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Alda (her) itage Old buildings New Functions WORK-SHOP 3

5th - 11th November 2017

Salma Khamis, Hassan Elmouelhi, Omar Nagati, Jens Birnbaum, Moritz Krekeler, Philipp Misselwitz (Eds.)

#### **ABOUT REALCITYLAB**

RealCityLab is a 4-year project (2016-2019) of the TU Berlin funded by the DAAD/ BMZ that focuses on practice-orientation of architectural education to develop the existing curriculum of the Architecture Department at the Faculty of Fine Arts, Helwan University in cooperation with German and Egyptian practitioners. The main objective of this project is to enhance the education quality, the curriculum and the teaching system of the Architecture Bachelor program, for which new didactic tools and applied research components are developed, to impart knowledge to understand the current urban issues and urban regeneration. Consequently, the graduates will gain higher awareness towards real urbanism within the Egyptian built environment.

## ALDA(HER)ITAGE - OLD BUILDINGS, NEW FUNCTIONS

Daily life in complex urban context of today's city is considered a resultant of many factors that interrelate. The older parts of cities suffer from being neglected. This requires close attention from different decision makers and professionals including architects. Education has to pave the road for such goals in order to enhance this jobs' market by highlighting the importance of urban regeneration through preparing the students to deal with such situations. Al-Daher area in Cairo is a good example for such heritage areas, planned and built in the early 13th century, centrally located, with treasures of urban heritage that have been neglected in the last decades and suffers from architectural deterioration.

Different layers of history that Cairo has witnessed during its development are reflected on Al-Daher physical, social and cultural expressions.

#### THE WORKSHOP

"Alda (her) itage: Old Buildings - New Functions" workshop aims to bring architectural heritage — as a crucial component of architecture education- into the interest of the young generation of future architects. Hereafter introducing the students to different approaches of dealing with heritage buildings within its context in order to preserve and highlight their historical and structural values in a real context.

Architecture provides solutions to preserve the values of heritage buildings and protect them from decaying. This requires a high level of understanding that must start during the undergraduate studies phase.

The shift (or downscaling) from the urban level to the architecture design phase needs certain awareness and skills. This workshop aims to introduce diverse adaptive reuse methods, understanding the needed functions in the city and at the same time preserving the valuable elements of the building. This in accordance with the methods of urban regeneration and architectural preservation, based on international experience.

Dr. Krekeler architects (German business partner), CLUSTER (Egyptian business partner) and Habitat Unit of Technical University Berlin in collaboration with Faculty of Fine Arts, Helwan University (academic partner) conducted this workshop that focuses on dealing with heritage buildings as one way of exploring the relation between the living heritage in-situ and its surrounding urban fabric.

This conducted workshop, by bachelor students of architecture, comes as a follow up on the previous workshop: "Aldha (her) itage: Urban perspective" urban planning and design course (Summer semester 2017, Helwan University).

#### **METHODOLOGY**

The workshop compiles of some theoretical lectures by the business partners, showing multiple real projects of adaptive reuse in various contexts. Dr. Jens Birnbaum and Dipl.-Ing. Moritz Krekeler focused on the architectural values of heritage buildings, their historical background and how architects dealt with it. Also elaborating on the different preservation levels.

On the other hand Architect Omar Nagati focused more on the relation of heritage buildings to its surrounding neighbourhood and the entire city. He brought diverse examples of CLUSTER projects and explained the muitlayered progress of such projects. He elaborated also on the differnt stakeholders and legal frameworks in Egypt. In addition he has shed light on the economic aspects and budget planning.

Moreover, a guided field visit to Al-Daher was organized focussing on both chosen buildings, the residential building and the old cinema. This visit aimed to understand the surrounding areas of both objects and the relation to the neighborhood on the ground. Also training the students to develop their architectural analysis and readaing values.

The main question is: How can architects develop an understanding to a heritage building in relation to the existing urban context, aiming to give it a new function to improve the quality of life?

Legend of used colors in the drawings

- removed old elements
- added new elements



GREATER CAIRO 🖒 SEJOUME & SIMS, 2009

## GEOGRAPHICAL AND ADMINISTRIVE BOUNDARIES

Al-Daher (al-Zahir) is part of Al-Wayli District which is considered one of the most important districts to the east of Cairo governorate. It includes Ayn Shams, Al-Daher and Manshiyat Nasir. The latter area was sub-divided in 1981 into two aqsam: Al-Wayli and Al-Daher, each of which includes multiple shiyakhat. Al-Wayli covers a total area of 13.940 km square, with an approximate population in July 2013 of 174,135 inhabitants. Al-Daher is bounded to the northeast with Ahmad Sa'id Street through its extension to al-Firdaws Street. To

the northwest it runs through al-Jad Street, Kamil Sidqi Street, and Al-Daher Street till it reaches Yusif Wahba Street. To the east it borders al-Wayli district, while to the west al-Azbkiya district, and to the north alsharabiya and Hada'iq al-Qubba districts. prosperity of its ethnic communities as manifest in the construction of synagogue Neve Shalom followed by that of Nessim Eskenazi in 1894. During the first few decades of the 20th century, two new synagogues, and five new churches were built, representing what could be termed the golden age of tolerance and coexistence. By the end of the 19th century an enthusiastic entrepreneur

named Gabriel Habib Sakakini, who worked in the Suez Canal Company upon arriving to Egypt, began building himself a palace, designed in Rococo style. A bus-line established along the new tramline, which ran adjacent to the al-Daher Mosque and around the borders of the district, was one of many factors that led to an increase in population during the early 20th century—the century of mass urbanization.



AL-DAHER MOSQUE © NOURHANE WAHBA

#### **URBAN CHARACTERISTICS**

Al-Daher covers an area of 2 km square, with a population of 72,278 inhabitants. Recognized by the national organization of Urban Harmony, for its diversity and distinctive heritage. Al-Daher includes 124 registered buildings, listed for their heritage value, 12 of which are located in the Sakakini neighborhood. This list includes three remaining synagogues, six active churches and countless mosques. Today, Al-Daher stands as a witness to its former glory, yet it lacks its historical diversity as many of the original inhabitants have left. On the other hand, due to the neighborhood's centrality and connectivity, new merchants from neighboring commercial areas, such as al-Muski and al- Sharabiya, have gradually replaced the original inhabitants.

#### HISTORICAL BACKGROUND

*In 1290 during the rule of the mamluk Al-*Malik Al-Daher Baybars al-Bunduqdari, commonly known as Baybars, only a few mosques were open for Friday prayer, other than al-Azhar. This led Baybars to issue a decree that all mosques should be available to the public during the Friday prayer. The construction began a year later of what is now known as al-Daher Baybars Mosque, which was completed in 1269. Throughout the 18th century the area around the mosque went through numerous changes. *The Mosque has been subject to a number* of transformations, as it shifted from being a place of worship, to a fort by Napoleon Bonaparte, to an army storehouse by the Ottomans, and a bakery during the rule of Muhammed Ali. By 1882 Al-Daher Mosque came to be known as al-Madbah al-Injilizi (The British Slaughterhouse) remaining in the hands of the British for quite some time. During the 19th century, the area witnessed the beginning of religious diversity and the





# Residential 2 PRO-Building 1897 POSALS



#### HISTORICAL BACKGROUND

The chosen residential building is located in Al-Daher district (Cairo) and classified as historical building. It is situated in one of the main arterial streets - As Sakkakini, close to Sakkakini Palace, both built 1897 in the Rococo stlye. Habib el Skkakini traveled from Syria to Egypt in the age of 16.

The house was owned by his mother and passed on to her servant Moris and his grandchildren.

Currently the next heir is missing. The building belongs to the government and is supposed to be managed by the ministry of culture.



THE RESIDENTIAL BUILDING C CLUSTER



As-Sakkakini Palace in the study area

سم الأزبكية

As-Sakkakini Palace



## RESIDENTIAL BUILDING: PROPOSAL I SITE VISIT



Streetview towards As-Sakkakini palace © stefanie rückrich

#### PROPOSAL 1

#### 'AL-DAHER HOUSE' Community Center

Abanoub Nagy, Kirolos Aziz, Lina Abd El-Hamid, Mina Atef, Mina Magdi, Sandra Nader, Yasmine Alaa El-Dien

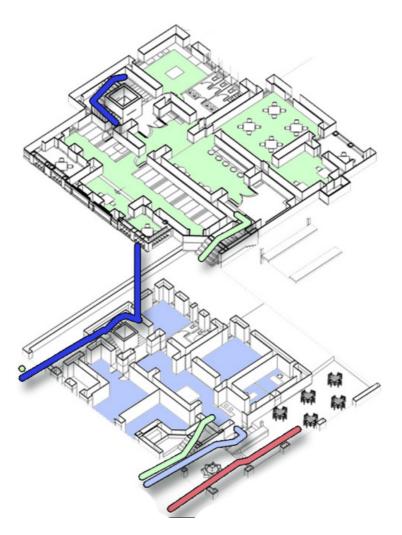
#### **OUR VISION**

Building a community center that can serve locals through gathering all family members and fulfilling the needs of all age ranges including kids, teenagers, adults, and seniors.

#### **OUR MISSION**

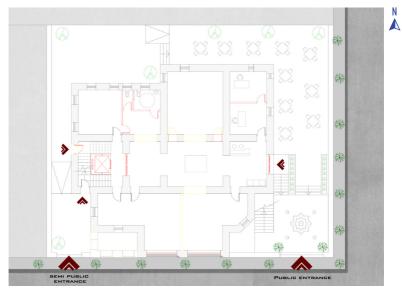
Utilizing original spaces of the building in the functions that can benefit the locals, has profit with only minor structural adjustments, to maintain lower budget and keep the original preciousness of the building's structure and texture.





The frist entrance to reach the whole building without the need to go through the café and gallery. The second entrance brings the people to the gallery and café It is connected to the main stair case.

## OLD BUILDINGS - NEW FUNCTIONS FLOOR PLANS



**Ground floor** 



First floor

## RESIDENTIAL BUILDING: PROPOSAL I FLOORPLANS



Second floor



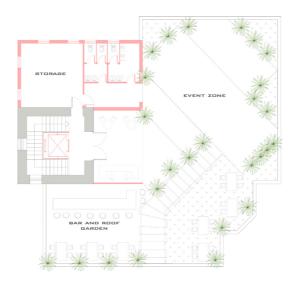
**17** 

5M

## OLD BUILDINGS - NEW FUNCTIONS FLOOR PLANS



18



Fifth floor



Main street elevation



Side street elevation



The entrance welcomes the visitors with a fountain and a cafe in the backyard



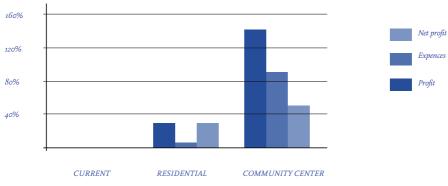
 $\mathrm{T}$ he building will be remarkable from the street and inviting to the public

#### RESIDENTIAL BUILDING: PROPOSAL I

#### **FINANCIALS**

Average of rent in Al-daher: 360.000 per year 850-1.500 / m² L.E Finishing 30.000 Rent / Month 5.000 Electricity / Water

Community c.	Spending in L.E	Profit / Month	Revenue in L.E
1st Floor Gallery Capacity: 100	2.500	Rent: 250 L.E / Day 250 x 30 = 7500 L.E	5.000
2nd Floor Café Capacity: 50	10.000	50-100 Persons / Day Average: 2.250 2250 x 40 = 90.000 L.E	80.000
3rd Floor Library Capacity: 100	2.500	100 Persons / Day 100 x 30 = 3.000 L.E	500
4th Floor Nursery Capacity: 30	6.000	700 Kids / Month 700 x 30 = 21.000	15.000
5th Floor Co-working Capacity: 50	7.500	50 Persons / Day 50 x 30 = 1500 / Month 1500 x 25 L.E = 37.500 L.E	30.000
6th Floor Event space Capacity: 220	2.500	Rent: 700 L.E. 15 x 700 = 10.500 L.E	8.000
Sum, Profit			138.500



#### 'BEIT AL NAS' The people's place

Dina Abdel Baki, Sara Khalil, Sara Yasser Abdel hamid,Salma Abou Zed, Mariam Ihab, Mostafa Mohammed Awady

Imagine a place where a side walk is not for the public anymore, where a kid's first destination to play is the streets, where the closest place for a mother looking for enriching activities for her kids is a whole neighborhood far. So "Beit Al Nas" (the people's place) comes to these people to Am Ashraf (Uncle Ashraf), Mohamed the 12 year old boy and the Demerdash ladies. A place that used to shut its doors in front of the people, opens them as wide as it can, to contain their needs.

"Beit al Nas" (The people's place) felt the need for public spaces, community spaces and educational spaces distributed accordingly through the ground, first and third floor levels; also the need for an expressive platform where people could leave their own print; there comes the role of the heart and core of the building that contains the mini souqs, bazaar and galleries.



#### **OUR VISION**

Starting from the garden that welcomes you; taking you down some stairs to the main entrance; but before that, showing you a glimpse of the backyard that was converted from being a dumpster to a plant market where people could rent a strip of land, plant it and sell their outcome or even sell their homegrown plants.

On entering the ground level (communities level) you are welcomed with the mini- souq inspired by the narrow street markets of Egypt, ending with a space used for galleries and community seminars and a café that is visible from the main street where the visitor could enjoy a drink and a musical band by the afternoon.

The secondary staircase is established to ensure the privacy of the living residents.

At the first floor level the visitor reaches the Bazaar with its souvenir gifts of old photos of Egypt and al Daher, books and replicas of accessories or antiques that emphasize the historical exhibition that is found on the right side. It starts with a video and audio room. On the left side, the visitors find a co-working space.

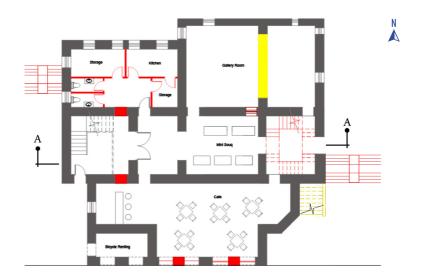
When people reach the third floor level (the educational level) they will find the mini gallery showing the products of this level's workshops. Four Workshops that are for kids, mothers and youth: for teaching art, painting, story writing and telling, animation drawing and sewing embroidery workshops especially for mothers. On the right there will be a meeting room for class lectures and an administration office for workshop bookings.

#### **OUR PROGRAMM**

- ◆ Community spaces
- Educational space
- Owner's apartments
- ◆ Main residents' entrance
- ♦ Visitors' entrance
- Mini markets

We made sure that Beit Al Nas would be self-dependent and so nearly all of the spaces would bring back a profit. 'Beit Al Nas' is a place created for the people of all generations; it is a place that lives on its people's activity.

## OLD BUILDINGS - NEW FUNCTIONS FLOOR PLANS

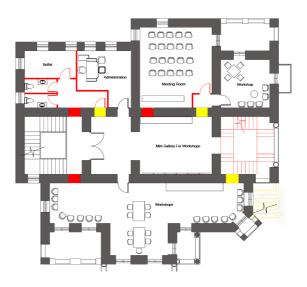


**Ground floor** 



First floor

#### **FLOOR PLANS**



Thrid floor

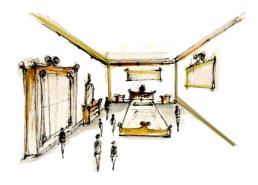


Top view

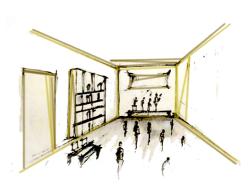




Co-working Space





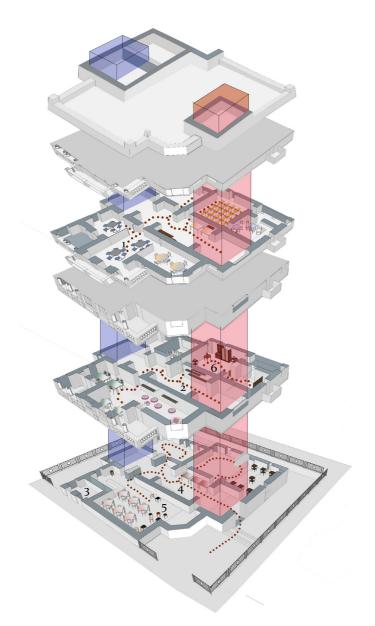




BICYCLE RENTING



## RWESIDENTIAL BUILDING: PROPOSAL 2 AXONOMETRIC



- Stairs for visitors
- Stairs for residents
   Circulation for visitors

## OLD BUILDINGS - NEW FUNCTIONS **ELEVATIONS**



Main street elevation





Side street elevation

## RWESIDENTIAL BUILDING: PROPOSAL 2 SECTIONS



Section 3D



Section A-A

## OLD BUILDINGS - NEW FUNCTIONS ILLUSTRATION

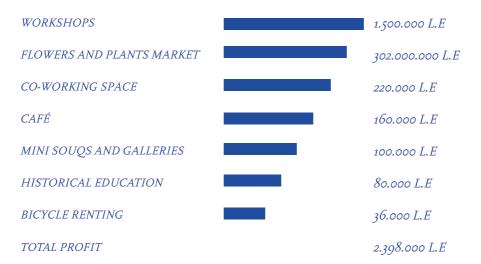
'The block which was once repulsive comes with a new face; Beit Al Nas comes to invite the people and provide them with public, community-, educational spaces and a platform to express themselves and to show off their products. A place that lives on its people's activity.'



A NEW PLACE FOR SOCIAL ACTIVITIES

## RWESIDENTIAL BUILDING: PROPOSAL 2 FINANCIALS

In the current state is zero income. Reviving it locally would create a successful profitable benefit.







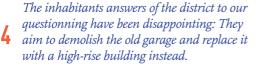
© TAREK MEGAHED

#### PROPOSAL 1

## 'FELERY BAZAR A re-design proposal for the garage space in front of Al-Daher mosque'

Ahmed Tarek, Mohamoud Ali, Noha Osama, Rana Khaled, Rania Ahmed, Saif El-Deen

Through our site visit we noticed that the area covers many workshops with different facilities. Our idea was to improve the situation of these workshop owners by finding a place with low renting costs and better accessibility to the society to see the craftsmen great art works.



Many of them prefered a residential building, only one person added a mall on the first three floors extra, others said "The garage is the best solution".

Through conversations we found out that the land has governmental problems: The government does not supply the land with water or electricity, as the owner did not pay taxes, which accumulated to 36,000 L.E.

The owner has a problem with selling the property due to heritage problems as the building is split between 70 heirs. He is a member of them, able to use it in the current status.



THE GARAG

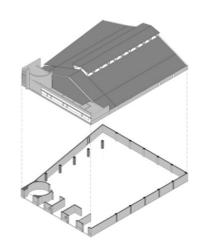
"We aim to make a space that would benefit the people in the area and uplift their profit by exposing it to a larger audience."

"We aim to introduce a place where they can engage with each other and other people while maintaining the feeling of belonging they have for the place."

#### HISTORICAL FUNCTIONS

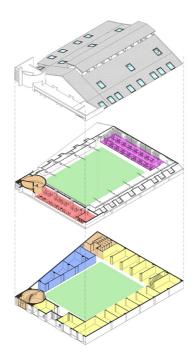
Cinema: 1930 -1952 (architectural style of the modernity)

Garage: since 1952 (with a steel structure roof top)



#### **OUR PROGRAM**

- ♦ 1 Main entrance, 2 secondary entrances
- ♦ 2 Shops on the main facade
- 2 Offices for administration
- 12 Workshops
- ♦ 1 Market
- ♦ 1 Multipurpose hall
- ♦ 1 Café
- ♦ 1 Library
- ◆ Services (toilets and stairs)
- Specialized library
- Café
- Multi purpose
- ♦ Admin
- Workshops
- Service



#### **SWOT ANALYSIS**

- Local activities
- Value and quality of handcraft
- Reinforce existing skills
- Product acceptance
- Targetting local people
- No competition
- Local loyalty
- Strong financial base
- New source of income
- Local volunteer

STRENGTHS

- Lack of new technologies
- Slow change due to internal decisio

WEAKNESS

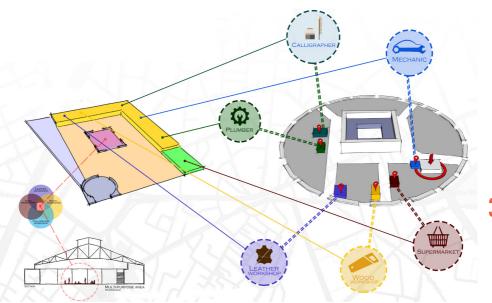
- Learn new skills
- Professional development
- Point of attraction
- Improve the economy of the effected area
- Marekting

OPPORT-UNITIES

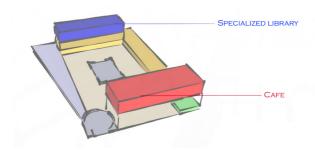
- Lack of funding
- Taxes and political influence
- Time delay cause increase to the cost

THREATS

As the area has a variety of workshop, wecreate a space which can be reached easily and provides the craftsmen more space for exhibition, which can be used as a multipurpose area. This will increase their income.



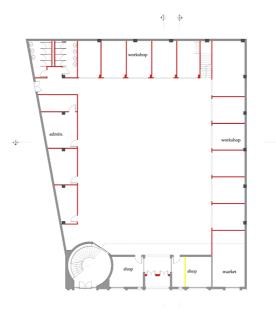
FIRST FLOOR ZONING



GROUND FLOOR ZONING

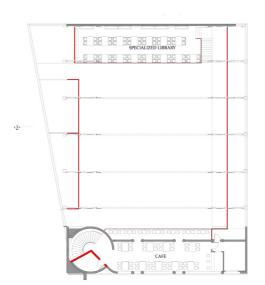
WORKSHOP III

### **FLOOR PLANS**



Ground floor

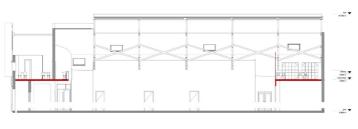
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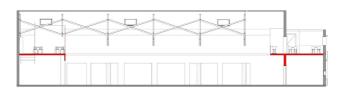
First floor



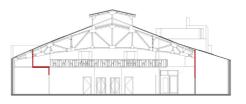
# GARAGE: PROPOSAL I SECTIONS / ELEVATION



Section 1



Section 2

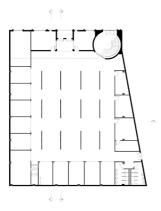


Section 3

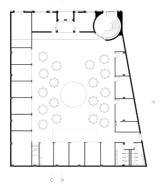


**Street Elevation** 

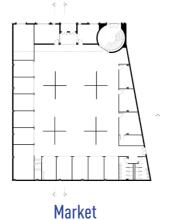
### **MULTI-PURPOSE INTERIORS**

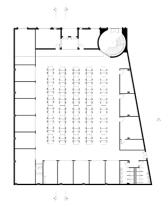


### Gallery

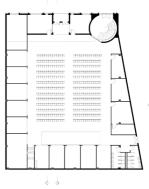


## Wedding hall





### Food festival



**Theater** 

### GARAGE: PROPOSAL I

### 3D ILLUSTRTIONS



**Cross Section** 



**Longitudinal Section** 



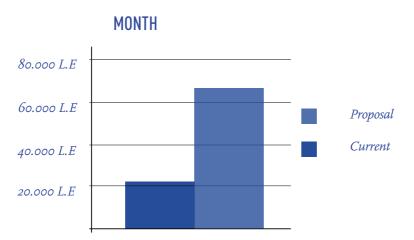
**Street Elevation** 

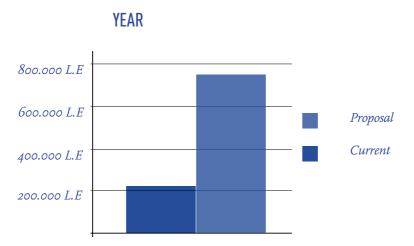






The proposal's profit is 4 times the current one! Estimated rental rate = 150 L.E /  $m^2$ 





THE PROJECTS BENEFIT

#### PROPOSAL 2

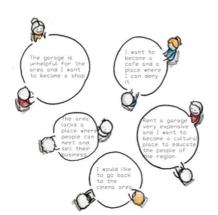
## 'THE SOCIAL CREATIVE CENTER'

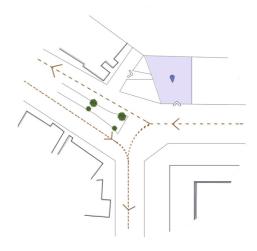
Amaar Yassen, Ebtessam Ahmed, Maha Mohamed Ahmed Abdellatif, Mostafa Shabaan, Nada Mohtady, Rana Reda

"Firstly you can see the facade, the shops and the main entrance which lead to the multi-purpose area surrounded by the studio spaces and services. By climbing the stairs you will enter the mezzanine which consists of closed and open working spaces. You can easily watch peoples activity in the multi-purpose area. Climbing more stairs you will reach the café, that has a great view to Al Zaher mosque and another view to the inside through openings."



"What are your opinions about the garage? What do you imagine it to be in the future?"





WHY The project develops the district citizens skills by interaction to reach creativity.

HOW Interactive design strives to create meaningful relationships between people, products and the services they use. This occurs by 'interactivity' and 'flexibility':

The Multi-purpose area in the middle is exposed to the surroundings. Co-working spaces are divided into open spaces and semi closed ones. Studio spaces (for graphics, crafts etc.) are also separated by partitions to create interaction with the surrounding. They can be divided into private space for meetings and public space for booths. The multipurpose area may be used as conference hall, for exhibitions, book fairs, theatre and as working space.

WHAT The project focus on social, cultural and co-working activities.

### **CONCEPT AND STAKEHOLDERS**

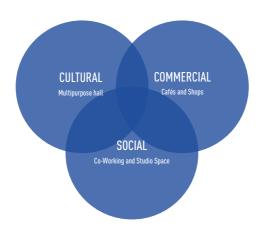
### **OUR PROGRAM**

- Cultural (Multipurpose area that is used for hosting different cultural events)
- Commercial (Shops, bazar, stationary, fast food, café, etc.)
- Social (Private Working spaces, studio spaces, crafts space, graphics space, etc.)

# Who has the biggest problems with the current situation?

Owner Government Traffic Car Owner Neighbours





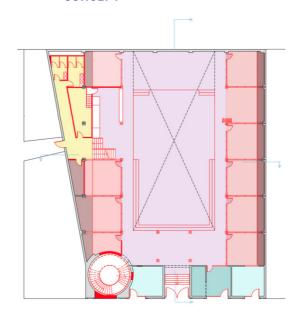
THE PROJECTS KEYWORDS

### **CONCEPT**

- Design Studio
- ♦ Public Area-MPU
- Service
- **♦** Lockers
- Shops

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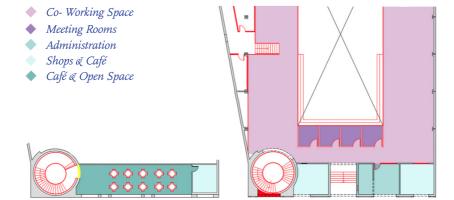
♦ Administration



**Ground floor** 



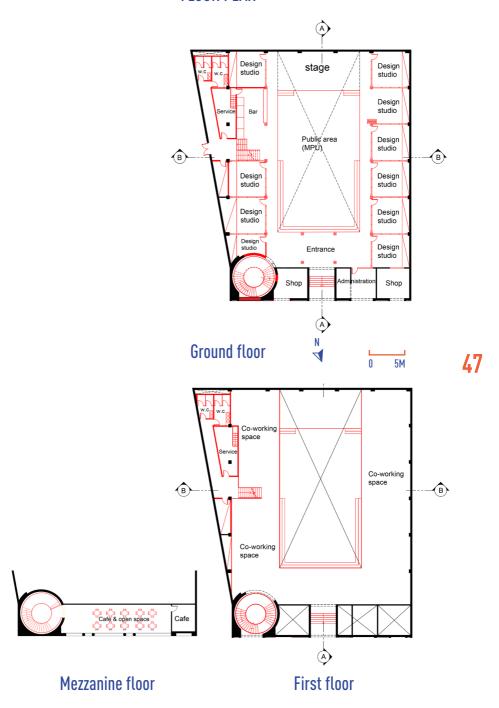
0 5M



Mezzanine floor

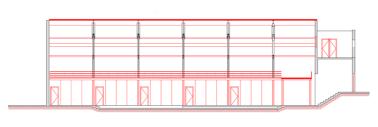
First floor

### **FLOOR PLAN**

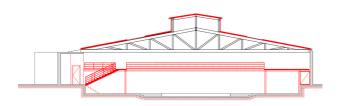


WORKSHOP III

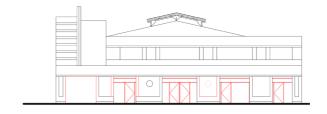
### SECTIONS / ELEVATION



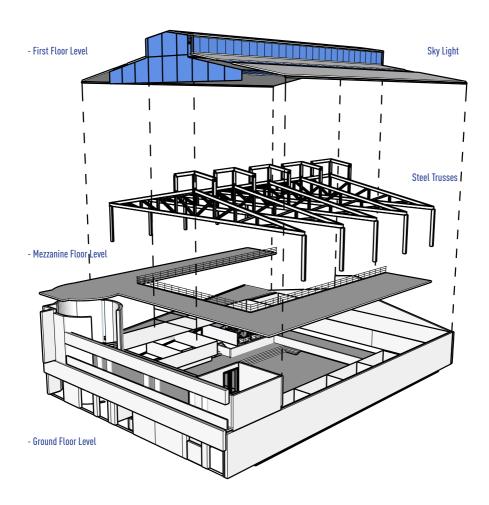
**Longitudinal Section** 



**Cross Section** 



**Street Elevation** 



# OLD BUILDINGS - NEW FUNCTIONS MULTI- PURPOSE / INTERIORS



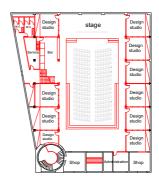
Lecture / Conference



**Theater** 



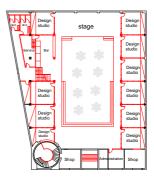
Fair / Open days



Cinema

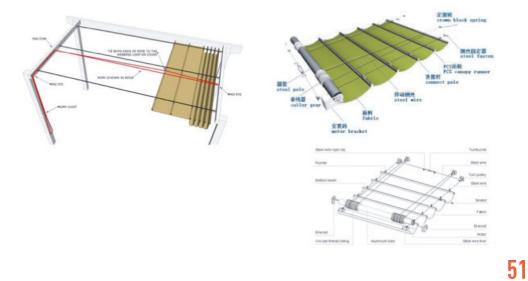


Art gallery

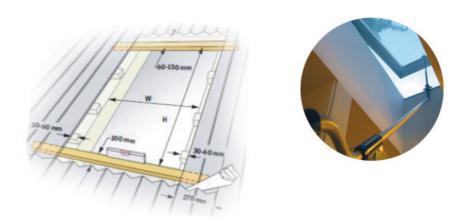


**Events** 

### **DETAILS**



#### SHADING POSSIBILITIE



MECHANISM OF WINDOW OPENINGS (ROOFTOP)

WORKSHOP III

#### **CONCLUSION**

In general, dealing with the historic built environment has different criteria and methods. These methods starts from urban rehabilitation to architectural renovation. In the context of Egyptian cities - dealing with the remaining heritage - gains more importance each year. In architectural and planning education, these methods should be included within the pedagogic process as a crucial pillar that prepares the graduates for an important field of the job market. Such skills are needed in order to prepare the graduates for the huge challenging urban and architectural heritage complexity in Egyptian cities. This workshop, entitled: Old Buildings-New Functions, has achieved its main objectives introducing the participants to such complexity supported by the practical experience of the partners from the private sector. Based on their international and local experiences they guided the students to go through an adapted design process. The mixed groups of participants of different educational level had peer-to-peer exchange and time to discuss with the workshop instructors/supervisors different factors and issues that relate to the quality of the built environment in a heritage context. Based on our chosen case study area Al-Daher, the students have tackled different building typologies and understood the complexity of the process. The students have successfully simulated the design process through their emergence in each of the required steps: (1) Data collection through several field visits, (2) interviews and discussions with Al-Daher inhabitants who live or work in the neighbourhood, (3) preparing a stakeholder analysis defining relations, influences and benefits of users and stakeholders from their proposed project(s).

According to the participants, further important achievements of the workshop is that they had the ability to prepare a feasibility study of an architectural design project, including the initial and running costs of the building for their first time. They became aware that their design should not only fulfil architectural requirements, but also be realistic and responding to the users' and market needs.

They have also learnt some techniques that are crucial for such kind of architectural intervention, which aims to give an existing building a new adapted function. The achieved outcomes from this workshop "Old Buildings- New Functions" are to a great extent satisfactory considering the limited time frame they were produced in. However, the general perception of most Egyptians towards the value of heritage needs to be critically questioned. If we intend to have better urban quality of the Egyptian urban realm, architects should be well prepared. The social awareness towards our urban heritage is partially the responsibility of architects. Repeating such workshops could raise the awareness and broaden the knowledge of future architects. *Integrating these within design studios* in the undergraduate level of architecture programs is endorsed.

## TEAM TEAM

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Supervisors TU Berlin - Habitat Unit Prof. Dr. Philipp Misselwitz, Dr. Hassan Elmouelhi, Salma Khamis

## Supervisors HU Cairo - Faculty of Fine Arts

Prof. Dr. Amal Abdou, Dr. Iman Gawad, Dr. Ahmed Radwan, Dr. Ahmed Abdelghany, Amanda Elwany, Zeina Elzein, Bahaa Wagdi

#### **Experts**

Dr. Jens Birnbaum, Moritz Krekeler (Dr. Krekeler Architekten und Generalplaner) Omar Nagati (CLUSTER)

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GROUP PHOTO









