academic study. The thesis is neither a final exam nor just another studio project. Rather, it is a unique opportunity – perhaps a once-in-a-career opportunity– for aspiring architects to explore ideas, sites and programs of their own choosing, and to undertake that exploration substantially on their own terms. In doing so, each student formulates a thesis idea– the “thesis” of the thesis– and then develops and tests that idea through a self-managed design process. Students receive periodic, sometimes contradictory guidance from the thesis director and thesis committee members, as well as constructive advice along the way from guest critics with expertise in architecture and urban design, landscape design, and structural and mechanical engineering. But ultimately each student must weigh all the advice and assume full responsibility for his or her final design decisions. Thus the students are the unambiguous authors of these projects.

This School– both through its faculty and curriculum– is committed to pedagogical methods and principles that strive for and celebrate the indispensable, Vitruvian balance between often conflicting design motives: engaging in imaginative, aesthetic speculation and formal invention; responding logically and creatively to the specifics of site, context, culture and program; and appropriately utilizing construction technologies. Not surprisingly, Maryland’s thesis projects reflect this struggle for balance in both concept and concept/design development. Students generate ideas and then demonstrate the potential for implementing those ideas artfully through buildable form.

*Professor Emeritus Karl Du Puy, AIA  
Thesis Coordinator, December 2019*

## Table of Contents

|         |  |         |   |
|---------|--|---------|---|
| Page 6  | Thesis Reviews Schedule  | Page 30 | Reviving the Heart of the City: Transforming Baltimore's Oldest Market into the City's First Food District            |
| Page 8  | Enlivening the Existence of the Weavers Who Weave for a Livelihood                                 | Page 32 | Connecting Crossroads: Designing an Equitable Future for Langley Park   |
| Page 10 | Peace Building: Providing Opportunities for Resolution Through the Built Environment               | Page 34 | Community Connections: Living Well Within Intergenerational Households  |
| Page 12 | Jakarta Underwater: Rising Seas as Opportunity   | Page 36 | Social Enterprise Development: A Preventative Approach to Homelessness and Displacement in Point Breeze, Philadelphia |
| Page 14 | Oil to Island: Repurposing Southern California's Offshore Drilling Platforms                       | Page 38 | Faith and Place: A New Center for Interfaith Dialogue   |
| Page 16 | HELTER SHELTER: Rethinking Natural Disaster Architecture as the Foundation not the Feature         | Page 40 | Hoboken Exchange: Transforming a Gateway into an Experiential Destination for Consumers                               |
| Page 18 | Urban Beeing: Enhancing Urban Ecology through the Cross-Pollination of Architecture and Apiculture | Page 42 | MeadWorks: Hydrology, Ecology, Mead and Architecture  |
| Page 20 | St. Ann's Collective: Stabilizing Families through Supportive Environments and Shared Spaces       | Page 44 | Sketches & Notes  |
| Page 22 | The Concept School: School that Creates Connections  |         |   |
| Page 24 | From Suburban to Sub-Urban: Re-envisioning the American Dream                                      |         |   |
| Page 26 | Death in the Round: A Critique of Funeral Architecture & Burial Practices                          |         |   |
| Page 28 | Access to the City   |         |   |

## Thesis Reviews: Fall 2019 Schedule

### Tuesday, 10 December

10:00 Mohit Dobariya  
11:00 Heather Summers  
12:00 Lauren Gilmartin  
Lunch  
2:00 Michael Delash  
3:00 Zain Shah  
4:00 Trevor Wood

### Wednesday, 11 December

10:00 Joanna Hess  
11:00 Jessica Ham  
12:00 Samantha Zuber  
Lunch  
2:00 James Jesmer  
3:00 Adan Ramos  
4:00 Eric Bos

### Thursday, 12 December

10:00 Sara Ghafar Samar  
11:00 Andrew Davies  
12:00 Cassandra Huntington  
Lunch  
2:00 Andrea Nichols  
3:00 Andrea De Carlo  
4:00 Kyle Huck

### Guest Reviewers:

Cecily Bedwell, AICP, LEED-AP BD+C | Principal, Design Collective  
Bill Bonstra, FAIA | Principal, Bonstra Haresign Architects  
Adam Bridge, AIA | Associate Principal, Ayers Saint Gross  
Ralph Cunningham, FAIA | Principal, Cunningham Quill Architects  
Alick Dearie, AIA, LEED AP | Principal, Grid Architects  
Professor Bradford Grant | Howard University  
David Haresign, FAIA | Principal, Bonstra Haresign Architects  
Colleen Gove Healey, AIA, LEED AP | Principal, Colleen Healey Architecture  
Prof. Khara James, RA | Montgomery College, Architecture Department  
Michael Marshall, AIA, NOMA, NCARB | Principal, Michael Marshall Design  
Christena McCabe, AIA LEED AP | Associate, Eric Colbert & Associates  
Monica Pascatore, AIA, LEED AP | Associate Vice President, Cannon Design  
Antonio Rebelo, AIA, IIDA | VP & Director of Design, Grimm + Parker Architects  
Roark Redwood, AIA, PMP | Vice President, Leo A. Daly  
Prof. Carlos Reimers, PhD., Intl.Assoc. AIA | The Catholic University of America  
Susan Salsbury, AIA | Associate, WDG Architects  
Amy Weinstein, FAIA | Principal, Weinstein Studio



## Enlivening the Existence of the Weavers Who Weave for a Livelihood

Mohit Ramniklal Dobariya

This thesis proposes that the holistic traditions and ancient way of life of weavers in the village of Sualkulchi, Asaam, India are a forward-thinking model for sustainable urbanism.

The main objective of this thesis is to provide a training institute, weaving yard and experience zone that will provides practice of traditions and craftsman's way of life, and develop a holistic way of living as a driver for sustainable urbanism and development.

## Peace Building: Providing Opportunities for Resolution Through the Built Environment | Heather Summers



Uniting a divided community is a challenge, especially when the community is divided by barriers of the mind. This thesis explores the relationship between the built environment and peacebuilding. More specifically, what role can architecture play in providing stability, unity and reconciliation? Can architecture pacify a conflicted society? To be located in Belfast, Northern Ireland, the site of the signing of the Good Friday Agreement, a major development in the peace process relating to The Troubles, this thesis proposes an International Center for Peace (ICP). Conceptualized as a Peace Pavilion in the Park, the ICP is a statement by Northern Ireland that it accepts its past and is moving forward towards a united future. The center promotes peace, stability and prosperity in Northern Ireland while accommodating the identities and rights of all who attend. It is a defining symbol for not only this country, but any conflicted society. Peace building can be fostered and facilitated through a peace building.



According to the UN, by 2100 nearly 5.25 billion people will live in coastal megacities in the global south where infrastructure, energy production, and water management has not kept pace with rapid urbanization. It is projected that this mass global migration will occur in Asian and African cities that also have the highest risk of vulnerability to climate change effects. The most concerning of these is sea level rise that could displace billions of people and submerge entire cities.

Jakarta, home to 30 million people, is facing serious threats of sea level rise and flash flood issues. Compounding these threats are the city's challenges with infrastructure. Due to pollution and poor access to drinking water, overuse of the city's groundwater aquifers has caused severe subsidence in the city.

This thesis proposes a solution that integrates city development, coastal infrastructure, and public resources by merging architectural innovations and planning to create a protected, resilient, megacity. These solutions will ease the effects of sea level rise and offer a promise of a better future for the planet—ultimately creating a net positive solution for coastal megacities of the future.

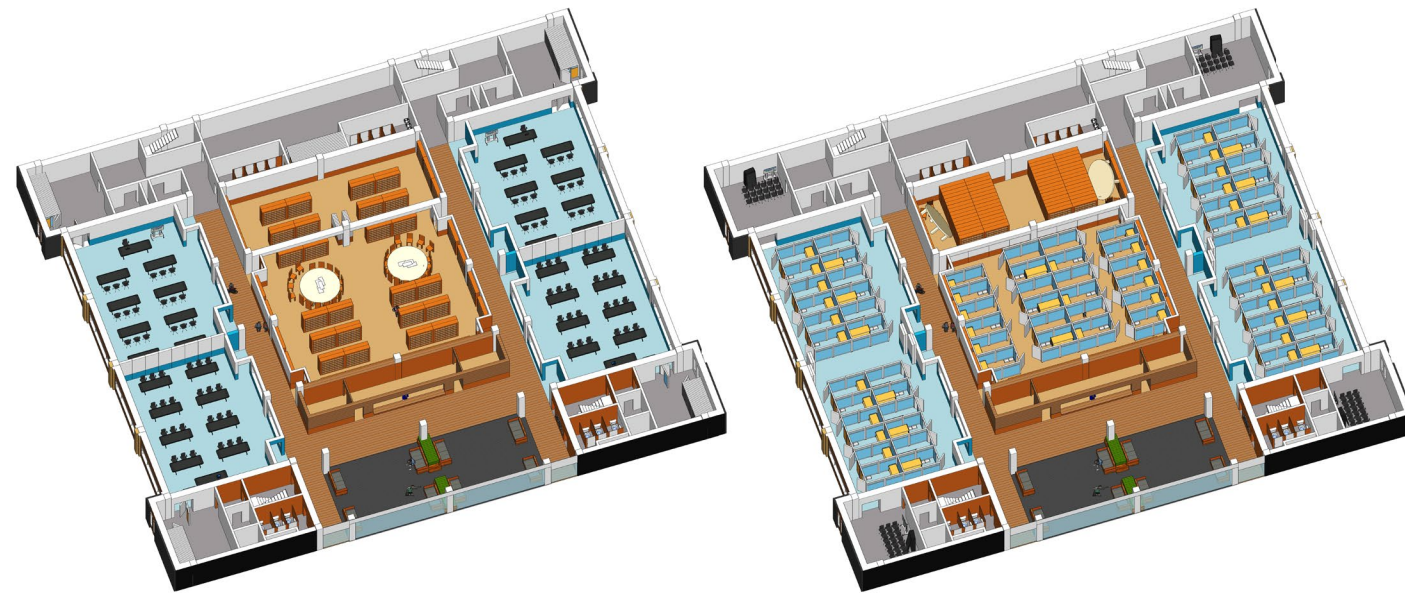


## Oil to Island: Repurposing Southern California's Offshore Drilling Platforms | Michael Delash

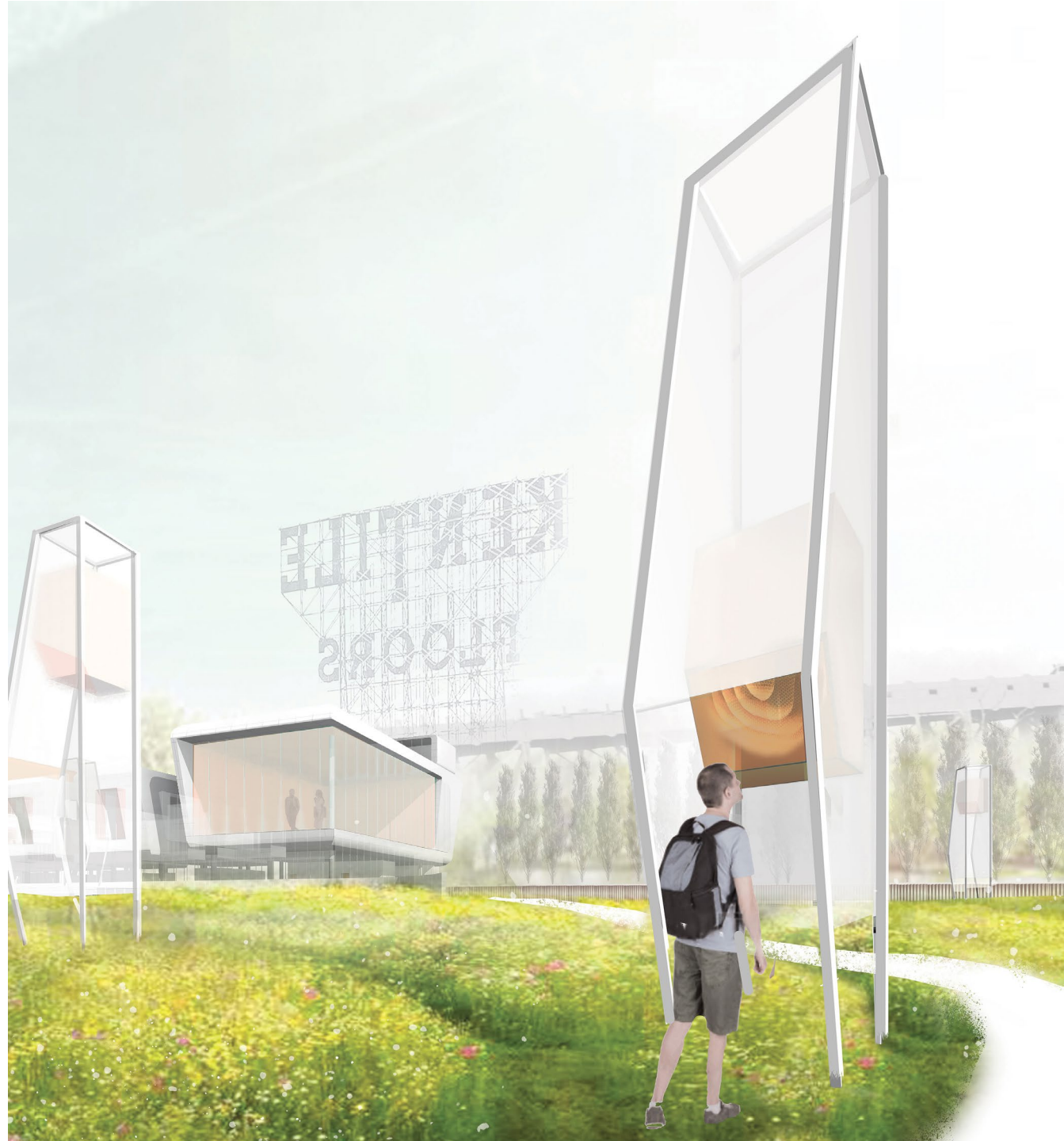
This thesis offers an alternative approach to the future of the offshore oil platforms. The Beta Unit platforms off the coast of Southern California offer a unique opportunity to develop into a satellite campus for the universities in the region. Here, students can be immersed in their areas of study in a novel way. Utilizing a modular approach to the kept structure introduced distinct challenges and opportunities in a future without dependence on fossil fuels.



## HELTER SHELTER: Rethinking Natural Disaster Architecture as the Foundation of the Future | Zain Shah



Natural disasters are an ever-present threat to humanity, so why should there not be an ever-present solution? The goal of this thesis is to create a proposal for a new typology of structures that are designed primarily as permanent disaster shelters. These structures would focus on housing and defending evacuees during the initial stages of a natural disaster as well as provide services to those within it such as medical services, warm food and communication with those outside. This thesis to a lesser extent also will explore and critique current practices with assigning locations as disaster shelters by highlighting their failures and then provides solutions through the design of the final product. Finally, this thesis will define a potential solution through design explorations on a selected site in New York City's lower Manhattan. This project can act as a template for how future designers can create similar structures specific to their sites.



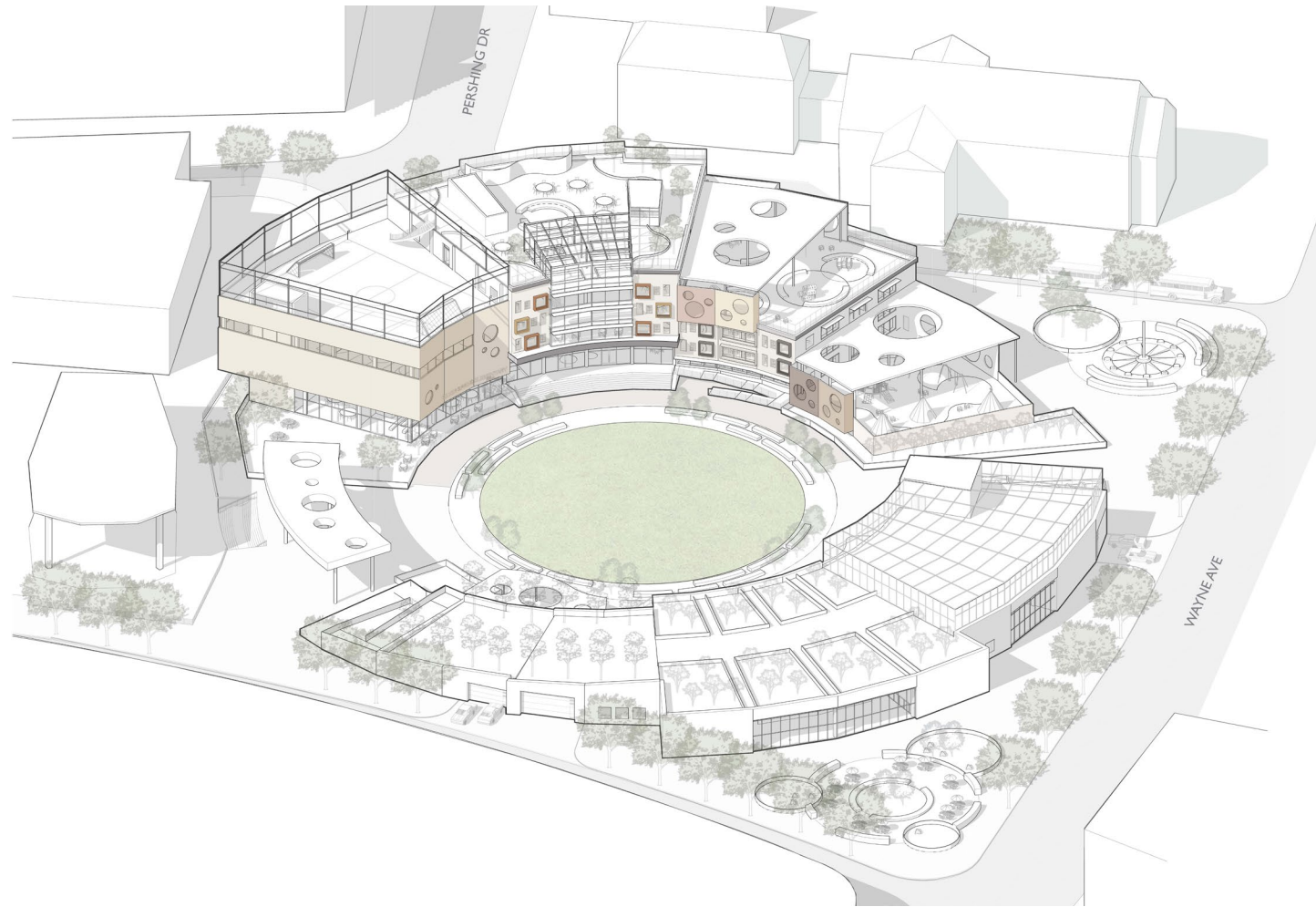
## Urban Beeing: Enhancing Urban Ecology through the Cross-Pollination of Architecture and Apiculture | Trevor Wood

Bees play an essential role in our ecosystems. The majority of all flowering plants on earth, both crop and wild, are pollinated by animals. With bees acting as the chief pollinators globally, their prosperity is vital to maintain ecologies and agricultural processes. Recent bee population decline has raised concerns from researchers and governments alike about the stability of our current environments and economies. This thesis aims to explore and reimagine the post-industrial landscape of the Gowanus Canal with remediating infrastructure that supports and is maintained through the natural processes associated with apiculture to enhance urban ecologies and resiliency. Recasting the relationship that humans have with bees in urban environments will provide a new vision for ecological architecture and resilient landscape design. Various scales will connect apiaries with research and educational programmed architecture within a greater canal pollinator park network to activate community awareness and involvement in the process of promoting bee prosperity to achieve a new vision for ecological urbanism.

## St. Ann's Collective: Stabilizing Families through Supportive Environments and Shared Spaces | Joanna Hess



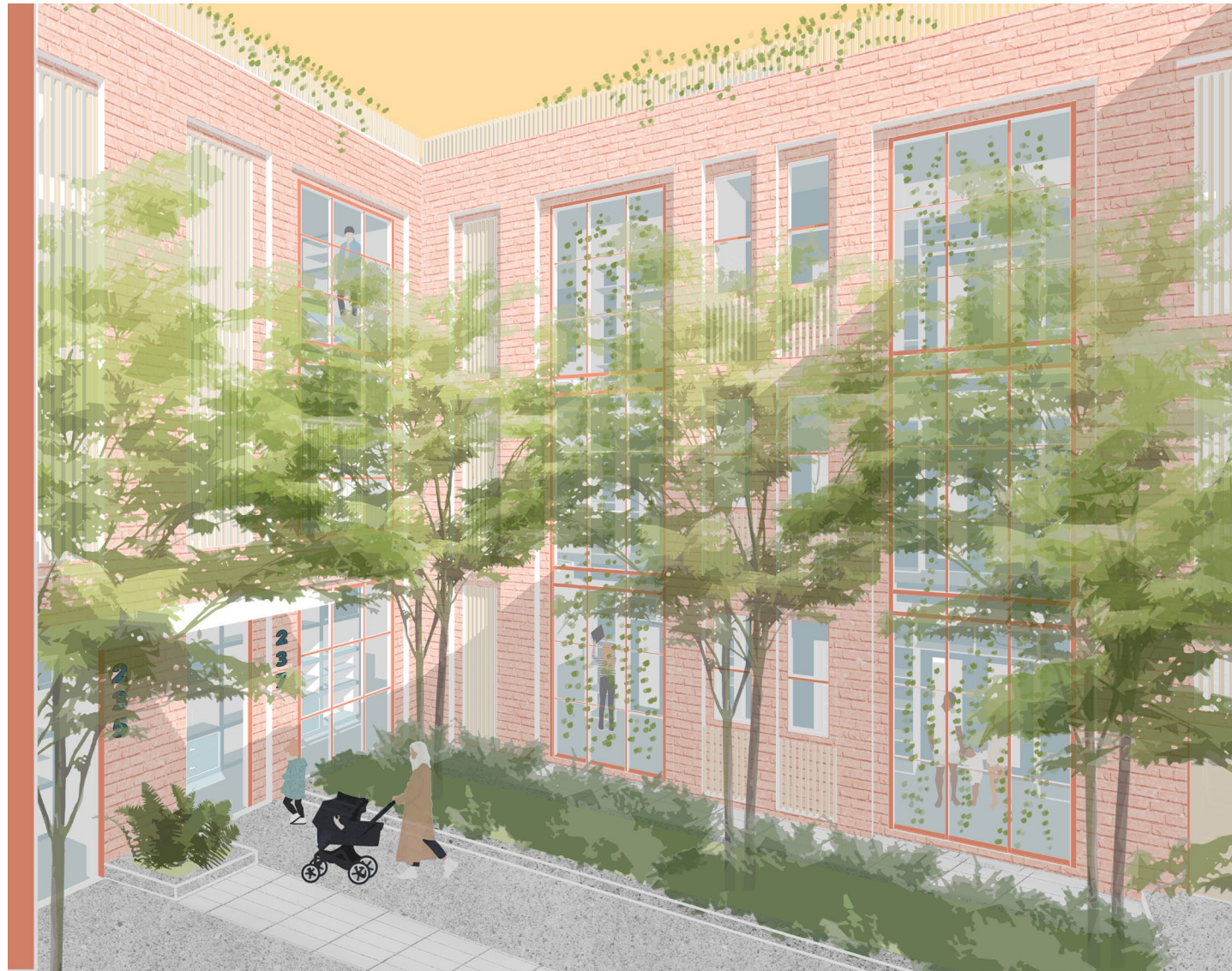
This thesis is a transitional housing program for young mothers or expectant mothers who are ready to take the next step in their independence. This facility is connected to a charity called St. Ann's Center for Children Youth and families. Women who find themselves in threatening situations with their child can stay at St. Ann's while they gain their strength. This thesis acts as a stepping stone between St. Ann's structured and protective environment to complete self-sufficiency. The main focus for this thesis is providing a safe environment that fosters growth, health, independence and a supportive community for these women and their children



This thesis examines the pragmatic implementation of a concept school design that integrates contemporary views on learning and education in downtown Silver Spring. The site location is characterized by its multiethnic residents, the profusion of business organizations and a highly urban setting. Moreover, the Concept School is featured in a central area that is between public landmarks such as the Silver Spring Civic Building and the Silver Spring Library. Consequently, the Concept School will be prominently displayed within Silver Spring and will develop programs with the surrounding businesses and organizations. The proposed school design aims to capture the three tenets of experiential learning, social interaction and community integration. Furthermore, the Concept School, through its architectural design, pursues to transform the educational experience of each child, harmonize its diverse student population and create lasting connections throughout the community.

## From Suburban to Sub-Urban: Re-envisioning the American Dream

Samantha Zuber



With changing generational attitudes towards sustainability and cities people have been leaving suburban and exurban conditions. Since this exurban exodus we're seeing a greater demand for a variety of housing options in cities.

A factor most greatly effecting this demand is the new image of the family. Today's family's, or co-familys, can be much more complex and inclusive, then the nuclear family of the 1950's.

This thesis aims to provide a few typologies of co-family housing that are currently underrepresented in the housing market. Three co-family typologies have been developed that address varying degrees of shared space and courtyard access.

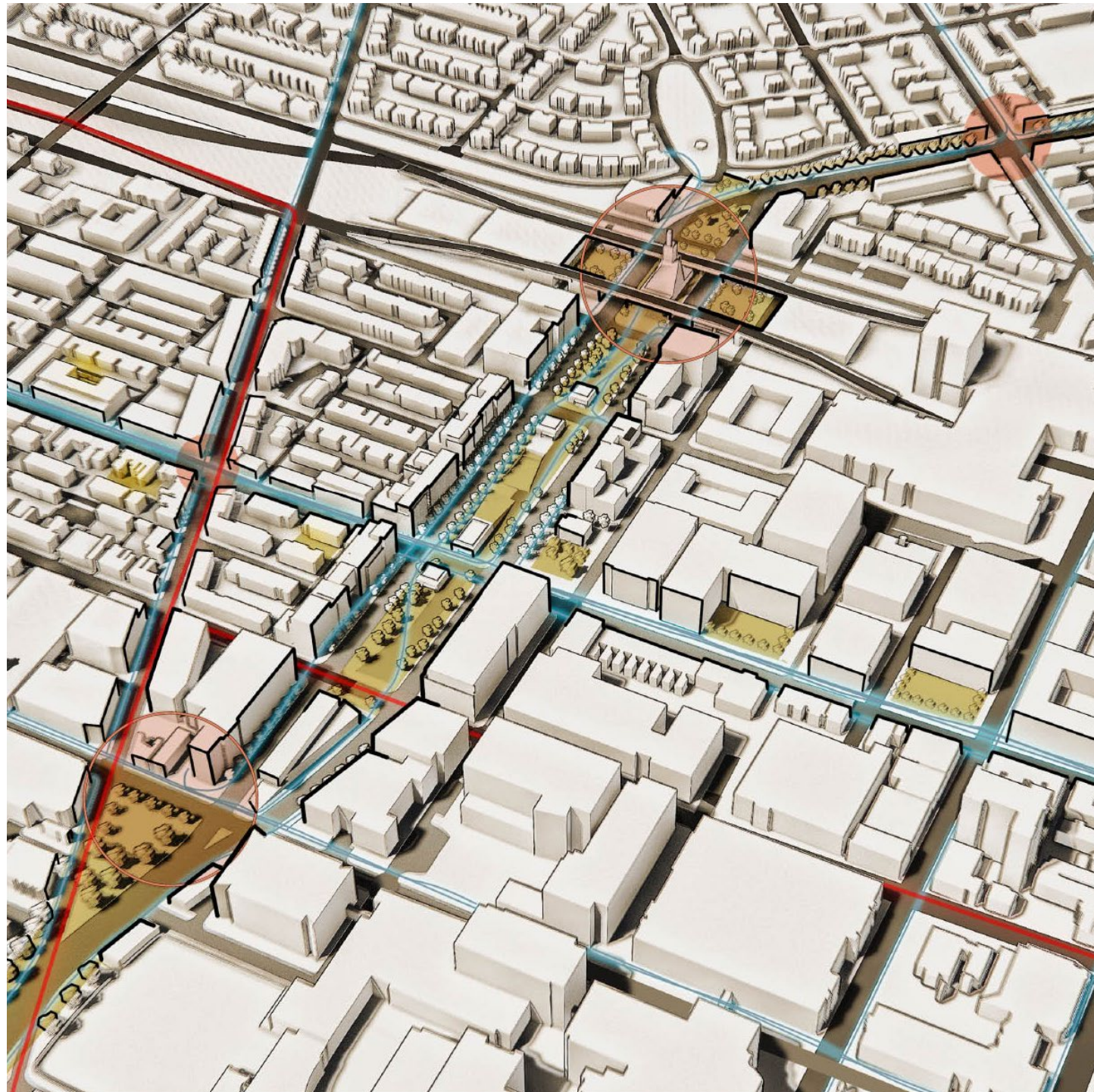
## Death in the Round: A Critique of Funeral Architecture & Burial Practices | James Jesmer



Traditional Cemeteries are known for their groomed, grass lawns with headstones denoting rows of graves. These environments often use vast swaths of land and serve as biological monocultures with one purpose—to hold people who have passed. Spaces like these are only activated when a burial takes place or when friends and family visit the deceased. Because of this, cemeteries are often placed at the edges of society and all but forgotten during everyday life. This distance augments society's negative association with death.

A cemetery complex will be the focus of this thesis. Consisting of ceremonial halls, mortuary, crematorium, and a refectory for repast, the complex will promote sustainable interment practices, serving as a model for future cemetery sites.

The grounds will offer a variety of landscape typologies that accommodate the needs of natural burial, while providing programming for a waterfront park throughout the year. The location for this thesis will be on the urban edge of Part Covington in Baltimore, remediating a brownfield site and giving it back to the community, instilling values of environmental stewardship.



## Access to the City | Adan Ramos

Urban Renewal Highways of the 1960s perpetuate a culture of inequity and segregation in many postindustrial American cities of the Great Migration. In the Post-Great Recession Real Estate Boom disconnected communities have received little to no investment, while communities in desirable locations have faced displacement. South West Baltimore Maryland embodies the former. Separated from the heart of Baltimore by Martin Luther King Junior Boulevard the neighborhood has made modest strides in recovering from urban exodus and institutional racism involved in home loans, red lining, and block busting following World War II. As cities revitalize, now is a critical point in history to improve connectivity and provide access to quality of life in communities like South West Baltimore while maintaining affordability and existing culture. To maintain neglect is an endorsement of physical divisive urbanism and subsequent inequitable ethos.

## Reviving the Heart of the City: Transforming Baltimore's Oldest Market into the City's First Food District | Eric Bos

This thesis is about food, about how to replenish an abundance of good food, of availability and access in the inner city.

Baltimore's Westside neighborhood in downtown has been plagued by vacancy and dereliction for more than half a century. Public markets have long been cultural and social hubs of cities, yet amidst this backdrop, Lexington Market—Baltimore's oldest public market—sits out of date and in desperate need of a new vision. Through a redesign of the market and the surrounding blocks to better connect this node to the city, a vibrant food-centric community can grow again.

By expanding upon traditional market typologies to include the entire food cycle, the new market effectively responds to the needs of the 21st century. Food is grown, sold, cooked, and eaten on site, sparking cyclical nutrient and energy loops. As urban populations rise and agricultural land wanes, it is more important than ever to secure arable land within cities, vertically. Urban food production reconnects people with the food they eat, provides local produce with minimal transportation, and can be integrated into the public market. This thesis both revives a struggling piece of public infrastructure and demonstrates the efficacy of bringing super-productive farming into the city.





## Connecting Crossroads: Designing an Equitable Future for Langley Park | Sara Ghafar Samar



Langley Park is a largely low-income community in Prince George and Montgomery County Maryland with a majority of foreign-born residents and a mix of small businesses and relatively dense multifamily housing. The arrival of the Purple Line Light Rail is both an opportunity and a threat to the vast amount of market-rate affordable rental housing and the strong community and culture of residents, businesses and social institutions of the area. Immigrant communities may be poor in capital but they are rich in culture and foci of cross-cultural connections. This thesis aims to address the needed attention to this transit center, the international corridor, and its adjacent affordable residential area to produce equitable transit-oriented design solutions and action plans that will protect the area's affordable housing alongside addressing the communal and cultural goals of the immigrant residents by creating cross-cultural urban spaces of connection.

## Community Connections: Living Well Within Intergenerational Households | Andrew Davies



Today there are roughly 41 million people in the U.S. who are older than 65 years of age. By 2030 it is estimated that number will rise to 72 million people. With this dramatic increase in our aging population it is necessary to explore options such as multigenerational living as an approach to maintain this generation's inclusion in society rather than create isolation. This thesis explores the relationship between typical levels of 55 + communities and the nuclear family under one roof. Through mixed-use developments, different building typologies, and several residential sizes, this research will reshape ideas of senior living, future generations, and the community while in an intergenerational site. Connection to the surrounding community, nature, and active lifestyles under a dwelling fall under the pretense of living well no matter what age. The result of choosing an intergenerational shared site and having the option of living in a residence of multiple generations is a life of better social interaction, activity, and happiness.



## Social Enterprise Development: A Preventative Approach to Homelessness and Displacement in Point Breeze, Philadelphia

Cassandra Huntington

Social enterprise development focuses on creating economic value to help solve social problems. This thesis tests the viability of this concept by creating a mixed-use, mixed-income property in a low-income neighborhood in South Philadelphia. A profit-sharing financial model is used to support both affordable housing and transitional housing for homeless adolescents. The thesis uses biophilic design principles and values to explore architecture's role in healing from adolescent trauma and preventing future health issues.

This thesis presents a preventative solution to social issues rather than a reactive solution. Prevention of chronic homelessness and prevention of displacement are key to addressing social injustice and help break cycles of poverty in low-income communities. This thesis exemplifies architecture's ability to provide equal access to both housing and services to help the most vulnerable members of society and help them become self-sufficient and contributing members of the community.



This thesis will explore the relationship between place-making and faith practice within urban centers. The role of faith communities in city centers has historically organized dwelling patterns. However, as various BZAs approve more and mixed use zoning designations, and our national religious landscape changes, it will be important for both architects and real estate developers to critically think about this relationship.

As our cities densify, and our society changes, it will be important to design sustainable, and socially responsible development solutions in which the population demands both a place and a spiritual outlet. This thesis would like to feed to the spiritual needs of our ever changing city by testing an urban example of spiritual architecture. This thesis will draw upon precedents from history in which sacred spaces lived within the city fabric, as well as emerging practices within real estate development entities work with congregations, and to test a solution in Philadelphia. With this background, the thesis will explore what solutions design and development can provide for a mixed-use development. What themes connect us, and how such themes can manifest themselves in design? How can we begin to shift the national rhetoric surrounding religion in a positive direction, while improving faith relations?



## Hoboken Exchange: Transforming a Gateway into an Experiential Destination for Consumers | Andrea De Carlo

Hoboken Terminal contains multiple modes of public transportation, each of which, connects Hoboken to its surrounding municipalities, the rest of New Jersey and to New York City. Hoboken Exchange explores utilizing these different movement systems to benefit the city, the public infrastructure, and the well-being of the citizens. Through the use of a market hall, this project looks to connect detached places, capitalize on commuter movement, and utilize flexible design to ensure adaptation to future social and market needs.



This thesis seeks to redefine the relationship between communities and water infrastructure through a scalable, adaptable and hybrid architectural solution. By focusing on the ambiguous intersection of nature and the built environment, this thesis will make an attempt at place-making in a setting typically disregarded by cities and communities. Challenging the boundaries of public infrastructure, architecture, and landscape architecture, this thesis will provide a dynamic solution to the water pollution epidemic of the Chesapeake Bay that involves subliminal community awareness and engagement. Through the program of a meadery, beekeeping, agriculture, and brewing will integrate with water treatment infrastructure to mutually benefit all processes.









SCHOOL OF  
ARCHITECTURE,  
PLANNING & PRESERVATION

**Maryland's Built Environment School**