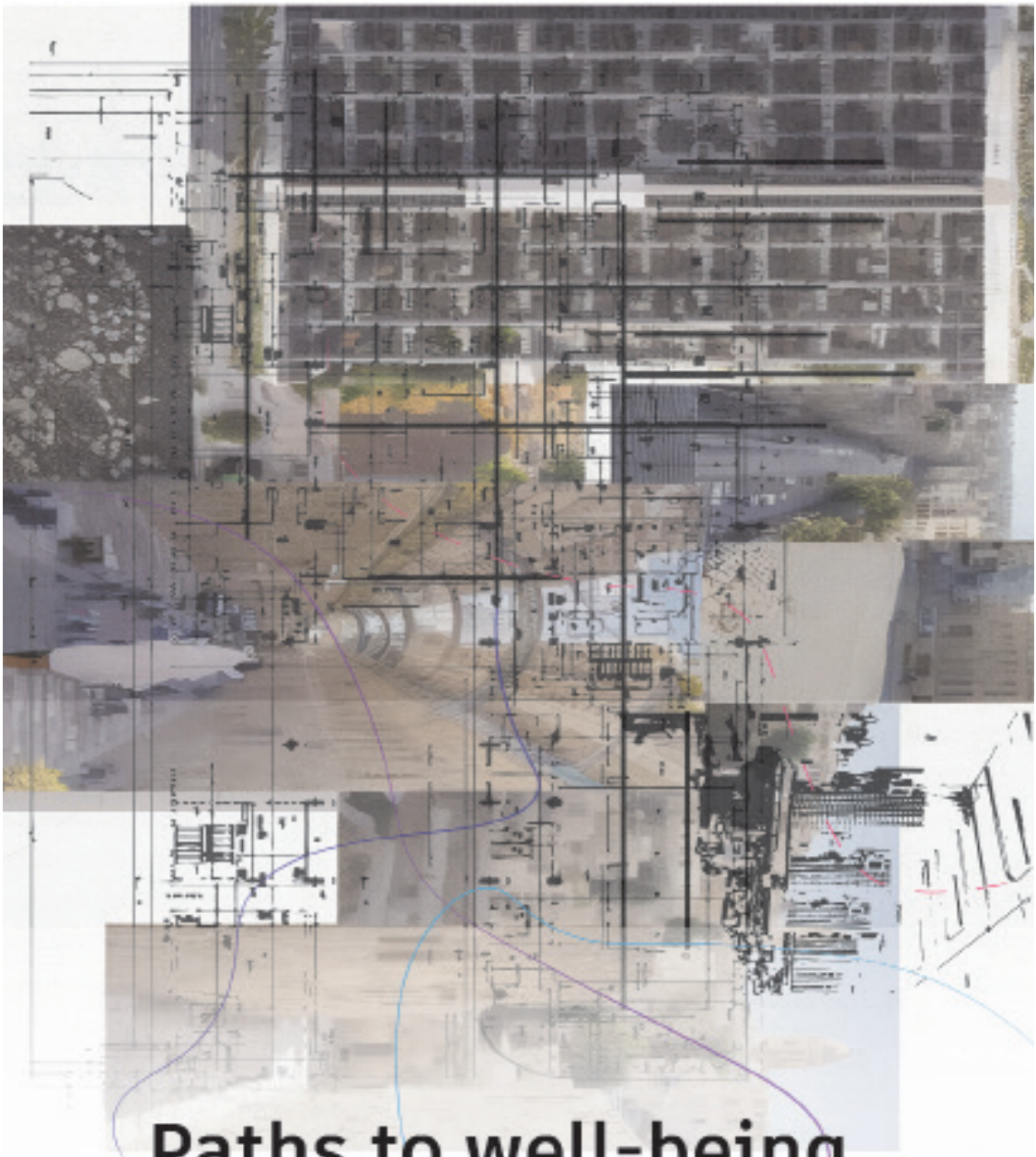
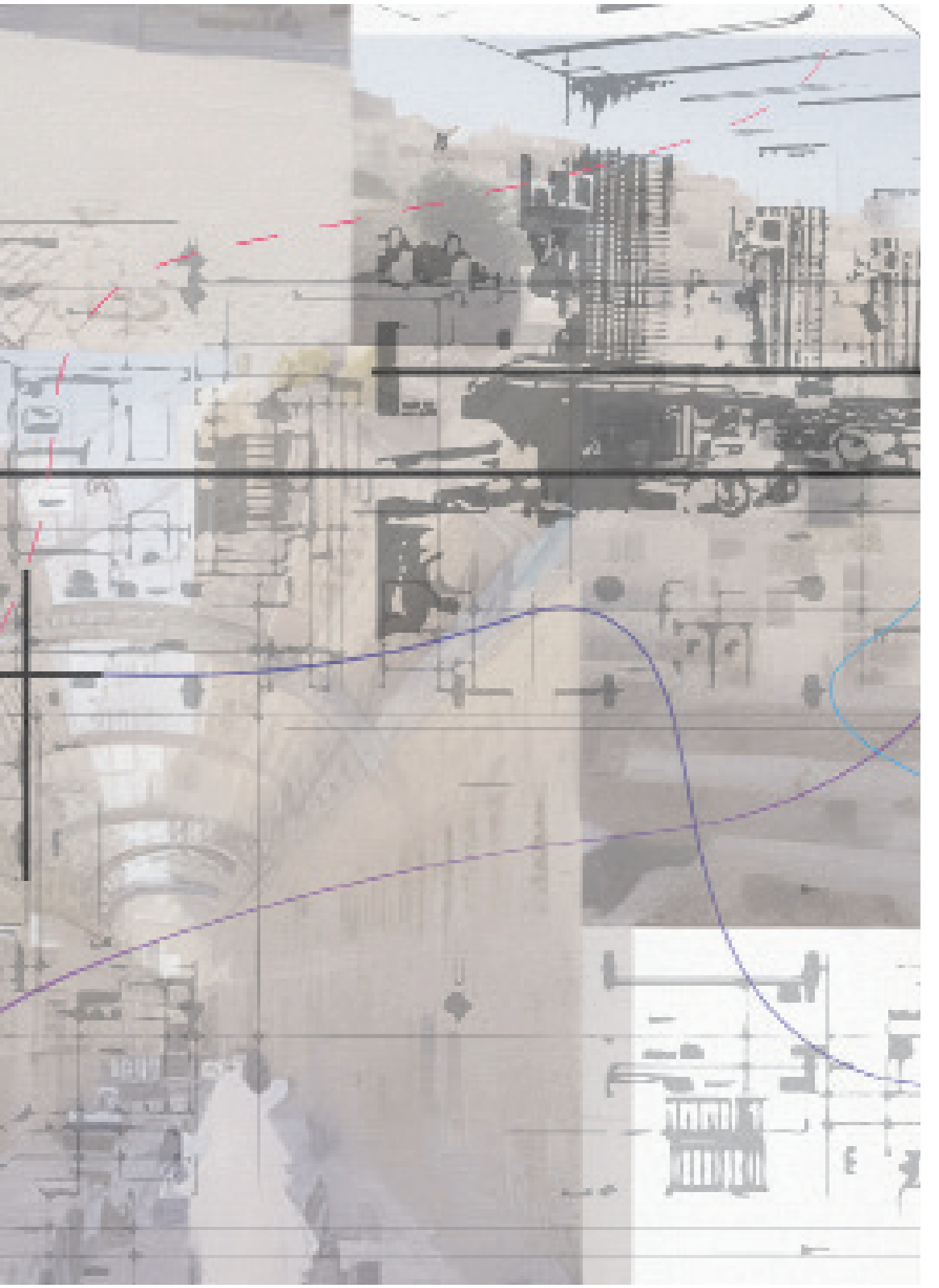


Paths to well-being

Architecture for mental health equality

Raya Shehadeh



Raya Shehadeh

Paths to well-being

Architecture for mental health equality

Final Project

[Pro]active Architecture

Instructors | Prof. Gaby Schwartz, Dr. Dikla Yizhar

Research Seminar

Instructors | Dr.Oryan Shahar

Architecture and Town Planning Program

Faculty of Architecture and Town Planning, Technion

2024

TECHNION
Israel Institute of Technology

Faculty of
Architecture and Town Planning

CONTENTS

ABSTRACT 06

Mental health and Theories 08

- Theories
- UNDERSTANDING MENTAL HEALTH: DEFINITION AND SIGNIGICANCE
- ANALYZING MENTAL HEALTH THROUGH CASE STUDIES:
  - 1.SCHIZOPHRENIA
  - 2. PTSD- POST TRAUMA STRESS DISORDER
  - 3. BIPOLAR

EXPLORING AKKO, ISRAEL 20

- THE CHARM OF OLD TOWN AKKO: NOTEWORTHY Architecture and Heritage Sites
- AKKO IN THREE LAYERS OF VISIONS:
  1. Urban fabric
  2. Daily life and work environment
  3. Society and community

Interconnection Between Akko's Old Town and Mental Health Case Studies 30

-The Contribution of Akko's Physical Environment and Resources to the Wellbeing of Individuals with Mental Disorders

THE VISION- INTERVENTION 46

EPILOGUE 72

Abstract

The Citadel of Akko, with its layered history as a mental health hospital, a prison, and now a museum, symbolizes the evolving challenges and opportunities in rethinking spaces for mental health care. This project explores how such spaces can be reconceptualized to offer greater mental health support by replacing isolating institutional models with community-integrated environments that foster true healing through thoughtful architectural design.

This project examines the transition from traditional institutional models—characterized by designs focused on isolation and control, which have historically contributed to the stigmatization of mental illness—towards environments that promote well-being and recovery through community inclusion. **How can architectural design improve environments for individuals with mental illnesses by shifting away from institutional models towards spaces that support well-being and recovery through community integration?** This thesis reimagines mental health care in urban settings, with a focus on Acre's (Akko's) old city, aiming to repurpose urban fabric in innovative ways that reintegrate mental health care into the heart of our cities.

Drawing on Inclusive Design principles, the project emphasizes the creation of sensory-friendly residential environments that are accessible, supportive, and safe for everyone. By incorporating

Universal and Biophilic Design, the project creates spaces that are inclusive, nature-infused, and adaptable—promoting recovery and well-being. These environments are designed to provide the dignity, independence, and comfort necessary for individuals to fully participate in their communities.

This thesis builds on the critical work of Goffman[1] and Foucault[2], who highlighted the damaging effects of isolating environments. Goffman's study of total institutions and Foucault's analysis of the history of madness in Western society offer a crucial framework for understanding the need to move beyond these outdated models. Instead, the project advocates for creating inclusive spaces that support mental health and well-being through integration with the broader urban environment.

Imagine a future city where architecture intentionally supports mental health—an equitable place where all can thrive in safety and togetherness.

1Erving Goffman was a Canadian-born American sociologist, social psychologist, and writer. Wrote "On the Characteristics of Total Institutions"

2 Paul-Michel Foucault was a French philosopher, historian of ideas, writer, political activist, and literary critic. Foucault's theories primarily address the relationships between power and knowledge, and how they are used as a form of social control through societal institutions.

Part 1: Mental health and Theories

Theories

Two essential works that open a path towards a cooperation of architecture, sociology, and history are "On the Characteristics of Total Institutions" by Erving Goffman and "Madness and Civilization" by Michel Foucault. Goffman's analysis examines behaviour patterns within total insulations such as asylums or prisons, which operate outside the regular mechanisms of society and create a reality of their own. He explains how social mechanisms are complemented by control and administration directed towards the individual's behaviour as a replacement for normal social adaptation functions. This analysis is critical for understanding how physical spaces can reinforce or undermine social norms and mental well-being.

Foucault, on the other hand, offers in-depth historical research of the concept of madness, which was introduced during Renaissance as a term to define and conceptualize non-ordinary reality experiences. He reveals how the term "madness" was used to define and marginalize those who experienced reality differently. Foucault's work highlights the ways in which society's understanding and treatment of mental illness have been shaped by broader historical, cultural, and architectural contexts.

These foundational works are highly relevant to the fields of architecture and urban planning, particularly when considering the principles of inclusive design[1] which the authors seek to illustrate.

1Inclusive design, which emerged in the late 20th century as a response to the limitations of traditional design practices, seeks to create environments that are accessible and supportive for all individuals, regardless of their physical or mental abilities.

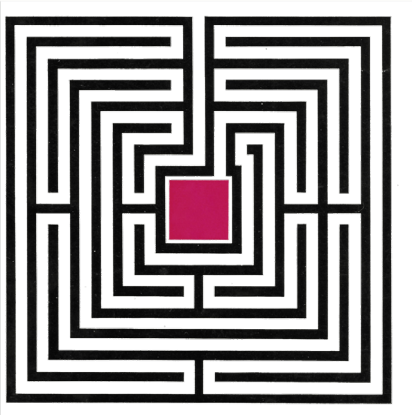
The concept aligns closely with the Universal Design [1]principles formulated by Ronald Mace and the Center for Universal Design at North Carolina State University, which emphasize creating spaces that are usable by everyone without the need for adaptation (Mace, 1985).

In the context of mental health, inclusive design in architecture must focus on creating sensory-friendly environments that mitigate stress and foster supportive, integrative communities. Considering Goffman's description of physical space in total institutions can either contribute to or alleviate the distress experienced by inmates. Similarly, Foucault's critique of how society has historically isolated those examined "mad" underscores the importance of designing urban spaces that are inclusive and do not affect social exclusion.

to the works of Goffman and Foucault provide a critical framework for understanding the importance of inclusive design in architecture and urban planning. By applying their insights to the design of spaces that support mental well-being, architects and planners can create environments that not only mitigate stress and foster supportable and integrative communities but also challenge the historical stigmatization and sidelining of individuals with mental health conditions. This approach aligns with the broader goals of inclusive design, which seeks to create equitable, accessible, and supportive environments for all.

---

1 The difference between inclusive design and universal design is: Inclusive Design focuses on creating solutions that accommodate the diverse needs of specific user groups by involving them in the design process, while Universal Design aims to create broad, one-size-fits-all solutions that are accessible and usable by everyone, regardless of their abilities or circumstances.



CONTROL
ISOLATION

Mental Health

Understanding Mental Health: Definition and Significance

According to WHO (World Health Organization) mental health is a dynamic state that encompasses our emotional, psychological, and social well-being. This concept includes people's ability to accept and love who they are and know to deal with stress and manage social activities. "Mental health is a basic human right. And it is crucial to personal, community and socio-economic development."

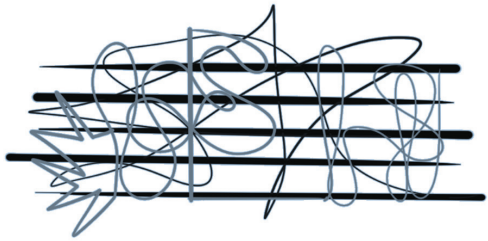
Taking care of mental health is extremely significant since it impacts our lives on many fields e.g. the productivity of the person, the education level and even the social fabric of the nation.

One of the prominent approaches that links architecture and socio-environmental and planning spheres, is the Universal design. The main idea of this approach is to design an environment that can be accessed and have the ability to be used by all people, irrespective of their abilities or disabilities. In her work, Inger Marie Lid explores this notion, stressing that inclusive environmental planning can drastically help people with different needs through eliminating barriers in the environment and participation in their daily routines.

Analysing mental health through case studies:

Schizophrenia: the condition of schizophrenia results from a combination of genetic, environmental, and social factors. This is a complex disorder characterized by idiosyncratic thinking, hallucinations, and weakened social functioning. Insights into the complexity of this condition highlights the necessity of personalized treatment plan, incorporating both pharmacological and psychosocial interventions.

Architects of mental health spaces must consider spaces and environments that encourage stability, minimize sensory overload and clear paths and ways.



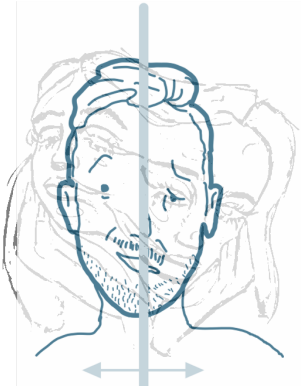
Analysing mental health through case studies:

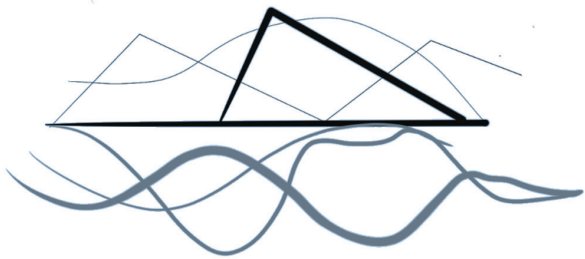
Post Traumatic Syndrome Disease (PTSD):

a mental health condition caused by a traumatic event. PTSD can occur after experiencing or watching military combat, natural disasters, severe accidents, terrorist attacks, or other assault types. dealing with PTSD is especially important in conflict affected areas like Israel. The recovery pathways highlight the significance of early intervention, community support, and trauma-informed treatment techniques. Designing and planning for recovery must contain safe havens, open spaces with minimized triggers.

Analysing mental health through case studies:

Bipolar: a condition characterized by extreme mood swings from high (mania) to low (depression). During manic episodes, the individual might experience heightened energy, creativity, and euphoria, but this can quickly turn into irritability, reckless behavior, and unrealistic assessments of one's ability and power. Conversely, depressive episodes cause the individual into deep sadness, hopelessness, a lack of energy, and a disinterest in life, sometimes even leading to suicidal thoughts. Research indicates the need for an entire plan including pharmacological treatment, psychoeducation, and changes in lifestyle. Architects design areas and environments that provide stability through routines, natural light, and calming spaces considering the two phases of mania and depression and their needs.





The journey to mental health rehabilitation is as unique as the people it aims to support. Broad approaches to rehabilitation include medicine, psychotherapy, community support, and—most importantly— interventions designed to improve the work and social environment.

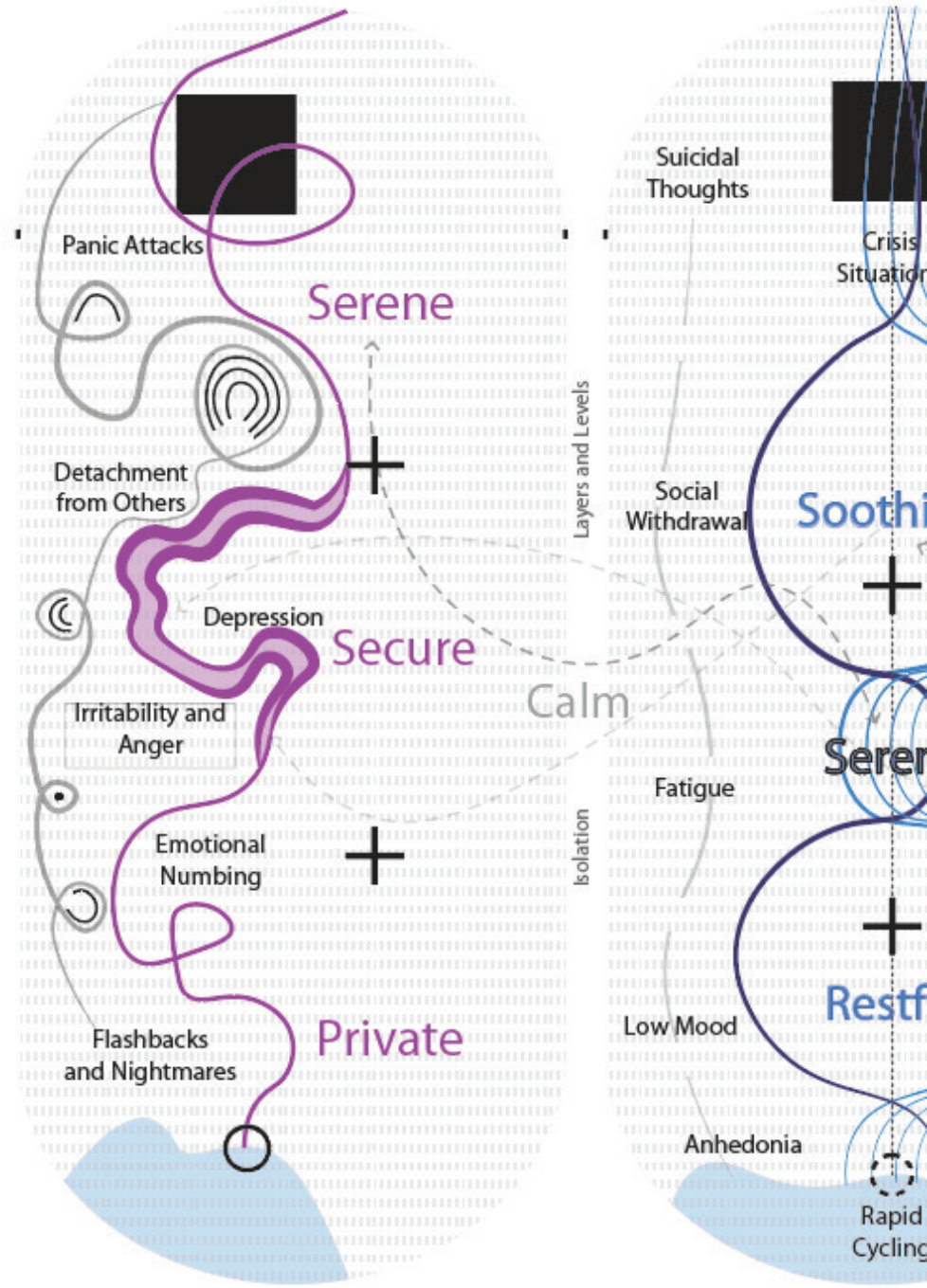
The process of recovery is complex especially if we are looking in designing aspects and how they promote well-being:

- Physical environment: incorporating nature and promoting community connections.
- Art and Expression: replacing the known psychiatric hospital rooms that look like prison and design them full of art therapy that allow emotions to find voice.
- Breaking Silence: there are a lot of stories to share within exhibition, dispelling stigma and promoting empathy.

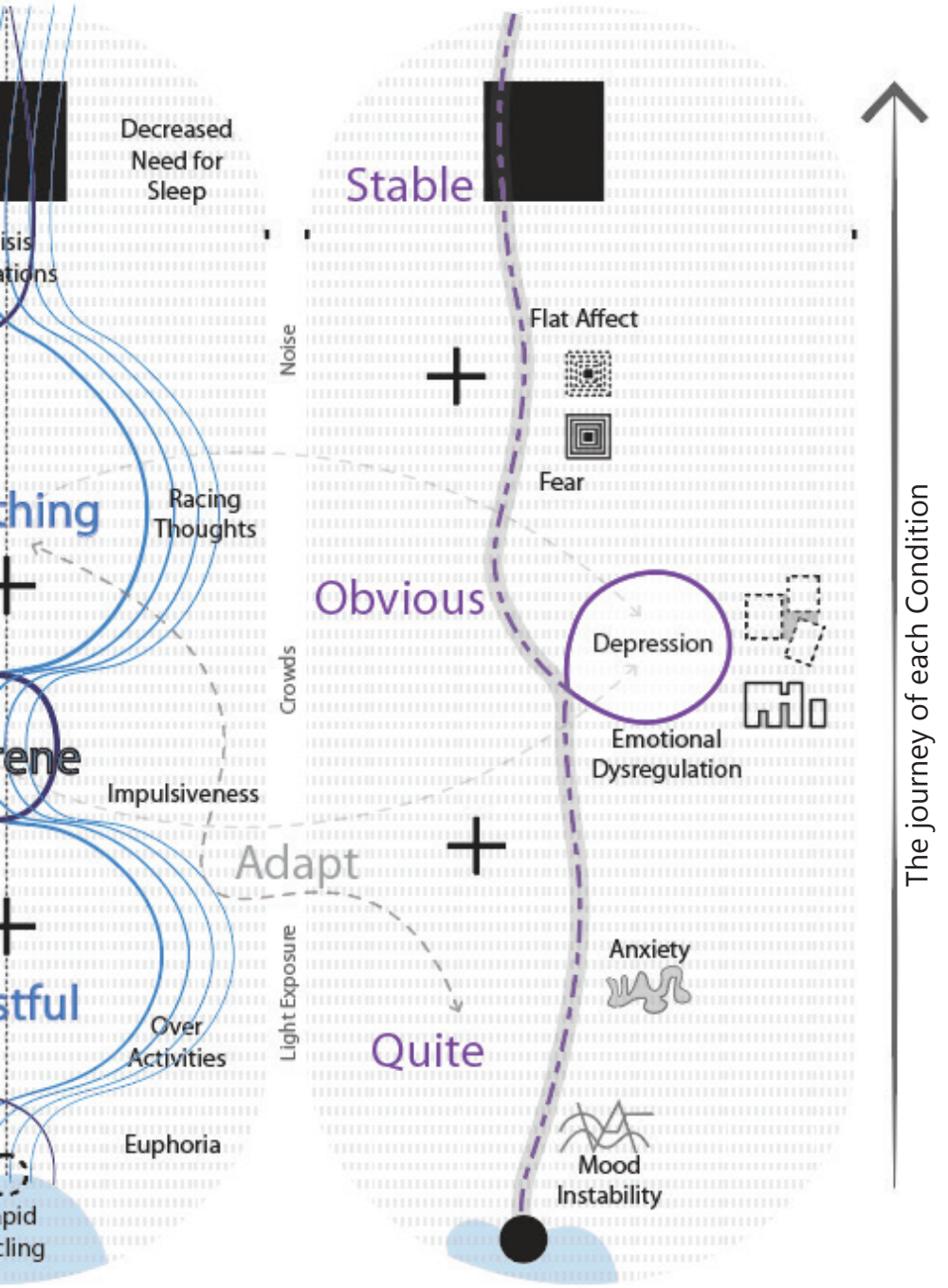
Architects have the power and the ability to create spaces that nourish heal and empower people- a sanctuary where stigma dissolves, and recovery begins.

The evolution of mental health care, especially in conflicted areas like Israel, demonstrates the dynamic interaction between the needs of the individual and the capacity of the system to adapt to them- hinting to a day when mental health will be essential to public health.

This diagram shows how people's feelings change in different urban spaces. It connects how we design these spaces to how calm, stable, or stressed people feel in them.



For example, someone with schizophrenia who needs to feel dominant in the space might feel mood instability or depression. They need a space that feels Quiet, obvious and stable to help manage these feelings effectively.

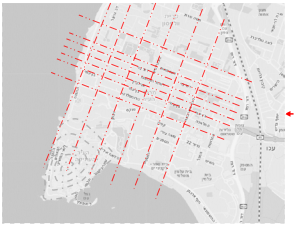


Location: Akko, Israel

The old town of Akko

Old town of Akko

The ancient city of Akko, a place with a rich cultural legacy and extraordinary community. with influences from various civilizations including the Canaanites, Romans, Crusaders, Ottomans, and British. Its UNESCO World Heritage status reflects its unique blend of history, architecture, and community life. This background provides an exceptional platform for an architectural intervention targeting mental health sufferers based on principles of urban inclusion. Integrating structures designed to positively affect mental health within Akko's ancient fabric not only preserves and honors its historical past but also addresses contemporary needs. Moreover, inclusive design in Akko may contribute to social addition, pull down stigma, and boosting attitudes among all city members.



The Charm of Old Town Akko: Noteworthy Architecture and Heritage Sites

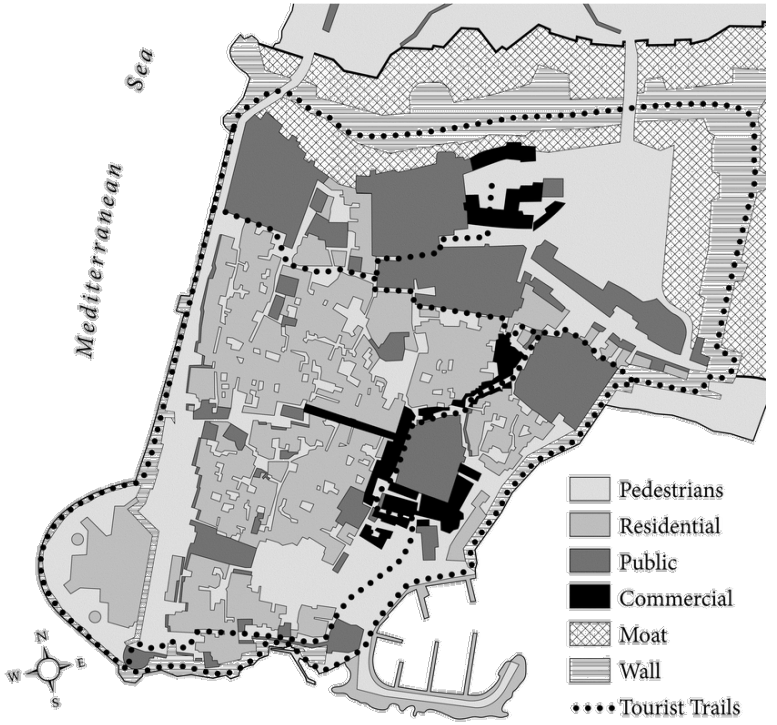
Akko's Old Town is an ancient site that has been nominated as a UNESCO World Heritage. This place presents an exciting setting of centuries of history and culture intertwined. Among of its many historical gems, **the underground prison of Akko**- (it's called the underground prison even though it's not entirely undergrounded)- stands out as a site of profound historical significance and architectural interest.

the underground prison formally **known as the Citadel of Akko**- originates as the Ottoman fortress from the early framework- has went under numerous alterations throughout time following the power changes and the inherent establishments. Indeed, by the end of the eighteenth century, the Ottomans increased the fortress and converted it into a fortified structure under the reign of Jezzar Pasha, playing a critical role in the victory over the Napoleon forces that attempted an invasion in 1799.

However, in the late-nineteenth century, the fortress was **repurposed into a prison by the Ottomans**, and it was strongly employed during the Mandate period by the British. The prison is presented as an underground prison system with a network of tunnels and cells that were added during the Ottoman fortress. The walls are thick, iron heavy doors, with windows covered with bars. However, while telling a story of imprisonment and oppression, this structure paves way for **a story of resistance and struggle** that was happening within the imprisoned walls.

The prison underwent another major change after the establishment of Israel in 1948. The structure was remade into a psychiatric hospital. Akko psychiatric hospital was created inside the old prison's historic walls and existed as such until the late 20 th century. This transformation reflected the shift of it from captivity to treatment.

The prison is currently used as **a museum** that enables visitors to see the harsh realities of the detainees' lives and immerse into the history premised on the cold walls of the cells. Preservation efforts are directed at preserving the existing structure and, at the same time, enabling visitors to perceive the history of the prison.



Akko in three layers of visions :

- **Urban fabric**

Old Town Akko's urban fabric is a captivating blend of architectural styles, shaped by centuries of history and cultural influences. The town is defined by the medieval Crusader-era buildings, medieval fortress walls and contemporary later buildings and structures of Ottoman-Arab character. The design of the town, typical of many fortified port cities of its time, is marked by its nearly round shape, with thick defensive walls surrounding the town. includes **narrow alleys** designed like forts for defence but were transformed nowadays to appealing elements in the city, that are interesting to Explore and discover. hidden corners and historical layers that speak to the city's rich past.

Beyond the thoughtfully planned and preservation of the most ancient structures—the centre still contains buildings from the Crusader period of the 12th to the 13th century, many with distinct Crusader crosses still visible, serving as a testament to the city's medieval heritage. Akko's urban landscape, with its symphonic blend of ancient and more recent architectural elements, offers a unique window into the past while providing a vibrant and dynamic environment for modern life. The city's historical depth and architectural diversity make it a fascinating place to study and engage in architectural interventions that honor the past while addressing modern needs.

Akko in three layers of visions :

- **Daily life and work environment**

Due to the very high cultural and touristic influence, **daily life in Old Town Akko is very vibrant. The local economy depends on the inflow of the tourist money** – the numerous workshops and shops, street markets, and restaurants offering traditional crafts, foods, and souvenirs. Workplaces are accessible for the tourists - offering a unique attraction – one can clearly see some people working on their crafts using age-old techniques. This direct engagement with local craftspeople not only enriches the tourist experience but also helps preserve Akko's cultural heritage.

In the summer, the crowded streets are made even tighter by crowds of tourists and the lifestyle becomes more intense. The majority of Akko's residents are employed in the heritage and tourism sector, – from street tour guides, multiple small hotels to the restaurants and boutiques that are so numerous insides of Old Town. This deep connection to tourism has shaped the local economy and culture, making Old Town Akko not only a historical treasure but also a lively hub of activity. The symbiotic relationship between the residents and the tourism industry ensures that the rich traditions of Akko continue to thrive, while also adapting to the demands of modern visitors.

Akko in three layers of visions :

- **Social and Community**

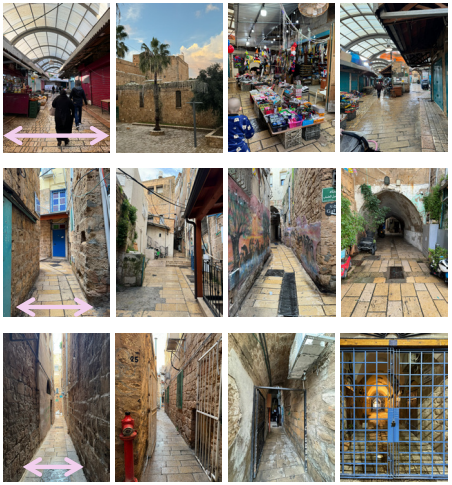
The city of Akko has a rich history and cultural diversity. Jews and Arabs (Muslim and Christian, Druze) and other minority groups have lived in the city for decades. However, the cultural mixture of the region is not always positive; rather, it points to the city's socioeconomic and political issues. There are significant differences between the Jewish and Arab groups in terms of income, employment, and education, have led to social tensions and disparities.

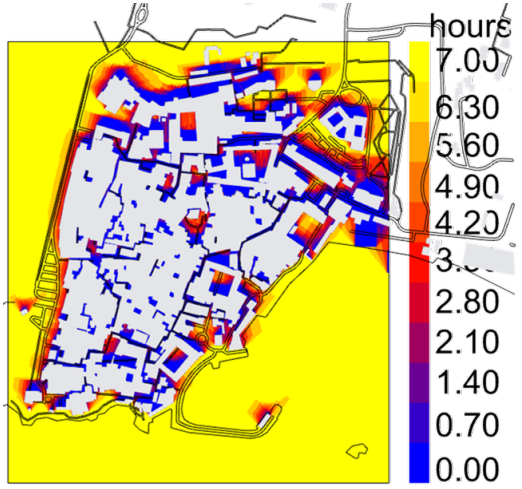
Nonetheless, Akko is also a place of hope and resilience, where numerous initiatives aimed at fostering reconciliation and coexistence are actively pursued. Various NGO's[1] (Non-Governmental Organizations (NGOs) are independent, non-profit groups that work towards social, cultural, environmental, or humanitarian goals, often addressing issues that government programs might overlook or supplementing public services.) groups and community centres, combined with education programs, bring people from different cultural backgrounds together. These efforts are crucial in a city that is deeply interconnected with its past but also striving to build a more inclusive and harmonious future.

Addressing Akko's challenges requires a multifaceted

1(Non-Governmental Organizations (NGOs) are independent, non-profit groups that work towards social, cultural, environmental, or humanitarian goals, often addressing issues that government programs might overlook or supplementing public services.)

approach that acknowledges the deep historical roots of these issues while promoting comprehensive policies aimed at horizontal equity and peaceful coexistence. By capitalizing on its rich cultural heritage and fostering inclusivity, Akko has the potential to transform its diverse community into a model of shared growth and harmony, ensuring that all its citizens benefit from the city's economic and cultural wealth.



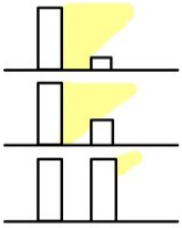


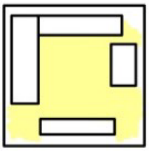
The urban fabric

Alleys | Courtyards | Arch

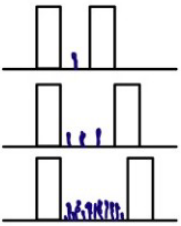
Akko's features

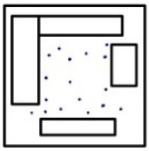
Light exposure



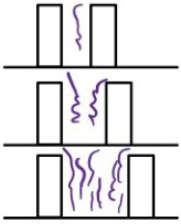


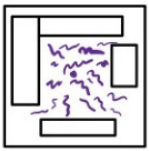
Density



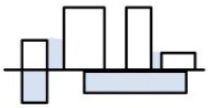


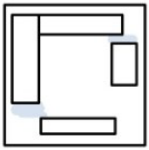
Noise

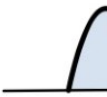




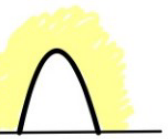
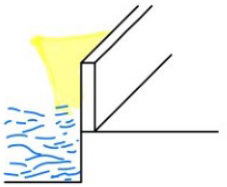
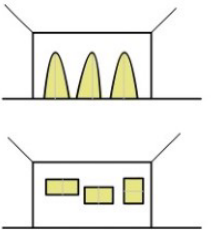
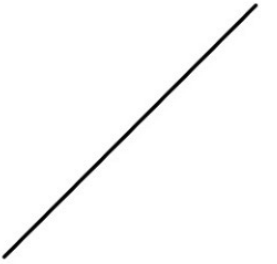
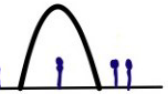
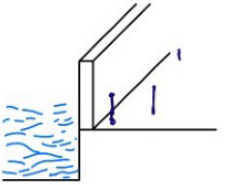
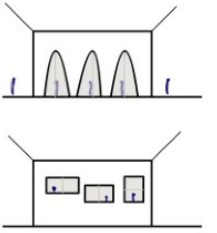
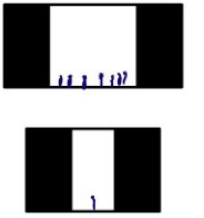
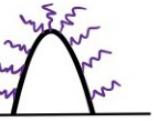
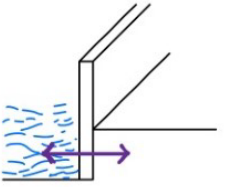
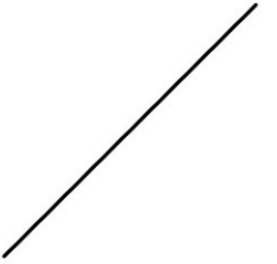
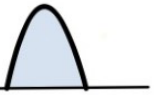
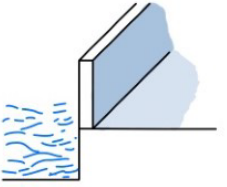
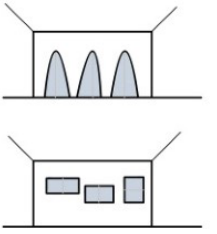
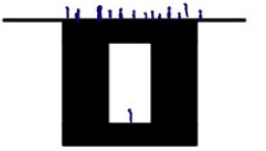
Isolation







bric of Akko's Old Town

rches	Walls of Akko	Openings- Doors and windows	Underground
			
			
			
			

The Architecture to the well-being

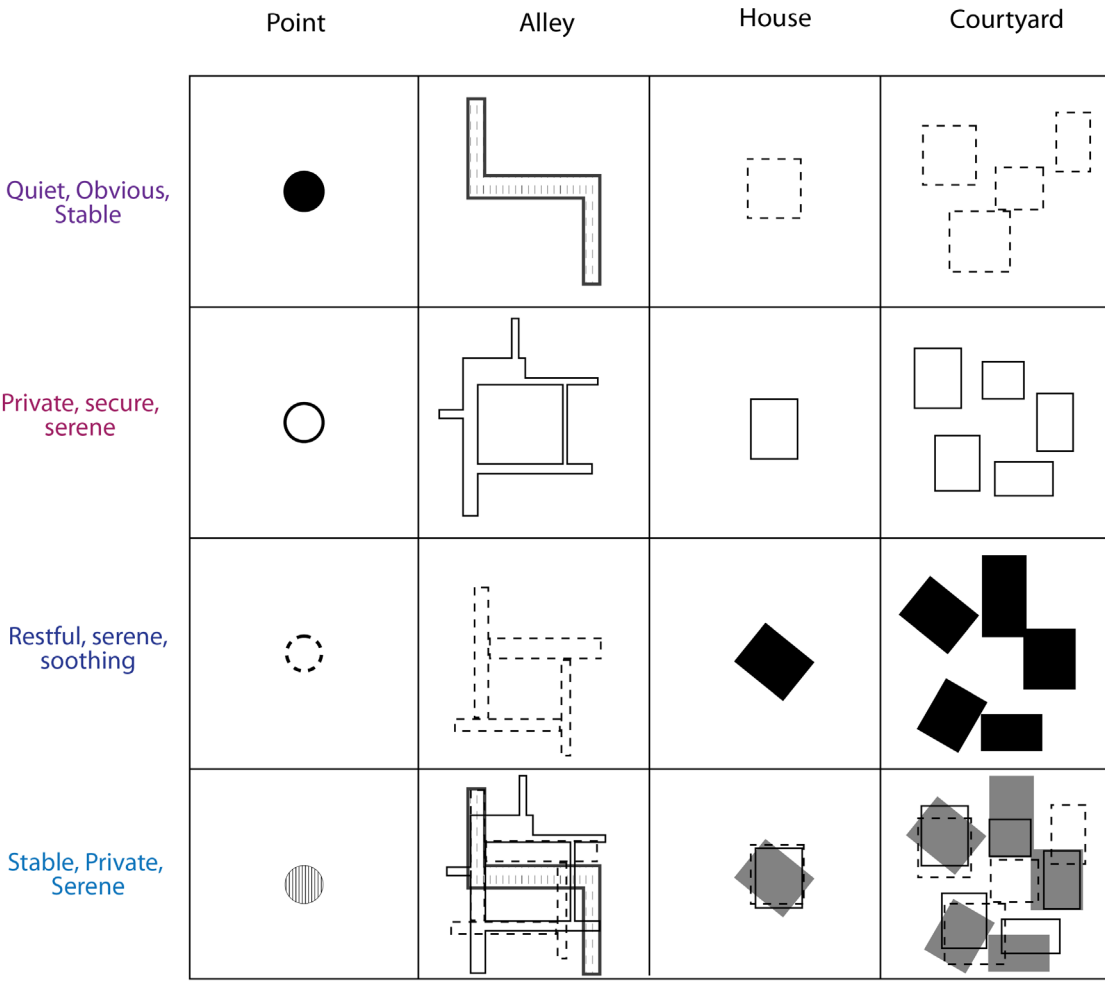
The connection between Mental Well-being and the old town of Akko.

The unique combination of natural beauty, historical richness, and community life makes Akko **a supportive therapeutic environment** for individuals with mental disorders. The city's location near the Mediterranean Sea contributes to the **natural calming effect of water**. The water sound and its sight convey a relaxing atmosphere, helping to relieve stress and promote psychological well-being. Since Akko is located in an area with a mild climate, **outdoor activities are possible**, which is essential for promoting functioning and well-being.

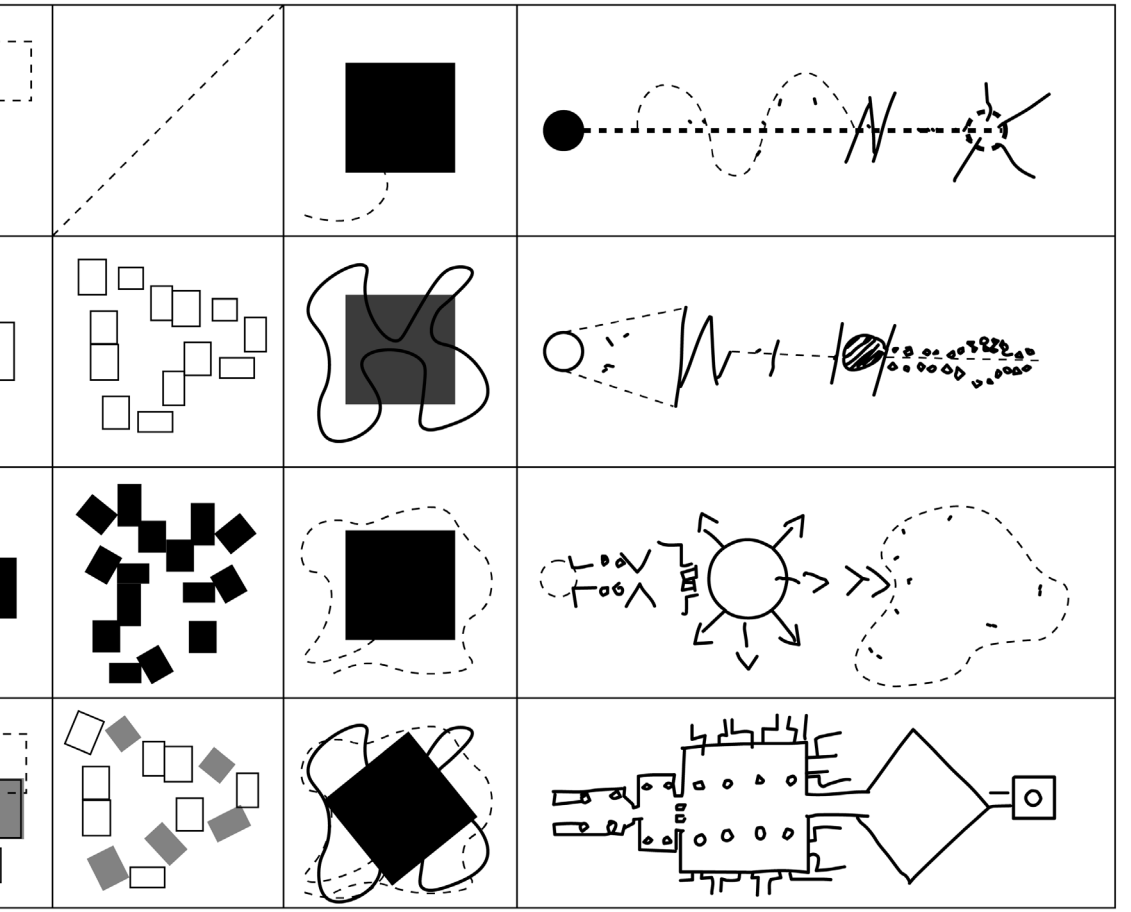
Meanwhile, the visit to Akko's Old Town provides cognitive stimulation and connects individuals to a broader historical retrospective. The access to the city's cultural life contributes to the sense of belonging and togetherness. The diverse cultural texture of the city ensures reliable community backing and **eliminates the risks of isolation.** Finally, the city's healthcare facilities offer services specifically designed for mental health patients. This collection of natural, historical, and community factors makes Akko the ideal setting for mental well-being and recovery.

The rich urban fabric of the ancient city of Akko provides a distinct therapeutic landscape that could be designed for the distinct needs of individuals with mental health disorders, including schizophrenia, PTSD, and bipolar disorder. The current study explores the interaction between these conditions and the environment and suggests three independent "recovery" processes

within Akko. They present unique patterns of the urban environment specifically designed to encourage the process of healing.



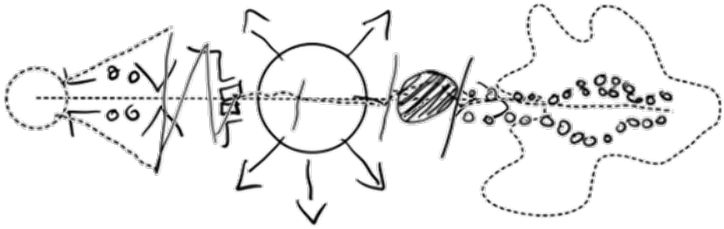
d Open space Public building Path- urban fabric



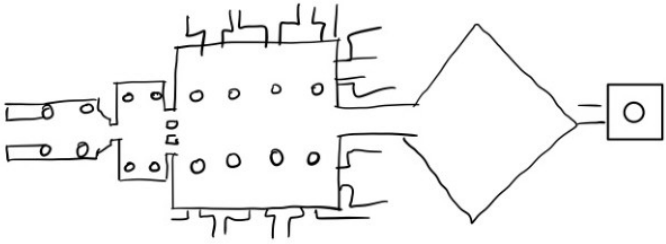
free Path

Integration

Dark Quiet Obvious Path



Quiet open spaces calm Path

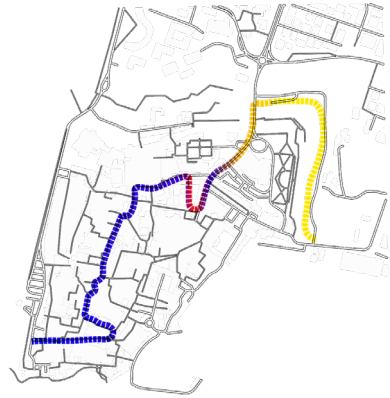


High Energy Path

The three Paths

The “Dark Quiet Obvious Path” would be suitable for individuals with heightened sensitivity during certain phases of schizophrenia. This technique often uses tunnels, or the “underground’’ method, is well-suited for acute-phase individuals of the disorder, especially when they possess a high level of sensory sensitivity. The diminished light in this dark, sheltered environment can help lower certain symptoms, providing immediate relief.

The Path



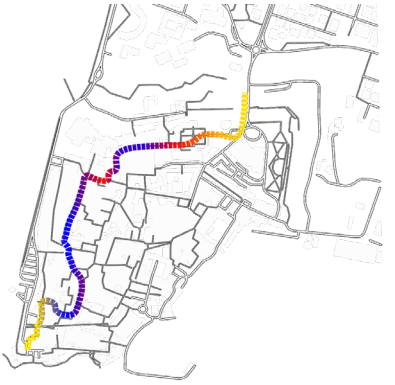
Sun light - blue to yellow from direct sun during the day to none

calm and noisy areas

Isolation

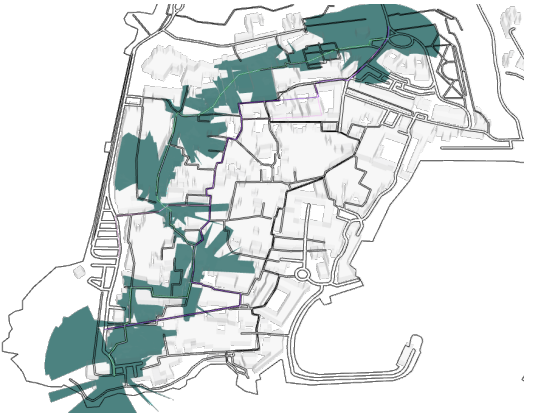
The second path is considered for individuals recovering from PTSD and Depression phase of bipolar disorder is the Quiet open spaces calm Path. It includes open spaces and rooftops that offer the sense of safety. travel across the residency quarters of the Old Town Akko that offers sense of calmness.

The Path



Sun light - blue to yellow from direct sun during the day to none

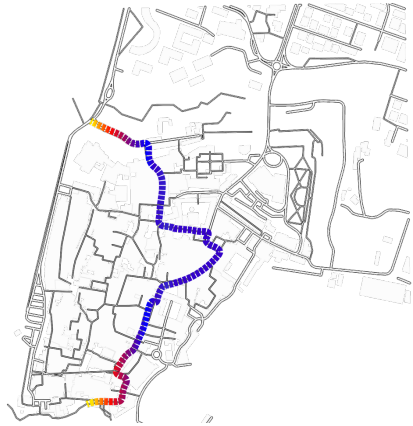
calm and noisy areas



Isolation

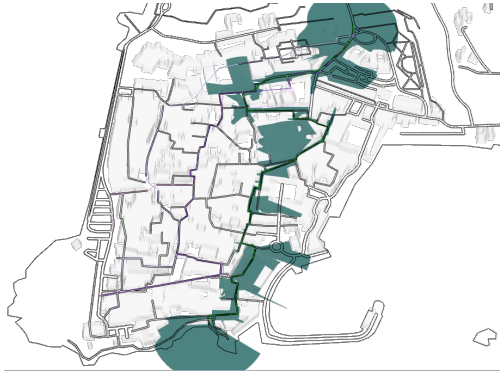
The third is a relatively new path suitable for the mania phase is the High Energy Path involving the heavily crowded market roads and lively walking areas.

The Path



Sun light - blue to yellow from direct sun during the day to none

calm and noisy areas



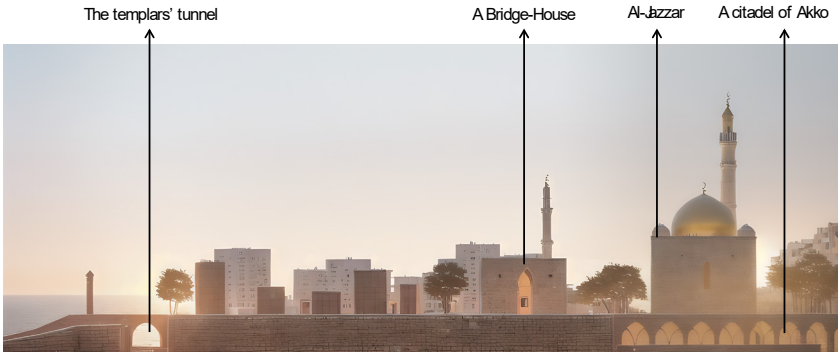
Isolation

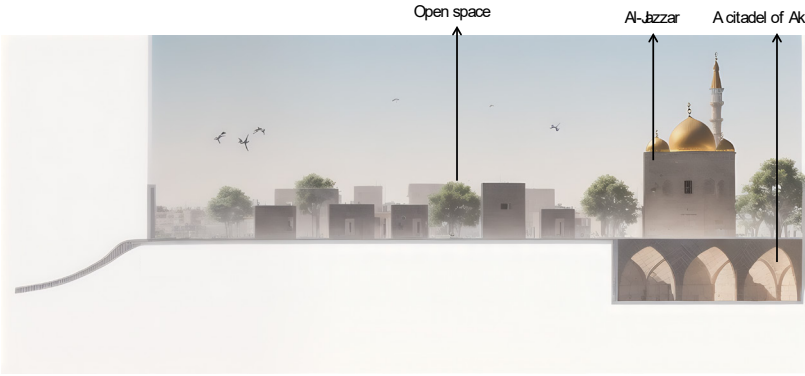
To sum-up, each of the established paths offers a unique pattern of environmental factors. By integrating natural and artificial assumptions, these routes not only facilitate therapeutic experiences but also integrate the city's unique historical and cultural essence. The paths of healing are believed to promote and facilitate "well-being".

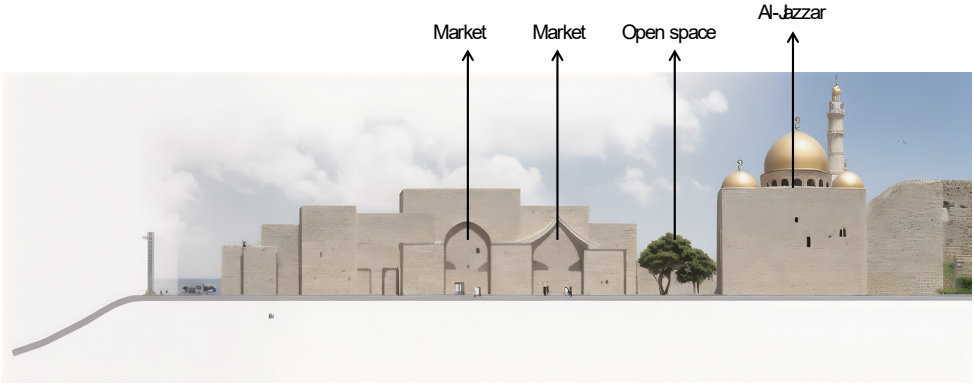
Dark Quiet Obvious Path

Quiet open spaces calm Path

High Energy Path


The templars' tunnel
A Bridge-House
Al-Jazzar
A citadel of Akko


Open space
Al-Jazzar
A citadel of Akko


Market
Market
Open space
Al-Jazzar

The three Paths

Special zones for varies activities to support mental health within the old city.

Building and areas for mental health dailylife support

Moreover, aside from creating individual, mental health-friendly pathways suitable for patients with various conditions, special zones and facilities are integrated into Old Town Akko to promote the daily care routine.

1. Special Zones for Varied Activities.

To enhance the therapeutic benefits of Akko's environment, special zones are established within the city to host activities that support mental health. whether natural or architectural, they could offer suitable spaces for art therapy, meditation, social interaction, and physical activity, thus establishing foundational services to mental health rehabilitation.

The first could be specialized zones for art therapy. The near area of the historical sites and the tourist-populated centres would be the designated spots for the individual sessions of creative expression. Art therapy is a known method of emotional processing and stress reduction. (Point number 2)

Other zones could be built around the already existing calm and quiet area in the Old Town. Meditation zones, intentionally located near the sea walls and in less navigated courtyards, could allow for peace and isolation demanded by mindfulness and reserved for people suffering from PTSD and depressive symptoms. (Point 6 and 7).

Finally, there could be specialized zones for physical activity established along the walls and in the more open spaces near the port. Physical activity increases well-being by reducing anxiety, depression and negative symptoms while increasing self-esteem and proper cognitive functioning. (Point1)

2. Buildings and areas for daily life support:

As people require ongoing support, several buildings in the Old Town of Akko are adapted to serving as centres for daily mental health care. The centres offer individual and family counselling sessions, Code of Safety workshops, and support groups, critical components of community-based mental health care.

Community Mental Health Centres: The centres are full-service buildings offering services such as therapy, counselling, group therapy, concentric circles, and crisis intervention. They act as nests for mental health professionals and patients to provide one another with a supportive environment. (Point 3)

Residential support facilities: In cases where individuals require round-the-clock support, the centres place patients in a 24/7 living facility. These organizations maintain a community-based approach critical for keeping connections with the city's social circles, dramatically reducing the separation between social groups and the stigma mentioned previously.

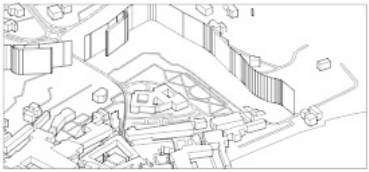
Workshop and education centres: Learning and educational centres foster workshops focusing on learning about mental health care and coping mechanisms. They are provided for the entire community to increase awareness and create an open conversation and learning environment.

To conclude, the special zones and facilities in Old Town Akko promote the residents' and visitors' mental health. The successful leveraging of the unique historical and cultural legacy allows Akko to not only keep its history intact but also re-imagine its urban space as a healing retreat. The description of the initiatives demonstrates the potential of urban adaptation to the health needs of citizens, encouraging a productive environment for their well-being.

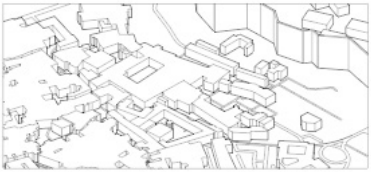
1
2
3
4
5
6
7
8

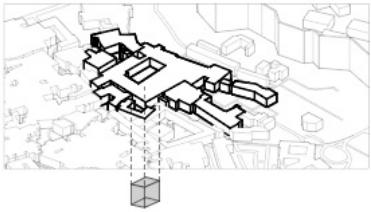
P1

P2

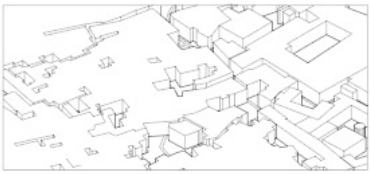


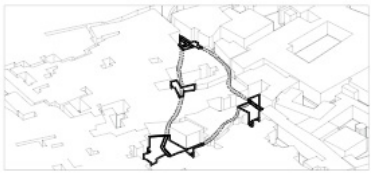
P3



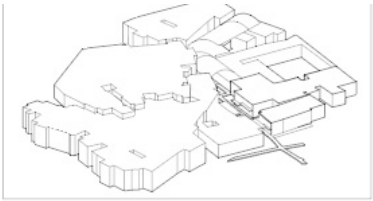


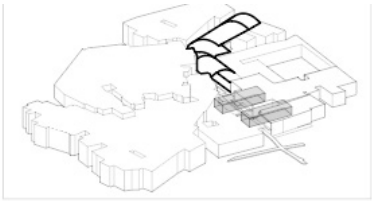
P4



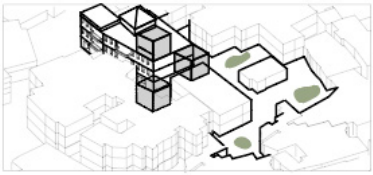


P5

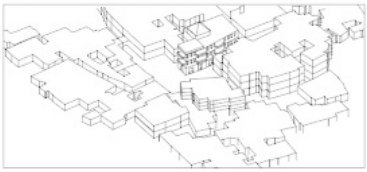


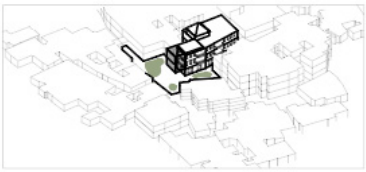


P6

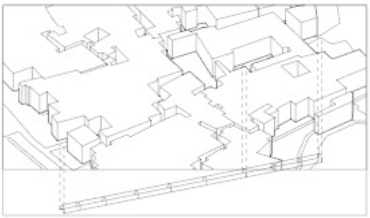


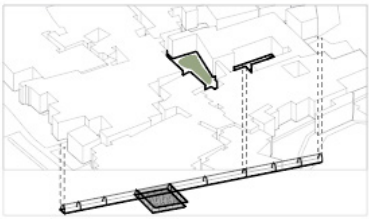
P7





P8





Intervention

To gain a deeper understanding of the project and its underlying concepts, it is essential to focus on a specific site located at the edge of the sea. This 70-dunum area integrates multiple pathways to well-being and incorporates several distinctive zones. The site features notable elements such as the Templars' underground tunnels, Khan al-Shune, and a combination of abandoned houses and restaurants.

The project introduces new facilities within the existing urban fabric, including dormitories for patients, a nurse's station, workshops, and educational spaces designed for reciprocal learning, where patients both teach and learn. Additionally, it incorporates therapeutic facilities such as doctor's offices, a swimming pool, physiotherapy spaces, and a community center aimed at fostering interaction between the existing population and new residents.

The core concept of the project centers on the integration of new and existing urban fabric, preserving the historical layers while introducing contemporary interventions. The design approach is akin to a "Lego" construction, where new elements are carefully inserted into the old, creating an interlocking relationship. This method ensures that the new interventions respect and enhance the existing structures, allowing historical and modern components to coexist harmoniously. Rather than replacing the old, the new fabric interacts with it, adding functionality and responding to the evolving needs of the community.

Focusing on the edge of Old Akko, which clearly marks the boundary between the city and the sea and vividly illustrates Akko's complex urban fabric.
This area includes all the key elements discussed in the project, such as a mix of open and closed spaces and connections between various paths.

Several key design principles underpin the project:

- **Historical Preservation and Integration:** Harmonizing new constructions with existing historical buildings, preserving the cultural and architectural heritage of old Akko.

- **Inclusive Design and Accessibility:** Designing an environment accessible to all, addressing diverse user needs with spaces dedicated to rest, residence, and recovery.

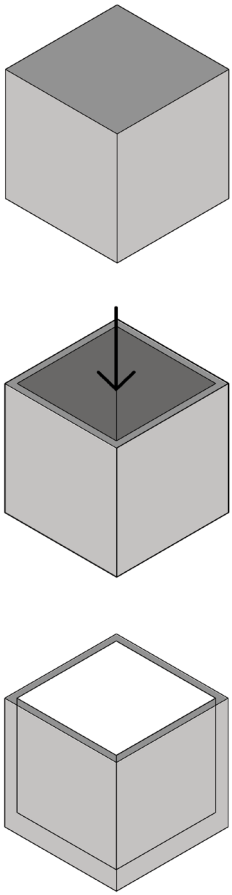
- **Natural Materials and Lighting:** Incorporating natural materials and ample lighting to foster a relaxing environment conducive to healing and mental well-being.

- **Therapeutic Spaces and Social Activities:** Creating therapeutic spaces, workshops, sports facilities, and social areas to encourage community integration and social interaction.

- **Community Connection:** Engaging the local community by opening spaces to the public, integrating patients into everyday life, and fostering social inclusion.

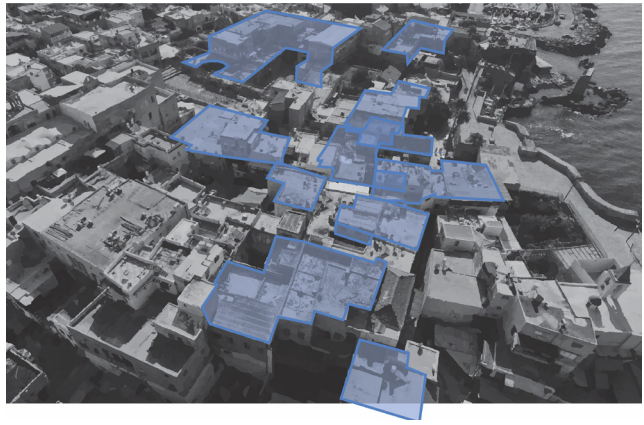
- **Multifunctional Spaces:** Designing versatile spaces for therapeutic activities, social gatherings, and community events, ensuring efficient use of space.

· **Integration of Green Spaces:** Incorporating green areas and gardens to promote tranquility, improve air quality, and provide therapeutic benefits through interaction with nature.

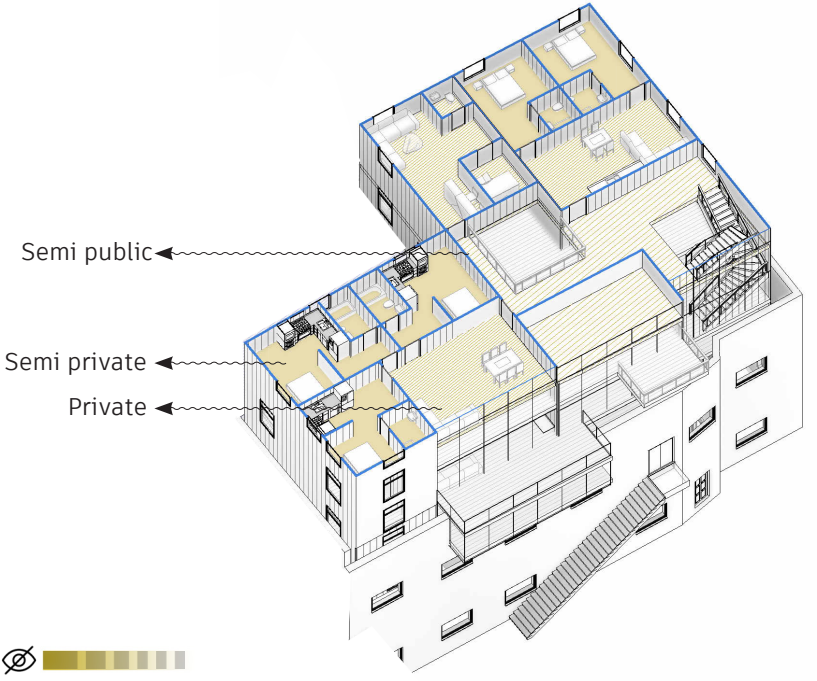


Given Akko's rich historical significance, my approach focuses on preserving existing structures. My **primary design concept** involves creating a 'cube within a cube' structure.

This method allows for altering the interior programming and adding new layers on top of existing buildings, all while respecting and preserving the architectural heritage.



Additionally, the design introduces a privacy gradient to accommodate the diverse needs of residents. The gradient ensures that patients experience a sense of comfort and security within the space. Private rooms are followed by semi-private areas serving 2-3 individuals, which connect to larger semi-public areas that bridge multiple semi-private spaces. These, in turn, open to a public open space that links with the public buildings.



The project offers a gradient of privacy, starting with the room as the most private space. Then there's a shared area for two or three rooms, which is semi-private. From there, you move to the semi-public spaces shared by two or three dorms, and finally, to the fully public areas. This thoughtful arrangement ensures residents have spaces that balance personal privacy with community interaction.

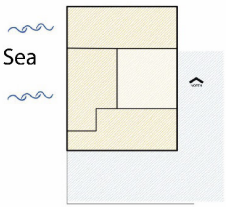
This is a catalogue that illustrates how each room is different from the others, highlighting the unique design elements customized to meet various needs.

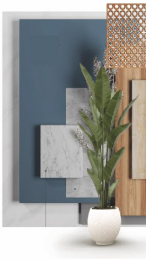
Views

Colours sch

Dorm 1

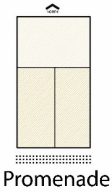
Type B
Area 103m2

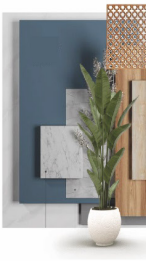




Dorm 4

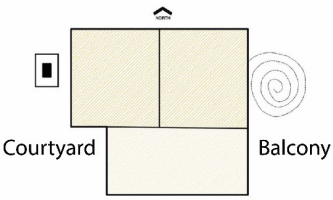
Type A
Area 54m2





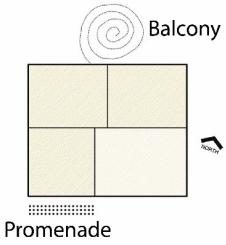
Dorm 5

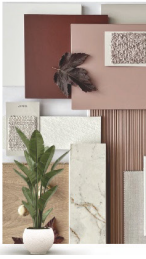
Type A
Area 75m2



Dorm 8

Type B
Area 115m2

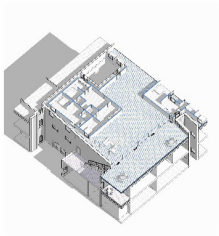


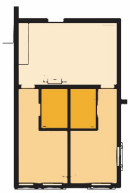
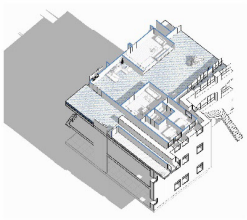


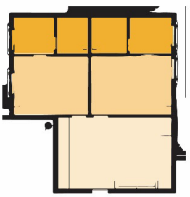
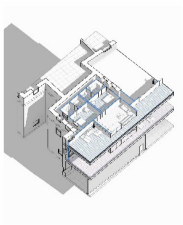
Each room is thoughtfully designed to maximize natural lighting and provide picturesque views, creating a serene and inviting atmosphere. The color scheme is carefully chosen to evoke calmness and focus, utilizing soothing tones that enhance the sense of space and light.

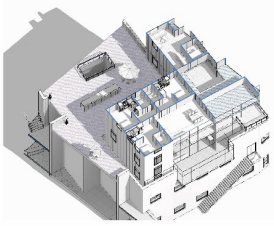
scheme Scheme Isometric

Servant Served Semi-Public





Scheme

Semi-Private

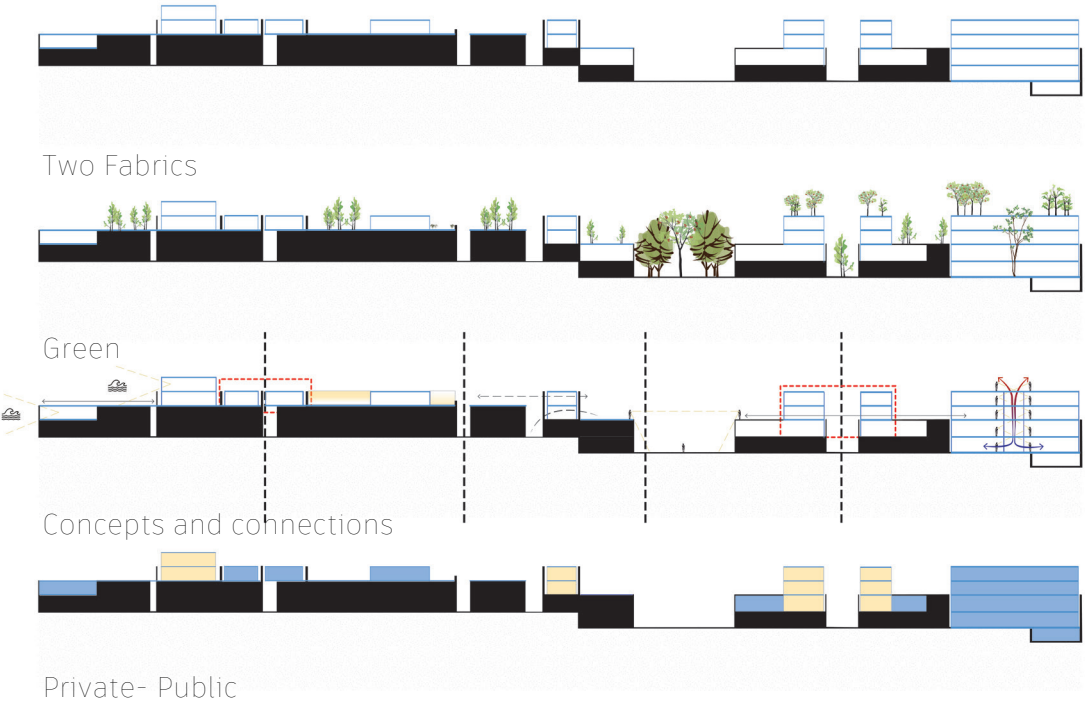
Served

Servant

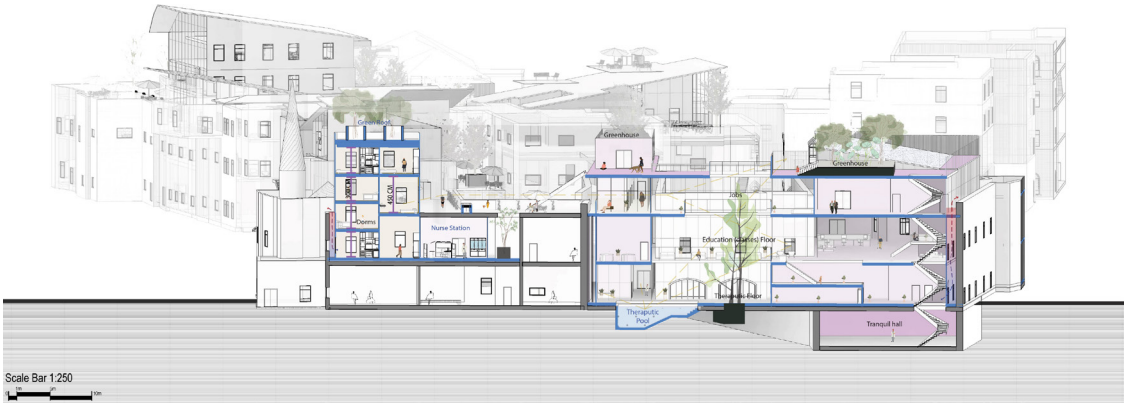
Type A : area: -80m

Type B : area: 80+m

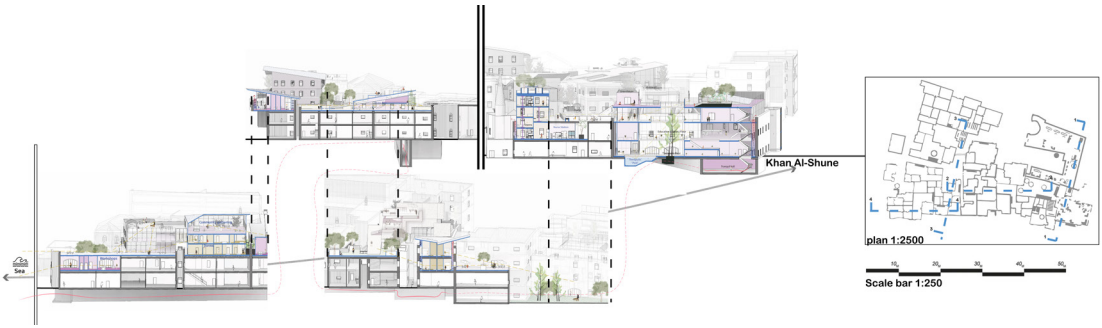
The design adds plenty of green spaces and creates strong connections between areas. Private and public spaces are placed next to each other in a way that ensures smooth transitions while keeping privacy and promoting interaction.



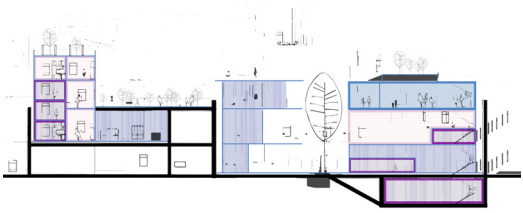
The project introduces new facilities within the existing urban fabric, including dormitories for patients, a nurses' station, workshops, and educational spaces designed for reciprocal learning, where patients both teach and learn. Additionally, it incorporates therapeutic facilities such as doctors' offices, a swimming pool, physiotherapy spaces, and a community center aimed at fostering interaction between the existing population and new residents.

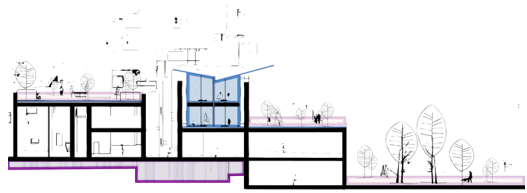


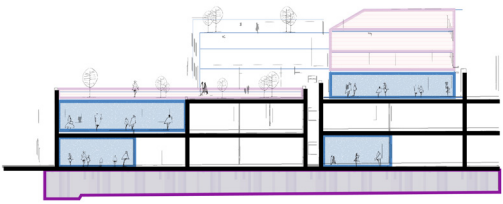
The section cuts through the Khan, a public building with each floor serving a different purpose. The first floor is the therapeutic area, where nurses and doctors work, and it includes small, private, quiet spaces and a therapeutic pool. Above this, there is the educational floor where the mixed community learns from each other. Then, there's a jobs floor to support integration, followed by an open space that connects to the dorms.

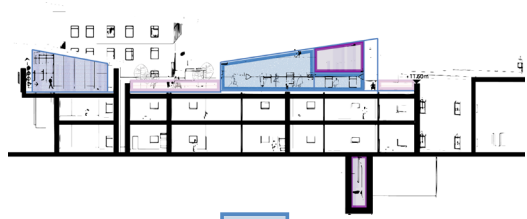


Sections









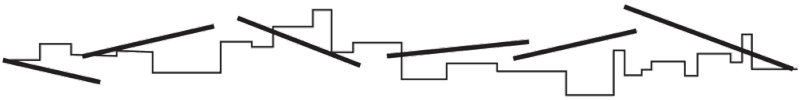
Dark, noiseless underground path Quiet Open spaces and calm path High path

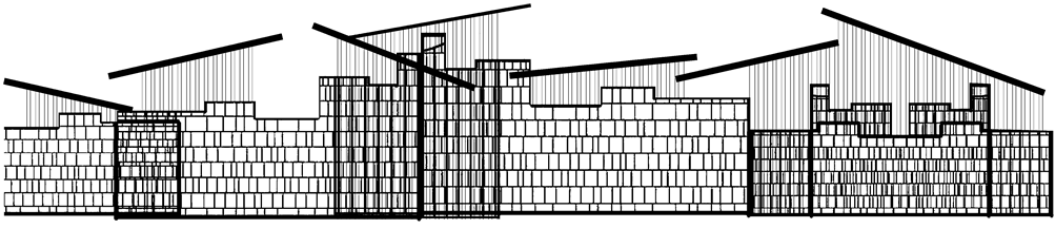
By looking at all the diagrammatic sections together, we can see how the design thoughtfully supports each pathway and condition, and how these paths interact to create a seamless flow.

The design interventions reflect a delicate balance between preservation and innovation, ensuring that the new does not overwhelm the old, but rather enhances it. The project's success lies in its ability to create multifunctional, sensory-friendly spaces that foster recovery, community, and well-being.

Khan interior Elevation- Host side

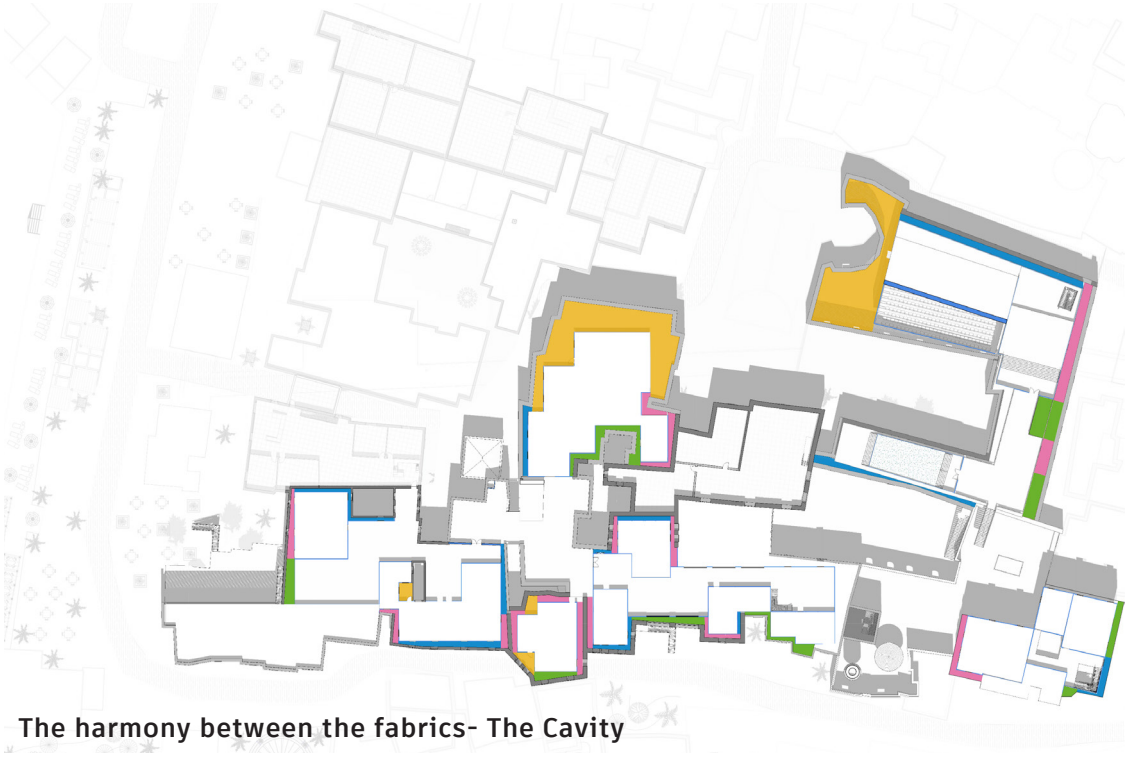
section/elevation illustrates the architectural experience from the inside, showing how the facade evolves. It reveals the blend of old and new materials, as well as the integration of nature, creating a dynamic and harmonious space.



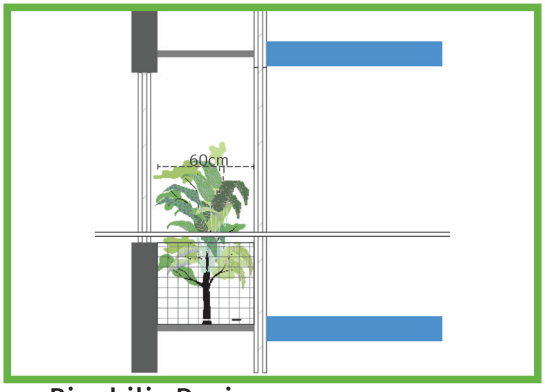


The main concept is the harmony between the old and new materials. The new materials enhance the sense of open space, while the traditional, heavier materials ground the building in its historical context,

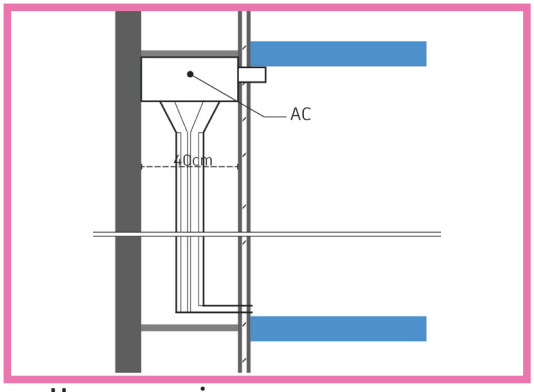
South Elevation- Guest side



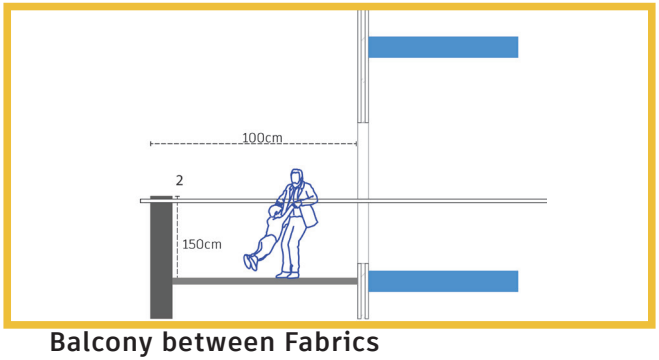
The harmony between the fabrics- The Cavity



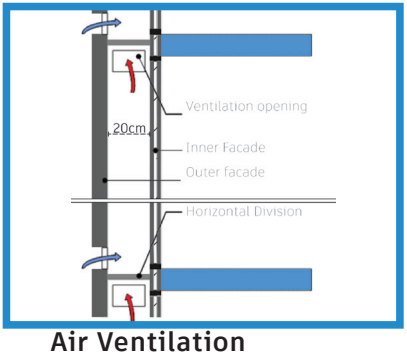
Biophilic Design



House services



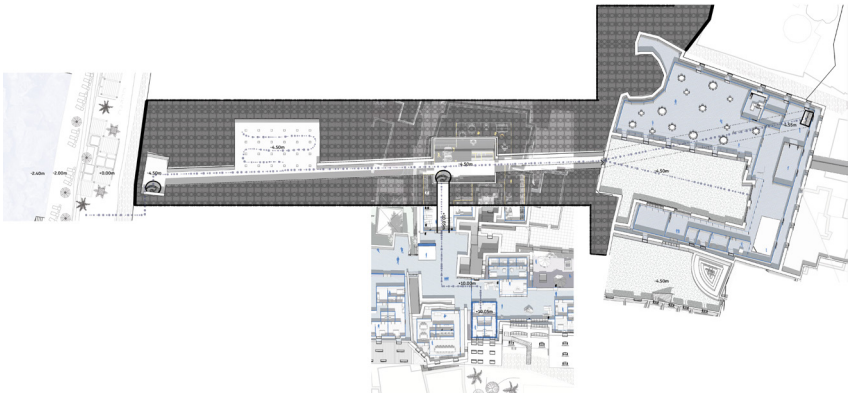
Balcony between Fabrics



Air Ventilation

Circulation Plans

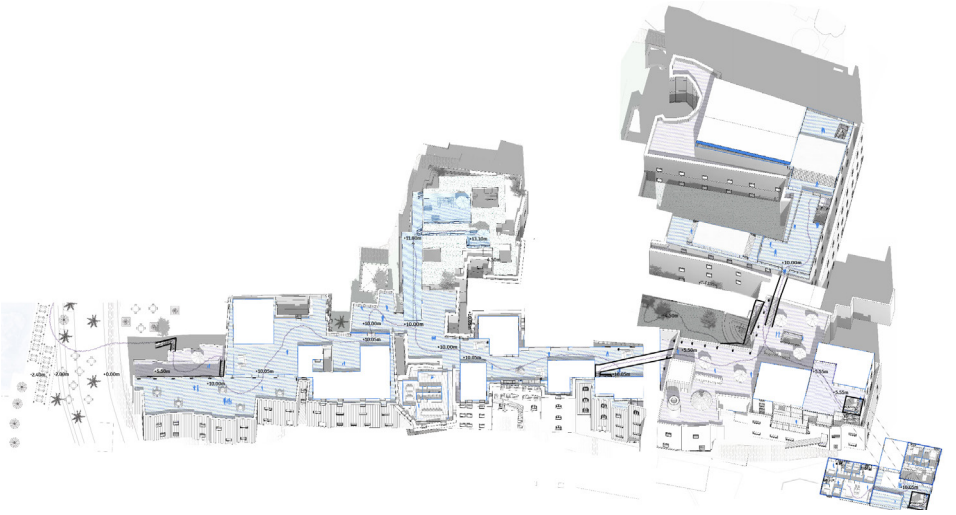
- Dark, noiseless and underground Path



With the first path: the dark, noiseless underground path. As we can see, it begins with the underground tunnel near the sea and moves in a straight, clear direction. Along the way, there are tranquil halls, and it connects to public buildings and via stairs, leading to the dorms in a similarly direct and straightforward way.”

Circulation Plans

- Quiet, calm and open spaces path



Second, the quiet, calm, and open spaces path. Here, the plan takes us through the upper open spaces provided by the project, connecting to the public buildings. The path leads to the edge of the site, where the atmosphere becomes even calmer and quieter, eventually reaching the dorms that are best suited for this peaceful route.

Circulation Plans

- High-activity Path

Lastly, we have the high-activity path. This route connects with the existing historic buildings in the tourist and sea areas. From there, it provides access to stairs leading up to the project, where the dorms and public buildings are located, offering an active and dynamic connection throughout.

Final Thoughts

This intervention redefines the way we approach mental health care in urban spaces. The gradient of privacy, the interlocking design of old and new, and the introduction of therapeutic facilities all contribute to a holistic environment that supports both individual healing and community integration. By prioritizing dignity, accessibility, and inclusion, this project not only transforms the physical space but also sets a precedent for future urban interventions that aim to care for the mental well-being of their inhabitants. The edge of the city, once a boundary between isolation and the sea, now serves as a connecting point—between history, people, and the city's future.

Eco-Energy integration

Solar power generation- ≈850m2

Rooftops and Greenry

Skylights

Water Storage- ≈1050m2

Energy Production=Roof Area×Efficiency×Solar Irradiance

Energy Production (daily)=850m2×0.18m×5.5= **841.5kWh/day**
Energy Production (yearly)=841.5kWh/day×365days/year=**307,147.5kWh/year**

Number of Households=6,000kWh/year307,147.5kWh/year≈**51.19**
Households will have power through the year only from the solar panels

Volume of Water=Roof Area×Rainfall×Runoff Coefficient

Volume of Water=1,050m2×0.5m×0.85= **446.25m3**
From M3 to liters: 446.25m3×1,000=**446,250liters**

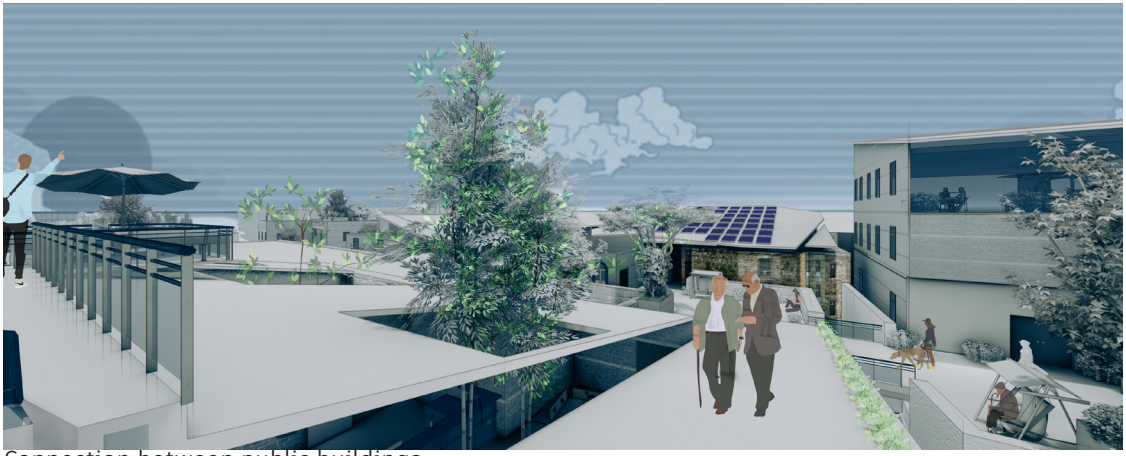
Number of Households=150,000liters/household446,250liters= **≈3**

Powering the future with energy-efficient spaces that heal the environment and the soul

Co

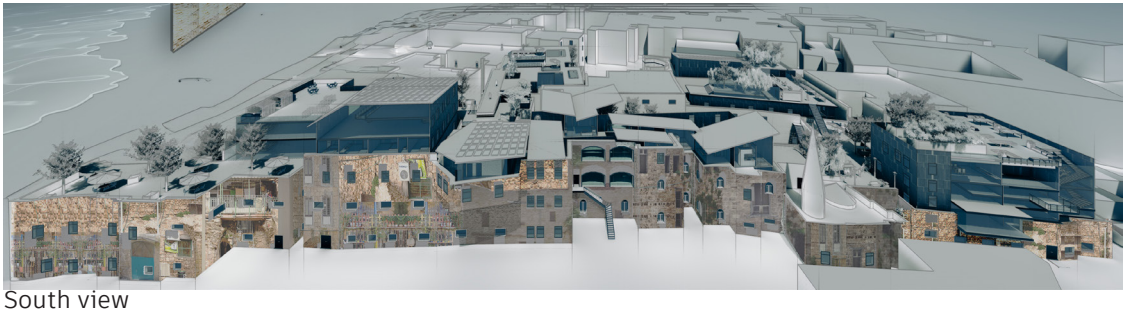
Op

Sc

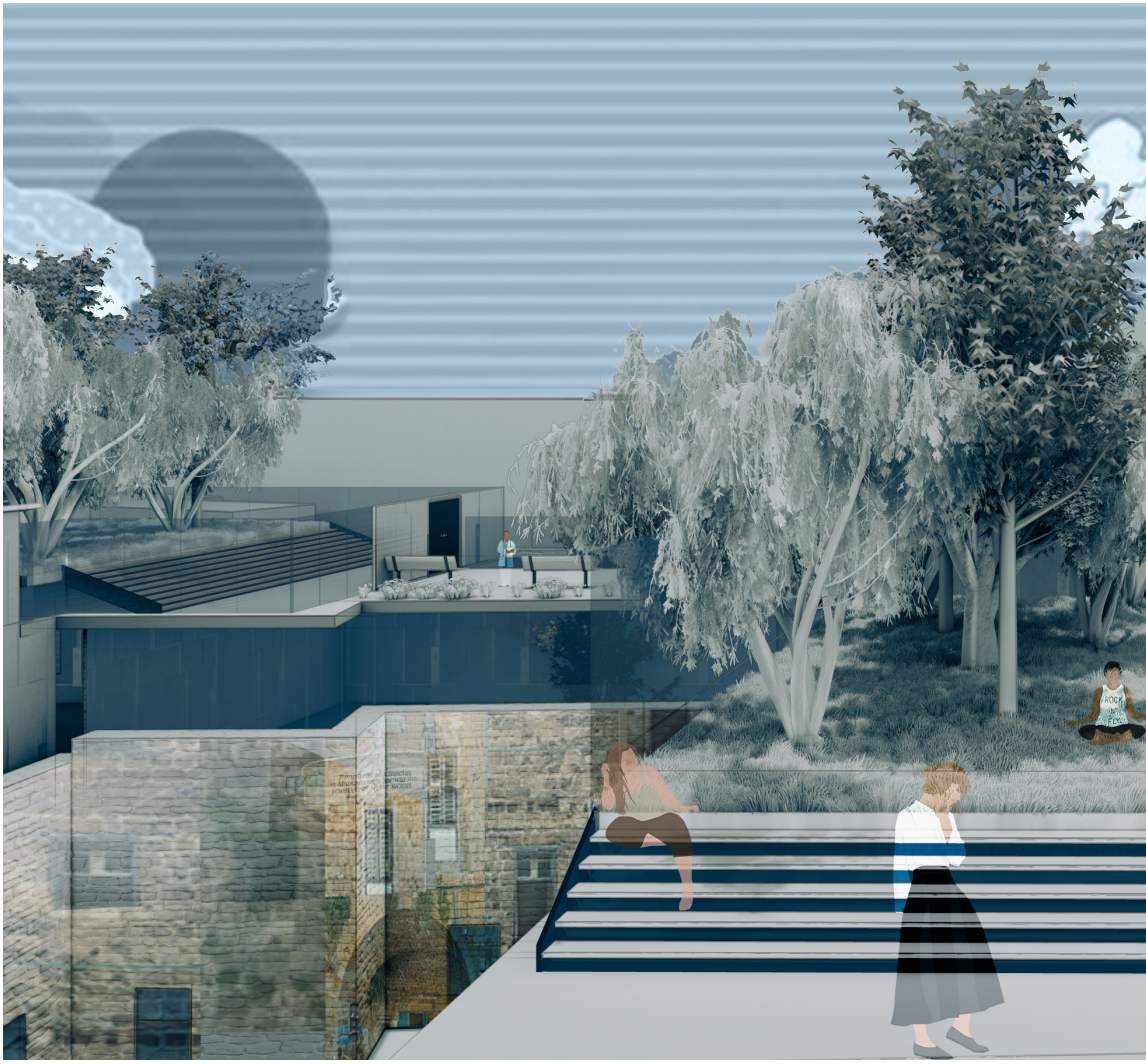


Connection between public buildings

Open space above the mosque- Between Dorms



South view



Connecting open spaces- Khan and Dorms

Refernces

- **Thesis:**

1. Foucault, Michel. Madness and Civilization: A History of Insanity in the Age of Reason. New York: Vintage Books, 1961.
2. Goffman, Erving. Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. New York: Anchor Books, 1961.
3. Mace, Ronald L. Universal Design, Barrier-Free Environments for Everyone. Designers West, 1985.
4. The Center for Universal Design, North Carolina State University. The Principles of Universal Design. North Carolina State University, 1997. Available at: NCSU Universal Design.
5. Steinfeld, Edward, and Jordana Maisel. Universal Design: Creating Inclusive Environments. Hoboken, NJ: Wiley, 2012.
6. Lid, Inger Marie. “Universal Design and Disability: An Interdisciplinary Perspective.”
7. “The Psychosocial Context of Bipolar Disorder: Environmental, Cognitive, and Developmental Risk Problems.”
8. “Demographic and Environmental Factors Associated with Mental Health: A Cross-Sectional Study.”

- **Cultural Diversity and Socioeconomic Challenges in Akko**

9. Rouhana, Nadim N., and As’ad Ghanem. “The Crisis of Minorities in Ethnic States: The Case of Palestinian Citizens in Israel.” International Journal of Middle East Studies 30, no. 3 (1998): 321-346.

Refernces

10. Yiftachel, Oren. “The Political Geography of Ethnic Protest: Nationalism, Decolonization and the Uneven Development of Israel’s Periphery.” Political Geography 16, no. 6 (1997): 505-527.

• Coexistence and Reconciliation Initiatives:

11. Abu-Nimer, Mohammed. Dialogue, Conflict Resolution, and Change: Arab-Jewish Encounters in Israel. Albany: SUNY Press, 1999.
12. Amara, Muhammad, and Izhak Schnell. “Identity Repertoires Among Arabs in Israel.” Journal of Ethnic and Migration Studies 30, no. 1 (2004): 175-193.

• Tourism and Economic Distribution in Akko

13. Ashworth, Gregory J., and J. E. Tunbridge. The Tourist-Historic City: Retrospect and Prospect of Managing the Heritage City. Oxford: Pergamon, 2000.
14. Cohen-Hattab, Kobi, and Noam Shoval. “The Decline of Israel’s Mediterranean Resorts: Life Cycle Change Versus National Tourism Master Planning.” Tourism Geographies 6, no. 1 (2004): 59-75.

Level 2
+11.50m
Scale Bar 1:250
1m
5m
10m

+00.00cm
+4.80cm

Epilogue

This work is a journey into the power of architecture to transform the lives of those who suffer from severe mental health conditions like PTSD, schizophrenia, and bipolar disorder. Set in the ancient heart of Akko, Israel, a city where history is etched into every stone, the project seeks to reimagine spaces that have witnessed despair and suffering. The Akko prison, once a symbol of punishment and later a mental health hospital, now stands as a museum—a testament to the complex narratives of pain and healing that have unfolded within its walls.

The design aims to confront and dismantle the stigmas that have long surrounded mental illness. It aspires to create environments that not only acknowledge and understand these struggles but also offer empathy and foster recovery. This project asks a profound question: How can architectural design improve environments for individuals with mental illnesses by shifting away from institutional models towards spaces that support well-being and recovery through community integration?

Inspired by the insights of Erving Goffman and Michel Foucault, who both critiqued the isolating nature of total institutions, this work challenges the notion that those with mental health conditions must be separated from society. Instead, it proposes spaces where architecture acts as a bridge—connecting, soothing, and healing. Goffman believed that architecture holds the power to bring peace to troubled minds, a sentiment echoed by Foucault's emphasis on the importance of understanding the needs of individuals with mental illnesses.

Building on these ideas, this project integrates inclusive and biophilic design principles to create therapeutic environments that support unique paths to recovery. By making spaces accessible and infused with nature's healing elements, the design strives to restore dignity and connection to those who have been marginalized. As Inger Marie Lid reminds us, "What is to be designed universally has to be usable by all people, to the greatest extent possible." This project is a testament to the belief that architecture can, and must, be a force for healing.