# BRIDGING THE DIVIDE ON AL QURSAYA ISLAND Mediating Conflicts Through Design A La Conflict Through Des

Jenna Ashraf Hussein Tawfik 2024-2025.



### Politecnico Di Torino

Department of Architecture and Design Master of Science in Architecture For Sustainability

> Master's Thesis February 2025 2024-2025

### **Bridging The Divide on Al Qursaya Island**Mediating conflicts through design on Al Qursaya Island in Cairo, Egypt

### Candidate

Jenna Ashraf Hussein Tawfik, s314264

### Tutor

Prof. Daniele Campobenedetto

### Acknowledgments

My family raised me to to believe that with privilege comes responsibility. As designers we are privileged to design and define common users interactions with their surrounding environment, therefore we can only be responsible to ensure that this interaction is an inclusive, accessible and sustainable one that can outlive our practice as designers.

To Cairo, the city I grew up in, Cairo instilled in me a will to do better for its people, a fascination of its dualities of living. While searching for a thesis topic I did'nt know where to begin but I knew it would all start back home. I hope that I can dedicate my architectural studies and time studying in both Barcelona and Torino in service of a bigger purpose beyond this research, for Cairo, for myself and for my family.

This thesis would not have come together if it weren't for the unwaivering support and guidance of Prof. Daniele Campobenedetto, who's belief in me and passion regarding the issues I was investigating was the true inspiration that got me through the challenge.

The community of Al Qursaya, whose hospitality and generosity to share stories in hopes of advocating for change was a force driving this research.

I want to extend my gratitude to Mona Henry, Dr. Amir Gohar, Dr. Momen El Husseiny, for their support. My geddo, your building construction lessons in the balcony. My Zouza, who led by example and was a living reminder that no matter what you do, make sure you do good. You raised to believe in the impact of selflessly dedicating your professional career to serving a purpose beyond our immediate scope of intervention, something I tried to mirror in every project I have worked on, somehow trying to find a larger moral narrative to its story. My Gedy, the passion you talk about our Egyptian history is something I carry wherever igo, always making me proud of where i come from. My Anna, a positive force I always carry by my side. My Khaltos, Hoda, my logic and reasoning, Mona for giving me faith Heba, for guiding me to believing in me from the very start. The friends and family who this journey would be nothing without Mahmoud, Abdelrahman, Taya, Siso. To my parents everything I am is because you believed in me when I didnt believe in myself, wherever I was. Zeina, my anchor and constant through it all.

 $\downarrow$  5

# **VBSHRACT**

This thesis aims to investigate the potential of design as a tool for mediation within the dimensions of social spatial systems architecture takes form in, focusing on the specific case of Al Qursaya Island in Cairo

This is done through the exploration of small-scale design systems that address the issues of territorial mechanisms. Positioned at the nexus of urban density and rural self-sufficiency, Al Qursaya faces dual pressures: the threat of eviction due to its high-value land status and the community's reliance on self-sustaining livelihoods amidst limited infrastructure. These tensions are compounded by competing stakeholder interests-government aspirations for tourism and economic gain versus residents' desires for security, autonomy, and livelihood preservation. The design explores mediating disputes of abandonment, self-sufficiency and environment of a city as complicated as Cairo, analysed through fieldwork within the context of Al Qursaya. Drawing on Albena Yaneva's Five Ways to Make Architecture Political, this thesis conceptualizes architecture as an active mediator, shaping relationships between stakeholders, material arrangements, and urban realities. Emphasizing architecture's role as a site of negotiation and transformation, transcending its traditional function as a reflection of power. This thesis positions design as a tool for empowerment and reconnection; allowing architecture to stand resilient against the test of time and proposing strategies that attempt to reconcile ownership disputes, enhance community livelihoods and mediate between divergent stakeholder motives. Addressing these issues demonstrates the potential for architecture to act as a catalyst for connection

# **ABSTRACT**

تهدف هذه الدراسة إلى استكشاف إمكانيات التصميم كأداة للوساطة ضمن أبعاد الأنظمة الاجتماعية والمكانية التي تشكل فيها العمارة، مع التركيز على الحالة الخاصة لجزيرة القُرَصَية في القاهرة. يتم ذلك من خلال استكشاف أنظمة التصميم صغيرة الحجم التي تعالج قضايا الآليات الإقليمية. تقع جزيرة القُرَصَية في تقاطع بين الكثافة الحضرية والاكتفاء الذاتي الريفي، وتواجه ضغوطًا مزدوجة: تهديد الإخلاء بسبب قيمة الأرض العالية، واعتماد المجتمع على سبل العيش المستدامة في ظل البنية التحتية المحدودة . تتعقد هذه التوترات بسبب تعارض مصالح أصحاب المصلحة بمثله من جهه بطموحات الحكومة في السياحة وتحقيق الأرباح الاقتصادية و من الجهه المقابله رغبات السكان في الأمان والاستقلال والحفاظ على سبل العيش. يستكشف التصميم كيفية الوساطة بين قضايا الإهمال والاكتفاء الذاتي وبيئة مدينة معقدة مثل القاهرة، يتم تحليلها من خلال العمل الميداني في سياق جزيرة القُرَصَية. من خلال الاستفادة من أمثلة متنوعة من الأدبيات، يطمح هذا البحث في إبراز العمارة كوسيط فعال، يشكل العلاقات بين أصحاب المصلحة، والترتيبات المادية، والواقع الحضري. مع التأكيد على دور العمارة كموقع للتفاوض والتحول، متجاوزةً وظيفتها التقليدية كمرآة للسلطة. يضع هذا البحث التصميم كأداة لتمكين وإعادة الاتصال؛ مما يسمح للعمارة بالثبات أمام اختبار الزمن ويقترح استراتيجيات تهدف إلى تسوية نزاعات الملكية، وتحسين سبل معيشة المجتمع، والوساطة بين دوافع أصحاب المصالح المتباينة. معالجة هذه القضايا يظهر إمكانيات العمارة للعمل كمحفز للاتصال. ويبرز دور العماره . في الوصول للحلول الغير تقليديه في حل المشاكل المتباينة

### **Table of Contents**

Introduction	: Al Qursaya, an Island Disconnected
The Mediati	on
1.1	Design as Mediator
1.2	Foundations of Mediation, Perspectives on Space, Conflict and Conne
The Context	:
2.1	The Nile, the City's Lifeline
2.2	The Disputed Island
2.3	Designing Across Divides: a Review of Mediating Practices
The Divides	and Dualities
3.1	The Divides
3.2	The Dualities
3.3	The Dialogue
Mediating th	ne Divide
4.1	A Program of Mediation
4.2	Mediating Through Activities (Community Led Agri-Tourism)
4.3	Mediating Through Production (Community Led Marketplace)

Preface

Bibliography



Al Qursaya is a small island in the heart of Cairo's metropolis. Only accessible by boat, it seems almost suspended in time. Home to some 5000 farmers and fishermen and their families, it lives in constant threat of eviction by the government who view the land as a valuable real estate asset

The community of Al Qursaya deserve architecture of people, place and reconnecting power and ownership. Exploring these power dynamics and .ownership disconnects through Architecture form our platform for discussion

In Arabic, the word "Falah"—meaning farmer—derives from "el Felh" which means to succeed. To succeed is to cultivate and reap the rewards of hard-earned labour, whose expertise is the heartbeat of the community and the .key driver in future interventions on the island

ひ 女 山

The name Al Qursaya, translates in Arabic to a small piece of bread, which to many Egyptians, symbolizes sufficiency and survival- representing the quiet resilience that sustains life itself

During the 25th of January Revolution, in their moment of uprising, the people chanted "bread, freedom, social equality" while fighting against the regime, with bread coming to symbolize not only sustenance but also the will to fight for better livelihoods against the previous government and the triumph of the revolution.

عيش حربة عدالة اجتماعية

Al Qursaya stands disconnected and not part of the urban landscape of the city. The initial fascination with this island was inspired by its self sufficiency, with no modern connective infrastructure to the mainland. In comparison to surrounding, larger islands, the island stands as a rural secluded haven .floating amidst the urban jungle of Cairo's urban fabric

This work explores the potential lessons- and questions- that can arise from .its further exploration



Navigating present dualities in hope arising from a new generation that strives for more and the despair due to threat of eviction by government to take over the island.

00.

### Introduction

The purpose of this thesis is to explore the potential role of architecture as a possible mediator of divides. The divides explored are more than merely spatial, and include socio-cultural, economic and political.

It does so through a research/engage/design investigation of the site of Al Qursaya Island, a small rural island located in the heart of Cairo. With a population of approximately 1000 fisherman and 4000 farmers and their families the island remains largely disconnected from the city and its existence is currently under threat- from eviction and consequently commercial exploitation by governing structures and market demands to serve a new master plan of a touristic facility driven by capitalist needs.

Mediating the Future exploring potential rooting of empowerment for a resilient future for the community balancing divergent stakeholder interests

An Atemporal Process, honouring the Past, the Generations of rural expansion and farming history on the island.

Image: Collage created by the author using images from site visits.

To conduct this investigation, the thesis is divided into four different segments, 1. introduction of the concept of architecture as a tool for mediation and the site of Al Qursaya, relating the issue to the global discourse and literature. 2. Contextualising the issue related to wider territorial mechanisms of the city of Cairo, its urban and political governance and disputes to better understand the forces acting and influencing the island, laying the foundations for mediation, as well as reviewing different meditative practices designing across their own contextual divides. 3. Testing of notions and hypotheses are further interrogated and explored through fieldwork on Al Qursaya, conducted with the local community, as well as local volunteers collaborating with initiatives such as VeryNile working on the island as well as a visiting academic team from the American University In Cairo. The fieldwork revealed further socio-spatial divisions in the urban landscape of the island, and provided insights and further curiosity around the potential role of architectural interventions in navigating political disputes over security, autonomy and livelihood preservation, laying the groundwork for a community-informed design process which is rooted in and inspired by the local context and existing condition. 4. The design at the potential of smallscaled systems which mediate, discuss and further question the divisions explored in the fieldwork. An understanding of overlapping spaces that bring together a program informed by the divergent needs of both government and community, proposes two potential models for mediation; through activities and production. These systems of interventions and initiatives are driven by the local community, funded by the government and embedded in the existing urban fabric and context. This proposal aims not to act as a solution to the divide, but to recognize these existing dualities as part of the architectural process and question the potential reasoning behind bringing together issues that are normally separated in the architectural practice.

The issue of Al Qursaya is a symptom of a larger problem. To properly contextualise the study of mediation on the island, one must frame

the story of Al Qursaya as a microcosm of larger territorial mechanisms of dispute, division and inequality. The understanding of the tension between the governmental aspirations for profitability and prime real estate location, versus the local community's hope for securing their livelihood and land, mirrors issues related to ownership of the city's waterfront which prioritise financial return as drivers of future expansion plans over social gains. In looking at parallel scenarios- where architectural and urban projects initiated by the government and intended for utilisation by the community- we see the prioritising of profit over people manifested in the physical form of realised projects. The analysis of the Nile as the city's life-line throughout history unravels a pattern of different political constructs at different points in time on the waterfront, expressing it as a prominent site that is constantly in contestation.

Through one lens, architecture may be seen as inherently political, acting as a mediator in socio-spatial systems by shaping relationships between people, places, and time (Yaneva, 2017). Through this lens, rather than being a static reflection of politics, architecture operates dynamically, influencing and being influenced by the practices of design, construction, and use. With this framing, architectural objects and spaces may serve as sites of negotiation, fostering dialogue among diverse actors and addressing power dynamics. This perspective emphasizes the capacity of design to create connections, challenge inequalities, and propose new forms of collective engagement within the built environment.

We first look at Al Qursaya as an incubator for experimentation of exploring potential mediation through the analysis of the existing geopolitical condition. We explore initial questions raised on the intentional disconnect of the island from the surrounding city, and the resultant attempt towards self-sufficiency by the community. We raise the questions around the extent and ways in which design can navigate conflict, restitch dynamics and question social space as an overlap between social and the physical. We explore the significance and

relevance of mediation through posing a critique of the preformative notion of architectural sustainability typically discussed in the architectural discourse. The relevance of mediation is explored by bridging in the qualitative social dynamics and quantitative preformative mechanisms of our built environment. The notion of sustainable architecture typically looks at the ability of a building to withstand forces acting on it over long periods of time, forces of climatic conditions and those of social and political constructs as well. This highlights the significance of the issues of architecture as tools for mediation. Looking at existing literature on the architecture of politics, conflict, connection and community, we acknowledge the wider role architecture can play in social impact in communities- like those of Al Qursaya- or potential deepening inequalities through the commodification of architecture.

Exploring notions of architecture as a platform for mediation within the global architectural discourse, these notions are framed in the contexts of the issues of the dualities of the island- the division of control, issues of ownership and abandonment and the struggle between residents and the community. Architecture emerges as a powerful mediator of spatial agency- particularly in the geographies of the global south, and in contexts of conflicting priorities and asymmetrical power structures. Through the lens of "Spatial Agency" (Awan et al, 2013), discussing architecture as belonging to a wider frame and scope of social issues, and "5 Ways Architecture Can be Political" (Yaneva, 2017) we can better explore and unravel different ways architecture can resolve conflicting interests and operate within different contexts. This work also draws critical conclusions of the challenges faced when exploring a conceptual notion of mediation in a practical setting of an architectural program. For future research conducted in similar contexts it is recommended that careful consideration of the community's condition and planning of the fieldwork process is conducted to secure the community's trust.

In order to understand the importance of architecture as a tool for mediation between different stakeholders it is important to highlight a brief critique of the modern definition of sustainability, or more specifically the current sustainable architecture practice.

More often than not architectural sustainability is limited to the assessment of architecture as a preformative, quantitative numerical output value and material utilisation in the building. If we take the notions of Spatial Agency, where the product of the architectural practice is not solely the building and we look at the longer term, wider network and broader notion of the production of architecture beyond the static process of the production of a building, we can appreciate that the product of the architectural practice cannot only be quantitative analysis of values. For example, what does the u-value, or the compliance with the ASHRAE Standard 55- both numerical indicators of thermal comfort and insulation of a certain glazing structure used in a small household in Al Qursaya- inform us about the true user comfort? When in fact, the user is never a numerical variable in any equation. We use the word comfort, but which user and which standard and definition of comfort is being used. Are tenure security, freedom from fear of eviction, food security, access to energy-not all also contributors for feelings of comfort?

The codes, compliances, simulators and attempts to bring the built environment closer to the "optimal", can be seen as dismissing important constructs of the built condition- the user, the social, the spatial, the political, the ecological, economical and contextual. As architects we can design optimally preformative sustainable buildings, however more often than not, the use of the spaces we create is not something within the scope of control of the architect, but is defined by the user of the space. The UN's Sustainable Development Goals alone perhaps cannot capture the full responsibility of the built environment, however, when combined with the notions of Spatial Agency, acknowledging

architecture to exist within a wider social construct, we can perhaps provide a more holistic roadmap. The challenge lies in quantifying the qualitative, but if successful, could overlap to create regenerative sustainability that thrives beyond the performative numerical aspect of sustainably in the discourse of true sustainability.

This study addresses the potential of design as a driver for such mediation and the critical role that architecture can play in social justice, community engagement, empowerment and the negotiation of power dynamics navigating relationships between different stakeholders involved.

This study asks: To what extent can architecture play a role in mediating conflicts and managing different motivations by different stakeholders? Through this work we ask ourselves: Does architecture have the potential to play a significant role in the bridging of such socio-spatial disconnections? Can it mediate between different stakeholders' conflicting interests? Can it empower existing communities while fulfilling governmental capitalistic needs?

The method of the work is through three modalities: an analysis of selected architectural practices as case studies; community engagement and fieldwork on site; and an experimental design process to explore the potential possibilities of architecture as a mediator of divides.

The first modality is one of exploration of local case studies, which give shape to the notion of architecture as a mediator when showcasing it in practice. Initially examples from international contexts were reviewed, however they were excluded from the final exploration to maintain relevance and appropriateness of these case studies in informing potential interventions for experimentation on the island in the design stage. The case studies were selected based on the following criteria of relevance to the chosen site of

study on Al Qursaya island: socio-economic relevance, geographical relevance, geopolitical relevance, socio-cultural and ethnic relevance; demographic relevance, technological relevance. They are explored to understand the different broader social narratives and motives behind each example, allowing us to unravel the complexity of each project.

The second modality is one of community engagement and fieldwork and looks at the state of the island on ground. It explores the reality of these dualities, disputes of ownership, and notions of self sufficiency, to further explore how the hypothesis raised in the earlier stages are translated to urban life through the community. The fieldwork explores the multiple facets of the divide-documenting the different instances of division in order to map the challenges, dualities and conflict faced by the local community. This exploration also uncovers the potential latent practices that can be mobilised and empowered through potential systems. The divide is discussed at two levels- as the social divide- that between the community and the government- and the physical divide, mapping the boundaries and divisions of control and the resultant built environment as a byproduct of the current condition of division.

This is illustrated as the intersecting divides, where both social and physical notions overlap, understanding the combination of these divisions in shaping the existing urban landscape. In entering this phase of fieldwork, I wanted to look at the community as an integral part of the site analysis. Traditionally throughout my architectural studies, before beginning a project we would conduct an analysis of the site. In this situation, given the geographical condition of an island as a controlled social experiment, I wanted the community to inform the site analysis, rooting this phase in their way of living. I was welcomed by the community through a series of interviews with different members of the community, several days spent on the island going on walks, being hosted in local residents' homes and attendance of urban design workshops with

The American University in Cairo, I was able to gain a relative understanding of their day-to-day activities and lifestyles. The participatory practices of including the community in the process was a foundation for the establishment of the questions raised while exploring the literature and existing geopolitical situation and laying groundwork to deepen those questions in the coming design stage.

The final modality is one of design. The design stage does not attempt to bridge the divide, but it attempts to mediate it in a way that makes it understandable and allows it to be discussed in different contexts. It does not set out to provide a solution, but explore a possible system of design interventions that could be implemented for further exploration. It does so by raising questions and exploring potential ways to best use the community's existing agricultural practice, while maintaining their land and protecting them from eviction- and at the same time fulfilling the government's income generating touristic facility on the island as prime location. In exploring the ways in which architecture can negotiate a middle ground in these conflicting goals, questions of architecture as a platform for transformation and mediation, as opposed to its traditional function as a reflection of power, arise.

The Design Stage explores mediation through three lenses- mediation through overlapping spaces; mediation through activities and mediation through production and operation. The concept of mediation through overlapping spaces looks at created architectural programs and systems of micro interventions that bring together government and community through a proposal that questions the potential to mediate profit and community prosperity.

Setting the narrative of dualities, the study of the island uncovers a story of conflict, and the idea of contrasting landscapes is explored in the thesis

to better understand both the current role the architectural process plays in defining these contrasts and the potential role it can play in their mediation. This involves an acknowledgment of the existing contrasts in the urban landscape—rurality and urbanity, land and water, accessibility and inaccessibility, and the inequalities that potential governmental projects focused on privatization and commercialization can create, leading to economic barriers of accessibility and the resultant abandonment of buildings, in contrast to the potential democratization of the island and communal empowerment. It also considers the tension between artistic practices and the lack of employment opportunities, as well as the new forces of progressive change emerging through various initiatives, set against an older generation that resists this change. These contrasting dynamics are explored to further question their existence, their formulation, and their potential mediation, where the current power dynamics and geopolitical conditions play a role in shaping futures on the island.

The mediation through activities of agri-tourism utilises existing communal practices to rehabilitate abandoned buildings and expand them using earth structures built by the community and funded by the government. This aims to question the potential for mediation across different stages of the building lifecycle. In mediation through production and operation, the community participates in the production process acting as a labour force, and in operational through leading the agri-tourism facility for the government instead of bringing in external operators at a higher cost. Economic feasibility frames the mediation for production, where the question is mainly generating income as the main driver of the government's plan for the island. It questions the possibility of a community led market place which utilises existing agricultural practices and works on selling them in collaboration with the touristic facility, or even external residents coming to spend the day from outside of the island.

By broadening our lens beyond the quantitative notion of sustainability to

include the qualitative aspects- we can expand the social impact of potential solutions and the architectures that spatialise them. This work aims to contextualise this hypothesis at a wider scale, setting up the dynamics to be explored to further deepen the initial questions.

The output of the study presents the following possibilities:

Multi-Scale Impact: the study presents the possibility of impact on several scales; the immediate human scale of the residents of the island; the neighborhood scales creating and empowering communal connections and mediations; between the governments and local communities as well as a wider inter-island scale on the level of the district; as well as the Nile territorial scale as the country's main spine.

Design as a Process not only a Product: This scalability is expanded in the exploratory nature of the design component of the research. Design is not presented as a summative and definitive artifact, but rather as a formative and inquisitive process- used to spark a deeper curiosity to generate questions as opposed to providing specific solutions.

Contextual Replicability: These questions may have application beyond the immediate surroundings, in the greater context of the political urban discourse around community and government motives in the Global South and other densely populated world capitals- particularly in the context of issues of: contestation of land; tenure insecurity and threat of eviction; and natural resource disputes as well as potential profitability of an architectural development project.

Perhaps most importantly, this work aims to provoke questioning for further investigation in later studies: is land only a resource for economic gain? And

can economic gain be authentic, sustainable and meaningful without equitable, social, communal human gain? And finally What role can architecture, and we as architects, play to negotiate these dynamics?

01.

Setting the narrative of dualities, the study of the island uncovers a story of conflict, and the idea of contrasting landscapes is explored in the thesis to better understand both the current role the architectural process plays in defining these contrasts and the potential role it can play in their mediation. This involves an acknowledgment of the existing contrasts in the urban landscape—rurality and urbanity, land and water, accessibility and inaccessibility, and the inequalities that potential governmental projects focused on privatization and commercialization can create, leading to economic barriers of accessibility and the resultant abandonment of buildings, in contrast to the potential democratization of the island and communal empowerment. It also considers the tension between artistic practices and the lack of employment opportunities, as well as the new forces of progressive change emerging through various initiatives, set against an older generation that resists this change. All of these contrasting dynamics will be explored and investigated to further question their existence, their formulation, and their potential mediation, where the current power dynamics and geopolitical conditions play a role in shaping futures on the island.



### 1.1 Design as a Mediator

This chapter explores the literature's theoretical framing as well as practical implementable outputs, not as solutions to the issue or a specific design brief, but rather as explorative attempts in sparking dialogue and understanding the dualities of the island in different contexts. It presents design as a tool for mediation through the specific case of Al Qursaya Island, while framing it within the broader context of shared challenges and resources of locales across the Global South. The objective is to explore the mechanisms by which architecture can play the role of mediator between divides.

It presents architecture as the potential to mediate through the following proposed constructs:

Bridging Power Structures: Architecture can serve as a bridge between government entities and marginalized communities, facilitating dialogue to democratize access to resources and services. In contexts with historical power imbalances such as Cairo- which often exclude rural underprivileged communities, this becomes particularly relevant. (Hernberg, H., 2022).

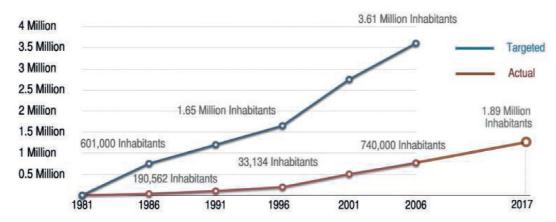
Enhancing Community Identity: Architecture as a mediator can empower communities to express their cultural identity, values and vernacular. This approach may help preserve local traditions but also encourages community participation, bringing in residents as stakeholders to facilitate mediation between governmental interests and communal needs- allowing the community to integrate their existing practices, products and informal economies in the program to be proposed.

Addressing Social Inequities: Architecture may play an important role in addressing systemic social inequities. Through the creation of inclusive spaces that cater to local underprivileged communities, architecture may be able to empower neglected communities, particularly through the role of public space. The design of public spaces that are accessible and run by the community may be able to eliminate the notion of disconnect between the policy makers creating the architecture, and the users and residents inhabiting the spaces. By ensuring that these spaces are designed with input from local communities, architecture may better meet the needs of those who are often overlooked in urban planning.

Contextually, being located in the Global South, this study has particular significance. The scale of divide in this region is augmented by higher levels of poverty, disparity in urban resource distribution across socio-economic groups, challenging governance structures and asymmetrical social power dynamics (Shawkat, Y. 2024). The processes, case studies and implementable architectural tools presented investigate and raise questions around one example of mediating and navigating these complex divides through architecture as a driver for connection.

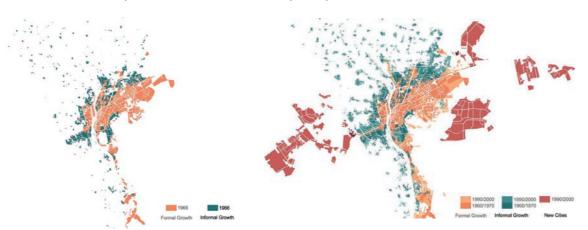
Given the city's current urban expansion and sprawl, we can understand the importance of utilising central Cairo as a potential site for new projects. A large influx of major investments feed infrastructural expansion in new desert cities, pushing the city towards an urban sprawl across the extremities of the city, west and east of the Nile. The goal was that these new desert cities become sustainable and economically feasible, however, recent studies show that these desert cities only accommodate 6% of the upper-middle class by providing privatised gated-communities with little to no civic engagement (Zaazaa, 2024). The remaining population of the city reside in the urban core and informal settlements, giving shape and form to the socio-economic divide.

### Graph showing targetted versus actual number of inhabitants in new cities.



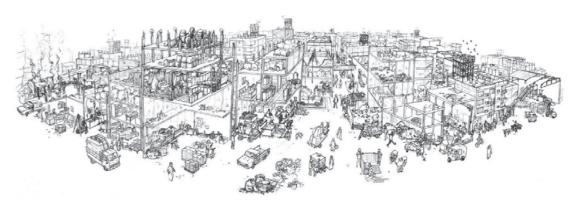
Source: Middle Eastern Cities in a time of climate crisis, Deboulet, A., & Mansour, W. (Eds.). (2022). Shawkat, Y. "The social justice and built environment" The Shadow Ministry of Housing.

### Cairo's Urban Expansion Source: Middle Eastern Cities in a time of climate crisis, Deboulet, A., & Mansour, W. (Eds.). (2022). Maps by Ahmed Zaazaa, 2021. Map Source: CAP MAS Data analysed by david Sims, 2019

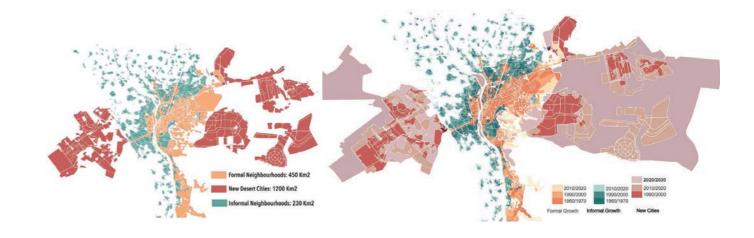


To see the informal as inferior however is to discredit historically important notions of urbanism. Within these neighborhoods one finds concepts such as: the 15-minute city; notions of spatial agency, work-life proximity and walkability. The examination of informal urban economies incorporates insights related to the transition from domestic labor to public employment, as well as the dynamics between constructed and unconstructed spaces, which have been relevant for years in areas that the West refers to as "slums." (Kipper & Fischer, 2009) This urban sprawl poses an urgency and vitality provoking thoughts on ways to make use of existing natural resources in the heart of the city.

### Garbage Village, An Informal Ecosystem of Users



Source: Middle Eastern Cities in a time of climate crisis, Deboulet, A., & Mansour, W. (Eds.). (2022).



Current western models of resilience focus on quantifiable metrics alone to assess sustainability. By exploring potential actionable tools that present more equitable resolution of urban dispute through inclusive and accessible architectural approaches that address social, cultural and communal issues, this project hopes to expand such tools. It aims to illustrate these forms of architectural mediation as a means to bridge the gaps and question the western models of resilience and sustainability assessment- such as LEED and BREEAM that focus largely on quantifiable and building performance metrics. As important as these metrics may be, they fail to capture the qualitative elements of urban resilience presented by the socio-cultural capital of urban constructs. This study aims to present a perspective of low tech solutions, benefiting from local expertise and resources, social capital, and community tradition as assets and powerful tools to achieve similar regenerative goals that look beyond the performative goals. It works to understand sustainability as an act of creating impact that will outlast our immediate design process, which must include a social variable in the equation, expanding it beyond the physical preformative variables.

The social and societal elements of design are often secondary in decision making processes. This research aims to explore the potential social variable informing the design process, empowering the field of professionals, and policy makers in their design processes to include local communities, activities and resources as an integral part of the soil they choose to build on.

Limitations and Challenges: Navigating the urban discourse of disparity in the Global South can be a challenging one, with limits to access to communities, sites and information. Building the requisite level of trust with communities to successfully enact authentic participatory design becomes a major obstacle in such a social climate and posed as an obstacle through the duration of this research. With the support of Dr. Momen El Husseiny, allowing me to collaborate with the Urban Design students of the American University in Cairo

and collaborate with the local residents and community, who were generous enough to welcome us into their homes and tell us their story, to explore the real situation as it is on ground currently, provided a more informed and real design process.

For future research it is imperative to examine these potential obstacles to participatory design, and structure tactics of gaining community trust when proposing possible solutions for greater collaboration in future projects. It is important to address the sensitivities and the issues that have created mistrust when collaborating with creatives for a more impact and efficacy. (World Urban Forum, 2024)

The following sections outline such considerations to be made for future development and research, emphasizing community participation, within the context of environmental policies, and sustainable practices, beyond the quantitative preformative notion of sustainable architecture often discussed in the discourse. It includes experimentation on the inclusion of social and political aspects, informing design, the adoption of indicators of social sustainability and the integration of these constructs throughout the design process- disabusing the notion of the social as a by-product of our activity as designers, but rather as an input, a frame and a context as well.

The current constructs of architecture can be seen as binary (Linzey, 1996)- with an understanding of the architecture that is categorised and defined within clear constructs of building and landscape; interior and exterior; user and community, public and private, domestic and workplace, abandoned and occupied, informal and formal. These notions are explored through the fieldwork through drawing and mapping to represent, explore and question the physical manifestation of these definitive notions in practice on ground in the Island. This exploration unravels a reality that showcases the increasingly diverse and complex forces influencing our resultant social spaces, at times presenting a gradient, rather

than a definitive line, a spectrum of socio-spatial existence within the overlap of urban space- the in-between- within which communities have carved the reality of their urban livelihood amidst the existing factors of government, land ownership and formality. It presents existing architecture as a physical byproduct of social needs, taking shape beyond the defined, characterised and binary. Perhaps we should no longer read the urban maps of the city as two dimensional and binary- elements defined by built and unbuilt, public and private- but should perhaps acknowledge the existence of the gradient and multitude of layers blurring these lines. This is the canvas on which important architectural mediation may possibly unfold.

Interrogating these spaces that are non-binary, unclassified, often undesigned by architects but rather local residents- challenges the notion of the classic modernist and rationalist school of architecture which define spaces in opposing notions: in vs out, architecture vs city, built vs void- building a very binary categorization of our environment, which is not reflective of true urban life which exists beyond the walls of architecture. Architecture is often confined within the walls of our buildings and is mainly about the form making. We forget that real life happens within the negotiation and mediation between what's within and what's outside of its walls. It is in understanding, mobilising and empowering these constructs that perhaps the tools of our effective architectural mediation will emerge.

On a wider scale, both Cairo, and Al Qursaya's informal urban fabric presents an illustration of both the challenges and potential opportunities in exploring the different overlaps that exist in-between the realities of the dualities on the island, recognizing that it is in these overlapping and informal economies where true urban livelihood takes place and communities are formed. (Nagati et al 2013) It is perhaps in these spaces and their local communal practices that some lessons for authentic and sustainable mediation can be explored. Over the past decade an important body of literature has emerged within the global architectural discourse illustrating this role of the built environment as

a mediator of conflicting needs- on multiple scales and across different contexts. Looking at the events leading up to, during and post-2011 Arab Spring, shed light on the urban disparities, inequality, socio-economic divide and a division of trust between government and community in the region. This notion brought with it the potential of utilizing and exploring local community knowledge, practices and expertise as mediators of this divide.

This unfolds within the backdrop of the government expanding intensely with new desert cities aiming to address the congestion and overpopulation of the city. Drawing on precedents from the Gulf region, this expansion is seen as disconnected from local traditions, practices and Cairo's vernacular. This creates a divide at the scale of the city- between the historical urban core and the satellite expansion of new desert cities. (Sims, 2014)

Learning from the people: Current practices in the city of Cairo, particularly around its vernacular, may provide lessons of mediation. To what extent does the city of Cairo, and cities like it in the Global south- need real designers and actors to build better livelihoods? Can we not learn from existing communities that are thriving by designing and defining their own urban life without the intervention of designers? (Dutta, U, 2019). We can explore practices of different urban models that have proved to have their own definition of urban interactions through their prioritising of the existing informal economies and practices and the generational inherited knowledge informing their way of living. Learning from the city's spatial agents in differing contexts provides a lexicon of processes and tools to explore, replicate and scale, on the Island.

This thesis attempts to explore and raise questions around expanding these latent communal understandings of the value of architecture as a mediator, as applied to Al Qursaya Island with its potential and challenges of abandonment, poverty and conflict- of natural resources, geographic location, ownership, occupation and operation.

## 1.2 Foundations of Mediation, Perspectives on Space, Conflict and Connection

The objective of this section is to review relevant literature and connect it to the specificity of the site and its contextual dynamics.

Albena Yaneva's Five Ways to Make Architecture Political provides a framework to explore the potential of design as a mediator on Al Qursaya, showcasing key analytical tools and concepts for understanding the lenses of abandonment, self-sufficiency and environment:

Architecture as Mediation: Yaneva emphasizes that architectural objects and designs are not static products, but act as mediators that reshape social, material, and political relations. Providing further curiosity on how architecture can discuss the issues that exist within the differing dualities of Al Qursaya. (Yaneva, 2017)

Ecology of Practice: Architecture operates as a complex ecology involving diverse forces—both social and physical. (Yaneva, 2017) These social and physical dimensions are assessed in Al Qursaya through monitoring the differing stakeholders, residents, government and their needs and motives. This is coupled with understanding the physical environment within which these practices take place- the buildings, both occupied and abandoned; the materials, and the process of bringing them onto an island with no vehicular connections to the mainland or on the island; and subsequent spaces of communal livelihood through agricultural activities, communal kitchens and self-sufficiency. The analysis of the field raises questions on how the existing infrastructure, community needs, and government policies and control, should or should not interplay.

Design as Political Action: Yaneva states that design is inherently political—it organizes, connects, and transforms relationships among different actors, all of which should be considered as forces that influence the design process. (Yaneva, 2017) This notion is explored on Al Qursaya, in the exploration of the fieldwork which investigates the different existing divides on the island, the physical spatial divides in built fabric, land and water, controlled and uncontrolled as well as the social and political factors of local communities and governmental politics. All of which play a role in influencing the potential of an architectural intervention as a form of political mediation by creating systems to foster dialogue, collaboration, and coexistence.

Material Politics: Yaneva's work dissects material politics of the different architectural elements, looking into the materials and their spatial configurations as an active participation in political action. Material politics shapes behaviors

and either enables or disables agency, and redistributes power. Understanding the potential material politics is imperative for understanding who is funding the interventions proposed in the design stage? Is it a do-it-yourself action by the community? Or collaboration between government funding and utilising the community as a labour resource and operator to facilitate their local expertise and expand on their existing practices? Where are the materials coming from? Yaneva's discussion emphasizes the importance of integrating the material ecologies in the consideration of the design. Maximising in situ, locally sourced materials to minimize the transport of materials by boat from the mainland as well as rehabilitating, expanding and occupying existing abandoned structures could potentially serve as a middle ground between the government and local residents motives. (Yaneva, 2017)

Multiplicity and Negotiation: Yaneva discusses the multiplicity of realities and the role of design in navigating these, looking at the constructs of architecture as part of a broader social network and negotiation. Spatial negotiation allows for a built environment to reflect on the user-needs and patterns of living. Exploring the dualities of the island is informed by this notion of design as a multiplicity and involvement of the negotiation of space. This multiplicity includes the negotiation between- urban pressures of eviction; rural self-sufficiency due to the lack of sufficient infrastructure to the mainland and therefore the need to provide all their basic consumptive needs on ground; as well as the competing priorities of the government in producing a touristic facility with high economic return balanced with the social priorities of maintaining their urban livelihood by the local residents.

In an era of the commodification of architecture, the island, once ignored for decades by the Egyptian government, has suddenly gained increasing attention as prime real estate. In 2007 the government issued an eviction order, ordering that the farmers' land contracts not be renewed and claiming the island as state property- a prelude to the potential commodification of the island and profitability for potential developers. The reason why the story of the island has been selected as a prime area of study, is due to the alignment

with the themes, both positive and negative presented in the discourse of Spatial Agency. This discourse claims that in producing spaces of value, or "special space" we become enmeshed in the intertwining arms of social, global and ecological networks, a key study point of investigation.

The notions presented in Spatial Agency emphasize the need to engage with broader spatial forces, arguing that "without recognizing these networks and the role architectures play within them, we remain disconnected, reduced to mere polishers of static forms—acting in the name of utilitarian efficiency and progress" (Awan, Schnieder, Till, 2013). This approach aligns with capitalist demands, shaping space into commodified shining forms while contributing to an endless production cycle. "Efficiency becomes part of a larger agenda of spatial control, where lives and thus the product of the architectural practice is governed by market dictates, and the eventual endless production of commodities. Consequences of this include zoned cities, smaller dwellings, privatization of the public realm, and contractor-led public buildings" (Awan, Schnieder, Till, 2013). The consequences outlined in the book are directly reflected in the current geo-political governance in what previously took place with the residents of Al Qursaya, as well as the new governmental projects that perpetuate this model, as repercussions of failing to consider architecture as an integral part of a broader context.

Understanding sustainability as the overlap of several networks of elements and the ability of architectural work to withstand changes of time, allows us to understand where social and spatial agency may thrive. The overlapping of these layers of social, political, ecological spatial factors that inform design were understood through the seminal work "We Have Never Been Modern". We cannot characterise and explain certain phenomena through the strict segregation of what is social and what is spatial, but believe that successful and true architecture and urban life happens and thrives in the overlap of these notions. (Latour, 2012)



### 2.1 The Nile, The City's Lifeline

To best understand the role of the Nile as the city- and indeed the country's lifeline, we must explore several socio-spatial urban dynamics. The different ways Cairo's communities engage with the Nile present an important understanding of the potential, and challenges of the Nile. Architecture and landscape play different roles across the city- at times disrupting and displacing communities. In Al Qursaya's self-sustaining urban livelihood we find a social experiment that perhaps provides tools for broader understanding of the Nile/community relationship.

This chapter aims to explore the question: How can the current practices in Al Qursaya island constructively inform the design experimentation of this thesis as an extension of the vocabulary of the current City/River interfaces?

The importance of mediating and managing the different forces acting on the Al Qursaya lies in the critical role the nile plays in the city's urban fabric. The Nile's value operates on multiple scales- at the level of the continent, the country and the capital. The Nile front has become a site for political and social intervention throughout time. Historically it provided a lifeline to the cities and rural communities thriving off its banks. In ancient settlements, the Nile anchored much of the livelihood- through agriculture, fishing, trade and human settlement with the basic necessities for facilitating life, water and fertile soil for food production. From those ancient settlements, the Nile facilitated the means for further formation of a region, where it served as a main trading route for centuries, not just for commodities, but for irrigation and agriculture, through the appearance and disappearance of streams providing water to remote areas along the rural peripheries on a regional scale. Once a network of agricultural activity, these streams have now been infilled and covered for the further expansion of road infrastructure, further highlighting the need for change and investigation of mediation.

In our evolving modern world and our emerging cities, we still find that communities on the Nile, like those studied on Al Qursaya, still follow the footsteps of our ancient ancestors and rural communities along the Nile have managed to protect the lifestyle of rural activities, in the heart of the growing urban core of the region, Cairo, despite the urbanisation of the surrounding areas. (Alsayyad, 2019)

The Nile is a facilitator of life in the city, from the very beginning of time it provided the city with a resource that facilitated its every need in all its eras being a witness and taking various shapes in responding to different political and geographical turning points in the history of the country. The nile waterfronts and nile islands have always remained a largely political commodity, taking shape and morphing with the city throughout history. It was home to different ancient settlers, provided affluent waterfront housing for international colonizers of the city, it took the form of trading routes in a postindustrial capital, providing energy for the city through the hydro-powered great dam. Its ecology offers a safe haven, with its cooler microclimate of evaporative cooling giving its islands an almost otherworldly ecological separation from the urban jungle of Cairo, one of the globe's most congested cities.

The Nile offered alternative means of transportation, through traditional sail boats, cargo barges and the 20th century Nile Bus which provided relief to the growing rates of traffic. It has always been a site for tourist landmarks, high end water-front hotels and activities, maintaining its prominent status and high land value. It has recently become a landmark for implementation of public space through the "walk of the people" project, and is reflective of the ongoing political battle of ownership for public space in a post revolution democratization of the city. The transformation of the riverfront has been reflected in various cultural references beyond architecture and urban practices. The entertainment industry—through film, music, and other cultural expressions—has consistently portrayed the waterfront as an iconic symbol of its time. The recent Egyptian Pavilion at the 2023 Venice Biennale also highlighted the Nile as a laboratory for exploration (NiLab Curated by Abdelrahman et al, 2023).

This dual analysis of the past, present, and future of the waterfront aims to identify patterns of usage, infrastructure networks, and economic practices—both beneficial and detrimental to the ecosystem. Ultimately, this understanding will enhance our fieldwork by providing multiple perspectives on these temporal instances further informing the notion of connection.

### A Tale as Old as Time;

Cairo has been framed by historians and sociologists as Paris along the Nile (Myntti, 1999). This title has perhaps echoes of the city's colonial past- with the Euro-centric aesthetic of its downtown, but also its bourgeoisie exclusionary urbanism that segregated the city's inhabitants in a socio-economic demarcation.

The city's historic evolution of the riverfront is a physical manifestation that narrates the socio-political narrative through the privatisation and democratization of the city. Contemporary investigations have further explored this dynamic. In their 2011 work, Kondolf et al investigated this dynamic and explored the various divides along the riverbank, proposing locations for potential mediation. In their work they catalogue the diverse land | water conditions, providing an archive of divides and potentials for mediation. The study of the waterfront throughout history uncovers a story of a wider political ongoing battle hindering Cairo's urban development through its access to the waterfront. (Kondolf et al, 2011)

A Tale as Old as Time; when Cairo was once famed as the Paris of the Middle East, the hisotric evolution of the riverfront is a physical manifestation that narrates the socio-political narrative through the privatisation and democratization of the city.

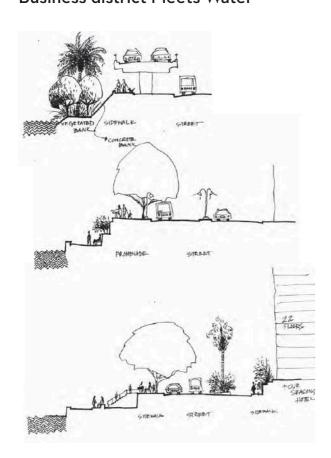


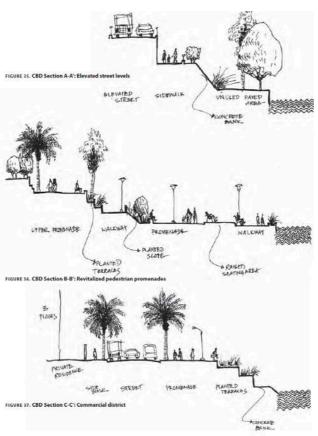


These categories include: Business District meets Water; Heritage meets Water; and Government Facilities meets Water (Kondolf et al, 2011). The study of Al Qursaya explores a fourth category of these land/water conditions- that of Rural meets Water- the rural landscape amidst the urban jungle, operating within the asymmetrical power dynamic of the governed/community and the governing/authority. The existing ecologies on Al Qursaya and communities corresponding resultant informal economies and social fabric in response to the divide between the government, are examined in how they affect urban livelihood, in order to explore the role of space in mediation.

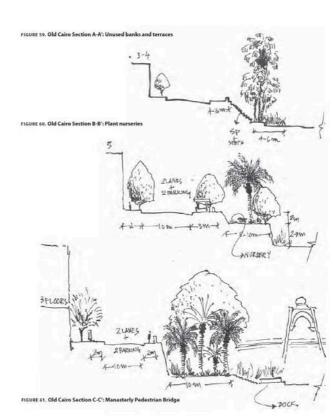
Although the current disconnect may suggest so, the Nile and its islands may be framed, not as voids in the city's urban fabric, but perhaps as arteries for the community.

### **Business district Meets Water**





### Heritage Meets Water



### Government Facilities Meet Water

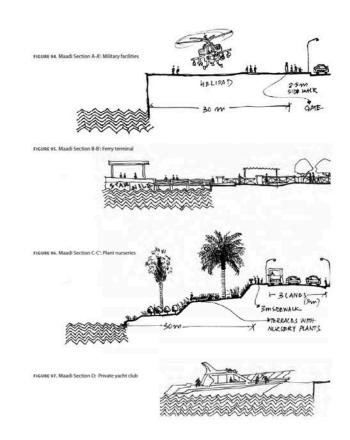


Image Sources: Kondolf, G. M., Mozingo, L., Marzion, R., Balakrishnan, K., Gohar, A., Jewell, L., ... & Church, T. (2011).

Connecting Cairo to the Nile: Renewing life and heritage on the river (No. 2011-06). Working Paper.

### Location and Site as a Resource and the current Climate of Rapid Urbanisation in Cairo

Despite the historic significance of the Nile in shaping Cairo's urban development, the current state of the riverfront warrants critical examination. The waterfront has been a focal point for various development projects driven by political interests (Tawakkol, 2021). While these initiatives are often marketed as inclusive and accessible, they have sparked debates about their effectiveness in meeting the diverse needs of local communities within Cairo's social-class divisions.

Efforts to activate the riverfront through various facilities have frequently resulted in underutilization and limited public access, primarily due to the privatization and commodification of waterfront amenities. Exploring the transformation of Cairo's Nile riverfront, highlights its historical importance and the modern challenges it faces. The waterfront is viewed as prime real estate, with access often symbolizing wealth and luxury. This is evident in the historic presence of international embassies along the Nile and exclusive yacht clubs that require memberships for entry.

Examples, such as community centers located on the Nile, demonstrate attempts to promote civic engagement, yet these initiatives primarily serve an elite demographic, with expensive entry fees (Khedr, 2021). Fieldwork showed nearby kayaking and water sports facilities that further exemplify this trend, underscoring the need for more inclusive, community-focused approaches to waterfront development. Government projects along the river aim to capitalize on its presence, impacting accessibility to islands, views, activities, and microclimates along the waterfront.

Recent political projects include a public promenade branded as "The Walk of the People of Egypt," intended to enhance urban access along the Nile. This initiative aimed to promote clean transportation as well as public space by incorporating benches, bike trails, and various facilities (Elsaman et al, 2022) Fieldwork shows that the reality is largely an abandoned and inaccessible space resulting from evicting successful local businesses such as plant nurseries and community art centers. The commercialization of this walkway has further entrenched social segregation by imposing economic barriers; vendors charge fees for access while cafes and restaurants set minimum charges exceeding local workers' average incomes.

The islands within Cairo's urban landscape may offer unique opportunities for ecological preservation and their existing community involvement. Although designated as protected nature reserves under Egyptian law, these islands remain underutilized due to limited accessibility from the mainland and a lack of basic services for local residents. A notable example is Maadi Island, which has become an urban scar due to violations of environmental laws. Despite its potential to address public space shortages for underserved communities in Badrashin, it has not yet fulfilled its promise as a socially inclusive and ecologically responsible initiative.

Image Sources: Original Photography by the author







"Countryside in the middle of the city – and that's why I came here and I decide to live here," says Mohammed Abla, a prominent artist who moved to Qursaya in 1997.

"And I think the first years were very quiet but the problems [started in] 2000."

Source: The Egyptian Independent

The focus of this chapter is the island itself- its state of dispute; its status among Cairo's other islands; its community; its ecology and its current practices.

The Egyptian Independent in 2013 presented the story of Al Qursaya is one of betrayal and struggle. Claiming it to be a story of "violence and imprisonment, of the powerful targeting the marginalized, of ruling interests trampling over the rule of law, and of an ongoing struggle against a state that regards its poorest citizens as a bothersome nuisance for impeding plans for progress. The military stormed the island with troops and bulldozers to try to forcibly evict the residents. They refused to leave and instead took their case to court and won. The government challenged the ruling, but was shot down in 2010 when Egypt's highest administrative court ordered the government to halt any eviction plans...



Nevertheless, the army maintained a small camp on the island, where it grows crops and sells them back to the residents. After the revolution, the army presence thinned out until two months ago (dated Jan 2013), when it decided to strike with brutal force." (Abdelkaddous, 2013 Egypt Independent)

Located in a prime location in the heart of Cairo, Al Qursaya has become the focus of the political discussion of ownership and control, where the government has made several attempts at evicting the people to complete its plans for a touristic facility, and the local residents continue to battle to keep their land and homes. (Bell, 2009) and (Dorman, 2021)

Al Qursaya is one of the few remaining rural communities that still exist within the geographic urban core of Cairo. Located in the heart of the city and only accessible by boat, it sits meters from the west bank of the city surrounded by a network of larger islands. Al Qursaya Island has been inhabited by generations of farmers and fishermen and even some local artists. With a population of roughly only 1000 fishermen and 4000 farmers, it covers a 70 acre rural community composed primarily of pastures and agricultural land.

Generations of families have been raised on the island. They have built homes and established roots while cultivating their land, and fishing the surrounding waters. The islanders lead an independent lifestyle of their own, a pocket of rural simplicity nestled within the bustling urban sprawl that is Cairo, starkly contrasting with the dynamic modernization surrounding it. The transportation on the island is mainly on foot, donkey, or bicycle, with no vehicles or bridge tying it to the mainland. The island is only accessible by boat. In an era of transformation of the city marked by rapid technological advancements and urban transformations, including the advent of high-speed railways, the island appears suspended in time. Only recently gaining access to running fresh water, it stands as a testament to a slower-paced, self-sufficient way of life,

yet is telling of the neglect by the government in providing basic facilities for living. The islanders established their own basic infrastructure, bringing in electricity and water, which they funded along with taxes on real estate and farmland. Although the government has never granted them ownership rights, to the residents, Qursaya is undeniably home.

However this research does not look at the story from the oppressive perspective, but takes the notions of Spatial Agency to look at the critical analysis of the situation, to see it as a consequence of commodification of architecture and the neglect to acknowledge it as part of a wider network. A proactive approach is adopted, one that operationalises architecture to mediate these divides in ways that seek to explore potential mutual benefit and common ground.

Al Qursaya island is one of three remaining undeveloped and inaccessible islands in greater Cairo- the others being Dahab Island and Al Waraq, where Al Waraq now is completely controlled by the military. Other islands- El Manial and Al Zamalek were connected to the city proper in the early 20th century with modern vehicular bridges and subsequently urbanised to become part of the formal fabric of Cairo. Exploring these islands can provide a context for more community-centered and responsive architectural mediation on Al Qursaya by understanding the surrounding fabric and network of Nile islands it exists within. The government aims to benefit from the high land value of the Nile islands as prime locations and has made several attempts of evicting residents in Al Qursaya to complete its plan of including a touristic facility on the island.

Al Zamalek presents an interesting case study, an illustration of top-down utilisation strategy of public space. A recent governmental initiative across Greater Cairo involves the construction of a new pedestrian and cycling

path along the Nile's waterfront named the "Walk of the People". Intended to provide much-needed public access to the shared resource of the river and its multiple ecologies, the initiative presents a largely hard landscape, which in the case of Al Zamalek and other affluent neighborhoods of the city, is commercialised with cafes, restaurants and other retail services. Together these form a socio-economic edge and barrier to this access, only allowing those with the means to patronise these establishments comfortable access to these spaces. This example illustrates a form of binary mediation, where the government plans to create public space, however its return on initial capital investment shifts priorities from a publically accessible to economic return, increasing the socio-economic divide as a means of controlling access.

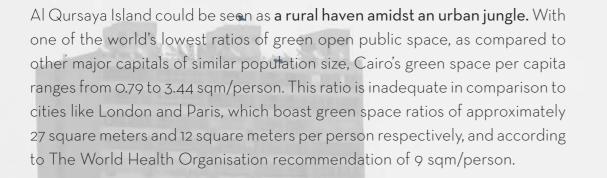
In the case of the Island of Al Qursaya we see what those spaces mean in terms of legislation and urban governance. We aim to understand the gradient of the public that exists in the city, and the island and the transformation in social agency. In understanding the multiple divides between the conflicting needs of the island- economies and ecologies, formal and informal, land and water, natural and man-made, urban and rural, the green and the grey, the solid and the void, the abandoned and the occupied- we can establish the canvas on which our proposed mediation can be explored.

Learning from Local Stories: The Power of Community Driven Agency: VeryNile is a non-governmental non-profit collective working with Al Qursaya island to partner with local marginalized groups- specifically fishermen and women- to establish waste collection systems and provide job opportunities. They work with a focus on the waterfront ecology with projects on Al Qursaya island and in the southern region of the country in Assiut. They benefit from the existing local expertise of fishermen to fish for plastic, as well as the local crafting skills of women utilising various traditional weaving techniques to produce products out of the recycled plastics. They are effective change agents promoting the pioneering practice of cleaning the Nile from its

plastic contamination and creating an economic base of resources and job opportunities for the community as a result. As their mission statement summarizes they are committed to "cleaning the Nile, one kilometer at a time.. (by partnering) with local fishermen and women, offering fair wages and social services in exchange for their plastic-collecting efforts. This not only cleans the river but also improves lives and builds sustainable livelihoods."

The VeryNile practice involves collaboration with fishermen in the community and partnering with them to incentivize the collection of plastic waste from the Nile by purchasing any plastic they collect. This plastic is later sorted and treated and recycled to be used as raw material for several different products to be produced by local women utilizing their local craftsmanship and weaving techniques to produce different products to be sold. They later expanded their headquarters by providing a small classroom for the women to leave their children while they work, as the first educational facility on the Island. Their business model not only offers potential for broader scalability of their model to different rivers and river islands but also creates a circular economy that integrates all stakeholders involved in all stages of the lifecycle and design process. The VeryNile example provides a case study with proven efficacy through its adoption of participatory processes such as community engagement and interaction to inform and create a profitable business model that builds on local expertise and provides a platform for connection and balances the financial and the social. This helps in creating long-term effects and resilient practices while promoting social cultural change through a mutual relationship of trust and impact.

This structure provides a helpful framework for an architectural interpretation that would adopt similar practices of community engagement and practices across the life span of a project but in built form, using architecture as a mediation tool. It positions spatial practices as a stage upon which these systems, cultures, products and traditions can unfold, expand and continue to flourish.



The city's islands can help potentially offset this deficit, but must do so within a framework of community agency, mutual benefit and non-exploitative practices that do not adopt gentrified, commodified and capitalistic trends seen in other contexts. The islands can provide access to important microclimates through strategies that still preserve communal needs and mediate any conflicting priorities.

Through the analysis of the island's stakeholder needs we discover an evident lack of facilities for education for their children as well as work opportunities for women. The potential expansion of the Very Nile model could provide an important avenue for expanding job opportunities and providing stable income, by facilitating new projects with tourism and income generation in mind while respecting local community traditions, come up practices and empowering their skills and labor.

Analyzing the current state of the Nile islands reveals insights into their potential for expansion and utilization within Cairo. This prompts us to consider the significance of having a nature reserve situated in the heart of a bustling city like Cairo. We must evaluate whether these islands are reaching their full potential and explore various strategies to enhance their impact.

The designation of these areas as natural reserves carries both social and environmental implications. How can we assess these aspects to maximize benefits for both residents and the broader urban landscape? What would public access to these islands entail? Furthermore, we should examine the interconnectedness of the islands and appreciate their collective significance.

These inquiries were investigated through fieldwork, with a focus on deepening our understanding during the design process.

Agriculture and Local Expertise as An Asset: The Nile banks hold some of the most fertile soil in the world. Centuries of flooding and retreat of the river water carrying nutrient rich silt from the origins of the river have given this soil an agricultural capacity that is impossible to replicate with even the most advanced modern agricultural synthetic fertilization technologies. This nutrient rich soil and its incredible fertility coupled with the local agricultural expertise, which itself has been evolving for centuries of inherited family tradition, together present potential for agri tourism and a rural escape to the heart of the urban core of Cairo.

The ecological soil stratigraphy along the banks of the Nile, on the islands, and in secondary streams supports the growth of fertile soil, ideal for agriculture. This fertility promotes social sustainability by enabling island communities to independently provide their own food supplies, supplemented by fishing in the Nile, which has significant economic implications. However the recent construction work along the riverbanks has had significant effects changing the regular availability of fish species, putting several fishermen in search for new means of income.

Additionally, Nile clay presents opportunities for innovative building techniques using rammed earth, moving away from traditional brick and

mortar construction. This approach fosters sustainable, "do-it-yourself" earth construction on the islands. This do it yourself process of building can potentially serve as a mediator between the government funding of the project, with earth construction costing less that traditional cost of transporting brick and mortar onto the island. The community could contribute to the building process and collaborate in the creation and operation of a facility, empowering the community and promoting a sense of ownership of the space while providing the government with a fast, cheap and available solution. Several local NGOs and architectural firms are investing in research on earth construction as a viable solution for vulnerable communities in rural Egypt.

The Commodification of Architecture: Balancing Ecological and Economical Benefits: Cairo's Nile Islands present a potential cultural ecological asset. As possible nature reserves protected by urban legislation they have within them potentials and possibilities to benefit the City from both the ecological and economical sustainability standpoint. This potential needs to be framed away from capitalistic exploitative practices and engage in mutually beneficial meditative practices to bridge various divides while empowering vulnerable communities.

The underutilisation and previous failed pilot projects indicate the need for the introduction of locally adapted solutions to assist the capital in benefitting from the presence of the islands to reach their potential. This project explores that potential using architecture as a meditative practice- as both a node for agricultural ecological and cultural tourism and sustainable economies. The following presents an overview of those potentials:

The Ecology of the waterfront: The study of the Nile and Nile Island ecology comes with several benefits beyond the qualitative urban engagement of having communal activity, sports activation and sustainable urban inclusivity

of the Nile. The presence of a body of water in the harsh climatic conditions of a city like Cairo provides two-fold quantitative sustainable benefits- the presence of native trees and vegetation on the islands creates shaded areas that can mitigate rising temperatures caused by urban expansion and highcarbon footprint construction materials used in the surrounding dense built environment of the city; while he Nile allows for cooling and lowering the urban heat island effect in the city and reducing the average temperatures on the river banks, the islands and even on the surrounding bridges. Studies from "bridges over the nile" show various indicators of user comfort along the bridges overlooking the nile and the resultant creation and birth of informal communal activities on these bridges despite their prioritisation of vehicular and urban civic access in their design (Kondolf & Gohar, 2020). The bridges and areas overlooking the Nile become urban nodes for their thermal comfort and breeze. Which poses the question, why can a similar informal economy and node not exist on the nile island. It currently does not as a result of the limited space to accommodate leisure activities beyond the domestic space on the island, but can reimaging abandoned structures as communal nodes not leverage the microclimates of the islands and provide spaces for social inclusion involving the community.

Table showing the number of users using the bridges overlooking the nile during the different times of day and the activities they conduct.

			Walking	Stationed	TOTAL	Male	Female
Qasr El-	Midday	North	6	0	6	6	0
Nil		South	4	0	4	4	0
Bridge	Evening	North	87	96	183	131	31
		South	32	44	76	58	18
El-	Midday	North	0	0	0	0	0
Moneeb		South	0	0	0	0	0
Bridge	Evening	North	13	55	68	54	14
		South	3	3	6	5	I

Source: Kondolf, G. M., Mozingo, L., Marzion, R., Balakrishnan, K., Gohar, A., Jewell, L., ... & Church, T. (2011). Connecting Cairo to the Nile: Renewing life and heritage on the river (No. 2011-06). Working Paper.





## 2.3 Designing Across Divides: A Review of Mediating Practices.

The examples discussed in the following segments illustrate the potential of designing across different divides, utilising architecture as a means to mediate across different contexts. They provide potential strategies to adopt or explore in the context of Al Qursaya keeping in mind the specifics of geographic, demographic and ecological characteristics. The discussion of these examples helps provide a clearer look of what mediation looks like in practice on the ground, analysing where it worked and where it failed, for urban citizens and policymakers to promote urban practices that make effective and responsible use of their natural resources. A critical analysis of the challenges and opportunities in localising these solutions to fit specific residents of Al Qursaya's needs presents the potential future scalability and broader applicability in varying contexts and scales for better quality of life for vulnerable communities globally.

### Potential Design Strategies: Architecture as a Tool for Mediation Reimagining "Public Spaces"

Strategy: Creating a network of public spaces that also serve as income generating activities for tourists or for the benefit of the general public, these can be market places that sell locally produced products, or communal kitchens and farm-to-table restaurants. These can take shape in existing abandoned buildings or as a modular system of kiosks or small interventions built using local natural materials available on the island as well as the island soil for earth buildings. These could host markets, workshops, or social gatherings, addressing the island's lack of public infrastructure but accommodating a different gradient of levels of accessibility, between public and private.

### Educational and Vocational Nodes And Agro-Ecological Economies

**Strategy:** Establishing a communal center could build on the existing communal kitchen model or draw inspiration from the cultural concept of "maedet rahman," which translates to "the table of mercy" in Arabic. This

concept represents a communal dining table in underprivileged areas where, during Ramadan, community members contribute food items to share a meal at no cost, supporting vulnerable populations. Such a model can empower locals by enhancing their circular enclosed economy principles embedded within their existing fabric and promoting crafts made from recycled materials and sustainable farming practices, ensuring that nothing goes to waste. These strategies would enhance food security while preserving ecological integrity, and could double as public spaces or even community and touristic attractions.

### Awareness and Ownership through Design:

**Strategy:** Use art installations, or workshops to encourage residents to reflect on the island's unique ecology and economy. Sculptures, urban furniture, playgrounds, shading systems made from recycled materials, earth building or the integration of vegetation to create shading systems or mural projects can visually narrate the story of sustainability and resilience and help the residents further identify a sense of ownership and belonging.

### Minimal Imposition Maximum Independence:

Strategy: Utilize and benefit from participatory design workshops to let residents act as spatial agents and inform these interventions, seeing them as key stakeholders in the potential project implementation plans, and not obstacles to hinder the process for the government. Maintaining existing structures and potentially expanding them using structures that are lightweight, modular, and easy to maintain, reducing reliance on outside expertise and raw materials, only sourcing local materials and labour. Utilise the existing micro climates and passive strategies, the existing vegetation to enhance air quality as well as nile mud for natural cooling.

### Embedding within existing fabric:

**Strategy:** Utilise a decentralised approach of fragmented infrastructure, implementing micro-interventions across a dispersed existing fabric. In this we draw on the reference of Alberghi Diffusi, a fragmented hospitality typology, implementing diffused hoteling throughout Italy to create tourism opportunity, economic benefit with minimal disruption to the social and physical fabric of the city.

### Dawar El Ezba Cultrual Center, Architect: Hossam Saafan

Ezbet Khairallah, Cairo, Egypt

### The Divide:

68

Migration vs Authority: Migrants, Refugees and Women (poverty) | Government and Municipal Authorities (threat of eviction)

The informal community of Ezbet Khairallah is under constant threat of eviction.

Their tenure security is continuously precarious. The neighborhood is a destination for multiple migrant and refugee communities in Cairo, providing affordable housing and work-live opportunities, albeit in high density neighborhoods, tenure insecurity and limited infrastructure. The neighborhood provides the social capital of a tight-knit interconnected community. Of particular vulnerability are the intersectional identity of women-both migrants or refugees and from the local community. Their poverty and limited economic opportunity further augments their vulnerability.

The Mediation: This project uses food- it's production and communal act of consumption and distribution- as a catalyst for change- through the creation of job opportunities, economic development and social integration of these vulnerable community members. It expands this provision to include art spaces as further catalysts of social integration and development. These include an art studio, theatre, workshop and social gathering space- bringing the community together around the cultural power of food. This centers the migrant, refugee and women's role as one of the providers of these values in the community, bringing positive social capital to this often stigmatised group.





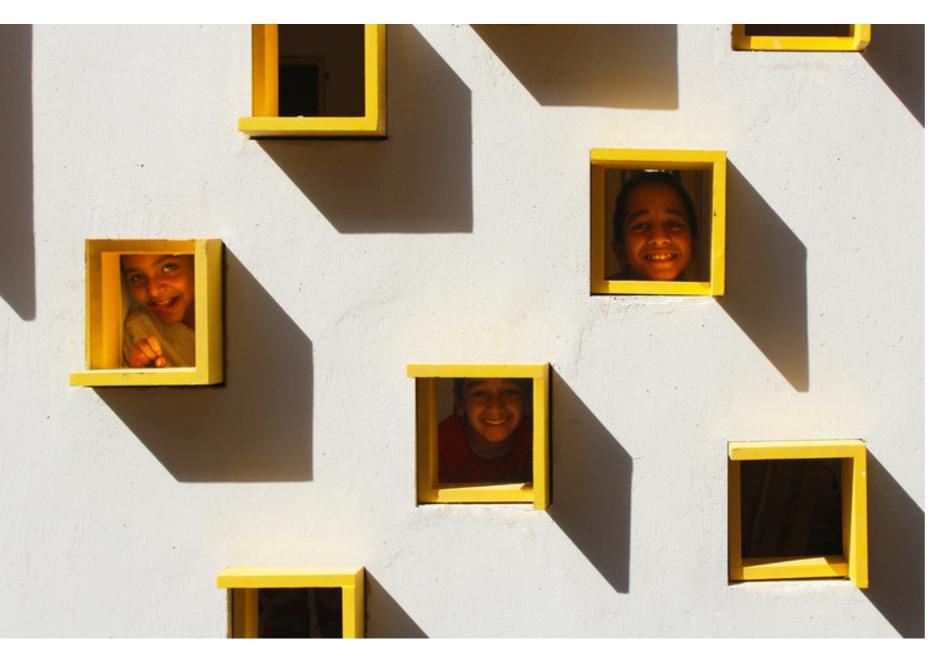


Image Source: Photographed by Hossam Saafan

The economic base of the 850,000 people living in the neighbourhood is primarily based on metal and wood workshops. The construction of the project leverages these local human and material resources, showcasing a contemporary and low-cost method of construction as an alternative to the reinforced concrete skeleton brick and mortar construction of the neighborhood. The building also incorporates a vertical garden, and demonstrates the impact of economic viability of urban farming in dense informal settlements. This provides an exemplar of low-cost local food provision, which should it be replicated and scaled up- has the potential to minimise the carbon footprint of bringing in fresh produce from outside the settlement, provide vertical green lungs to the congested community, as well as income generation for families.

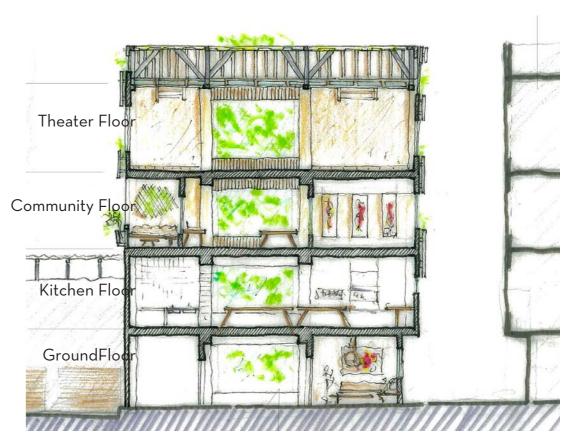


Image Sources: Sketch by Hossam Saafan

### New Gourna Village, Architect: Hassan Fathy

New Gourna, Luxor, Egypt

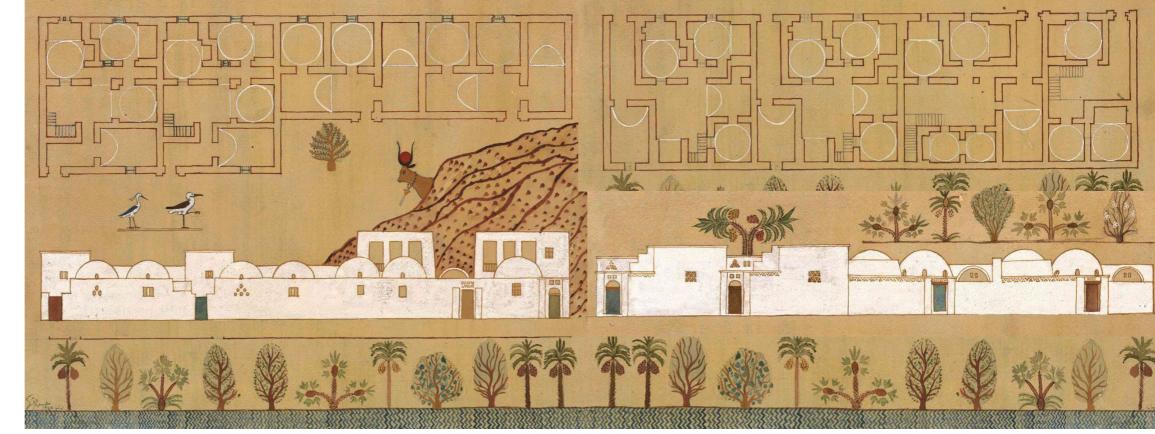
The Mediation: The original masterplan for New Gourna incorporated a layout that respected the social organization of the old village, dividing the new settlement into neighborhoods corresponding to the five tribes of the original community. This design aimed to facilitate social cohesion among residents. Fathy's approach included using local materials such as mud brick and adobe, which were not only cost-effective but also culturally resonant with the community's traditional building practices.

The Divide:

Land vs Authority: Settlement of the Old Gourna Community | Government

The New Gourna project aimed to provide a new settlement for the relocation of the population of the Old Gourna community. This community had been living above the ancient tombs in the necropolis of Thebes, with some families engaging in the illegal trade and smuggling of stolen artefacts. These practices dated back centuries, and for some, were their primary source of income. This situation posed significant risks to the preservation of these historical sites, as the presence of residents, their activities and growing population threatened the integrity of the Pharaonic tombs and the illegal trade was difficult to monitor or regulate, with so many historical tombs undiscovered, undocumented and unexcavated.

This choice was intended to foster a sense of ownership and connection to the new village. Fathy emphasized citizen participation in the construction process by training local masons and involving residents in building their own homes. This cooperative system aimed to reduce economic dependency on external resources and ensure that the architecture reflected local needs and traditions. Despite these intentions, the project faced resistance from residents who were reluctant to leave their ancestral homes, which they found more familiar and economically viable due to their involvement in antiquities trade. The village included essential community facilities such as a mosque, school, market, theater, and town hall. These structures were designed not only for functionality but also to enhance community life and cultural expression. The inclusion of communal spaces like courtyards was intended to promote social interaction; however, these features did not align with traditional practices in the region, leading to underutilization. This was despite the climatic and social value of the courtyard house prototype, which created cool private social spaces in the heart of the homes in a hot climate.



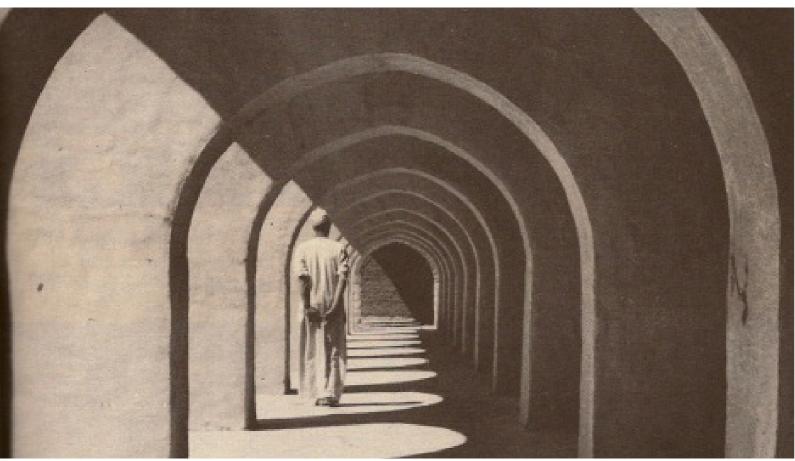


Image Source: The Hassan Fathy Architectural Archive Digital Collection at The American University In Cairo

The project ultimately faced political and financial challenges that hindered its completion. The unspoken lucrative antiquities trade proved too lucrative a practice to abandon, leading to resistance from the community to relocate. The Egyptian government's disengagement after three years left many intended features unbuilt, leading to only a partial realization of Fathy's vision, further contributing to it not meeting its goals.

New Gourna Village illustrates both the potential and challenges of using architecture as a mediator between rural communities and government authorities. While Fathy's innovative approach sought to empower residents through participation and culturally relevant design, the project's ultimate failure highlights the complexities involved in such undertakings. The lessons learned from New Gourna continue to inform contemporary discussions on sustainable development and community engagement in architecture

Despite its shortcomings, New Gourna remains a pivotal example of how architecture can address socio-political issues by attempting to integrate local culture with modern governance needs. The trained masons continued to apply their skills throughout the region, demonstrating a lasting impact on local construction practices, with lasting impact to this day. Disciples of Fathy have continued this construction tradition, with great success- scaling it up to prototypes beyond housing- including cultural buildings, recreation and hospitality. The work of Ramy Eldahan and Soheir Farid in the Aga Khan Azhar Park and the Gouna resort community are two examples of this impact.

#### The Divide:

Tensions between the community government authorities, police and cultural institutions such as the Ministry of Antiquities that oversaw all historical sites grew untenable and a decree to relocate the community was enacted. This separates the community from their original land and their familiar context which was located in the mountainous foothills of the desert belt running parallel to the Nile's rural agricultural strip. The new site brought the community to the lowlands, closer to the riverfront in a rural, as opposed to desert context.



Jenna Ashraf Hussein Tawfik 2024-2025.

### The Nubian House, Vernacular Architecture

Nubia, Aswan, Egypt

#### The Divide:

#### Displacement vs Authority:

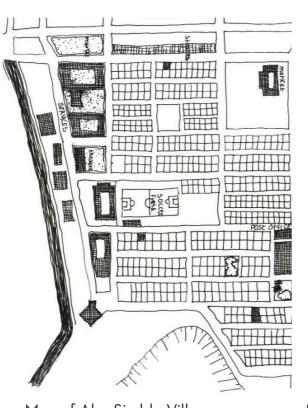
Displaced Nubian Communities Egyptian Government

With the construction of the Aswan Dam in the decade between 1960 and 1970, the community of Nubia, located south of the dam location. found themselves displaced as a result of the planned immersion of their former nile front communities by Nasser lake- the planned reservoir behind the Aswan dam. This period was called Al Tahjir- or the migration. The Egyptian government facilitated their relocation to the North of the dam, but in government social housing- designed by architects, dramatically different from the vernacular self-built dwellings they left behind- these new structure lacked the architectural vocabulary that supported their social cohesion, ecological sustainability and cultural expression of clustered courtyard housing.

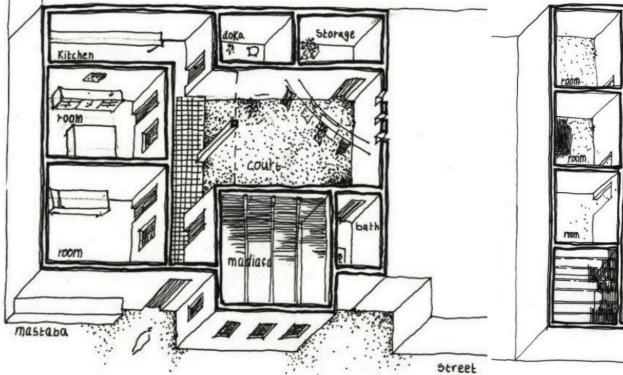
The Mediation: Fifteen years after this displacement, a community of Nubians decided to return to the reverbank region of the Nile and resettle. This project brought their traditional building techniques using mud and palm fronds to the resettlement community. Land was didivided in an area called the "Self-Help" quarter. This provided what we would today call bare-bones urban planning- street networks, basic infrastructure and land division- with facilitation of selfconstruction.

Families came together and built communally. This later became the social blueprint that Fathy used in his practice, famously saying, "ten individual men cannot each build a single home, but ten men together can build ten homes".

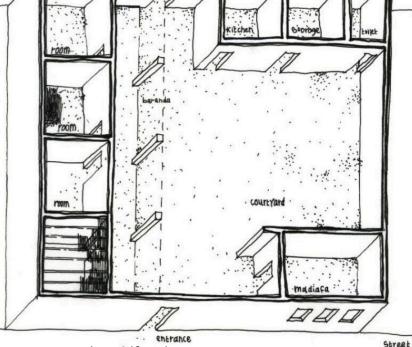
Many of these "Self-Help" quarter structures were adapted to the local climate and resources, demonstrating resilience against environmental challenges. The house prototype worked to emulate the traditional Nubian courtyard house, preserving their extended structures at the level of the unit- and their social clusters at the level of the neighborhood. The Nubian experience emphasizes community identity and social cohesion, illustrating how architecture can mediate cultural heritage with modern needs while fostering dialogue with governmental policies regarding land use. (Mahgoub, Y, 1990)



Map of Abu Simble Village



Fakhri's House at Abu Simble El Tahjir



A House at the Self Help Quater

Jenna Ashraf Hussein Tawfik 2024-2025.

### Street Revitalisation through Street Lighting, Locus Foundation

Garbage Village, Mokattam, Cairo, Egypt

#### The Divide:

similar to Al Qursaya in scale, as well women and children. as spaces informed primarily from their activities, whether agricultural practice of garbage collection. Garbage Village could be seen as an area of designers and urban practitioners neglect, its spatial design is informed by the need for the building to operate as a recycling machine, and beyond the building scale, the neighborhood to operate as an enclosed circular economy and recycling machine, making the production of spaces a result of the process of recycling. Can this form of practice-informed design be scaled and adopted to Nile-Front communities on in the Island?

Basic Infrastructure Needs vs Authority: Promoting cleaner water supply, adequate agricultural practices A socially segregated neighborhood and regenerative self sustainable communities along the nile of largely Coptic minority families. and in the islands? Where the Nile can be once again seen as During the industrial revolution these a resource facility as opposed to a natural barrier on the city's families migrated from rural suburbs urban-map. The community of Zabaleen is largely an informal to the capital in hopes of providing a settlement, with all the infrastructural insecurities of these better life, during the time they were types of settlements. Legal energy infrastructure is limited and discriminated against and denied job highly controlled, and according to some intentionally withheld opportunities. They began collecting to force illegal theft of electricity- which is then leveraged to domestic waste, slowly their primary keep the community insecure and reliant on the government income was generated through waste for fear of legal ramification. This robbed the community of collection and recycling of all of Cairo's much of their spatial agency. This lack of electricity, particularly waste (Wiacek, 2020). The small scaled in the public realm, leaves the neighborhood's street dark community's urban space emerged from at night, creating an unsafe and unstable public conditiontheir practice of collecting garbage, particularly for vulnerable community members such as

The Mediation: In 2012, shortly after the Arab Spring, a group of European scholars and students came to the Zabaleen community to conduct stakeholder engagement and participatory design workshops. The objective was to work with the community to support them in identifying their needs and co-design solutions. Among the key stakeholders was the APE, an NGO located in the community and working closely with the church, to help make the garbage collection process less dangerous, more efficient and less reliant on child and female labor. The center works with local residents to build their artistic and design capacities and create upscaled products from the waste collected by the community from the greater Cairo region. Working with this local NGO, the team conducted multiple community events and mobilised funding and support to design and build the first prototype- a locally made street lighting system. The system was a simple, replicable chandelier typology that would hang around low-energy bulbs donated by sponsors, lit by electricity generated by biogas and solar generators- both locally assembled and manufactured. The biogas engines used local waste, further contributing to the sustainability of the project. The lighting assembly itself was made of tin can rounds, which were easy to cut and assemble by young women.







## The Divides and Dualities

This chapter is an exploration of the divides and dualities on Al Qursaya Island, as assessed and analyzed on ground through communal interaction and spatial observations and exploration of social constructs within the community. It discusses the findings by illustrating the different experiences during fieldwork on Al Qursaya Island, which included a series of interviews which revealed the island and the local resident unique self-sufficient and resource-efficient lifestyle, offering critical insights on the direction of the study of the islands ecologies of economies in informing its potential sustainable urban development.

These form a test bed for the initial curiosities framed in the earlier stages of the research. They explore the potential of design and architecture as a mediating tool for empowerment and reconnection within the context of existing urban constructs and their implementation and practical application on the island.

## 3.1 The Divides

## The Physical Divide:

Suspended in the city, the island only appeared in 1930, having prior to this date been submerged by the Nile. It currently exists with minimal modern infrastructure or physical connections to the mainland. Its small population is composed of farmers and fishermen, who migrated from rural outskirts to create a life for themselves and their families in the middle of the capital and create for themselves a self-sustained microeconomy. They built homes on the land and established livelihood for generations. They were granted rights of usage of the land with minimal formal paperwork of ownership. The government recently issued a decree of ownership of all Nile islands, fueling the ongoing dispute.











#### Controlled and the Uncontrolled:

Al Qursaya Island occupies a very high land value and is currently seen as a prime real-estate location in the the central core of Greater Cairo. Under the current governance structure post-2011 revolution there exists a "line in the sand" between the local community and the military controlled section of the island, where several ongoing court cases and battles of ownership between government and community. This precarious relationship presents the tensions and a sense of insecurity in the local community, for fear of land seizure and eviction at any moment. This divide, although with little physical manifestation beyond a spatial tension of demarcation, abandoned buildings and agricultural land due to the fear of eviction, is perhaps the most powerful on the island and most challenging, and consequently important to mediate. Successful architectural mediation here could present a blueprint for similar waterfront divides around similar power structures.

#### The Productive and Abandoned:

The duality of two contrasting poles of urban condition- the active and productive portions of the island, with a robust community of fisherman and rural farmers fishing the waters and working the land, to provide a self-sufficient ecosystem that is not reliant on the external greater city, contrasts with the abandoned land, and buildings, both finished and unfinished. This duality is a result of the political ownership dispute with the government, as well as the lack of facilities available on the island, including work opportunities for educational facilities, forcing young families to leave the island in hopes of a better life. The expense of transporting traditional building materials also led to the incompleteness of several structures when they became too expensive to continue building, resulting in a clear contrast between the active and dormant built fabric.

#### The Urban Rural:

The island includes two distinctly different fabrics each representing and housing one of the local communities. The congested urban typologies of fisherman's housing district present urban alleyways and tight streets in a denser fabric when compared to the rural landscapes of the farmers housing district, with individual small homes across the agricultural land. This contrast physically represents a broader social issue of poverty. Due to the increase in built material along the riverbanks, the species of fish which were available in the Nile have decreased significantly, and therefore the fishermen have struggled to make ends meet, whereas the farmers have continued to self-provide from their lands and maintained their wealth and self-sufficiency.

#### The Privilege and Poverty:

The contrasting dualities living in parallel to one another are private-owned ultra-modern villas of wealthy individuals, contrasting with the local community living in very basic conditions. Another notion is of the island itself and the livelihood on it, the delineation is one of access- there are those who never leave the island, and struggle to make a life for themselves on it, but are bound to it through a sense of ownership and belonging- and those who have the ability to leave, often through education and employment opportunity outside the island, but who then grapple with their sense of belonging and inclusion within the larger community.

#### The Land and Water:

The relationships between land and water could be reductively seen as a binary one, a linear divide between two different natural conditions. The rich ecology and complex geometry of the Nile riverfront and how it meets its banks actually presents a rich premise for mediation. A powerful natural resource, this intersection historically was the source of wealth and sustenance in the Egyptian context. From earliest documented histories, and

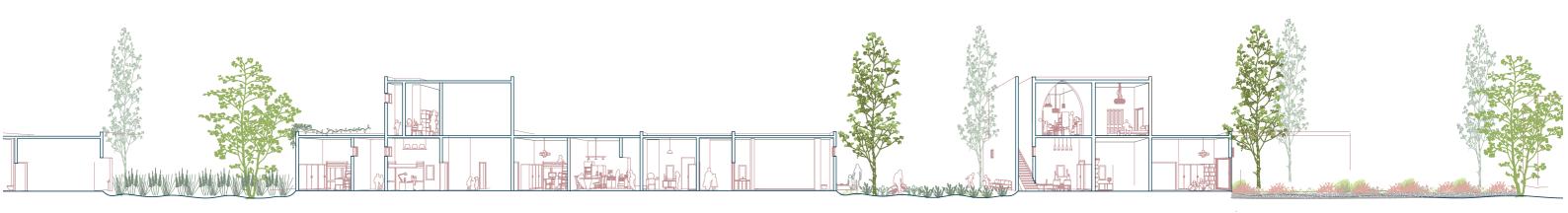
up to the construction of the Aswan dam, the Nile waterfront observed a seasonal rhythm of flooding and retreat of its banks, bringing nutrient rich soil from the equatorial regions of the river's source. This provided Egypt with some of the most fertile soil for agriculture in the continent, and supported the agro-communal networks along its banks along the entire length of the Nile. The continuous connection of this network led the country to being referred to as the "900 km City" (Tamburelli, 2012)

The Consumptive and Productive: The water-locked condition and limited accessibility of the island is seen as both a weakness due to the need to commute for basic needs, as well as an opportunity in promoting self sufficiency and profiting from natural resources and agricultural land. The island's community needs of resources to consume has resulted in the emergence of several agricultural activities as well as livestock farming and caring and a communal kitchen which is powered by local women partnering with farmers to create a microcosm and local interpretation of the now widely known farm-to-table concept. The contrast is of a community which seeks to produce in abundance and generate a small economic base to generate income. This can be explored and developed through the experimentation in how these small agricultural practices can be transformed into products to be sold and produced for aromatherapy, cosmetics and other raw materials for different products. Exploring the means of productive and consumptive agricultural practice can also provide insight into connecting economic drivers with local communal practices, where the potential program could integrate spaces for production of goods as well as farm-to-table concepts to align the communities expertise, utilising it as a resource to fulfil and align with the government's need for a profitable model.



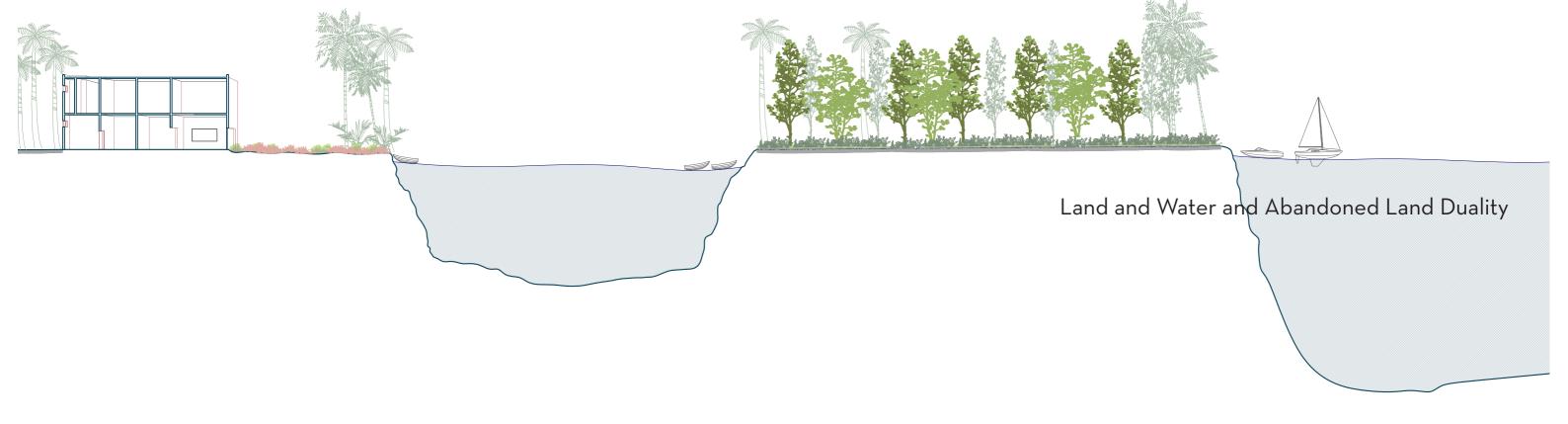




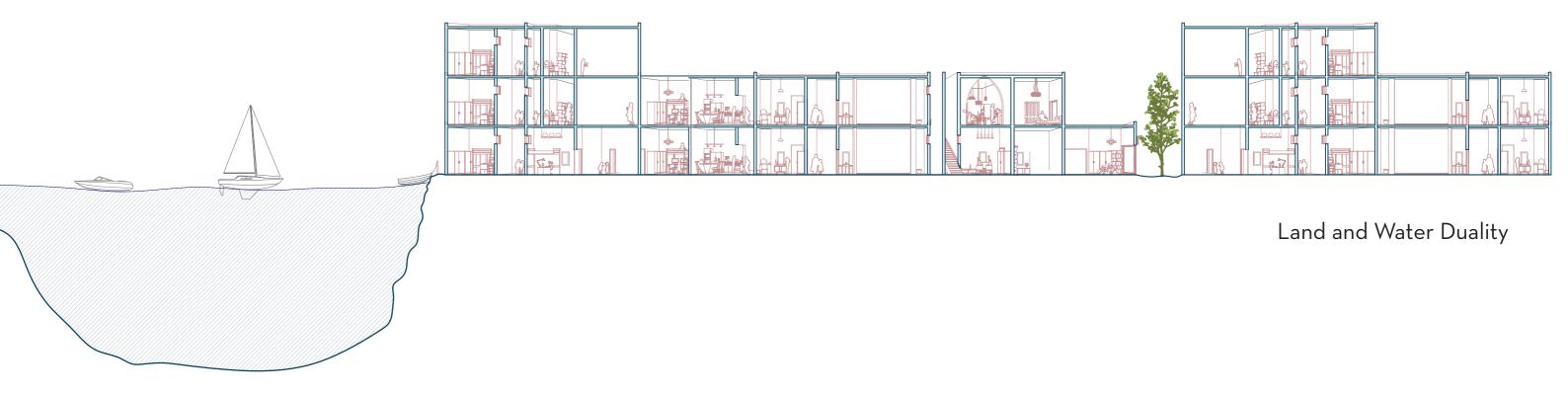


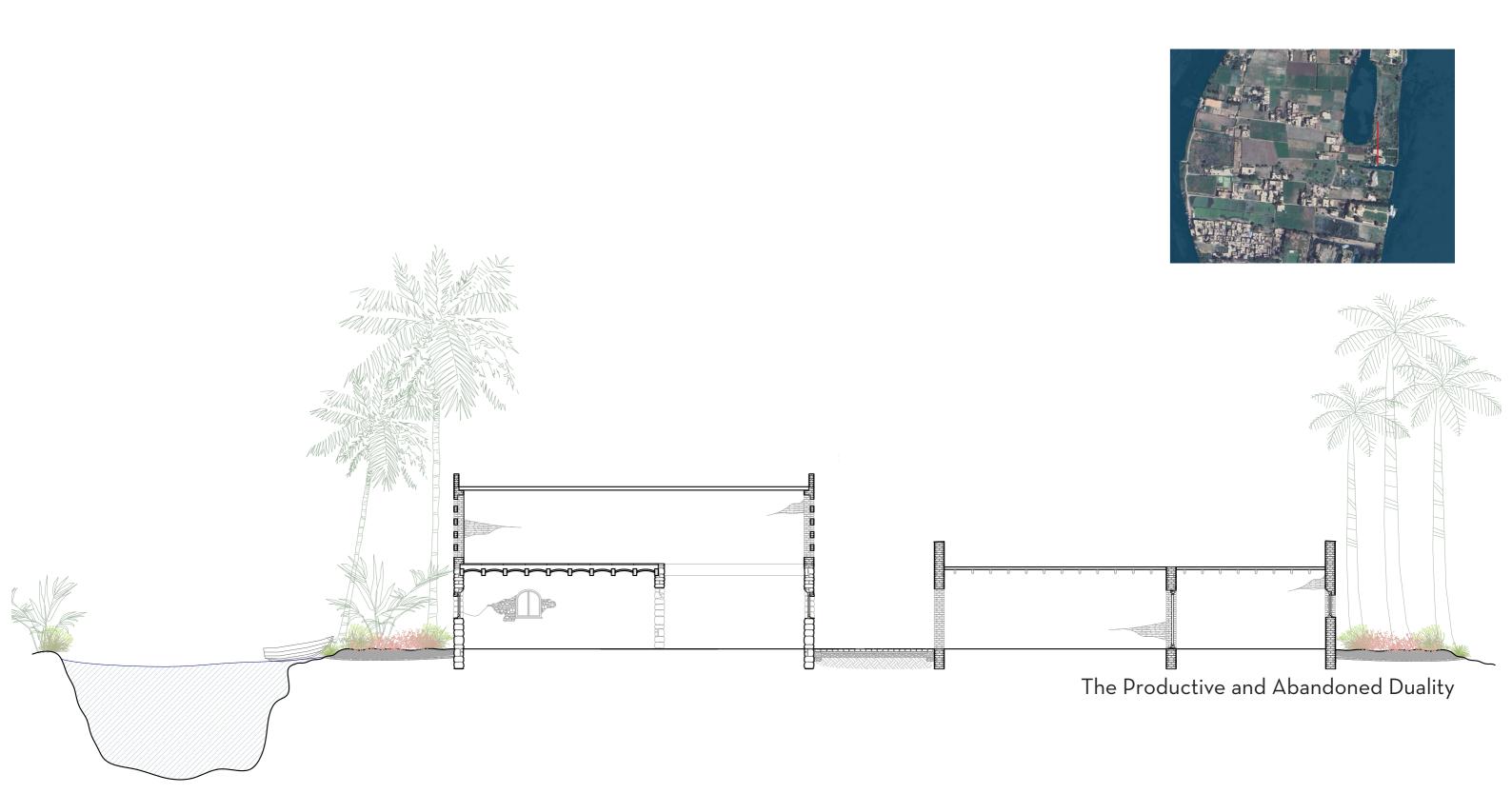
The Urban Rural Duality











### The Architecture of Abandonment

The ownership struggle between the residents and the community, this ownership struggle takes shape in the disconnection of the building structure, and the lack of transparency to the outside land as where the residents own their buildings, but dont own the land it is built on, therefore resulting in buildings that are completely closed off from the surrounding fields

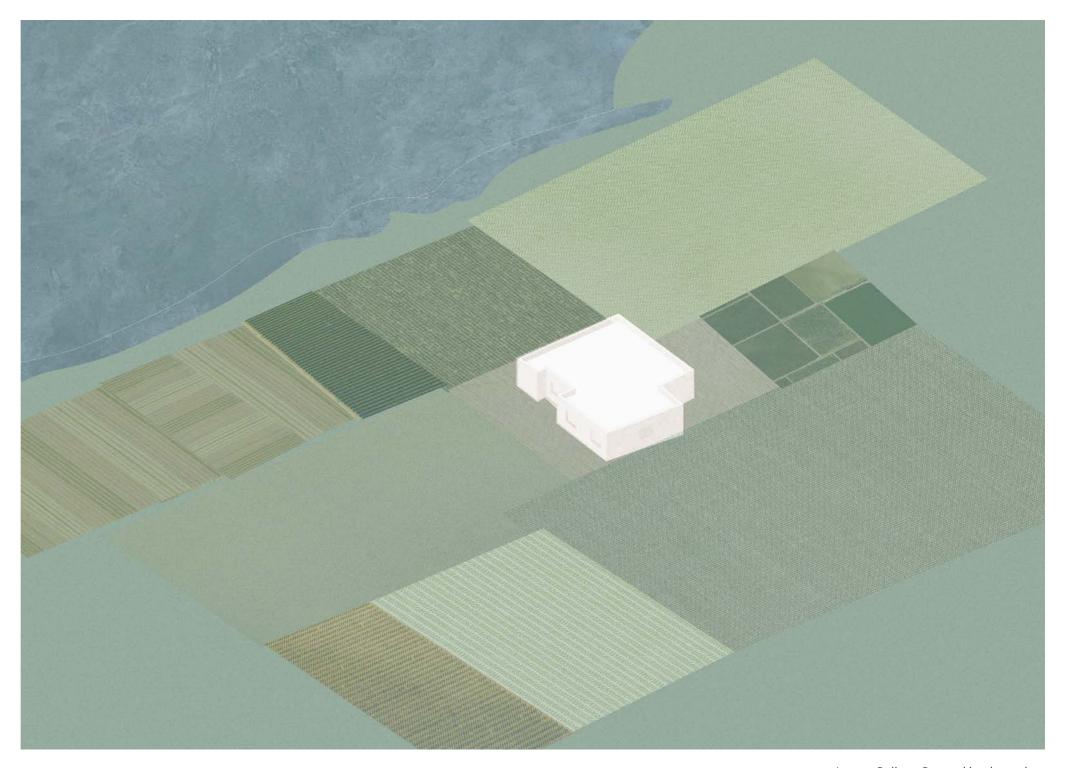
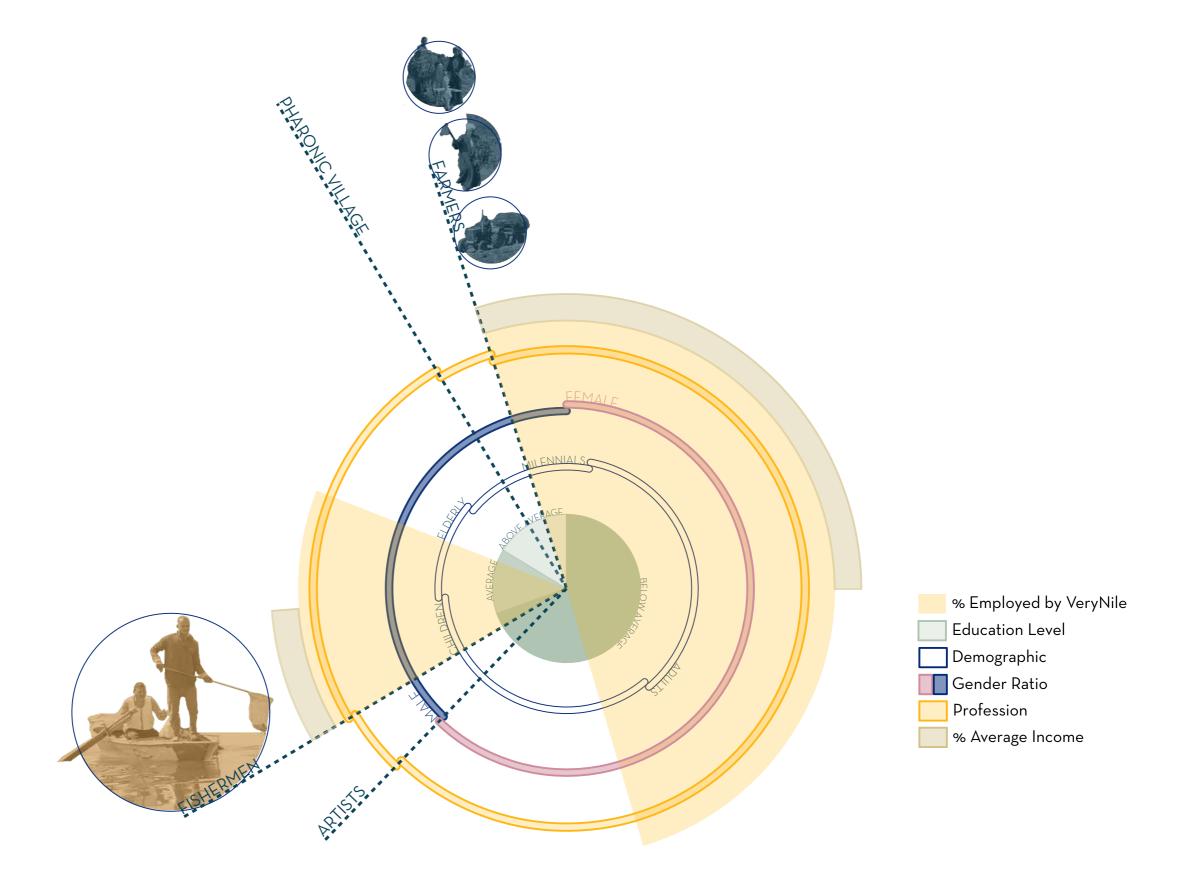


Image: Collage Created by the author,





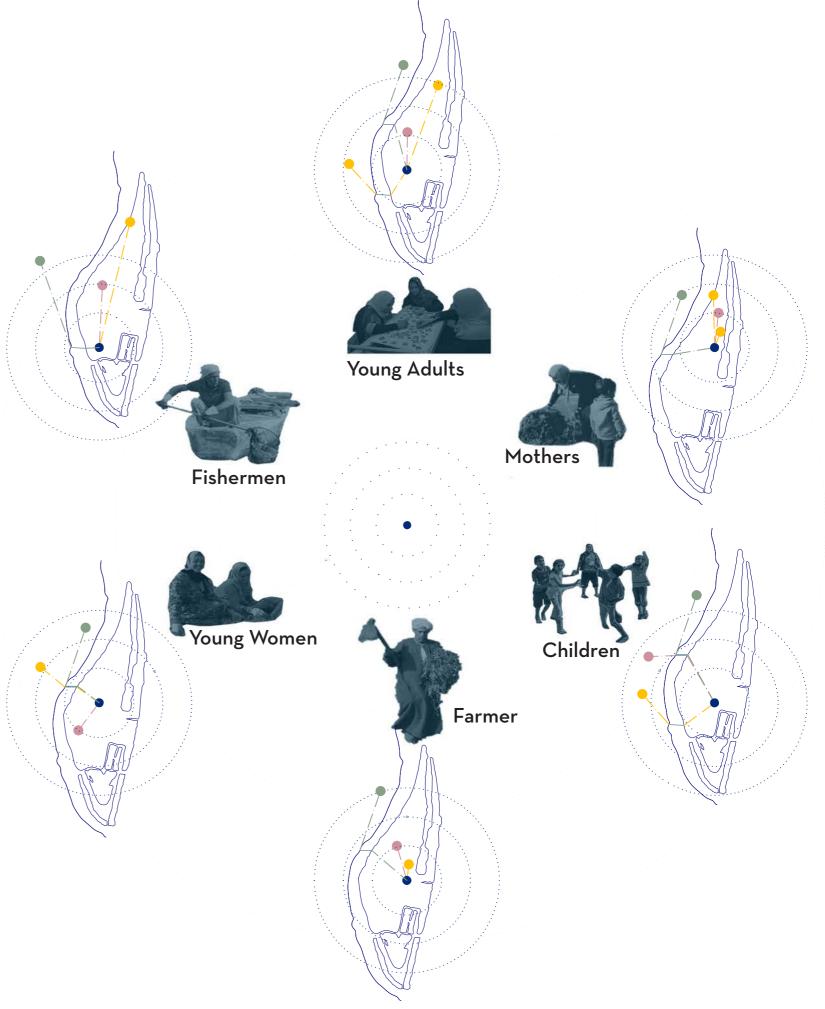
3.3 The Dialouge

Community Demographics as a basis for the analysis and design

## "Day In the Life" of a community member Mapping

A series of interviews and community observation uncovered a common thread, almost everyone had to leave the island for at least one facility, whether to provide sufficient income, schooling or basic healthcare, one had to leave in order to do so. The following diagram illustrates a map of the day in the life of different local members of the local community, mapping out their daily commutes to different facilities looking at the distances and time it takes for them to commute. This analysis uncovered a pattern of neglect on the island as it lacks basic infrastructure and facilities.







# Interview 2: The fishermen, one of VeryNile's plastic collectors, offered further insights into the ecological patterns of the Nile.

Q: Tell us about your experience with VeryNile?

Fisherman: There are different seasons to the work- summer is the peak season of the availability of plastic and garbage accumulation in the Nile. There are "garbage hot-spots" where waste was concentrated near cafes and public gathering areas. The river bank has a specific ecology and waterflow with different native plantations available on the island. The native Nile flower occasionally obstructs water-flow, though these blockages often create prime fishing zones.

Observation: This interview illustrates the potential of Al Qursaya's agricultural and recycling practices to inform broader urban sustainability strategies and acknowledge that each stakeholder operates as part of a wider social network. The island's adaptive reuse of waste and closed-loop agricultural systems highlights pathways to integrate ecological cycles into urban development while addressing community empowerment and resource resilience.



## Interview 3: Embassy employee working climate projects in Cairo, with experience on al Qursaya

Q: What is your relationship with the local community of Al Qursaya?

Climate project employee: The residents take pride in their self sufficiency and lack of dependance on raw materials and basic commodities from the mainland. Initially, the islanders were incredibly hesitant on trusting anyone who came to implement projects due

to the political situation with the military, who still maintained partial ownership of the land. The embassy worked with them on the potential for eco-tourism in adopting a farm to table concept in one of the old buildings, as the local residents currently have adopted a communal kitchen model where the women have created different culinary expertise and developed recipes using the crops grown on site. The project was co-developed by the residents and their involvement was vital, despite some of them still remaining hesitant to trust outside funding projects, most were passionate about the project and saw the potential in its implementation. The project went through several bio diversity studies, to better understand the potential in creating tourist attractions through the native plantations available on the island itself. The study assessed the native versus the invasive plantation and is currently undergoing refinement to understand what plantations and passive strategies can be developed to reduce the harmful impact of the invasive plantations, and which can allow the flourishing of the native plantations looking into the entire ecosystem of plantations as well as birds and different living species and organisms.

Observation: Although these reports are still in progress and are currently unavailable to the public, this interview offers insight into the potential direction of research taking place, which could align with the motivations of the design stage.





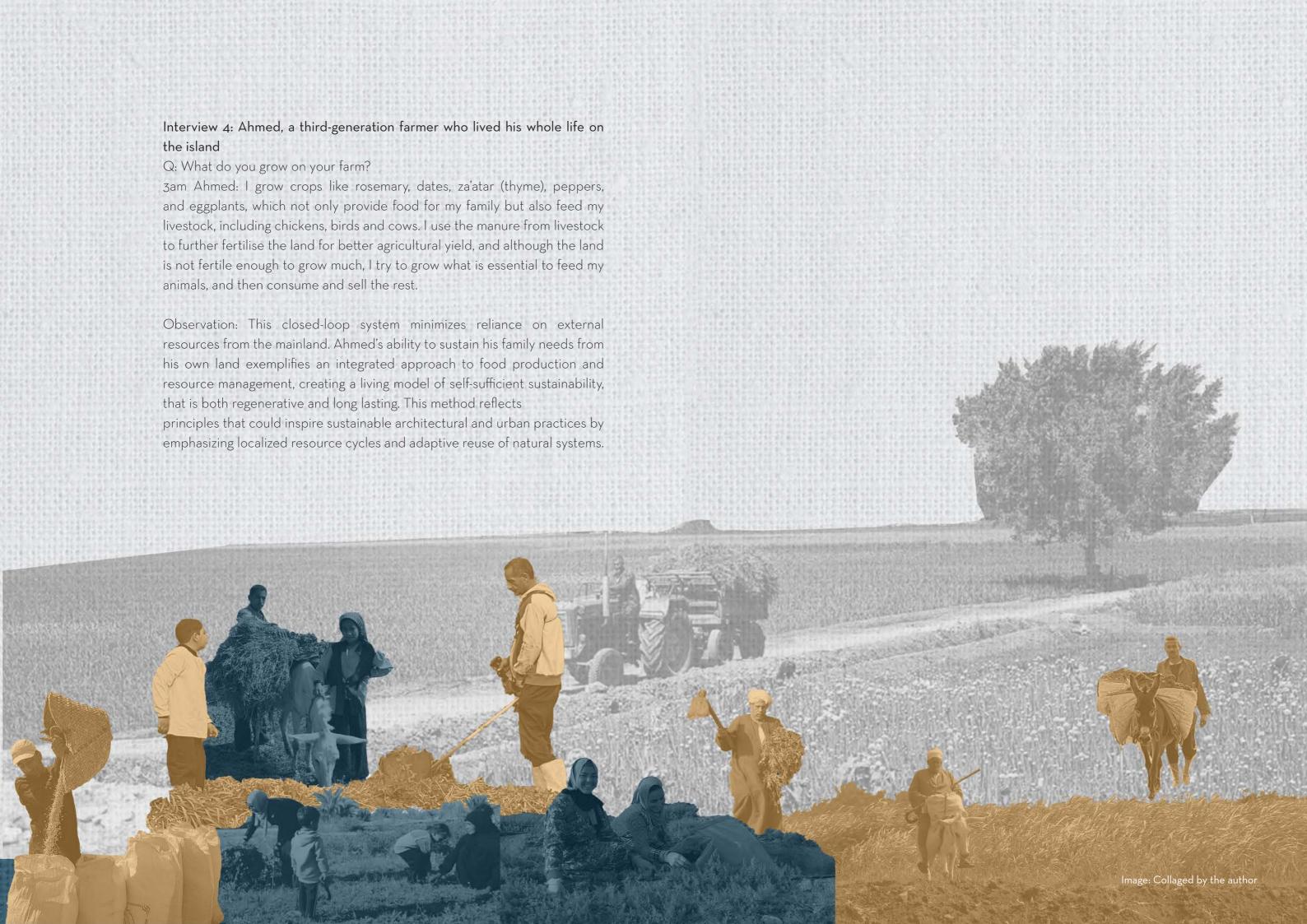






Image: Original Photography of the selected site current's situation by the author

## **Mediating The Divide**

The objective of this chapter is to present a design case study, counter to previous approaches found on site- one that mediates across the divide, rather than reinforcing it. It attempts to pair economic returns with local resident's needs. It explores a model that is inclusive of both, through mediating between profit and prosperity. It explores how architecture can achieve this mediation through providing spaces within which not only this mediation can exist, but overlapping motives can take shape.

Thinking of the act of empowering as something exclusive to policymakers, architects, urban planners and legislation may be limiting. Perhaps a more effective way to empower a community is to provide them with the tools to do so themselves. Some of the most sustainable practices are those that are regenerative beyond a specific timeframe, intervention or singular practice.

Jenna Ashraf Hussein Tawfik 2024-2025.

4.1 A Program of Mediation

within the existing urban system.

The Idea of a program of Mediation attempts to spark thought, bringing issues that currently go against one another, in this case the motives of the government in creating a touristic facility, while evicting the current community in order to do so by taking over their land. The community on the otherhand want

to preserve their livileehood. In understanding these different goals, where

they intersept and where they fall in contrast we can asses the possibility of addressing them through providing spaces to facilitate differing needs. This is done through an analysis of the existing urban condition, summarizing

the main takeaways from the fieldwork, to propose a program that operates

## From the fieldwork we can identify the following things lacking:

#### Lack of facilities and basic infrastructure:







#### Threats to livelihood:







#### **Existing Activities to Empower and Facilitate:**







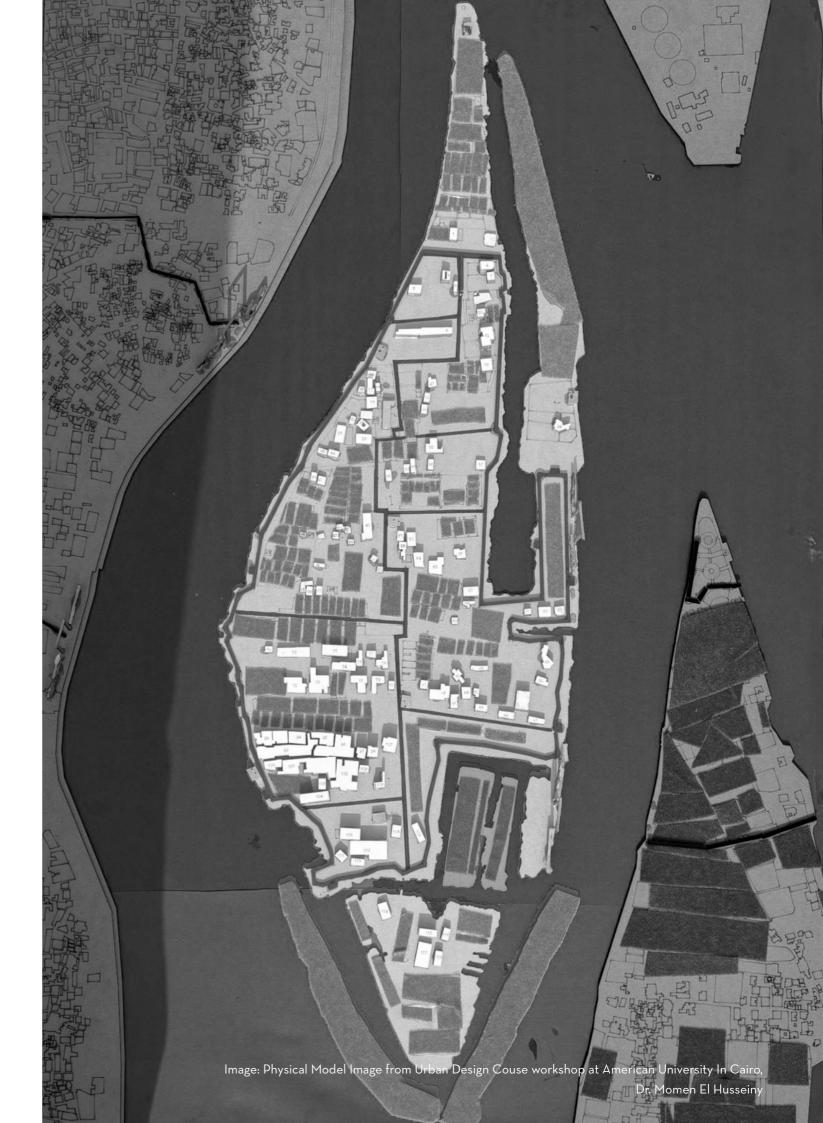


Abandoned Guest Pharonic Village Resident Artist Traditional Artisinas

In this case, it is important to spark dialogue regarding the potential scalability of a project beyond its immediate context and time, in doing so, we must acknowledge the broader impact a specific intervention would have on both larger and smaller scales than it initially considers, in this case the intra-island and the island to islands, island to mainland, island to territory scales. As well as also addressing the social and environmental implications of given action, we must look through a multi-sectoral approach involving all sectors to create self sufficient interventions. In this case, the toolkit will have to take into account, scales, time-frames, economic and environmental and users as variables in equations, where each component informs the action.

The project proposed works to present a meditative practice that combines the government's motives of touristic development, with community interests. It is designed by embedding within the current urban fabric and proposing the architectural intervention of agri-lodges. The embedding is not only spatial but also socio-economical- engaging the community in operation of the project which is funded by the government and external investors who facilitate the project. This operational model presents interest for each stakeholder- the community, the government and the Cairene socio-economic ecosystem. This explores the potential to align with stakeholder needs within the context of the island, its microclimate, its available natural resources, and the skill profile of local labor. It looks at the existing island as a natural resource, looking at its soil and earth as a building material, community as a skilled labor force, agriculture as a program driver, ecology as an asset and community as a resource to fuel the potential future project.

This operates within a framework of social and political variables, within the broader sustainable practice, including utilization and leveraging of the waterfront location of the site. This project typology was selected through an iterative process of field work and stakeholder engagement. Other initial ideas of mediation were discussed with the community in early stages of the fieldwork. These included; water mobility systems such as solar and hydro-powered water taxis to reduce and alleviate the vehicular traffic load within the city; hydro-power generation from the Nile tides to support the island's energy needs; and built-in integrated cleaning systems to capture plastic during these river mobility



systems routes.

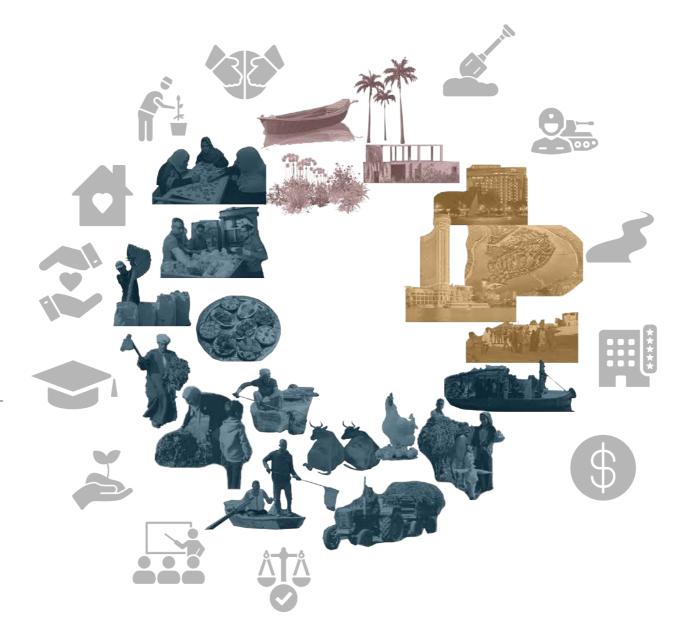
Another example of the political and qualitative impact and potential of utilising the Nile as a resource in the city's urban fabric, is the historic, and recent halting of the Nile Autobus- which used to leverage the river for sustainable transport alleviating traffic load. By reviving this practice and promoting water taxis, ferries, as well as sports activities, such as kayaking, one can present a more ecological means of transportation. This could help reduce the traffic load and dependance on vehicles in one of the world's most polluted cities.

All these proposals were probed in the exploratory preliminary community engagement on site through interviews with the workers of VeryNile and the local community. They were then assessed based on their feasibility, resources needed and funding availability. Of all presented, the Agri-Tourism model was selected for further assessment for its feasibility and potential ease of implementation within the existing abandoned villas, which was investigated in the design process and development.



## Local Community Goals:

Secure Homes and Livelihood
Secure Job Oppurtinities
Generate Sustainable Income
Safety and Security
Basic Education
Preserve Agricultural Land and
Production
Fair Compensation due to eviction
Resolve ownership disputes
New forms of income



### Government Goals:

Benefit from High-Land Value of Waterfront Touristic Facility for High return on Investment Income Generation Land Ownership Control Waterfront Control Resources

Jenna Ashraf Hussein Tawfik 2024-2025.

# Utilise Abandoned Strucutres Open Entry, No Material Transport Ticketting Permeability for Locally Sourced Materials Access Provide Agricultural goods for Assist in building and employ-Connection to exterior Water-frontage Enhance Agricultural Farm To Table Activity Connection Shaded Areas for Folded Garden Comfort Vocational Training

#### Government Roles:

Provide Funding Facilitate external Investments Provide materials Maintain the Facility Provide Training and Support Co-own the Project

An Architectural System Of Mediation

Local Community Roles:

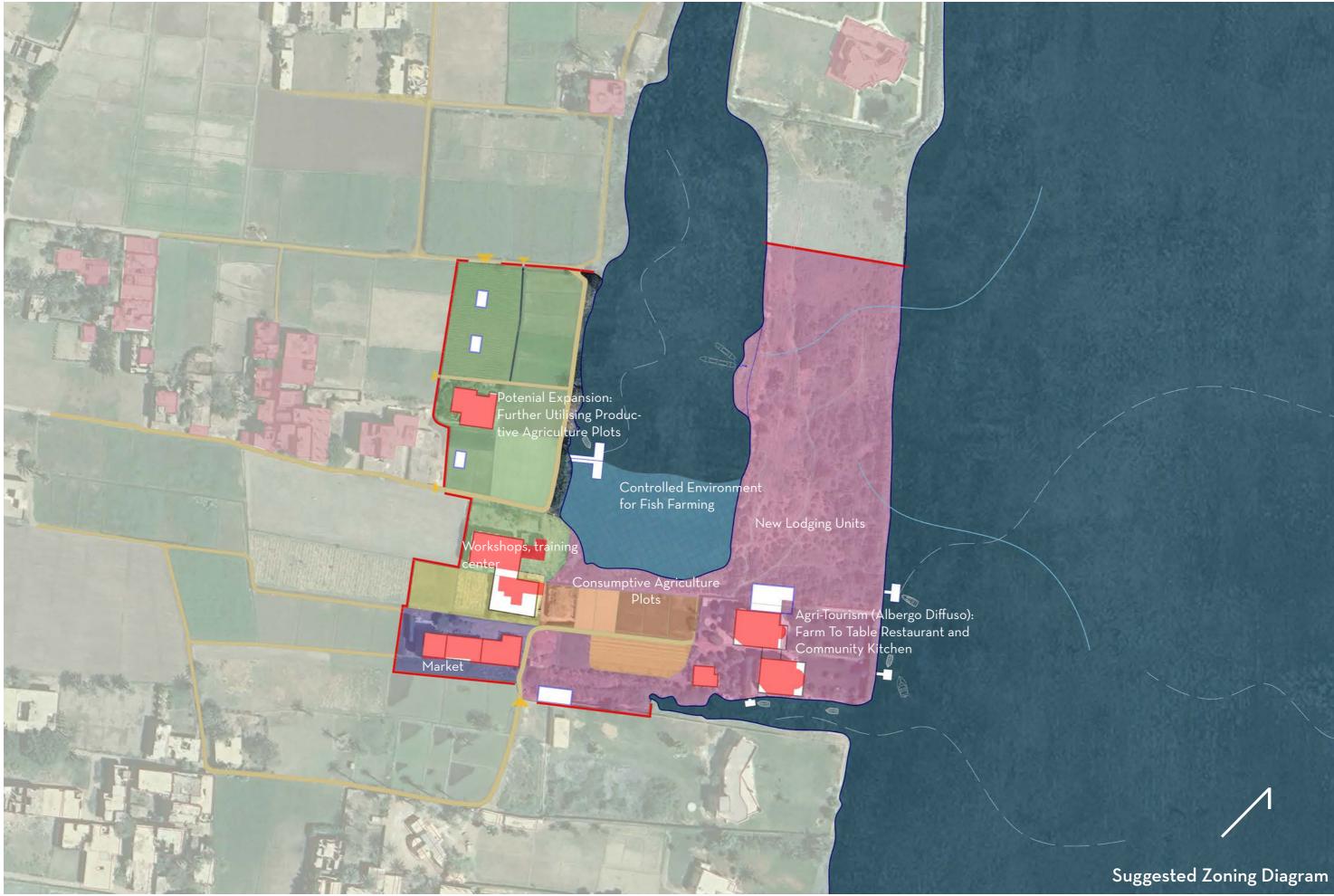
ment by the government

Co-own the project

hospitality

Run and Operate the Facility



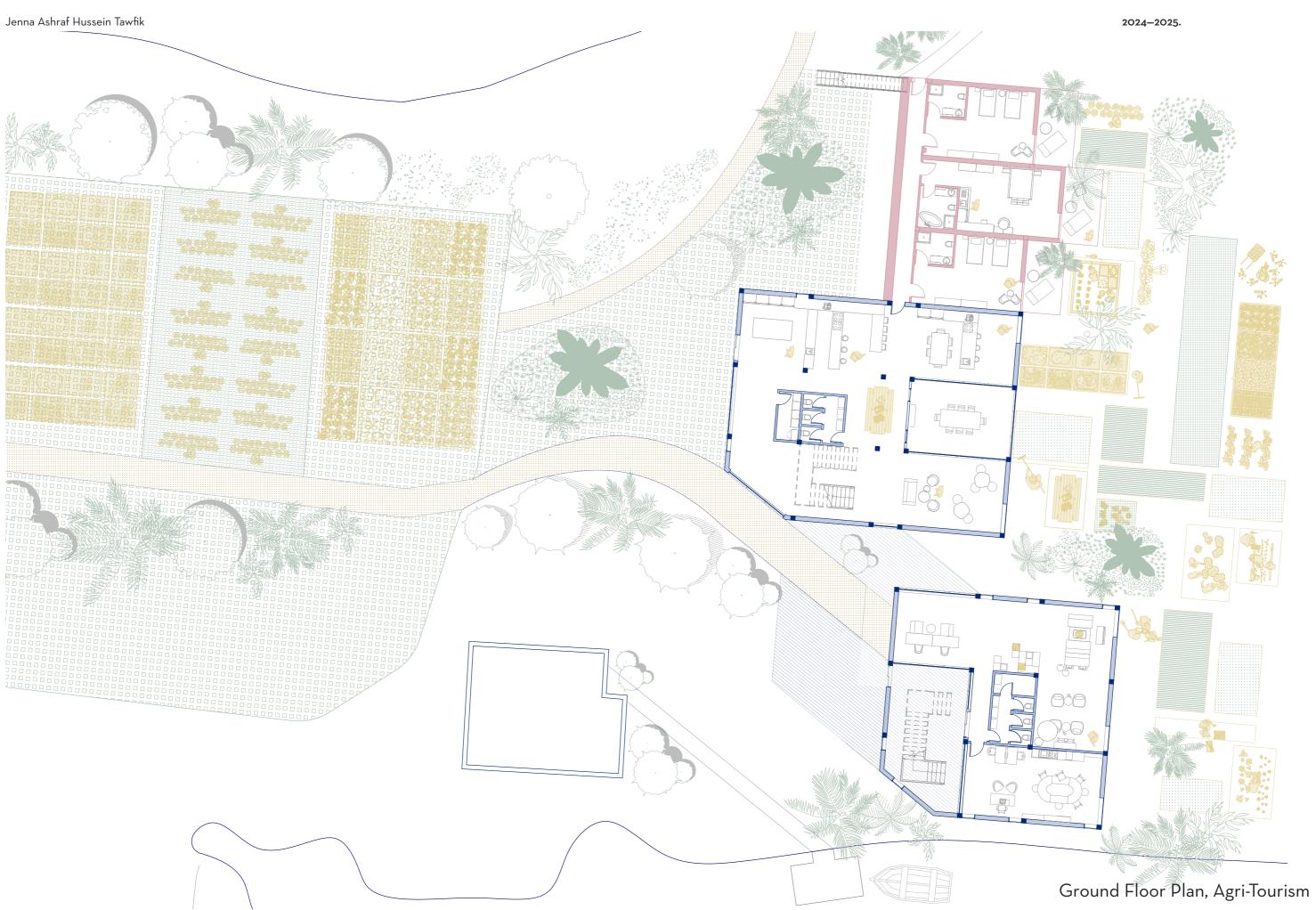






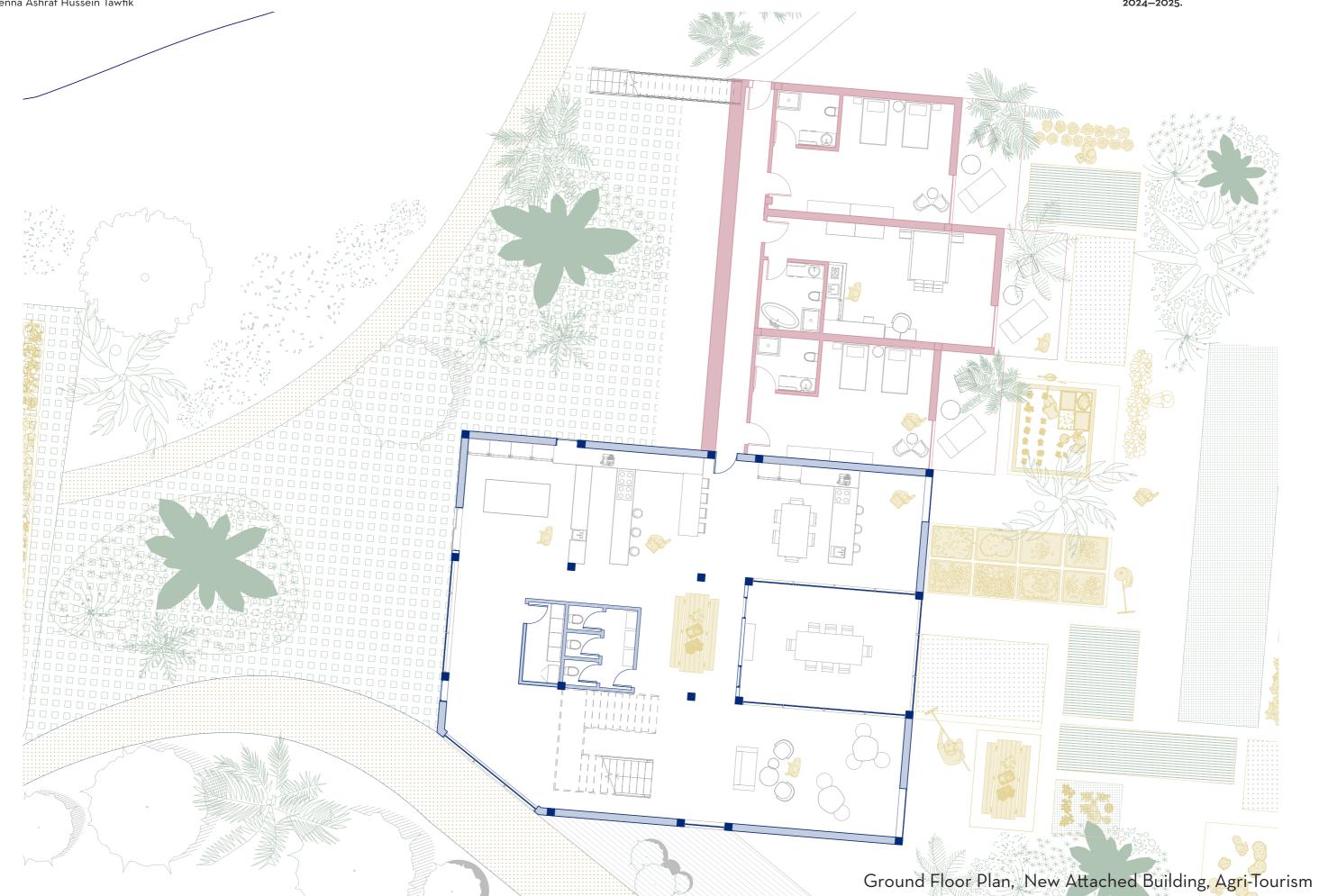








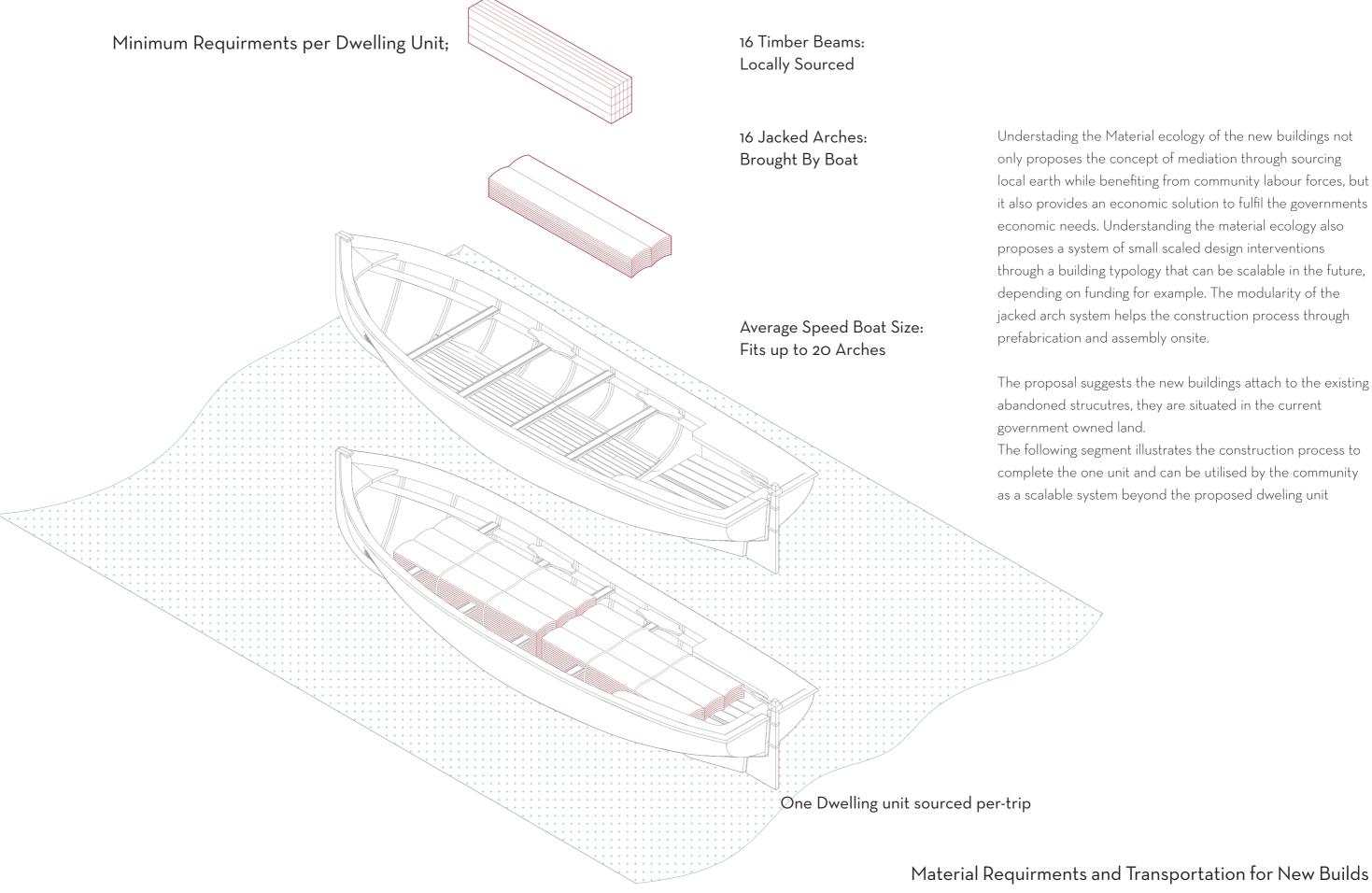
Jenna Ashraf Hussein Tawfik 2024-2025.

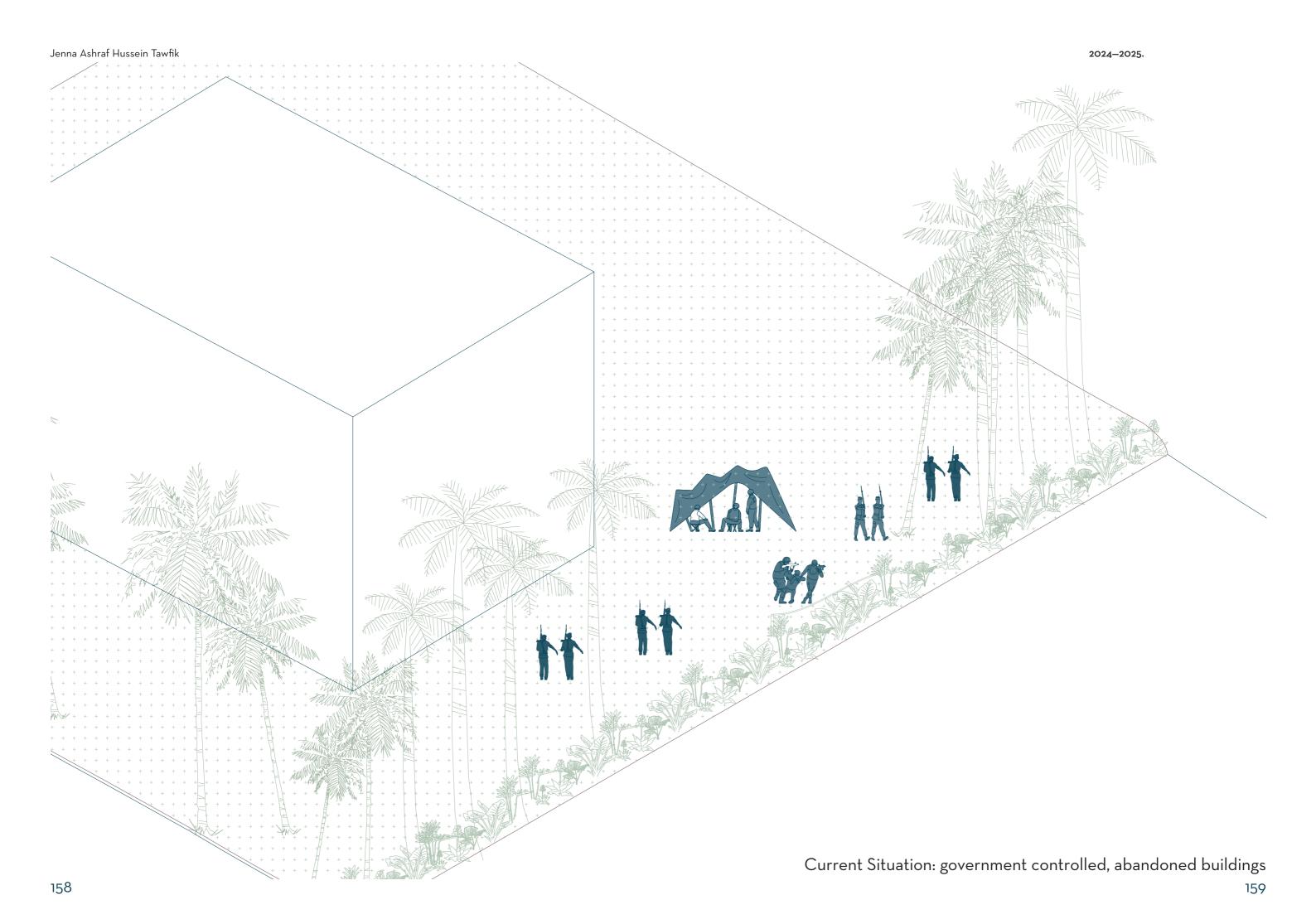


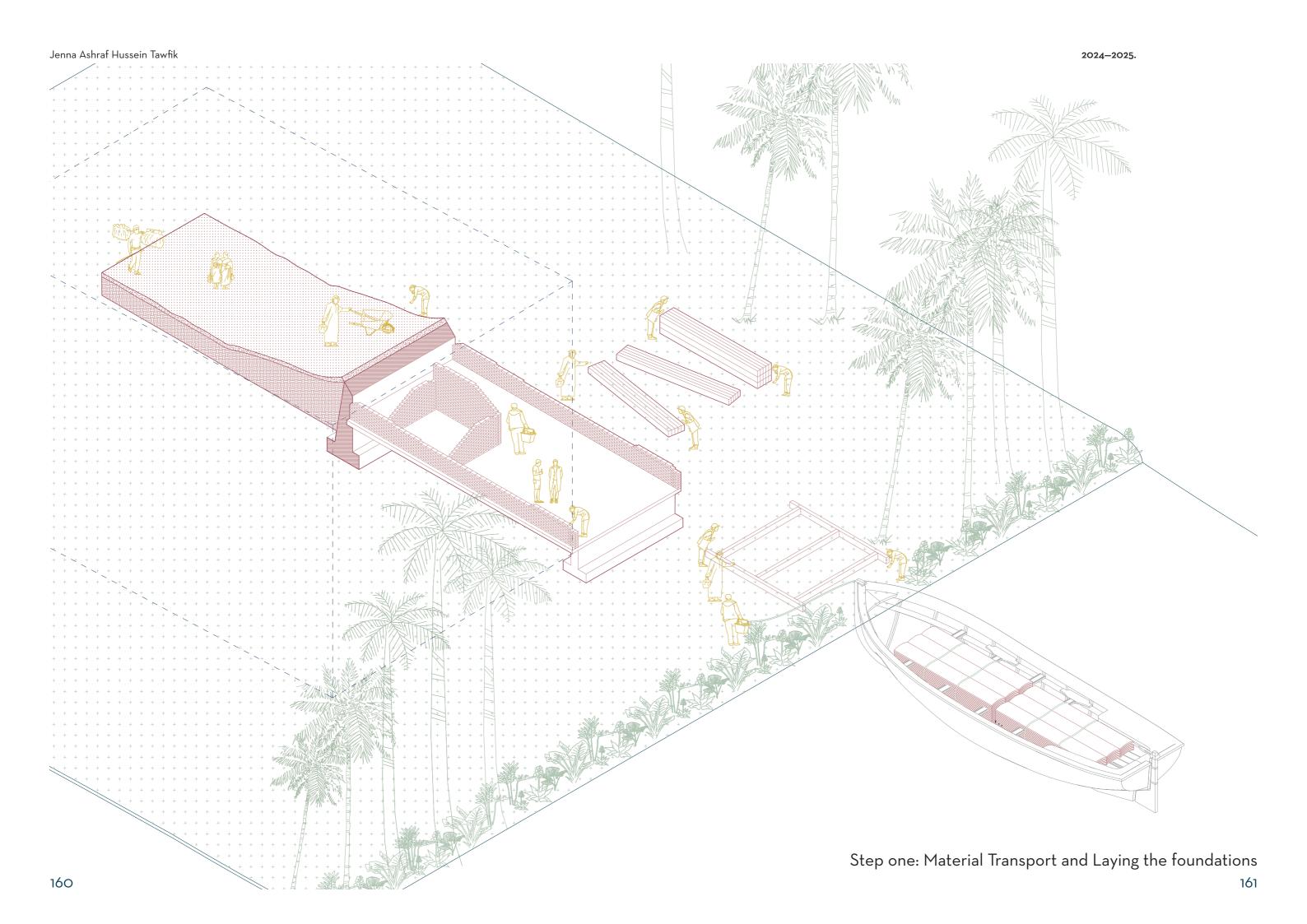


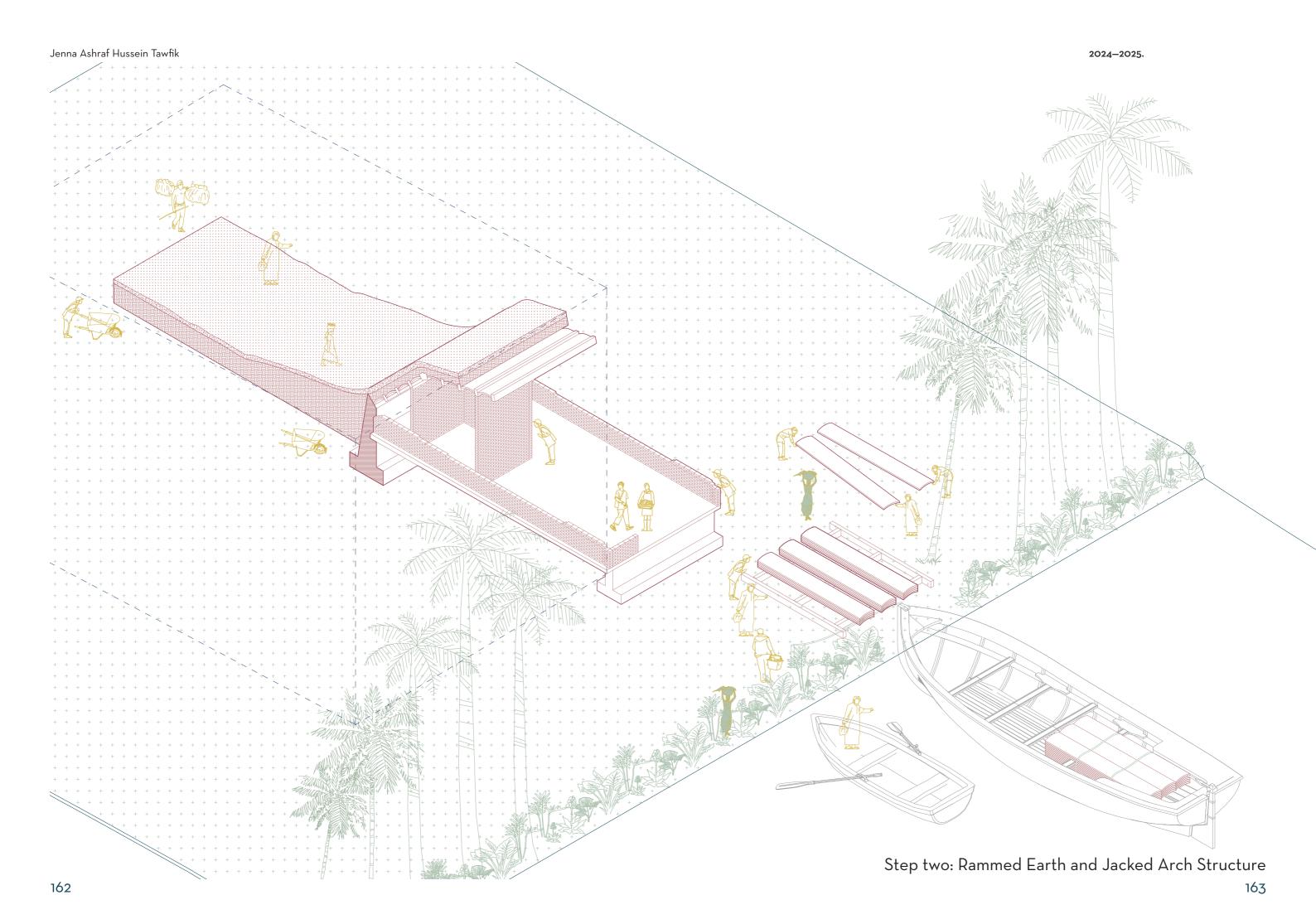


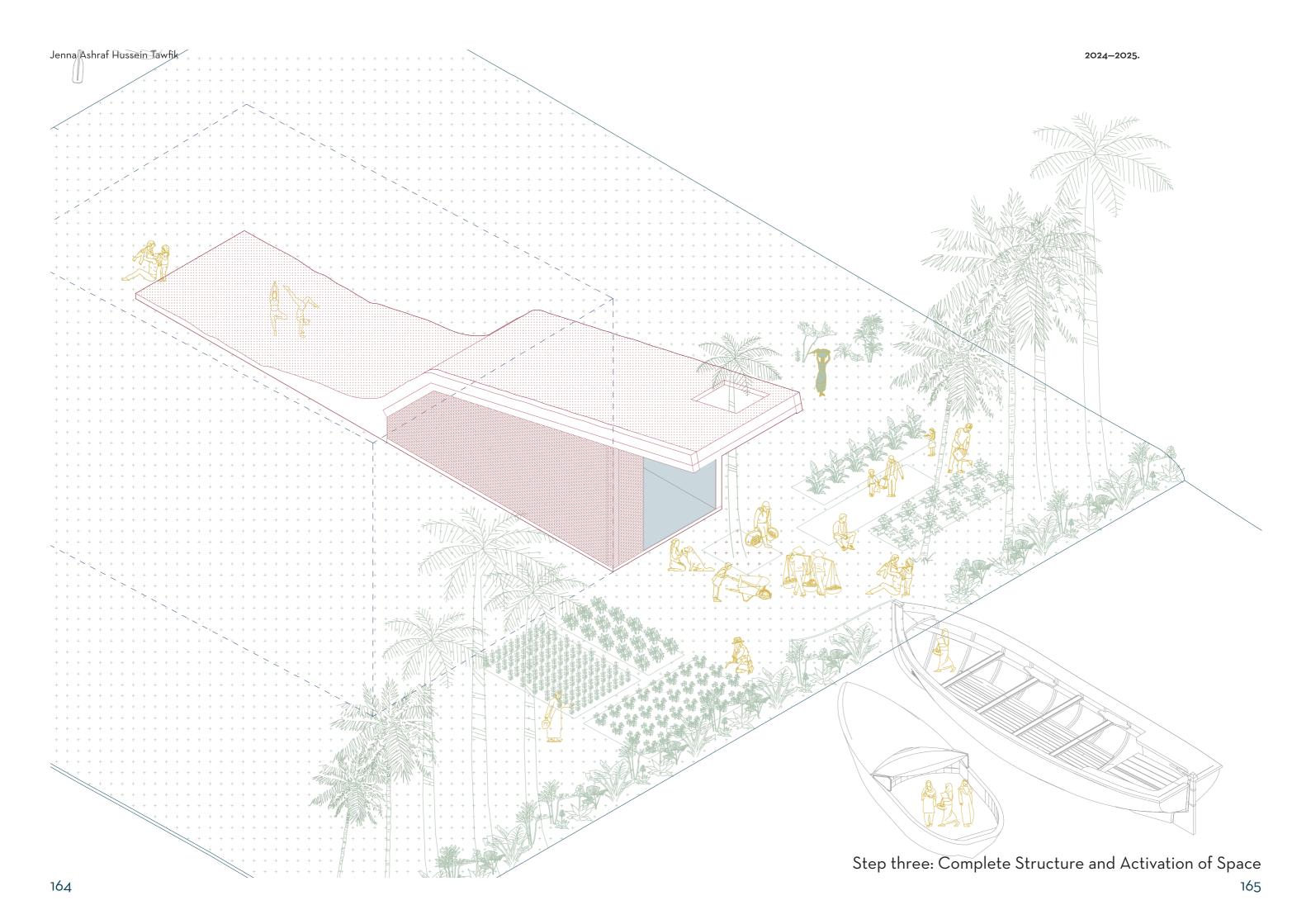
Section A, New Attached Dwelling Unit, Agri-Tourism

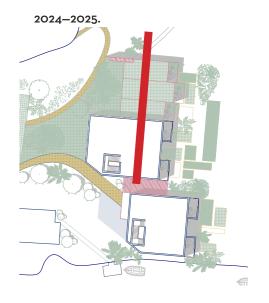


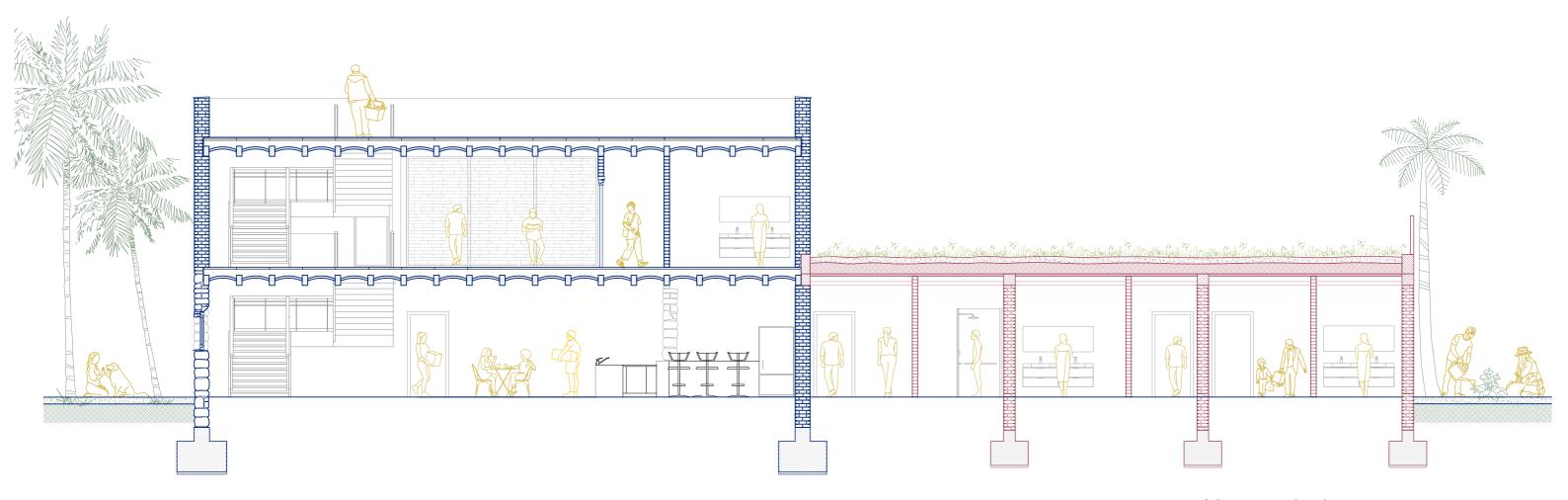




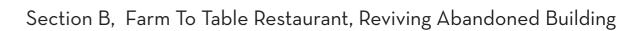


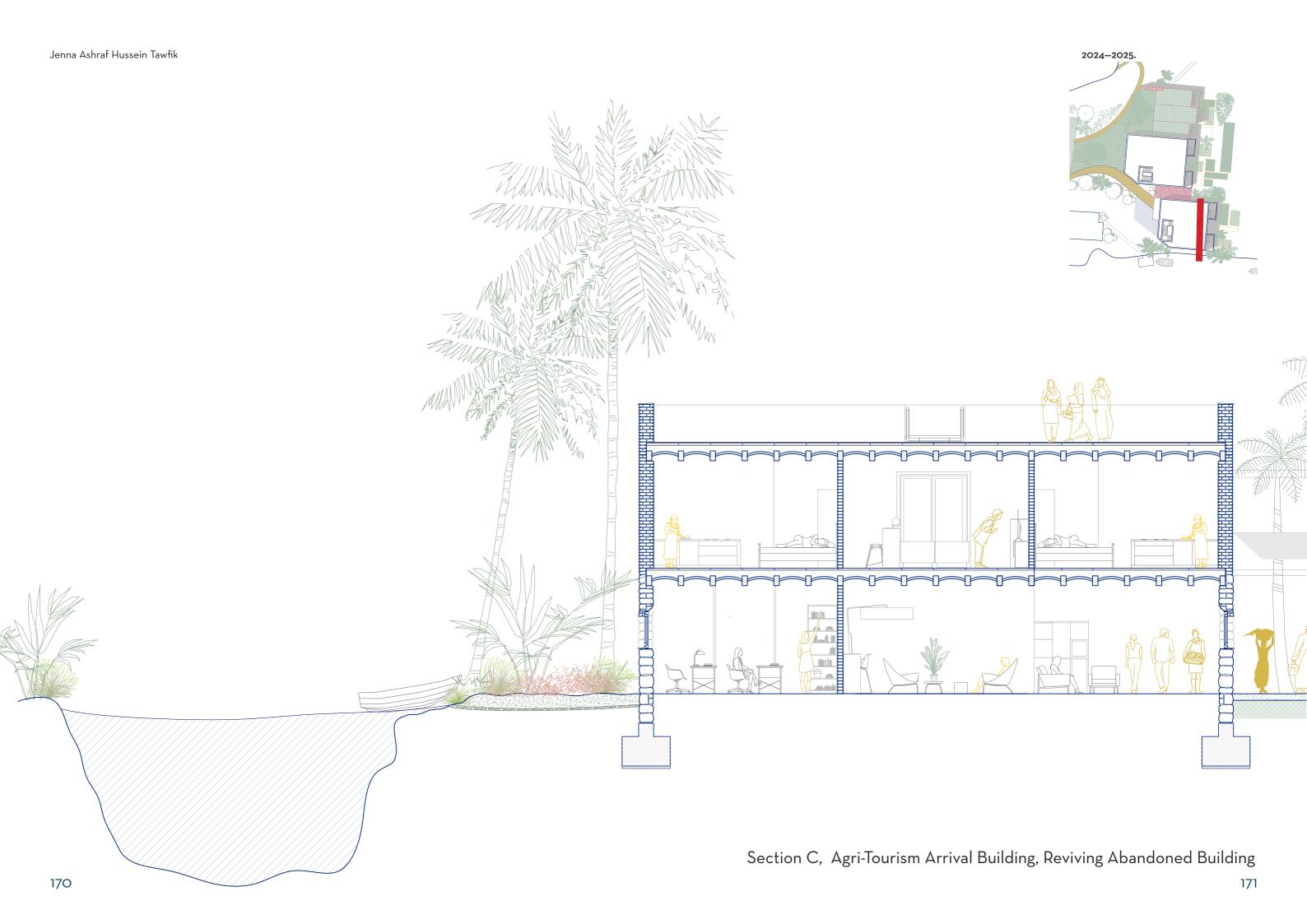




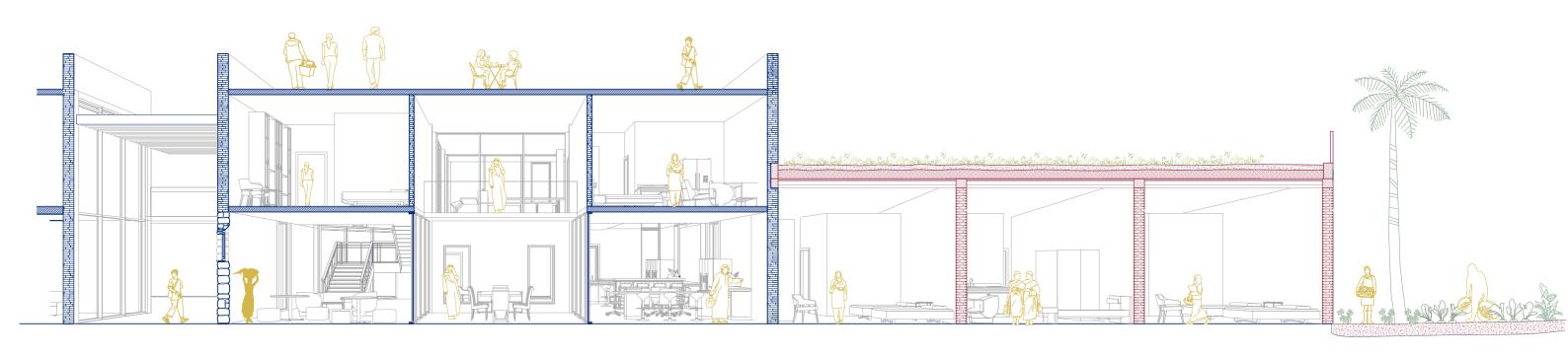


Section B, New Building attached to existing structure







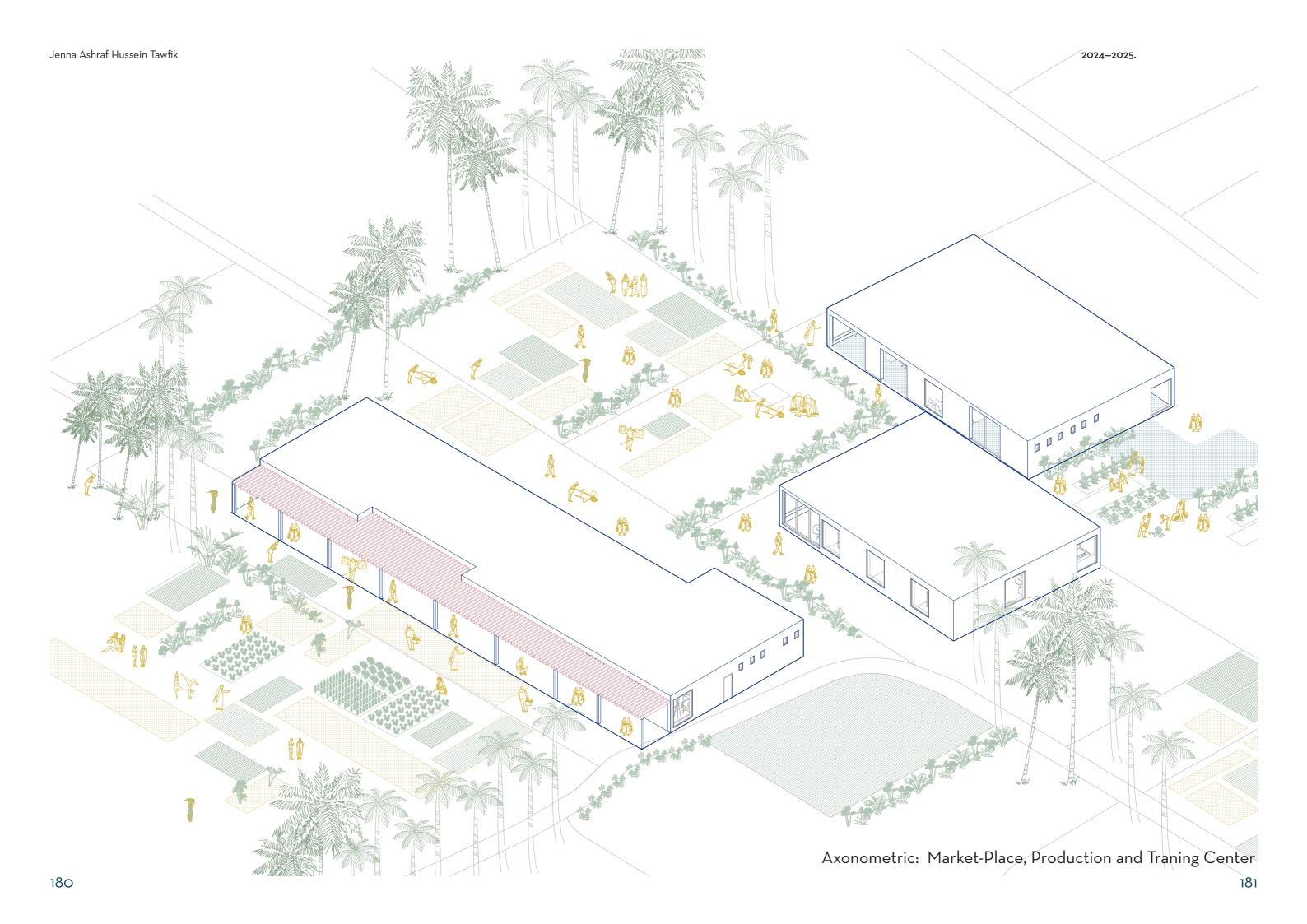


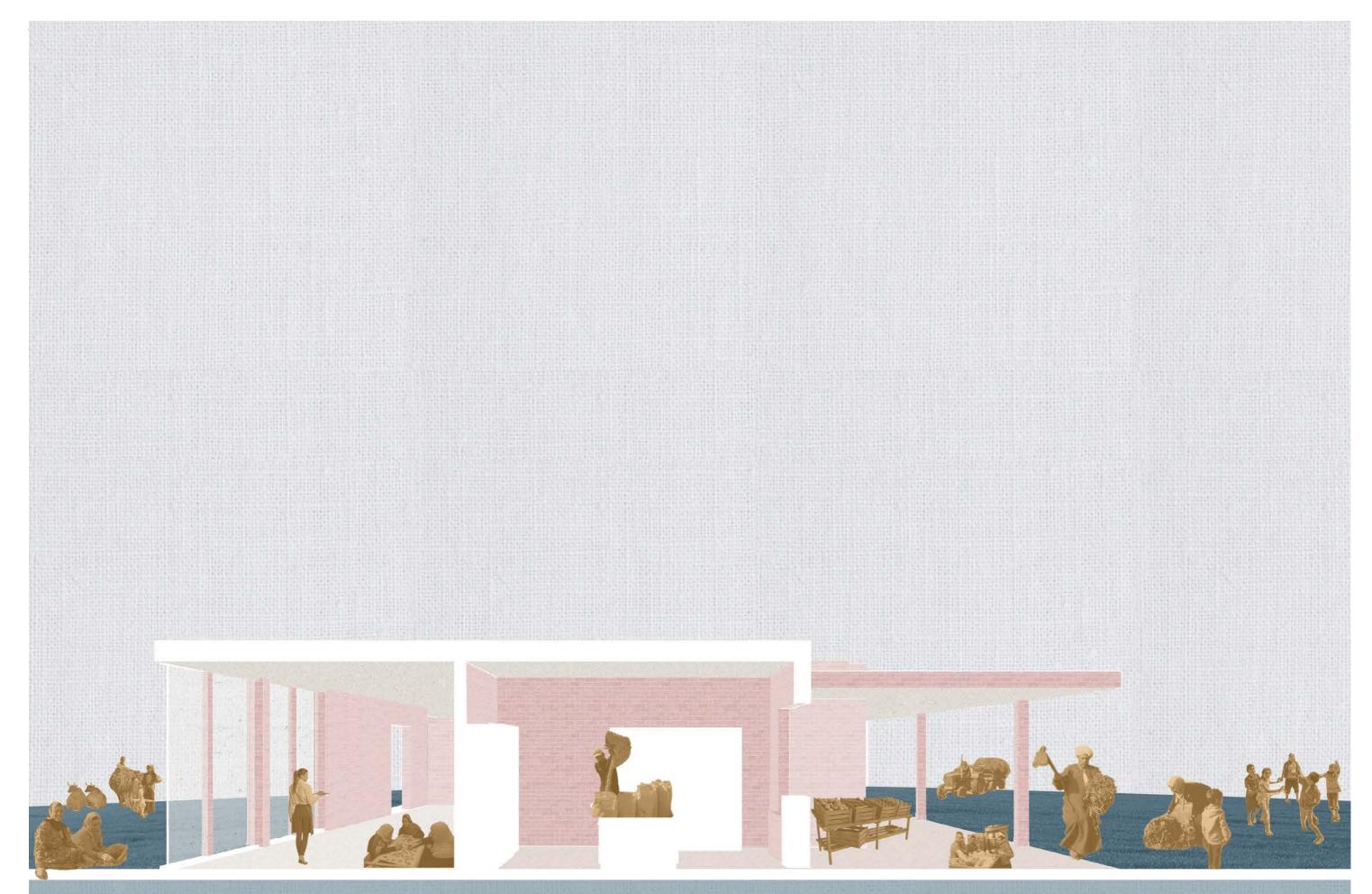
Section D, Agri-Tourism



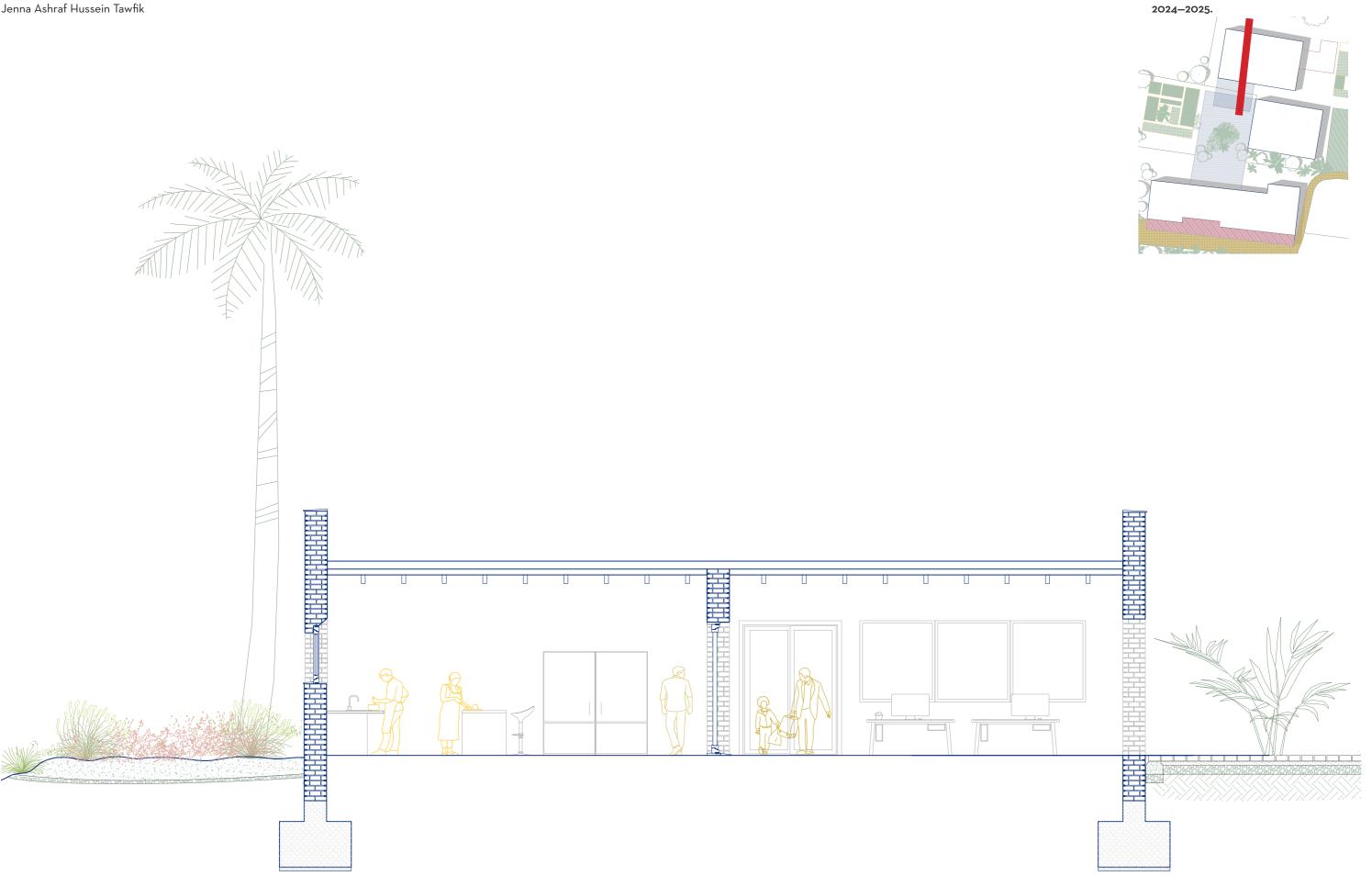








Market Place Section, Collage By The Author



Section A: Production Facility and Training Center Open to the community

Section B: Training Center Open to the community

## E PILOGUE

The purpose of this work was never to provide solutions. Its intentions were humble but also aspirational. The first was simply to shed light on the urban divides and dualities that exist within this small island in the bustling city of Cairo, and perhaps present an idea of how they might be negotiated. The second was to present this island perhaps as a microcosm of larger challenges. ones with similar divides and dualities but at larger scales and complexities

In a world of ever-increasing polarisations and inequities, small experimental provocations can perhaps present an allegory for a path to create space- both intellectually and literally- for seeking mutual benefits and finding common ground

The hope is that in this speculative experiment we may provoke further questions about ways architecture can bridge these divides, negotiate these dualities and give voice through the form of function of simple spaces- rooted in communities while negotiating across the dualities

Abdelkaddous, S, 2013, "Qursaya, a story of betrayal and struggle", the Egypt Independent

AlSayyad, Nezar. Nile: urban histories on the banks of a river. Edinburgh University Press, 2019.

Amar, P. (Ed.). (2024). Cairo Securitized: Reconceiving Urban Justice and Social Resilience. American University in Cairo Press.

Awan, N., Schneider, T., & Till, J. (2013). Spatial agency: Other ways of doing architecture. Routledge.

Bell, J. (2009). Land disputes, the informal city, and environmental discourse in Cairo. Cairo contested: Governance, urban space, and global modernity, 349-68.

Bergevoet, T., & Tuijl, M. V. (2016). The flexible city: sustainable solutions for a Europe in transition. (No Title).

Brisotto, C. (2022). Thinking Utopia: A Resilient Approach to Productive Landscapes by Yona Friedman. In Re-Imagining Resilient Productive Landscapes: Perspectives from Planning History (pp. 309-326). Cham: Springer International Publishing.

Butler, C. (2012). Henri Lefebvre: Spatial politics, everyday life and the right to the city. Routledge-Cavendish.

Deboulet, A., & Mansour, W. (Eds.). (2022). Middle Eastern Cities in a Time of Climate Crisis (1-). CEDEJ

Dorman, W. J. (2021). Encroachments: Land, power and predation. Routledge Handbook on Contemporary Egypt, 244-259.

Dutta, U. (2019). Design Engagements at the Margins of the Global South: De-Centering the "Expert" Within Me. Sustainability, 11(20), 5675. https://doi.org/10.3390/su11205675

Elsaman, S. M., Ehab, H., & Bahgat, F. A. (2022, December). Comparative Analysis of River Waterfront Urban Spaces to enhance social interaction: Case Study of Mamsha Ahl Masr in Cairo. In IOP Conference Series: Earth and Environmental Science (Vol. 1113, No. 1, p. 012010). IOP Publishing.

Friedman, Y., & Orazi, M. (2015). Yona Friedman. The Dilution of Architecture. Park Book & Archizoom.

Gasperoni, L. (2015). Architectural diagrams. M. Y. Pyo (Ed.). DOM publishers.

Gehl, J. (2011). Life between buildings.

Gohar, A. (2018). Greening and opening the public space of the Nile banks. A demonstration case study in Maadi, Cairo. The Journal of Public Space, 3(1), 31-48.

Gohar, A., & Kondolf, G. M. (2020). Bridges over the Nile: Transportation corridors transformed into public spaces. The Journal of Public Space, 5(1), 5-20.

Gretsch, S., & Gasperoni, L. (Eds.). (2022). Construction and Design Manual: Experimental Diagrams in Architecture. DOM Publishers.

Hernberg, H, 2022 https://www.ark.fi/en/2022/05/architects-as-mediators-of-change/

Hertzberger, H. (2005). Lessons for students in architecture (Vol. 1). 010 Publishers.

Horwood, C. (2011). Cairo-A City in Transition. Publishing Services Section.

Khedr, R. (2021). Challenges Facing Independent Cultural Actors: The Case of Egypt [Master's Thesis, the American University in Cairo]. AUC Knowledge Fountain.

Kipper, R., Fischer, M, (eds.) (2009) Cairo's Informal Areas: Between Urban Challenges and Hidden Potentials, Facts, Voices, Visions, GTZ Egypt Participatory Development Program in Urban Areas (PDP)

Kondolf, G. M., Mozingo, L., Marzion, R., Balakrishnan, K., Gohar, A., Jewell, L., & Church, T. (2011). Connecting Cairo to the Nile: Renewing life and heritage on the river (No. 2011-06). Working Paper.

Latour, B. (2012). We have never been modern. Harvard university press.

Linzey, M. (1996). Some Binary Architecture-Sites for Possible Thought. Interstices: Journal of Architecture and Related Arts, 1-5.

Mahgoub, Y, 1990, "The Nubian Experience: A Study of the Social and Cultural Meanings of Architecture", University of Michigan

Making Architecture Political, Urban Design and Landscape Architecture Course at the American University in Cairo (AUC), Dr. Momen El Husseiny, Prof. Abeer El Shater, Eslam Malak, Sara Seyam

Mossin, N., Stilling, S., Bøjstrup, T. C., & Hau, I. (2020). An Architecture Guide to the UN 17 Sustainable Development Goals: Volume 2

Myntti, C. (1999). Paris along the Nile: Architecture in Cairo from the belle époque. (American University Press).

Nagati, O. et al, (2013) "Learning from Cairo", Cluster Cairo and the American University in Cairo https://issuu.com/clustercairo/docs/learning.from\_cairo accessed October 2024

Nagati, O., & Elgendy, N. (2013). Ard-al-Liwa Park Project: Towards a New Urban Order and Mode of Professional Practice. Planum: The Journal of Urbanism, 1(26), 64-74.

NiLab, the Nile as Laboratory, Ahmed Sami Abd Elrahman, Marina Tornatora, Ottavio Amaro, Ghada Farouk, Moataz Samir curators, https://www.labiennale.org/en/architecture/2023/egypt accessed November 2024

Rudofsky, B. (1969). Streets for people: A primer for Americans. (No Title).

Rudofsky, B. (1987). Architecture without architects: a short introduction to non-pedigreed architecture. UNM Press.

Shawkat, Y., Built Environment Deprivation Index https://www.10tooba.org/en/?p=221 and http://10tooba.org/bedi/en/accessed November 2024

Shehayeb, D. (2011). Backtracking to sustainable urban development and working with local communities: the al-Darb al-Ahmar project in islamic Cairo. Interview with Dina Shehayeb by Pierre-Arnaud Barthel. Égypte/Monde Arabe, (8), 109-129.

Sims, D. (2012). Understanding Cairo: The logic of a city out of control. Oxford University Press.

Sims, D. E. (2014). Egypt's desert dreams: development or disaster?. Oxford University Press.

Tamburelli, P. I. E. R. (2012). The 900 Km Nile City. Volume 32(Summer 2012), 8-15.

Tawakkol, L. (2021). Reclaiming the city's core: Urban accumulation, surplus (re) production and discipline in Cairo. Geoforum, 126, 420-430.

Urban Design and Landscape Architecture Course at the American University in Cairo (AUC), Dr. Momen El Husseiny, Prof. Abeer El Shater, Taysser Elrefaei, Shahd Osman, Mariam Ghobrial, Hana Ibrahim, Shehab Elbokl, Hassan Badr

Wiącek, K. (2020). The Cairo Garbage City as a Self-Sufficient "Inner City". Quart, 55(1), 96-111.

WUF 2024 "The International Participatory Charter for Urban and Territorial Development to Deliver the New Urban Agenda", Habitat Professionals Forum, World Urban Forum 2024, Cairo Egypt chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://unhabitat.org/sites/default/files/2024/10/hpf\_ipc\_2024\_-wuf12\_lowres\_1.pdf accessed January 2025

Yaneva, A. (2017). Five ways to make architecture political: An introduction to the politics of design practice. Bloomsbury Publishing.

Zaazaa, A., 2022, Deboulet, A., & Mansour, W. (2022). Middle eastern cities in a time of climate crisis. CEDEJ, Egypt.

## BRIDGING THE DIVIDE ON AL QURSAYA ISLAND