



# the second skin

rehabilitation strategies and adaptive re-use  
of timber balcony buildings

<b>3</b>	<b>introduction</b>	
	<b>lectures</b>	
<b>5</b>	<b>Port Said and the Suez Canal · city development and personal memories</b>	
	Prof. Dalila El-Kerdany	
<b>5</b>	<b>urban structure and development of Port Said, Ismailia and Suez</b>	
	Ahmed Al-Zayyat	
<b>7</b>	<b>saving the heritage of Port Said · initiatives and aims, inventory, current status</b>	
	Pierre Marques Alfarroba	
<b>9</b>	<b>outside _ inside · building typologies and the ,second skin'</b>	
	Barbara Witt	
<b>11</b>	<b>climate aspects &amp; the utilisation of timber in Egypt</b>	
	Prof. Ingo Helmedag	
<b>13</b>	<b>diagnosis, maintenance and treatment of deteriorated architectural and constructural timber elements of monuments</b>	
	Prof. Ahmed Amer El-Settawy	
<b>13</b>	<b>construction systems &amp; maintenance strategies for Suez Canal residential buildings</b>	
	Mohamed Gohar, Mohamed Gamal	
<b>15</b>	<b>preservation of heritage sites under the precondition of utilisation</b>	
	Prof. Inken Baller	
<b>19</b>	<b>preserving heritage sites in Egypt · economical and legal aspects</b>	
	Prof. Soheir Hawas	
<b>19</b>	<b>discussion</b>	<b>h</b>
	<b>student work</b>	
<b>21</b>	<b>task</b>	
<b>23</b>	<b>team 1_ building in Palastine Street 20,22,24</b>	
<b>31</b>	<b>team 2_ building in Al Guesh Street 47</b>	
<b>39</b>	<b>team 3_ building in Harouna Rashid, Al Arab Quarter</b>	
	<b>epilogue</b>	
<b>46</b>	<b>conclusion</b>	
<b>47</b>	<b>impressions</b>	
<b>48</b>	<b>editorial</b>	

## Cottbus | Port-Said, September 2014

Dr. Juliane Jäger | Dipl.-Ing. Barbara Witt | Dipl.-Ing. Christoph Wessling

Assistant Professors / Coordinator Middle East Cooperation Unit,  
BTU Cottbus-Senftenberg

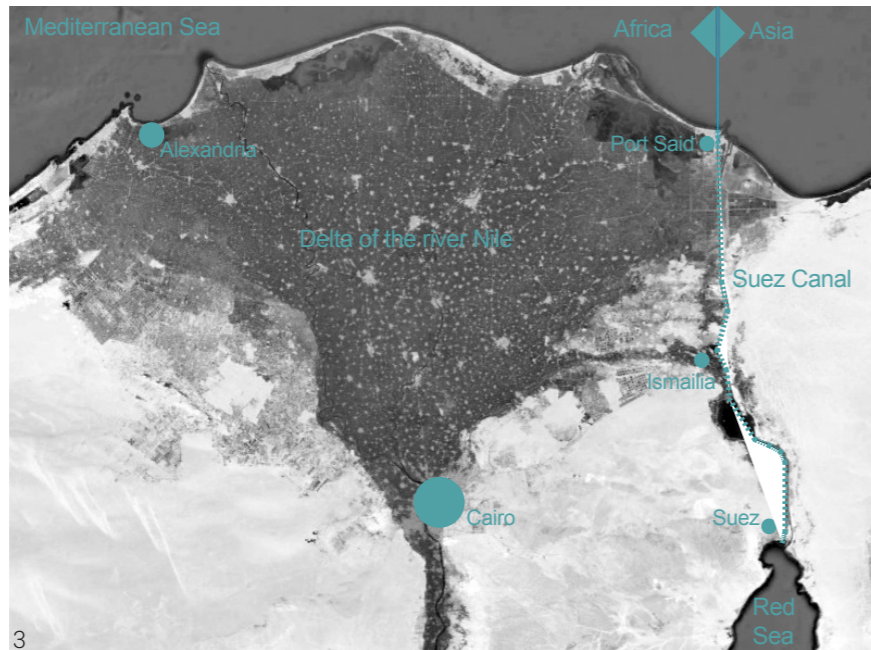
Our Egyptian-German architectural workshop focused on understanding and reflecting on the endangered heritage of the typical, outstanding 19th century architecture of Port Said and on outlining concepts for its rehabilitation and re-use. In the context of the cooperation between Cairo, Alexandria and Cottbus universities we aimed at initiating a rehabilitation process for the unique architectural and urban heritage of Port Said, of Ismailia and Suez. The workshop is part of joint research activities that aim at proposing the protection of the architectural and urban heritage of the Suez Canal region as UNESCO World Heritage.

Port Said is located on the coast of the Mediterranean at the northern entrance of the Suez Canal. It was founded in 1859 and developed in inseparable connection with the construction of the canal. Port Said on the western banks of the canal and its twin city Port Fouad on the eastern banks form today a metropolitan area with about a million residents that extends on both, the African and the Asian sides of the Suez Canal. The 1885 edition of the German Baedeker describes the place as "...a city between two continents, cosmopolitan, multifaceted and multi-ethnic, a passage between seas and oceans, a site where all the populations of Europe, Africa and the Near East, the religions of the Occident and Orient (...) existed in harmony; a city, furthermore, where one lived with ease and where one knew how to have a good time."

The historical cores of Port Said are the European quarters (Al Franj) with its later extensions towards the Mediterranean (Al Charq) and the former village of Gemila, occupied by indigenous inhabitants as a closed entity (Al Arab). Despite structural differences, those quarters are very similar regarding the large presence of wooden construction elements in a country that can hardly be said to produce any: the colonial architecture is characterized by facades lined entirely with rows of balcony-terraces from timber, superimposed wooden galleries, reaching up to seven storeys. The houses in the Arab neighbourhood utilize wooden facades with screen walls made from interlaced lathing, guarding the intimacy of their families. In fact in both ways – either being influenced by colonial standards or Mamluk traditions or their interchange - the use of the 'second skin' of wood along the facades as well as the presence of arcades along the main streets preserves a sense of unity to the city and represents a unique typology in the Egyptian context.

At present, many of those houses have been torn down and were replaced by standard high rise buildings, but the remaining ones give Port Said until today a distinctive and special atmosphere.

As a result of a prolonged 'Civil Campaign for Protecting Port Said's Heritage', a national cabinet decree has been reached in 2011 that proclaims around 500 buildings as listed heritage sites in the inner city. But nevertheless, most buildings are still threatened: Many of them are partly or completely out of use and in bad maintenance condition, suffering from termite infestation and are often afflicted with complicated ownership and rental structures. Although listed as heritage sites, owners have recently managed to obtain demolition permits, which could mean the start of further destruction and the irretrievable loss of buildings of historical value.



Pic 1:  
Historical image of Port Said, presenting Palestine Street - the representative waterfront toward the Suez Canal.

Pic 2:  
Historical image of the main street, today Gumhuriyya Street.

Pic 3:  
Satellite image of the Nile Delta and the course of the Suez canal.

Pic 4:  
Satellite image of the centre of Port Said / Port Fouad.

# lecture 1

## Port Said and the Suez Canal · city development and personal memories

Prof. Dalila El-Kerdany

Cairo University

With her family being residents of Port Said since several generations, Prof. Dalila took us on a personal journey through the history, structure and development of the city and its architecture. In a series of photographs she presented the three inner city districts Al Franj / Al Charq, Al Arab and Port Fouad, their buildings of specific architectural value and their relation to the canal and the waterfront.

As an architectural consultant of the governmental jury she described the process of evaluation and registration of selected buildings as local heritage and presented the current inventory list.

Pic 1: Historical image of Port Said, presenting Rue Palestine - the representative waterfront toward the Suez Canal.

Pic 2: Part of the Port Said heritage inventory.



## urban structure and development of Port Said, Ismailia and Suez

Ahmed Al-Sayyad

Assistant Professor, Alexandria University

Together with the construction of the Suez Canal, the three cities Port Said, Ismailia and Suez were founded along its course. They are positioned strategically at the northern, Mediterranean entrance, at the middle of the canal close to the Great Bitter Lake and at the Red Sea coast. Although different from their geographical location and their climatic and topographic context, they are united by their history and very similar urban planning strategies:

Port Said is characterized by the quarters Al Afrang / Al Charq (with houses up to 4-5 storeys high), Al Arab (2-3 storeys high) and the Residential Area run by the Suez Canal Authority with its main parts in Port Fouad (1-2 storeys high), constituting the first settlements of engineers, workers and traders related to the canal building process. The later extensions of the city, namely the Governmental Residential Area (4-7 storeys high) and the Co-operative Residential area (around 10 storeys high), which appeared in the 1970-s and the gated resorts that form the Touristic Zone at the waterfront outline Port Said's urban fabric.

Parallel to Al Afrang in Port Said developed Al Afrang in Ismailia and Port Tawfiq in Suez; Al Arab in Port Said appeared similar to Al Arab and Al Mahata Ejdeda in Ismailia and Al Arab and Al Faisal in Suez. Governmental residential areas, cooperative residential districts, industrial and touristic zones are similar in terms of urban typology and character, as found, e.g. in Al Sheikh Zayed or Al Salam in Ismailia or Al Sabbah or Al Abdeen in Suez.

The comparison presented the close connection of the three cities and the clear link of economic, social and political aspects, that shaped and still shape the cities along the Suez Canal.

# lecture 2



Pic 1: Suez Canal and location of Port Said, Ismailia and Suez.

Pic 2: Typology comparisons at the example of Ismailia.



## saving the heritage of Port Said · initiatives and aims, inventory, current status

Pierre Marques Alfarroba

Head of Alliance Française de Port-Saïd (until 2013)

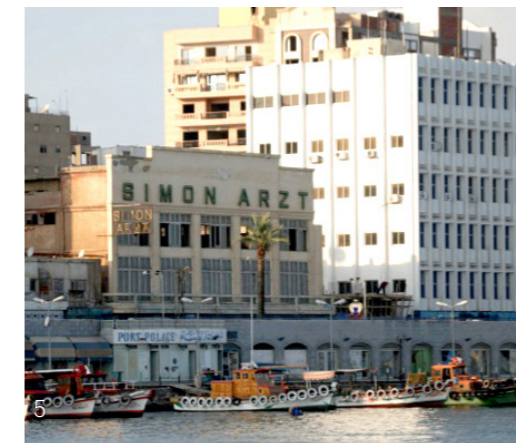
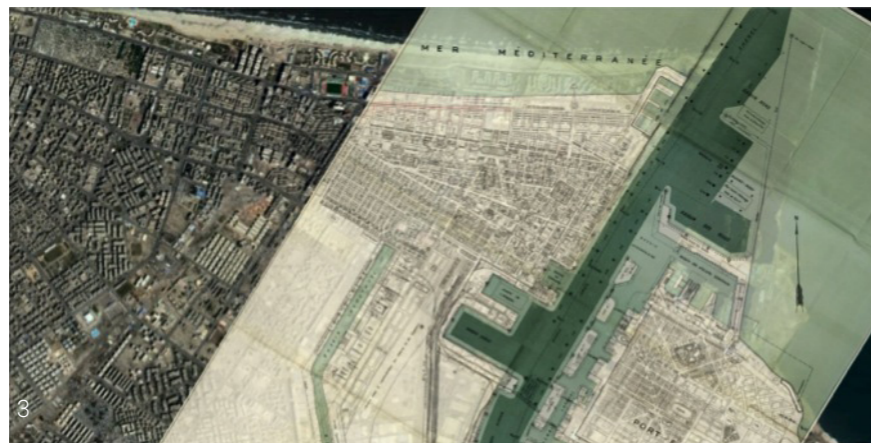
Port Said developed parallel with the construction of the Suez Canal and the rise and fall of its economic situation as a cosmopolitan mixture of different nationalities. Soon after its foundation in 1856 the number of inhabitants rose continuously, from 8.000 in 1886, 35.000 in 1885, 75.000 in 1914, 100.000 in 1929 to 300.000 in 1969, when with the Suez Canal Crisis trading through the canal was suspended and only 3.000 inhabitants remained. Today, Port Said has again 100.000 inhabitants, but the original mixture of nationalities is gone together with the city's importance as an international trading hub. What remains is the rich architectural heritage of a glorious past, that is fast disappearing in substance as well as in the collective memory of today's inhabitants. The historic core of the city is threatened by uncontrolled development, and a large part of its structure is lost already.

Alliance Francaise, affiliated with the French founders of the canal, started to raise awareness for this heritage: 2002-05 they created an inventory of 400 exemplary buildings, that represent different stages of development in the history of the city, the basis for today's official catalogue of listed buildings. A series of creative events, guided tours, and the founding of an heritage campaign group of local residents try to keep the heritage alive.

Pic 1, 2, 3:  
Overlay of the contours of the city  
1885 : 2013 / 1914 : 2013 / 1956 : 2013.  
The maps present the urban growth and several shifts of the waterfront.

Pic 4:  
Port Said's lighthouse, being built in 1869 as landmark at the Suez Canal entrance from 'concrete Mounier', evidences clearly the shifted waterfronts.

Pic 5, 6, 7:  
Examples of the cosmopolitan heritage, e.g. the Simon Arzt Department Store built in 1923, are currently out of use and threatened to be demolished. Alliance Francaise launched music and dancing days to re-display the beauty of those places.



## outside \_ inside · building typologies and the ,second skin'

Barbara Witt

Assistant Professor, BTU Cottbus-Senftenberg

Chair for Architectural Design, Housing and Institutional Buildings, Prof. Huckriede

The historic core of Port Said represents an unique example of a city developed according to a strict set of guidelines in regards to its structure / typology and appearance, giving it an overall homogeneity still visible today, in spite of the changes brought about over time. Although the buildings follow a typology imported by the colonial powers and foreign to Egypt, the double layered façades allow them to adapt very well to the local climatic conditions, cultural differences and changing building techniques. Their adaptability can be seen in the different materials used over time (wood, steel, concrete) and the different levels of possible exposure to the outside, from completely open balconies to examples screened-off by glazed or wooden shutters (al Charq / al Arab) (Pic 1/2/3); The double skin façade allows the buildings to be adjusted by the users, regulating the interior comfort according to their needs.

With this lecture we wanted to look at those buildings not only as valuable historic artefacts, but try to find what we can learn from them for a contemporary, sustainable way of dealing with the relationship between inside and outside, the building and its environment, through the use of the changeable, permeable filter zone of their second skin. To understand the different ways, a second skin can be used, we looked at examples of traditional and contemporary architecture, categorising them according to their use in different climatic conditions, divided into two opposing counterparts, 'the house in the garden' and the 'garden in the house'.

In cold / temperate climates the archetypal building, well suited to the climatic conditions, is a compact, freestanding volume, oriented towards the outside, with the fireplace as its central core (Pic 4/5). Filter-zones are positioned on the outside, as bay windows, winter-gardens, balconies or verandas, allowing a maximum exposure towards the warmth and light of the sun (Pic 6/7/8).

In hot / arid climates one of the predominant archetypes is the courtyard house, looking inwards towards an open, shaded courtyard, traditionally with a cooling element such as a water basin at its core (Pic 9/10). Filter-zones are positioned towards the inside as half-open living spaces, extending the cooling shade into the depth of the house (Pic 11/12). Permeable screens (e.g. mashrabiya) are typical elements, used to allow for ventilation and visual shelter, while protecting the interior from direct sunlight (Pic 13).

Today, with the possibilities of modern technology, traditional building typologies are being replaced by the architecture of a globalised modernism, that can be used irrespective of location, climate and culture, without reference to a specific context. With a high energy consumption to compensate for the missing adaptation, they often work in a very unsustainable way, while at the same time obliterating rich local traditions.

Thus, as an outlook at the end of the lecture, we presented several contemporary examples of a regional modernism, that re-interpret and transform traditional typologies to suit changed circumstances and a modern way of life, while trying to maintain the essence of its local culture (Pic 14/15).

Through the filter zone of their 'second skin', the historic buildings of Port Said represent a successful way of adapting a typology oriented towards the outside with a tradition, that for climatic and cultural reasons tends to be inverted - in a sustainable way, without the help of air-conditioning. Compared with the uncritical copying of Northern European prototypes without the necessary adaption to place, climate and culture, they can well stand as a model for a successful approximation of cultural and climatic opposites.

We close with a quotation of Paul Ricoeur, from his essay *Universal Civilisation and National Cultures*: „There is the paradox: how to become modern and to return to sources; how to revive an old, dormant civilisation and take part in universal civilisation.“

Pic 1 / 2 / 3:

Port Said street facades: House in the Al-Franj quarter with open timber framed balconies / House in the Al-Charq quarter with balconies of reinforced concrete, closed with glass elements / House in the Al-Arab quarter with timber framed balconies, closed with wooden shutters.

Pic 4:

House Bierings in Utrecht, Netherlands by Rocha Tombal Architecten, 2009.

Pic 5:

Fireplace at the centre of a traditional house in northern Europe.

Pic 6 / 7 / 8:

Movable shutters on outside balconies: Carabanchal housing project in Madrid, Spain by Foreign Office Architects, 2008.

Pic 9:

Traditional courtyard of a Riad House, Marrakesh, Morocco.

Pic 10:

Courtyard of Ben Youssef Medersa, Marrakesh, Morocco, 16th century.

Pic 11:

Courtyard of the Lions, Alhambra Palace, Granada, Spain, 11th century.

Pic 12:

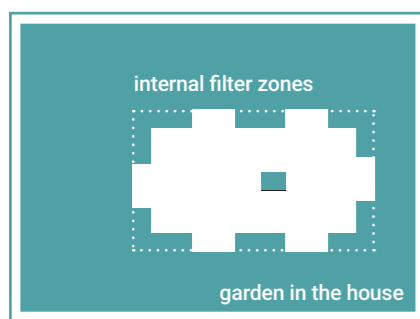
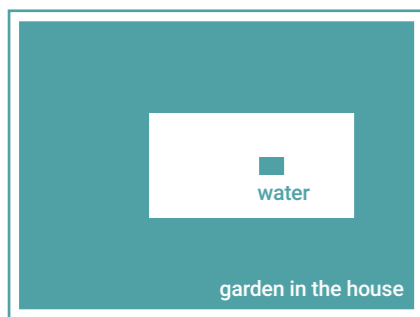
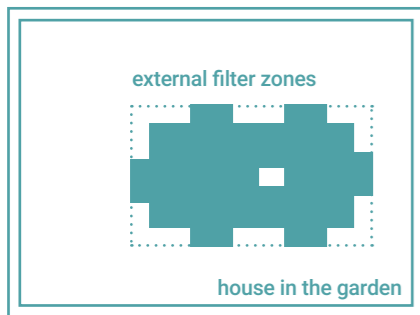
Beit el-Kiridiliya House, Cairo, 17th century: Courtyard with a ,maqaad', a covered outside living space.

Pic 13:

Mashabiya screens as filter towards the courtyard.

Pic 14 / 15:

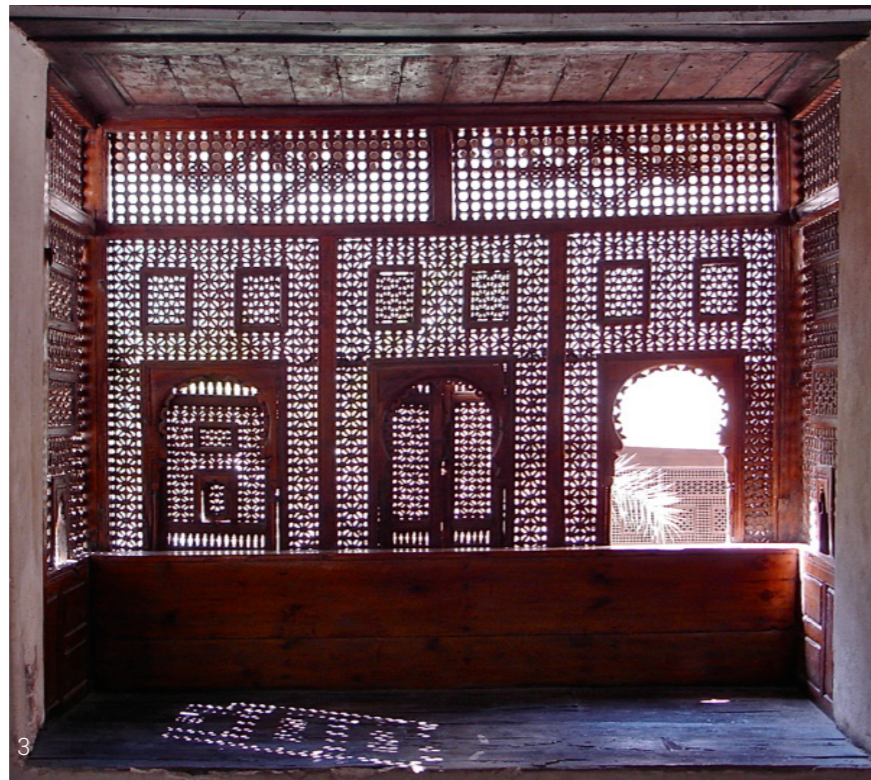
House in Nicosia, Cyprus, by Giorgos Hadjichristou, 2009 - A combination of two archetypes - a freestanding volume with interior courtyards that can be opened or closed towards the surrounding garden and street.



## climate aspects & the utilisation of timber in Egypt

Prof. Ingo Helmedag

'Ain Shams University Cairo / DAAD-lecturer



It is right, due to climatic reasons Egypt is not known for its abundance of wood. Nevertheless, wood or timber in Egypt has been used for building purposes, furniture or sculpturing since pharaonic times. Local trees like sycamore fig, acacia, date palm and tamarisk have been used as roof timbers, lintels, for doors and windows, but also for furniture and coffin construction or for sculpturing. The famous statue of the chief priest Kaaper from the old kingdom, displayed in the Egyptian Museum, is made out of sycamore wood. Wood was probably more plenty in ancient times than nowadays but the Khufu ship, preserved in the Giza solar boat museum, gives us even evidence of cedar tree timber imported from Lebanon. Timber processing and workmanship is pictured in many pharaonic tombs as well.

There are many timber evidences from Islamic times. They are still to be found in the traditional villages in the oasis towns of the western desert but also in refined timber uses in the old 'Islamic Cairo'. In the oasis you can find timber used for roof and 'opening' construction in traditional houses, but also for lattice work and shading purposes (mashrabiya). Oil and olive presses were also made from hardwood. The oasis town of Kasr El Dakhla is a still existing example of a traditional desert town, it is famous for its wooden lintels decorated with islamic verses. In old Cairo there is plenty of evidence for refined timber use, there are rich houses as the 'Beyt al Suhami' with highly decorated wooden beams and marvelous lattice work. There is also 'dome construction' with wooden corner solutions as a likewise constructive and decorative building technique to find in mosques in old Cairo. The wooden balconies decorating many houses in Port Said and other canal cities, like Ismailia and Suez, originate from a rich colonial past and are pointing to a design and building potential with timber materials, still to be explored. The 'second skin' offers a design and construction potential to be developed and adapted for the prevailing local climate. Beside the shading options for façades and openings, ideally respecting and following the sun trajectories in the hot summer months, a second, closed skin could also be a climate buffer in the rather cool and humid winter months. Proper ventilation and shading techniques could help to create a climatically improved extra living zone for all the year and could improve the energy efficiency of the building. Other uses of the 'second skin' could be entrance zones for public or private houses, coffee verandas overlooking public places or the Suez canal activities and more. Here, a variable skin could offer a shaded openness or a closed filtered light zone with the 'mashrabiya' effect and bigger interior privacy to select.

There are several reasons for an adaptive use of wood in building, even in Egypt. One reason is, that a harvested wood is most sustainable and contributes to a healthy environment by absorbing carbon dioxide and producing oxygen in its growing process. It is to investigate if its total energy balance wouldn't be in the plus, even as an imported material to Egypt. Another reason is its workability and individuality in expression as a 'living' material. For certain uses, like the lattice work of the 'mashrabias' it already has a long-standing tradition in Egypt. A development of its potentials, for example as a 'second skin' in modern buildings just seems to be reasonable and waited for. The Central market in Abu Dhabi by Foster architects could be an example for this.

Pic 1: Khufu ship, preserved in the Giza solar boat museum.

Pic 2: Statue of the chief priest Kaaper, old kingdom, found in Sakkara.

Pic 3: Mashrabiya window in Beit al Suhami in Islamic Cairo.

Pic 4: Central Market in Abu Dhabi by Foster Architects.

# lecture 6

## diagnosis, maintenance and treatment of deteriorated architectural and structural timber elements of monuments

Prof. Dr. Ahmed Amer El-Settawy

Head of Forestry and Wood Technology Department, Alexandria University

Wood has a long history of being used as a construction material since ancient times. First, the lecture started with an introduction about wood, then went on to explain the different methods of identification and analysis of wood, its general properties and different types. Then, the lecture went on to explain the causes of wood degradation such as mechanical wear and salt deterioration and then presented the different types of wood fungi and wood destroying insects. Finally, the lecture highlighted the importance of the right diagnosis in making the right decision and best plan for the preservation and protection of woody elements in monuments and heritage buildings.

summarized by Lama Fouad

Pic 1:  
Detailed picture of wood, degraded by Brown Rot Fungi.

Pic 2:  
Detailed picture of wood, degraded by White Rot Fungi.



# lecture 7

## construction systems & maintenance strategies for Suez Canal residential buildings

Eng. Mohamed Gohar & Arch. Mohamed Gamal

Building Department, Suez Canal Authority

The presentation started with an introduction about the Suez Canal, its importance for Egypt and the world and its assets. The Suez Canal authority is very keen on the preservation of its heritage assets and buildings. A big budget is assigned yearly for the maintenance of the heritage buildings owned by the company which helps maintain from 400 to 700 residential heritage buildings per year, ports facilities as well as summer houses. The main obstacle facing the Suez Canal Company in its efforts in the conservation of its heritage in the lack of skills - namely in wood preservation - required for such projects which in turn yields poor results. However, the company is trying to overcome this challenge by establishing a unit responsible for organizing workshops and training seminars for its personnel in the conservation and protection of wood. The Suez Canal Authority also believes in giving back to the community by rehabilitating and revitalizing the company's heritage buildings such as maintaining the company's historic villas both in Port Said and Port Fouad and turning one of its building into a museum for the history of the Canal. The lecture ended on an important note which stated that the neglect of heritage in Port Said is not the result of just legal or financial problems, it is in fact a cultural problem and if we were to deal with it on that basis, it will yield much better outcomes.

summarized by Lama Fouad

Pic 3:  
Heritage building in Ismailia with decoration from lattice wood.

Pic 4:  
Detail damaged decoration.



## preservation of heritage sites under the precondition of utilisation

Prof. em. Inken Baller

BTU Cottbus-Senftenberg



Looking on the city of Port Said the situation of the historic urban fabric seems nearly hopeless because of the lack of maintenance and of public awareness. To demonstrate that there could be a future, I want to present two European examples of the renewal of inner city quarters. In both cases the story started with negligence and demolition that led to citizens' initiatives against the official building policy. And in both cases the inhabitants recognized the values of their city when they were threatened and partly already lost. The case studies are Berlin Kreuzberg and the historic city of Amsterdam.

**Berlin-Kreuzberg.** Large parts of Berlin-Kreuzberg had survived the Second World War. Its urban fabric was characterized by houses in big blocks, built at the end of the 19th century in a very similar typology, and infamous for the wretched housing conditions due to the bad technical infrastructure and to overcrowding. Thus, the district of Kreuzberg traditionally has had a difficult reputation. In addition, during the fifties and sixties of the last century urban planning and renewal was led by technological, functional, and planned control. It was a time when the cores of cities suffered destruction because of the integration of large motorways, parking areas and office buildings. The situation in Kreuzberg had been even worse because of the division of Berlin and its direct neighbourhood to the Berlin Wall. Rehabilitation of the neglected areas until the seventies meant demolition. There was no confidence in the future of Kreuzberg. But then, citizens' initiatives supported by the students' movement started to demonstrate against the official building policy and forced the government to react. The result had been the establishment of the "Internationale Bauausstellung – IBA 1984/87 (International Building Exhibition) with the goal to "rescue the damaged city" (kaputte Stadt retten)<sup>1</sup>. The IBA was founded as a think tank and planning instrument beyond the official governmental administration; the staff, exhibitions, and publications were financed by public money. The positive aspects of the quarters despite its bad image soon became obvious: the limited number of typologies, the robust building construction, high flexibility for changes, rooms with high ceilings and a grand scale, social and functional mixture.

The IBA developed the tools for a sensitive urban renewal as participation of the residents or adapted constructive methods for a reasonable renovation. They started with a research about the typologies of the buildings, the common needs, and damages. After this they developed typical solutions with standardized technical details for the improvement of the flats. With this strategy it was possible to calculate costs and to define the financial budget in an early state. The rehabilitation programme was financed by already existing funds as the "Programme of Social Housing", Programmeme for Modernisation", programs for small children and youth. The experiences of the IBA had been reflected in the "Twelve Rules of Sensitive Urban Renewal." After the reunification in 1990 these process-orientated strategies and methods became the basis if the huge renewal programme in the historic cities of the former GDR.

**Amsterdam.** The historic city of Amsterdam with its characteristic system of canals had been built in the 17th century during the Golden Age of the city. In that time Amsterdam became the biggest trading town and depot; with 200.000 inhabitants, 800 shipping companies delivered goods to 180 destinations.

Pic 1:  
Berlin. Buildings in Admiralstraße in 1979.

Pic 2, 3:  
Same buildings in 2014,  
but not seen from the same view – it is not  
possible any more.

Pic 4:  
Berlin. Corner Fraenkelufer / Admiralstraße in  
1979.

Pic 5:  
Same corner in 2014.

(<sup>1</sup>)  
The IBA was founded in 1978 with the task "Regaining the Inner City as a Living Area" and with the focus of two different districts: The IBA-neu (new-builds) at the southern part of the Friedrichstadt quarter, that had been heavily damaged during the WW II with the topic "Critical Reconstruction of the City" and the IBA-alt (period properties) at the Luisenstadt and SO36 Kreuzberg quarters with the goal "Rescue the Damaged City". The paper is related to the IBA-alt.



Pic 6:  
Amsterdam. Historic site plan.

Pic 7:  
Kalkmarket.

Pic 8:  
A lელი. Buildings in the historic centre of Amsterdam around 1960.

Pic 9:  
Corner building overtaken by Stadsherstel.

Pic 10:  
Typical canal of today.

The visual message of Amsterdam had been: the whole is greater than its individual parts. The historic centre of Amsterdam was characterized by the system of canals, but without gardens, large places, wide prospects, axes. The Golden Age was followed by decades of decline. By the end of the forties of the last century the historic centre of Amsterdam had reached a perilous state of decay. Since the end of the 19th century, residents had left their canal houses for modern accommodations in the outskirts of the city, some canals were converted into streets allowing better access for cars but making traffic congestions worse in the inner city. The old houses had been more and more neglected, numerous old houses were left vacant.

The governmental planning policy considered the old city centre not any more appropriate for the housing of people, but more suitable as a business and cultural centre with easy access for cars, which meant destruction. A decree of 1945 had forbidden the demolition of listed buildings, however only about 4.000 houses out of 150.000 had been registered as significant historic structures. Amsterdam's townscape is not valuable because of its relatively few listed buildings but of the whole impression, the interaction of facades, colours, materials, canals. Preserving only the registered buildings would result in the erosion of the townscape as a whole.

When the first results of the planning policy became visible, the protest of the inhabitants grew and led to a change in the official policy. The first counter-movement was carried by members of the upper class. The Company of City Restoration (Stadsherstel) was founded in 1957 by members of the Amsterdam Kring, a club of leading persons from the most important sectors of Amsterdam society. Together with the very small department of conservation they decided to do something against the disastrous plans of the local authorities (department of city planning). The members of Amsterdam Kring were asked to buy shares in the new company. Stadsherstel sets three objectives with the overall goal that the residential function of the inner city should be restored:

- to buy and restore the most threatened historic houses, especially not listed ones
- to construct modern dwellings within these buildings for the benefit of public housing
- to maintain these buildings after restoring them.

In the beginning Stadsherstel bought houses in those parts of the city where the administration was planning to start demolition work. Corner buildings were very important; when restored, they provide a positive impact to two fronts. The company led by example, restoring the most unwanted and endangered buildings and converting them to subsidized housing of modern interior quality. The example of Stadsherstel was followed by many other companies and initiatives in Amsterdam.

In 2010, the historic urban example of the canal district of Amsterdam became a World Heritage Site. The historic centre is until now not easy to enter by car, but it has become the capital for biking.

### Lessons learned from the case studies

Rehabilitation is process-orientated and needs time. It is only possible with the integration of the residents (participation). A successful process of rehabilitation needs best practice examples to convince all participants.

Rehabilitation is an open process, however, it needs goals. Rehabilitation strategies and adapted re-use are dependent on the existing typologies. Even in protected buildings changes in the lay-out of the units are possible including integration of modern technical facilities. Especially protected are the facades to the street, the access, and other unique values. Each rehabilitation process must be accompanied by adequate legislation.

sources:

Tung, Anthony. Preserving the World's great Cities: The Destruction and Renewal of the Historic Metropolis. New York: Clarkson Potter Publishers, 2001.

Richter, Roegholt. Living Amsterdam: A City Protects its Historic Past. Amsterdam: Stichting Amsterdam, 1987.

Kupka, Karl. Redevelopment by Tradition: Urban Renewal in World Heritage Cities. Libreria Editrice Cluva, 2012.

Nitsche, Rainer. International Building Exhibition 1987 Project Report. Berlin: 1991.

Nakamura, Toshio (ed.). a + u architecture and urbanism. extra edition, 1987.

internet:

Bodenschatz; Harald. Learning from IBA – die IBA 1987 in Berlin, [http://www.stadtentwicklung.berlin.de/staedtebau/baukultur/iba/download/Learning\\_from\\_IBA.pdf](http://www.stadtentwicklung.berlin.de/staedtebau/baukultur/iba/download/Learning_from_IBA.pdf)



## economical and legal aspects in the course of preserving heritage sites in Egypt

Prof. Dr. Soheir Hawas

Cairo University, National Organisation for Urban Harmony, Egypt

Preserving heritage in the Egyptian context is a quite complex and multi-layered process. This lecture's aim was to explore the economic and legal aspects of heritage sites preservation in Egypt. Starting with the economical aspect, the lecture discussed the different heritage values and the concept of added value and their cultural impact and then went on to discuss the importance of economical values versus other heritage values. Although the lack of financial support is one of the main obstacles facing heritage conservation in Egypt, there are different types of financing available for these types of projects: state financing, private financing and NGO financing.

The lecture gave several examples of this such as the renovation and restoration of the Tahrir complex facades in Cairo which was funded by the National Bank of Egypt. The faculty of Engineering's administrative building was restored thanks to private financing. The restoration of the Abdeen royal palace was financed by the government. The Darb ElAhmar rehabilitation and restoration was financed and implemented through the partnership of several NGOs.

As to the legal aspect, there are mainly three laws that govern heritage conservation and management in Egypt. The first is law no. 117 issued in 1983 which is concerned with the conservation of monuments. The second is law no.144 issued in 2006 which is concerned with the conservation of architectural heritage. And the last - which is concerned with urban harmony - is law no.119 for the year 2008. And finally, the lecture explained the important role that the National Organization for Urban Harmony (NOUH) plays in preserving and managing Egypt's rich heritage.

summarized by Lama Fouad

The last session's aim was to summarize the main conclusions and recommendations of each lecture. Everyone agreed that a pilot project of adaptive re-use in Port Said would help change the people's perspective and raise their awareness about the importance and value of their rich heritage as well as attract investors to rehabilitate heritage buildings instead of tearing them down and replacing them with high-rise apartment buildings. Seeing the successful experience presented in the presentations also gave a positive outlook of what could happen in Port Said. Solutions were also suggested to the different obstacles facing heritage conservation in Egypt. At the national level, laws and regulation need to be modified regarding the low rent in old buildings, the loophole in law no.144 for the year 2006 needs also to be fixed in order to stop the de-listing of heritage building. As to Port Said, a conservation plan integrated within the urban development plan needs to be formulated to manage and preserve the city's rich heritage. Finally, placing the city's heritage on the tentative list of world heritage was suggested as the next step forward and this could be achieved by establishing partnerships between the Suez Canal Company and the governorates of the cities of the Suez Canal region.

summarized by Lama Fouad



Pic 1:  
Listed buildings in Cairo

Pic 2:  
Aga Khan foundation revitalisation project in Darb Al-Ahmar, Historic Cairo

Pic 3: Lectures and discussions in the workspace at the Misr Public Library, Port Said

## discussion

**Cottbus | Port-Said, September 2014**

Dr. Juliane Jäger | Dipl.-Ing. Barbara Witt | Dipl.-Ing. Christoph Wessling

Assistant Professors / Coordinator Middle East Cooperation Unit,  
BTU Cottbus-Senftenberg

The workshop task focused on a detailed research and survey of houses with a “second skin” of wood along the facades in both, the European and the Arab quarter of Port Said, to establish their history, origin and local adaptations and to develop future strategies for re-evaluation, maintenance and adaptive re-use. In cooperation with the newly founded civil campaign group, the aim was also to raise public awareness for these buildings and launch a discussion to save them as local heritage. In detail the workshop worked on:

**A measured survey of three houses**

- plans, sections, elevations/ catalogue of rooms
- survey of damages and symptoms

**B suggestion/ concept for re-use and design**

- short- and long-term strategies to upgrade the neighbourhood the urban block and the building itself

**C raising public awareness**

- interviews and questionnaires to integrate the local residents
- invitation of stakeholders / exhibition of results

The work was organised in three teams of eight students and three supervisors each, mixed together from members of each university, that worked on three different buildings (see attached diagram of the historic centre of Port Said with localisation of the surveyed buildings).

For the initial stage of the building survey, each team had to fulfill the following tasks, to be represented through photographs, drawings and documentation:

**survey and measurement of context:**

plot and neighbouring buildings / site plan / identification and interviews with stakeholders / owners / inhabitants about history, usage, future opportunities and wishes for the building

tools: camera, voice recorder, note book, laser tool, sketch pad / transfer to CAD  
format: CAD drawings: overview 1:1000 / site plan 1:100 / SWOT analysis

**measurement of main proportions and structure:**

floor plans / sections / elevations / catalogue of rooms / photographic documentation

tools: camera, metre, laser tool, sketch pad A3 / transfer to CAD

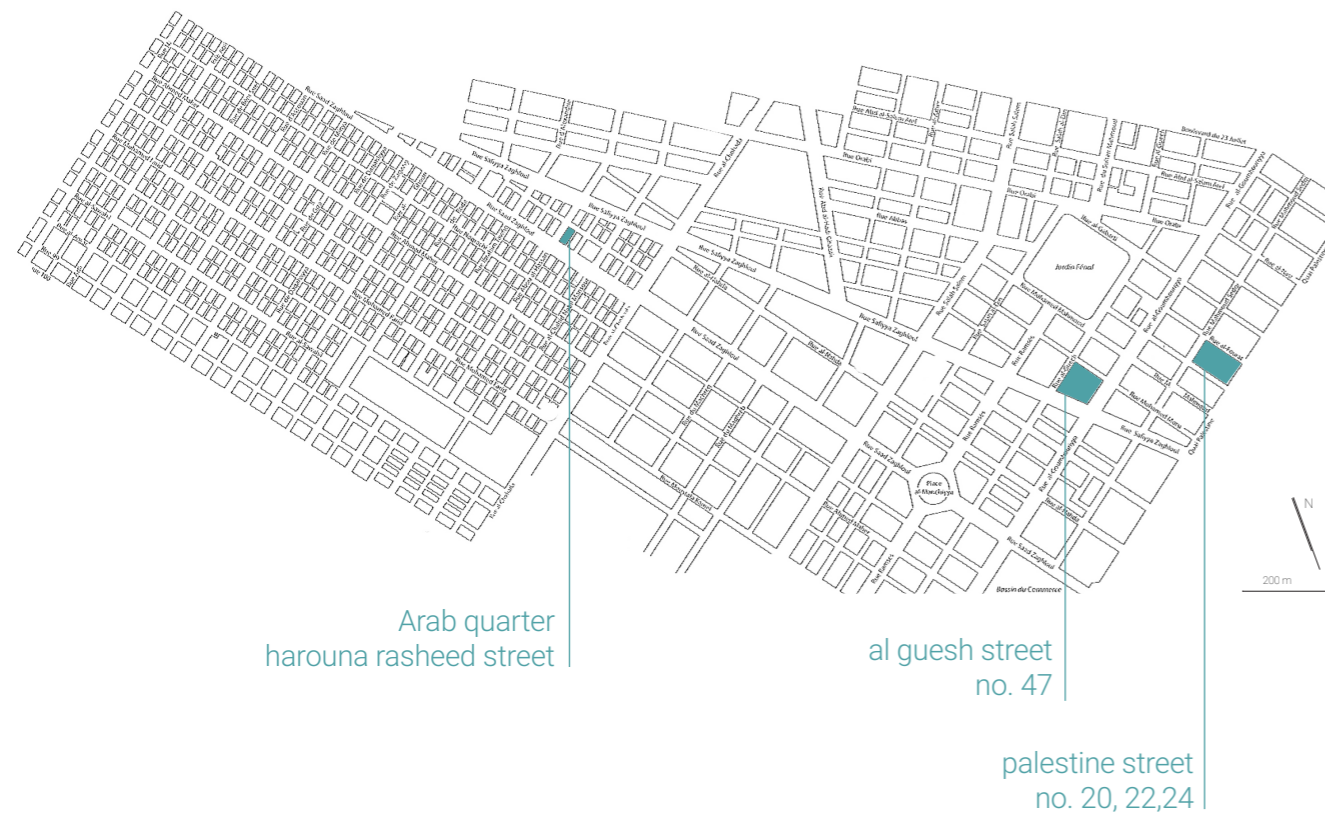
format: CAD drawings: plans, sections, elevations 1:100 with notes of damages and symptoms

**measurement of building elements and details:**

wooden structure / characteristic details (e.g. balconies, stairs, shutters, panning) / climatic aspects (e.g. shading, cooling, heating, ventilation) with localisation in the building

tools: camera, metre, sketch pad A3 / transfer to CAD

format: CAD drawings or hand sketches of details 1:20 / 1:10



Pic 1:

Port Said, historic centre, localisation of the surveyed buildings.

Source: JJ, on the basis of Claudine Piaton: Port Said.

**building in Palastine Street 20, 22, 24**

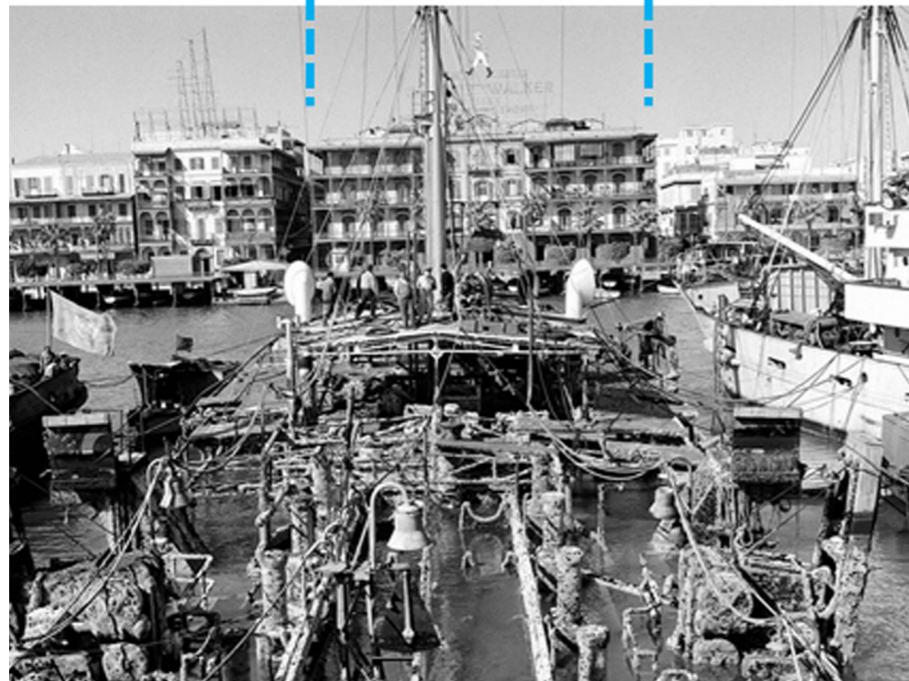
survey team: Rana Magdy • Dina El Mazzahi • Justyna Poplavska • Marleen Hoerning • Khaled Ashraf • Ehab Zaagog • Samar Adel • Alaa Atef • Alaa Ezz • Dina Deiaa • Marwa Fawaz • Eslam Malak



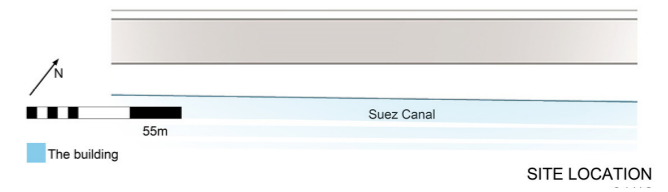
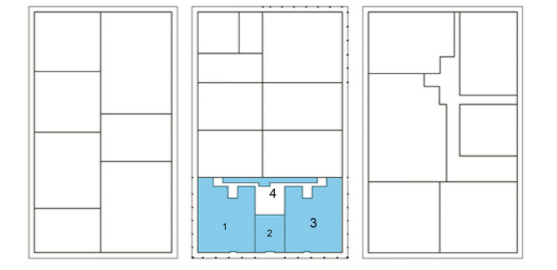
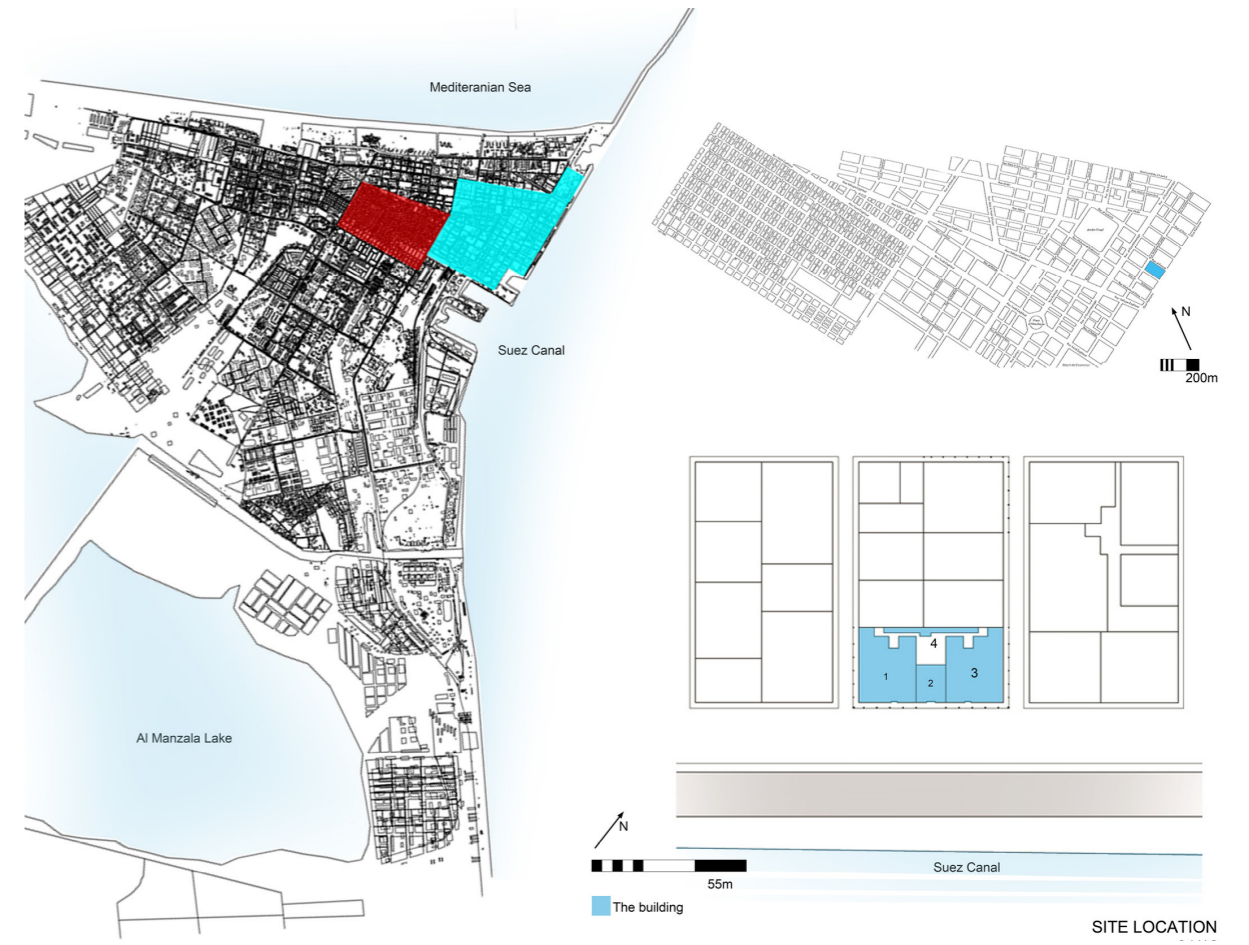
palestine street  
no. 20, 22, 24



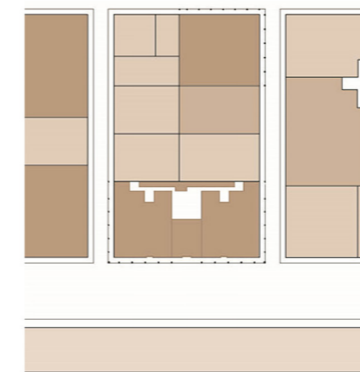
Late 19th century built



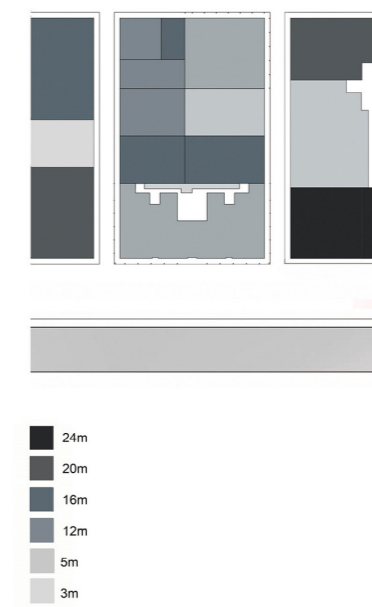
Building Of Palestine Street



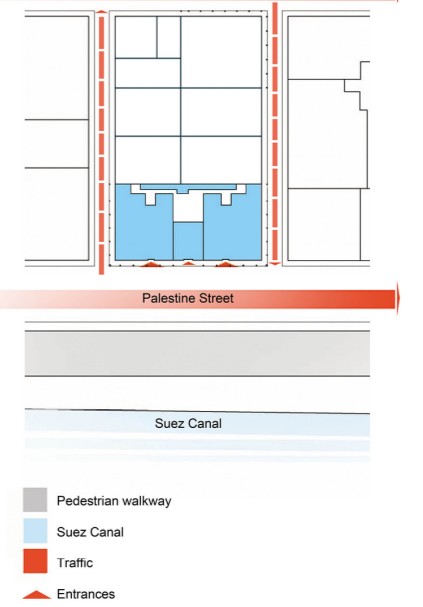
Buildings' Age



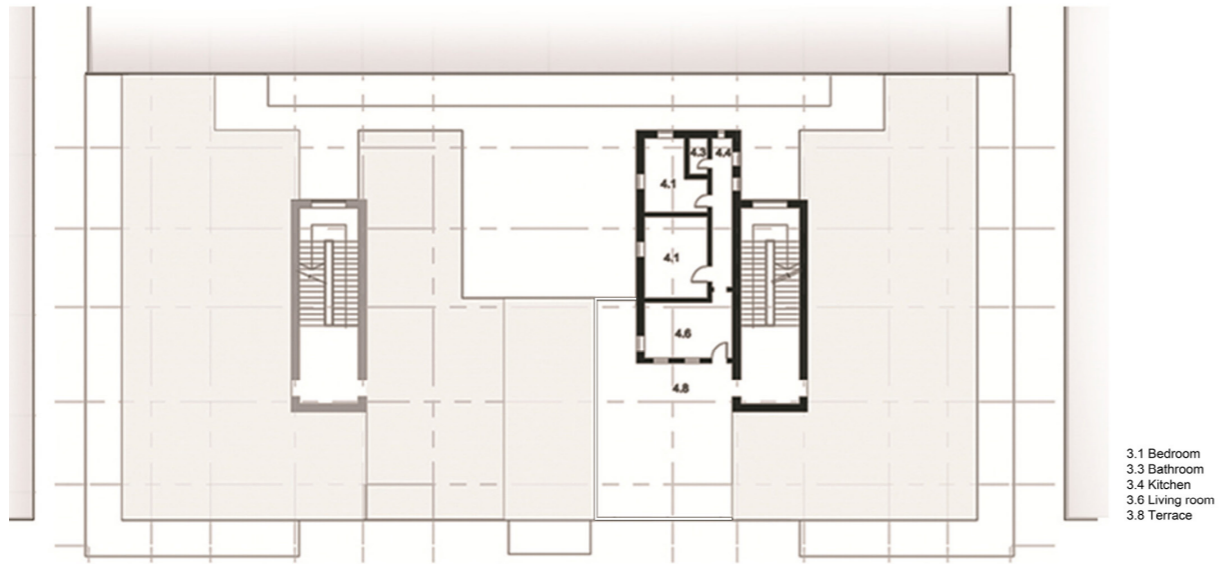
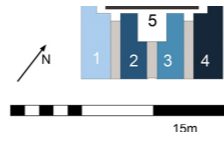
Buildings' Height



Traffic and Leisure

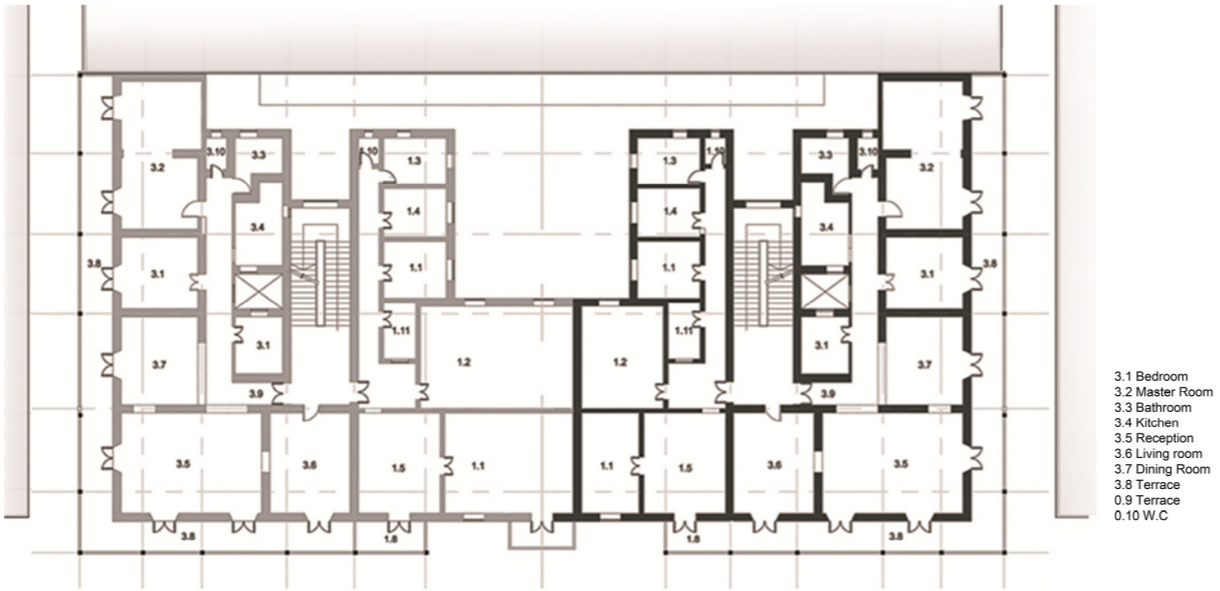


Building / Quarter Analysis



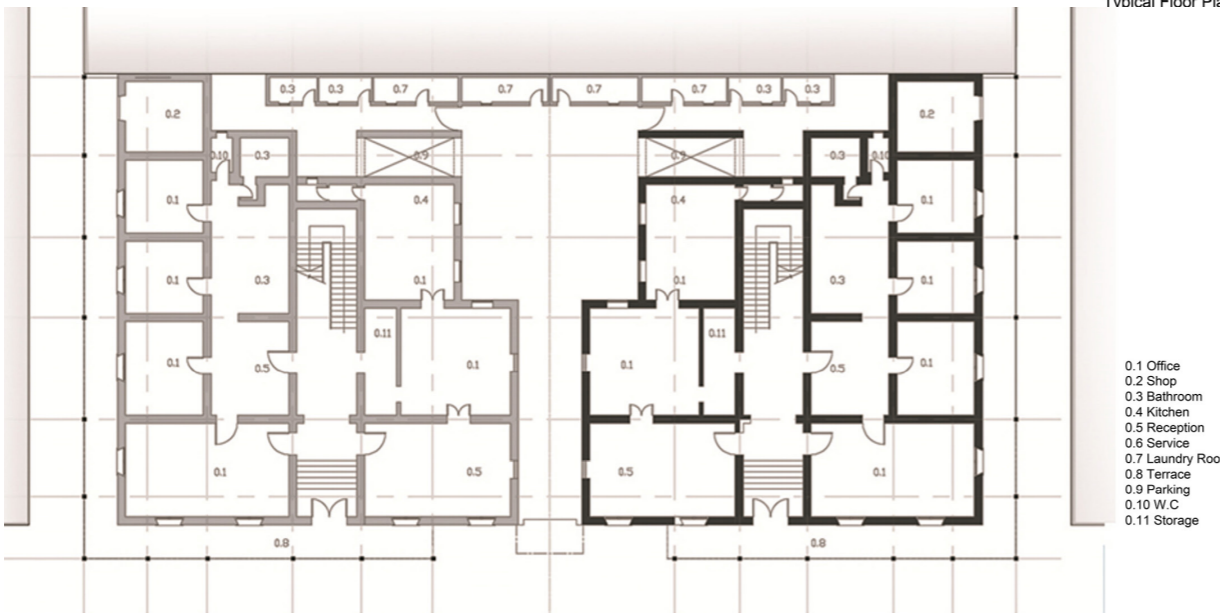
- 3.1 Bedroom
- 3.3 Bathroom
- 3.4 Kitchen
- 3.6 Living room
- 3.8 Terrace

Roof Plan



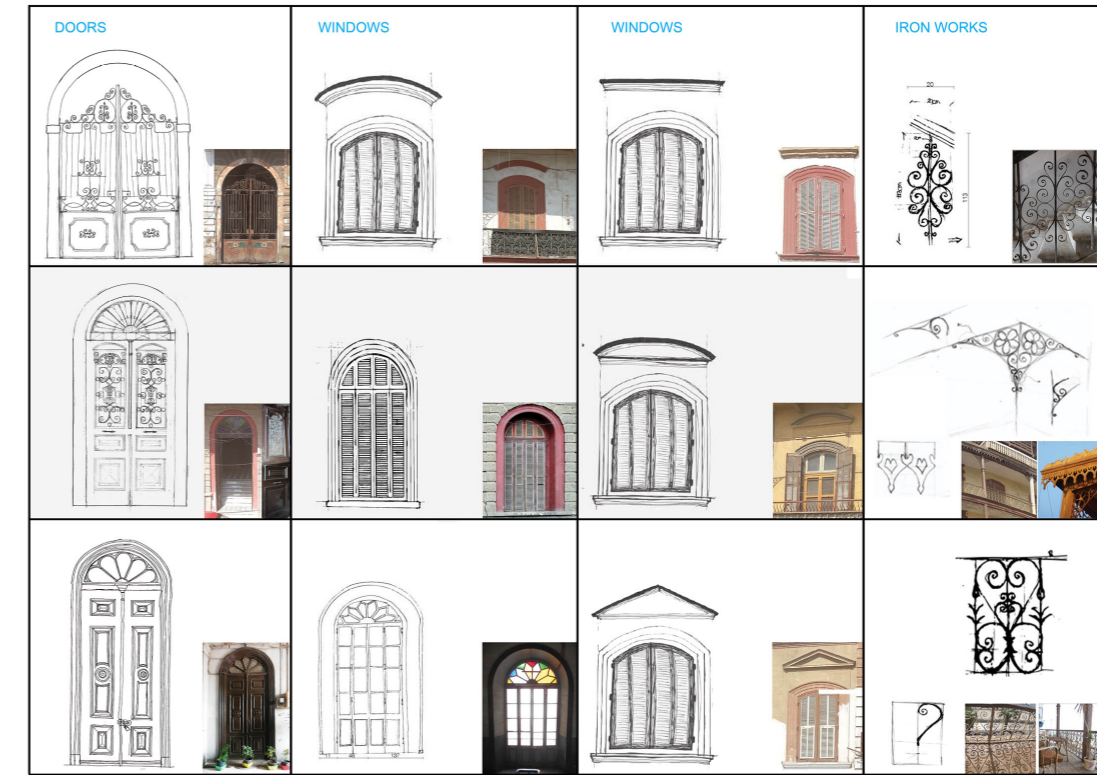
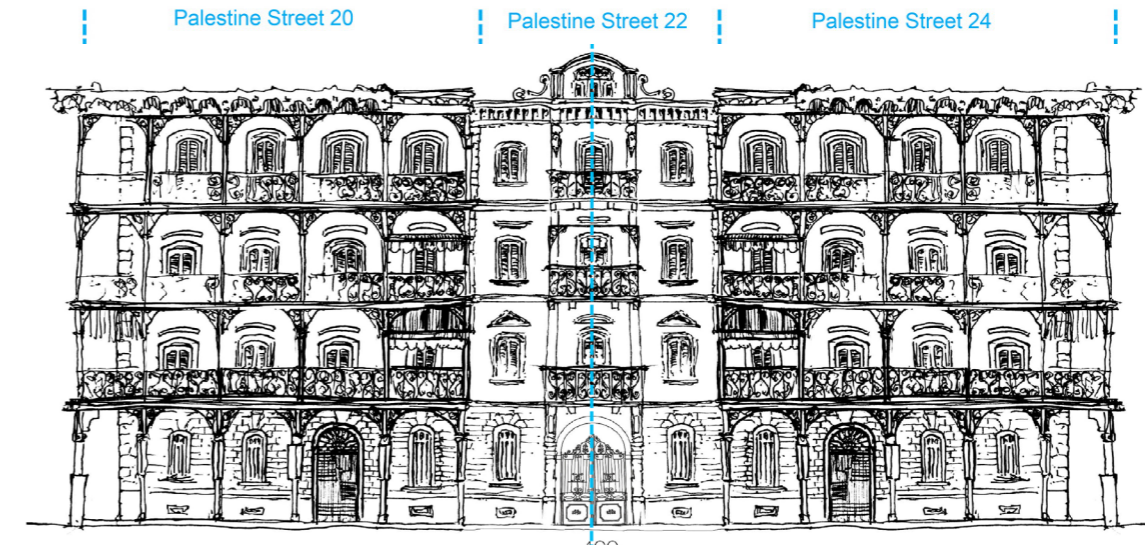
- 3.1 Bedroom
- 3.2 Master Room
- 3.3 Bathroom
- 3.4 Kitchen
- 3.5 Reception
- 3.6 Living room
- 3.7 Dining Room
- 3.8 Terrace
- 0.9 Terrace
- 0.10 W.C

Typical Floor Plan

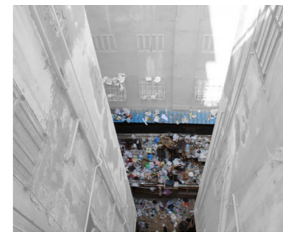
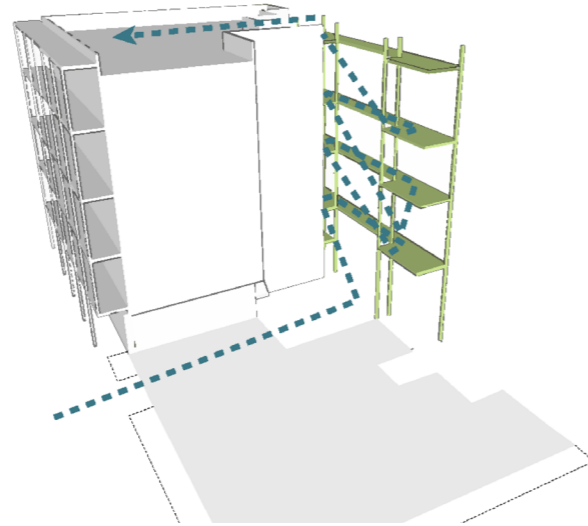
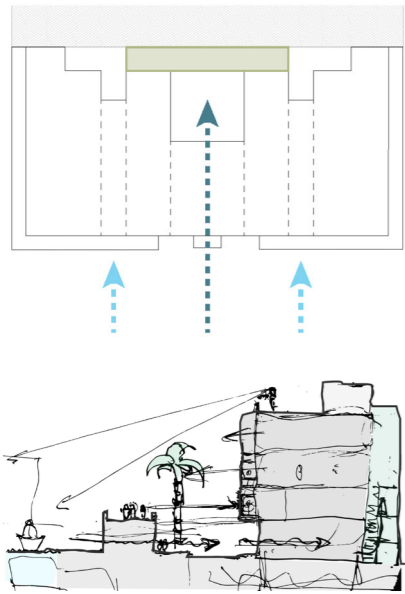


- 0.1 Office
- 0.2 Shop
- 0.3 Bathroom
- 0.4 Kitchen
- 0.5 Reception
- 0.6 Service
- 0.7 Laundry Room
- 0.8 Terrace
- 0.9 Parking
- 0.10 W.C
- 0.11 Storage

Ground Floor Plan



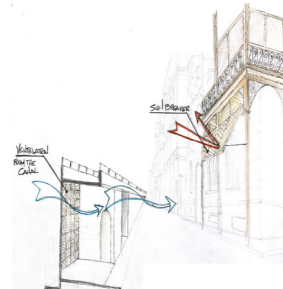
Details Catalogue



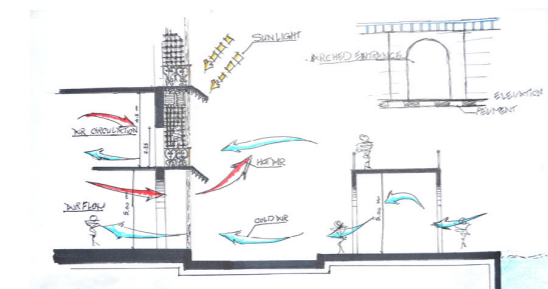
cleaning the court yard



Vertical gardens



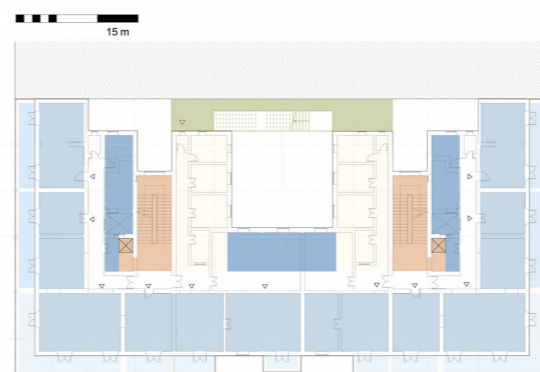
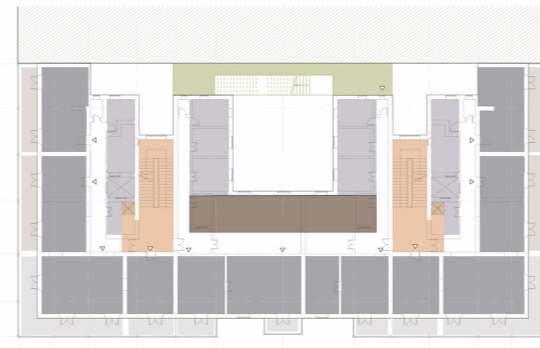
Cross ventilation/party opened Suez canal barrier



Cleaning the entrance towards the courtyard/ visual connetions



Rehabilitation of side walks

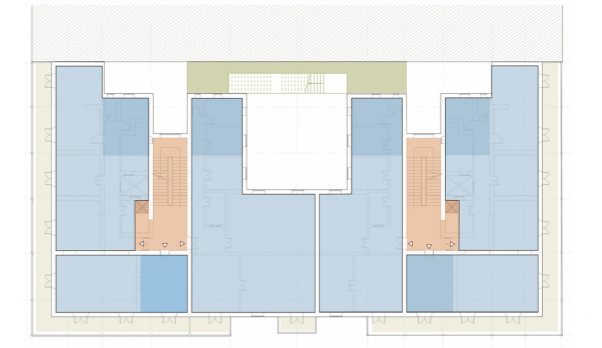


The long-term strategy of our project contains 3 components:  
The urban strategy reaches from cleaning, improving of the sidewalks, reduction of the traffic in the secondary pedestrian roads to the final prospects of opening up parts of the barrier building towards Suez canal, mainly for visual and climatic purposes

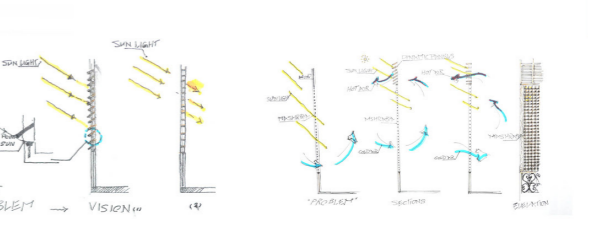
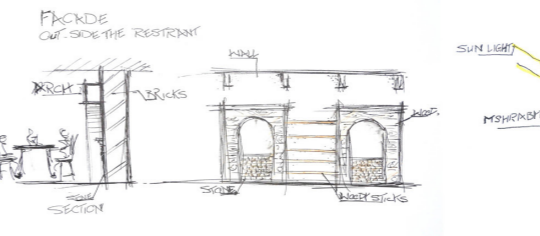
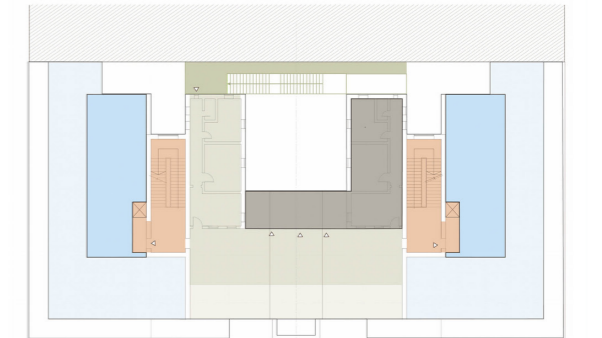
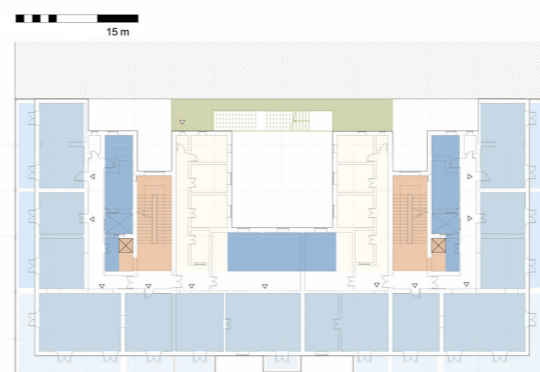
The building strategy concentrates on keeping existing offices and public functions in the ground level, including social and cultural spaces in the upper levels as a vivid mixture. The residential areas in the second floor are protected, but partly changed. Student dorms at the first and third floor and a restaurant and apartments at the roof create a variety of special offers. Thus, we suggest several possible typologies that could gradually could be included. The current circulation will be supported via extra elevators in both wings of the building. An additional circulation with staircase will be implemented at the back of the plot – being called the "vertical garden". Three courtyards will support this vertical garden idea

The detail strategy focuses on flexible shelters from wood and additional windows towards the courtyards. Together with the opening of the Suez canal barrier and the planned typologies, we will support the natural cross ventilation of the building

استراتيجية المشروع على المدى البعيد تحتوي على 3 عناصر:  
- أو لا الاستراتيجية الحضرية:  
ويشتمل ذلك في تنظيف وتحسين المسارات والأبنية الموجودة بالمبنى وكذلك الحد من حركة مرور السيارات والساحب بزيادة عدد من المداخل الموجهة للمبنى والتي تتيح مرور الهواء لتحسين تدفقه للمبنى.  
- تانيا الاستراتيجية المعمارية للمبنى نفسه:  
والتي تشمل في محل الدور الأرضي للمبنى محتويا على الوظائف العامة مثل الخدمات الاجتماعية والثقافية مع الاحتفاظ بالمكاتب والشركات الموجودة حاليا وجعل الدور الأول محتويا على استوديوهات أو ورش عمل أو مكاتب صغيرة وجعل الدور الثاني والثالث مخصصا للإسكان السكنية الخاصة بالسكان الحاليين وكذلك مساكن الطلبة أو للأجانب أما السطح فيمكن استخدامه جزء منه كمسخدم وكذلك تقنين كثير من أماكن تخزينها. وسوف يتم تدعيم مسارات الحركة عن طريق وضع مصعدين على جانبي المبنى كما أنه سوف يتم إضافة سلمان إضافيين في الجزء الخلفي من المبنى مشتملان ببعضهما عن طريق حديقه خلفية في المبنى وسوف يقدم هذه الفكرة الثلاث اقية الموجودة بالمبنى.  
- ثالثا الاستراتيجية الخاصة بالتفاصيل:  
وهي تركز على المداخل التي يمكن تحريكها والصنوعة من الخشب وإضافة نوافذ تطل على الأبنية التي جانب القاعات التي سوف يتم احلالها بدلا من المداخل والتي تطل على القناة وهذا سوف يؤدي الى تحسين مرور الهواء الى المبنى عن طريق القاعات المقابلة للمبنى.



Vision / Ground, First And Second Floors



Vision / Third Floor And Roof Plans | Detail Sketches Of Roof And Facades



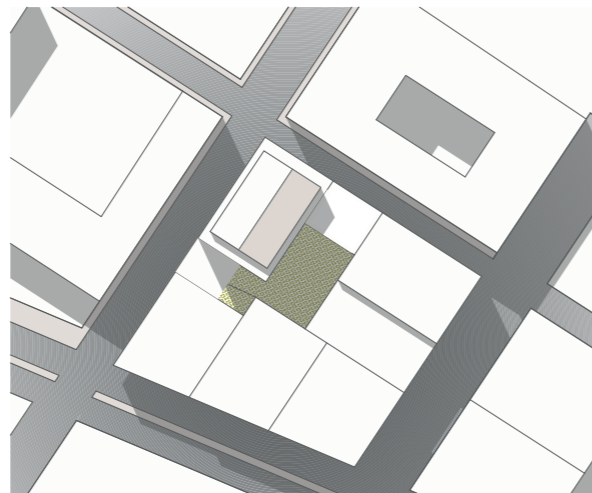
**building in Al Guesh Street 47**

survey team: Mohamed Abo Sira · Hend Hazem · Heba El Hanafi · Ahmed Atef El Sawy · Mostafa Magdy · Mohamed Ali Saleh · Hossam Abd El Khader · Nadine Ismail · Maram Waleed · Mohamed Salah · Miah Constanze Hutter · Alexander Hopf · Theresa Molle

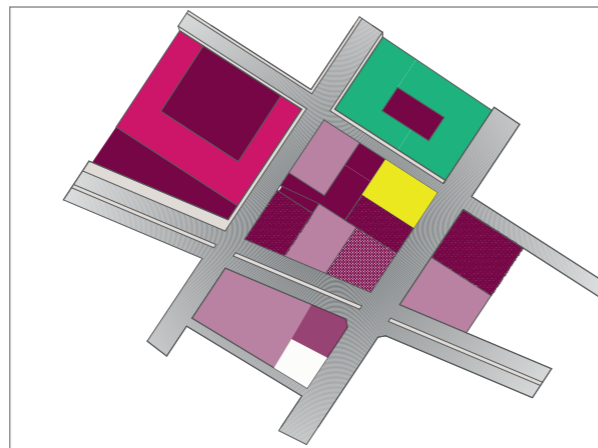


al guesh street  
no. 47

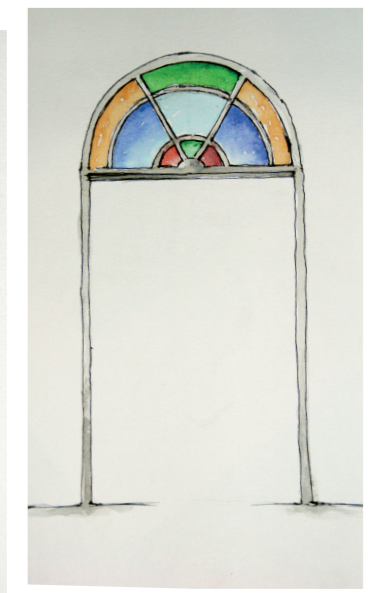
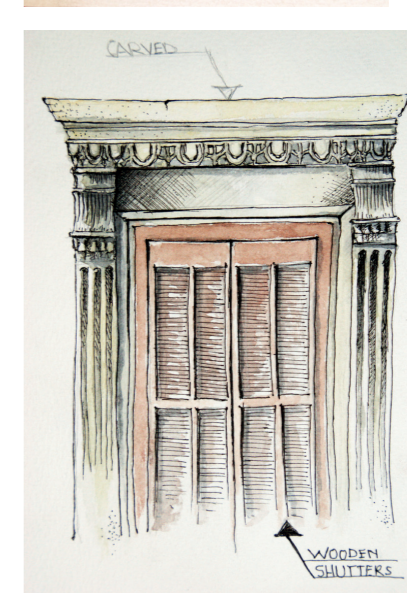
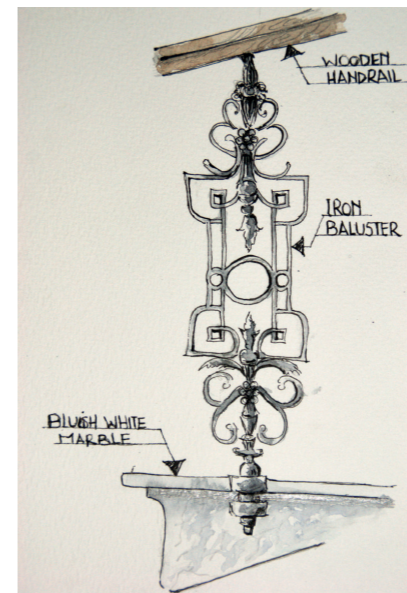
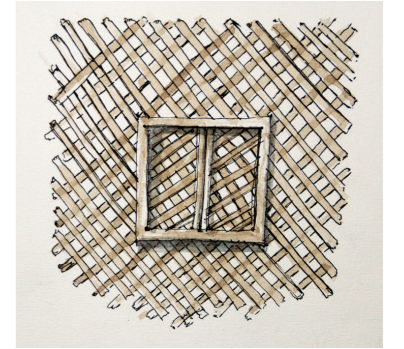
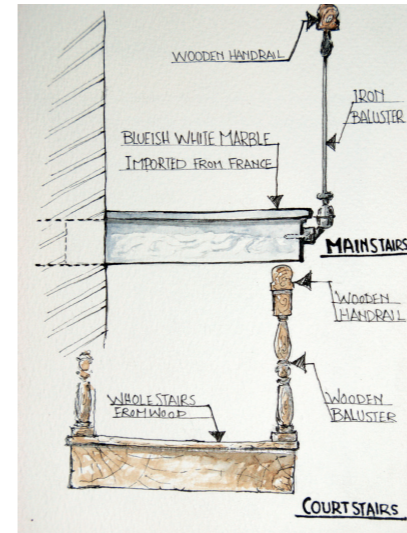




- commercial
- administrative
- educational
- hotel
- under construction
- empty house
- residential
- recreational



- commercial
- administrative
- educational
- hotel
- under construction
- empty house
- residential
- recreational



The house 47 al Guesh Street is a unique within the timber balcony buildings of Port Said, since it is organised around an interior courtyard. It seems it was not a typical residential building but, according to local residents, used as a boarding house in connection with the French school opposite. Everyone remembers the beautiful garden with Mango and Palmtrees that used to be adjacent to the house. Today only a few of the apartments are occupied, most are empty or used as storage spaces. Through its unique qualities, the house in Al Guesh Street could become a pilot project for the rehabilitation of the heritage buildings of Port Said.

Two alternative proposals have been developed during the workshop, that would benefit the neighbourhood and the inner city of Port Said: Culture and Media Centre for teaching, learning and enjoying, with books, new media and a cafe in the garden. Academy for craftsmanship, specialised in wooden construction and detailing, where students and locals could be trained. Both proposals would redevelop the surrounding as public gardens and courtyards, strengthening the spatial qualities of the building.

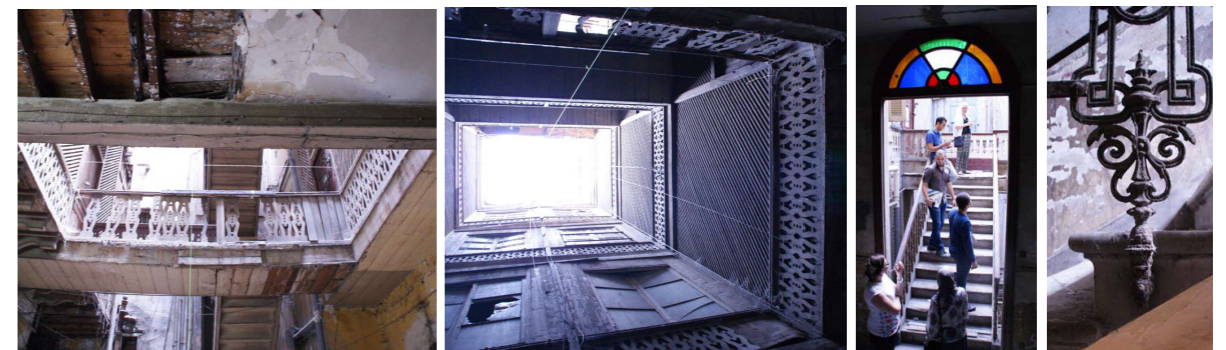
بعد المنزل الواقع بـ 47 شارع الجيش مميز بين أبنية بورسعيد ببنوكاته الخشبية وقفاته الناطق المعيز. يبدو أنه ليس بمنزل تقليدي ولكن كما قال بعض السكان المحليون أنه كان يستخدم كمسكن لطلاب المدرسة الواقعة أمامه. الجميع يتذكر جيدا الحديقة الجميلة التي كانت تقع بجانب المنزل. أما الآن يستخدم قفاته عند محدود من شقته والباقي يستخدم إما كمخازن أو غير مستخدم على الإطلاق. يستطيع المنزل الواقع بطريق الجيش أن يصبح مشروع تدريبي جيد جدا لعملية إعادة تأهيل المباني التراثية في بورسعيد.

لقد طورت ورشة العمل مشروعان يتبدلان من شأنهما خدمة المجتمع وأحياء بورسعيد المختلفة.

مركز إعلامي وثقافي للتعليم والتعلم والمتعة من خلال الكتب والوسائط الجديدة.

أكاديمية للحرف الخاصة بالمشنقات الخشبية وتفاصيلها. يستطيع الطلاب والسكان المحليون أن يتدربوا فيها.

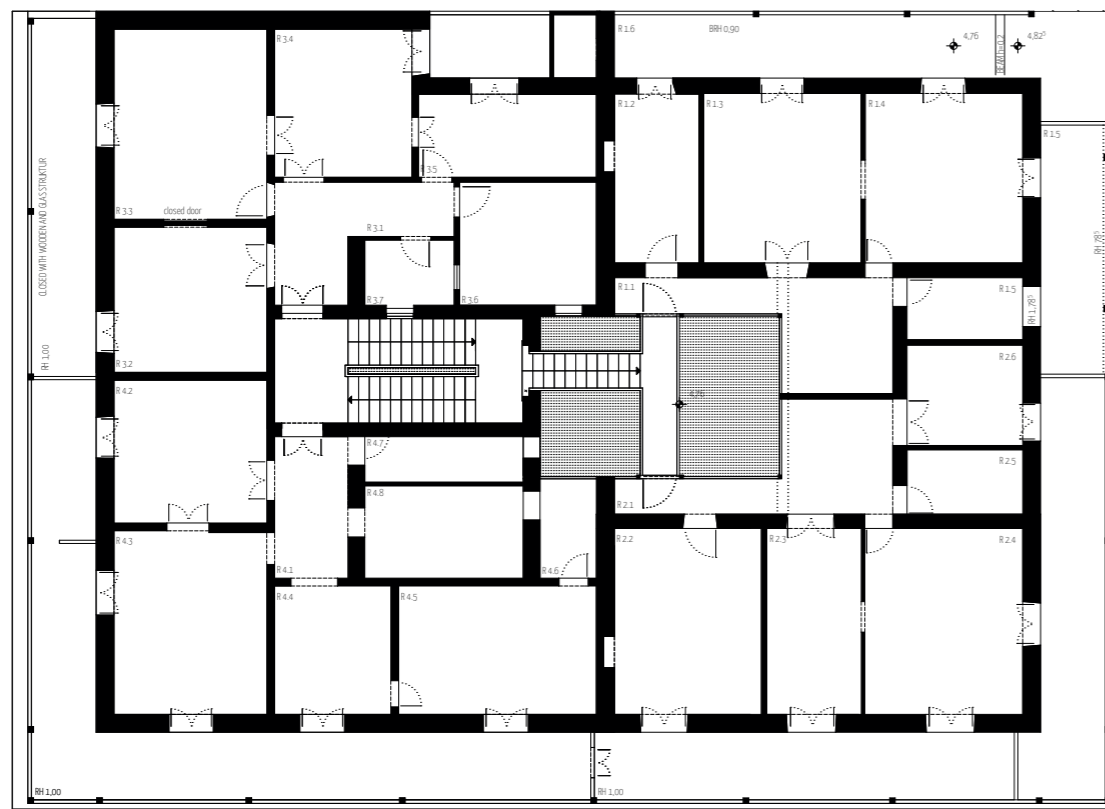
كلا المقترحين من شأنهما تحسين جزات المبني وإعادة تطوير محيطه وتحويله إلى حدائق عامة وأفقية.



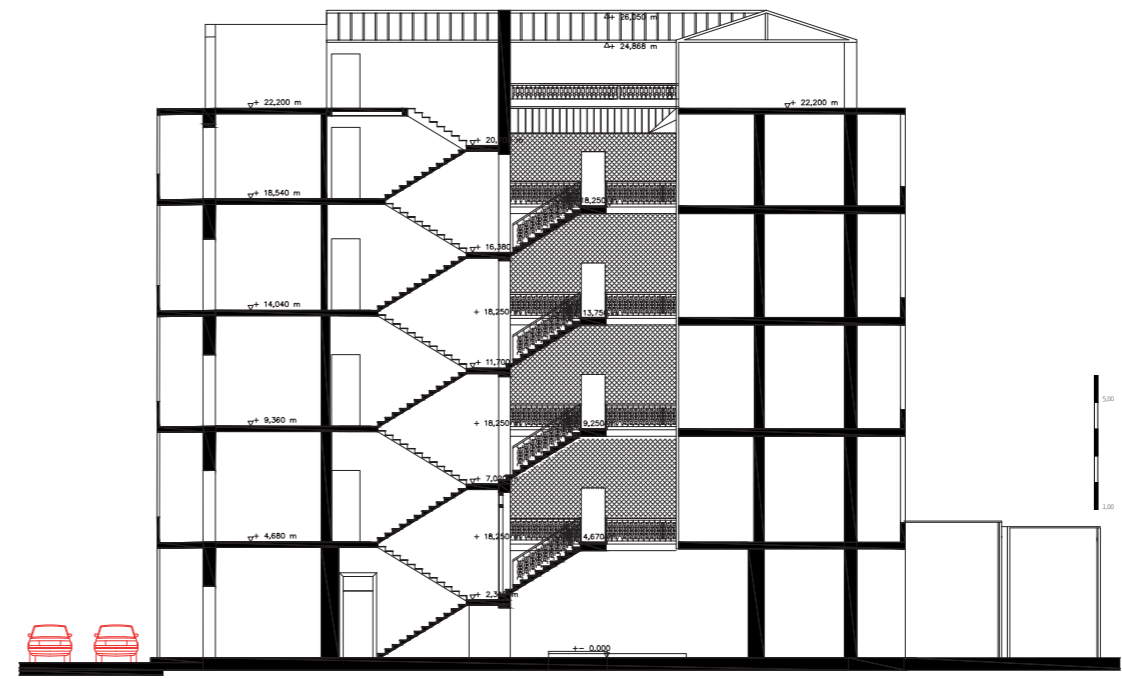
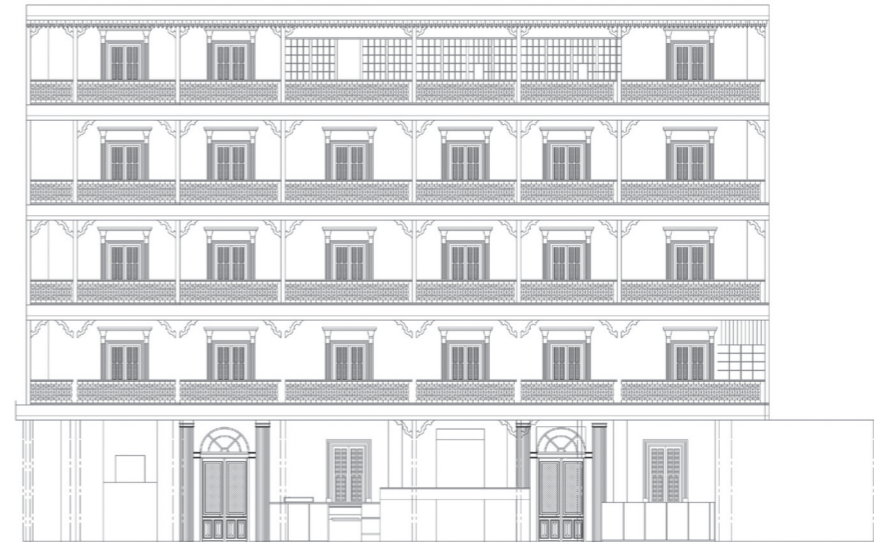


- flat 1
- flat 2
- flat 3
- flat 4

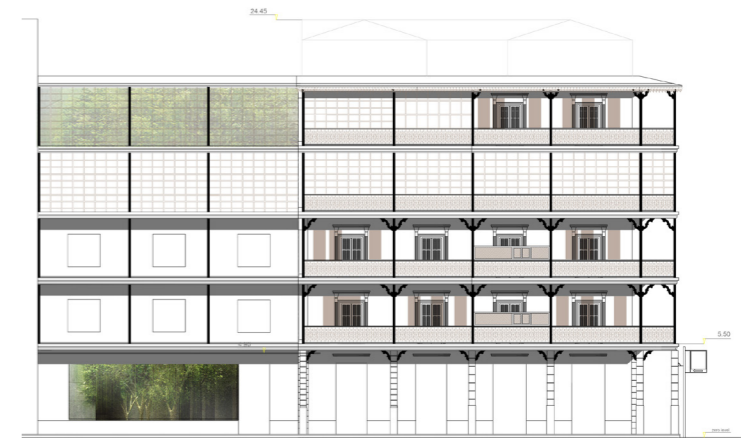
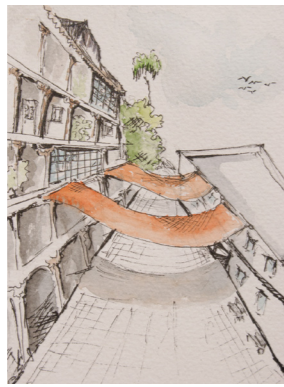
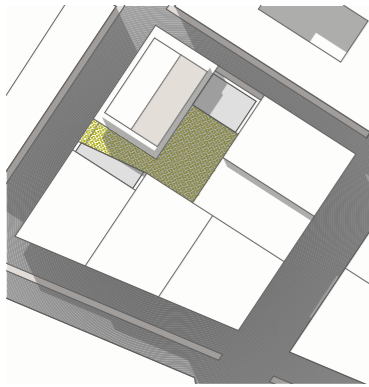
- private rooms
- bathrooms
- balconies
- corridors
- kitchens
- enclosed rooms



1:00 5:00

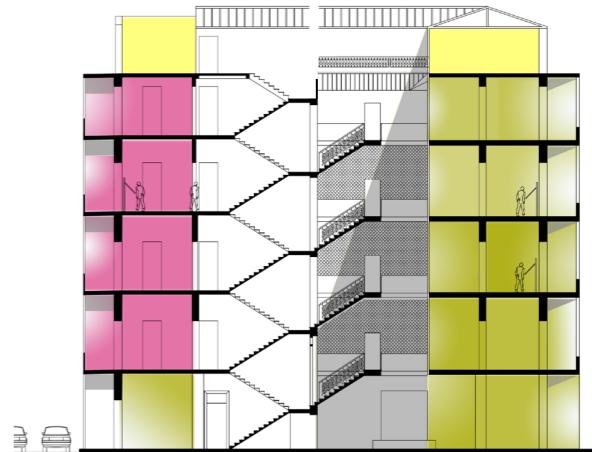
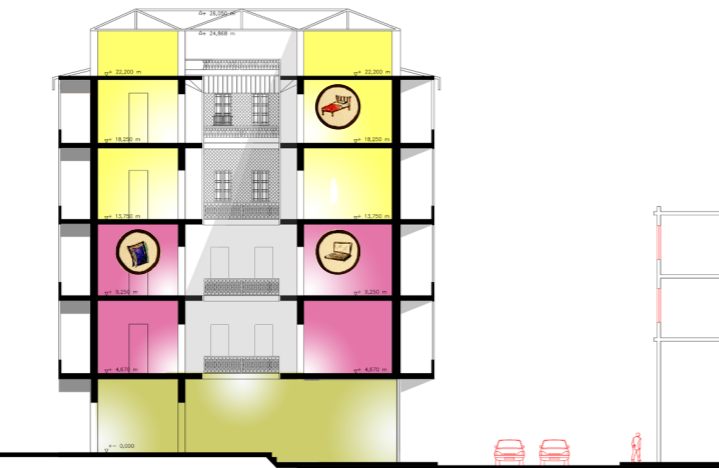
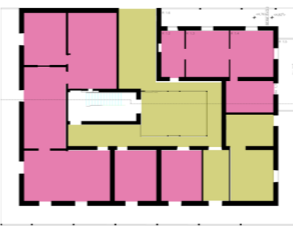
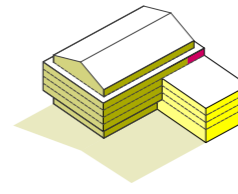
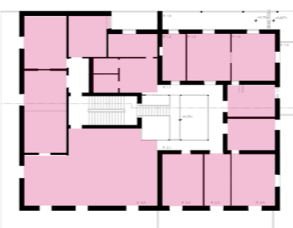
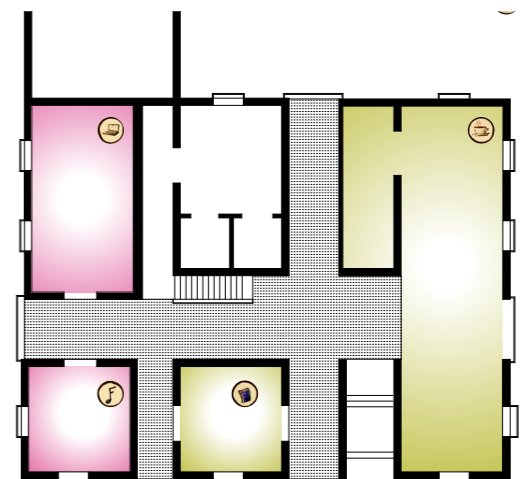
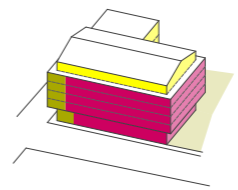
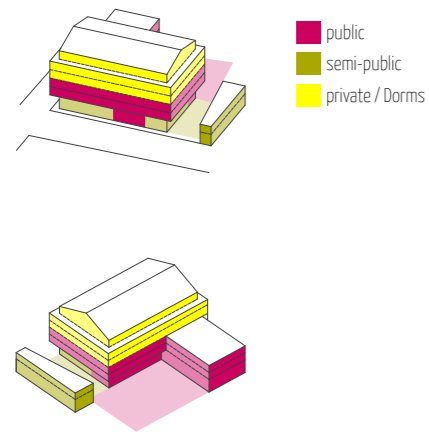


section



**CONCEPT 1**  
Academy for craftsmanship, specialised in wooden construction and detailing, where students and locals could be trained.

**CONCEPT 2**  
Culture and Media Centre for teaching, learning and enjoying, with books, new media and a cafe in the garden.



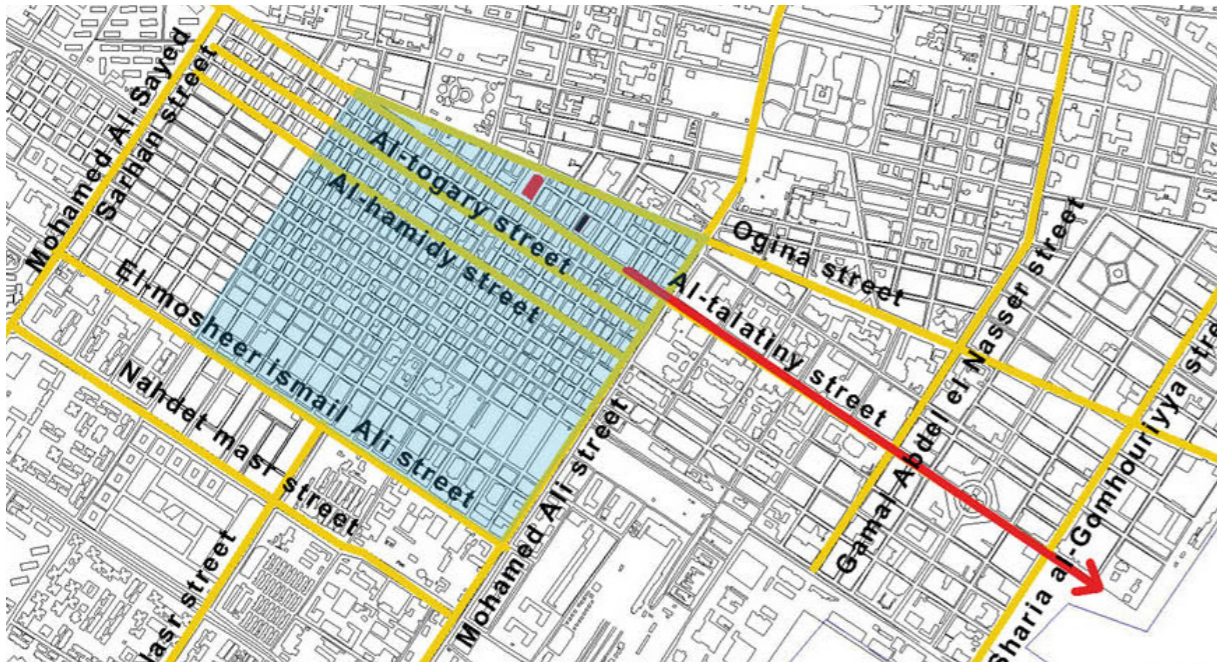
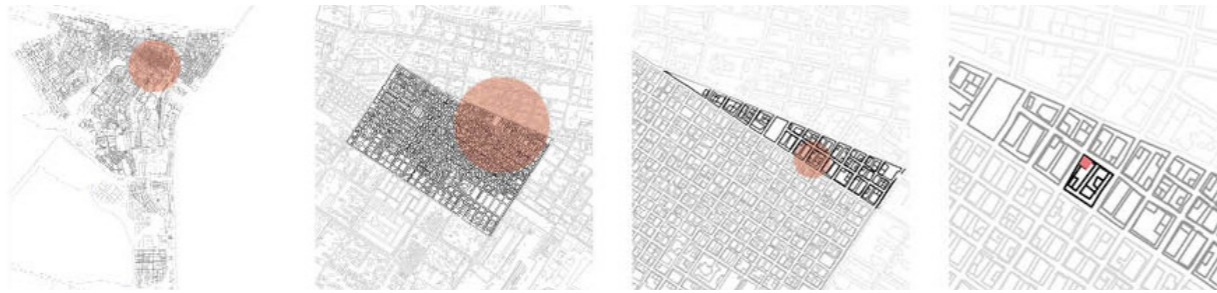
**building in Harouna Raschid Street (Arab quarter)**

survey team: Mohamed Safwat · Lojina Tolba · Safwat Ali · Mohamed El-Gohary · Heba Farid · Mohamed Ghorab · Ruaa Ismail · Josefine Schulz · Ahmed El-Ghazouly · Sandra Hurek

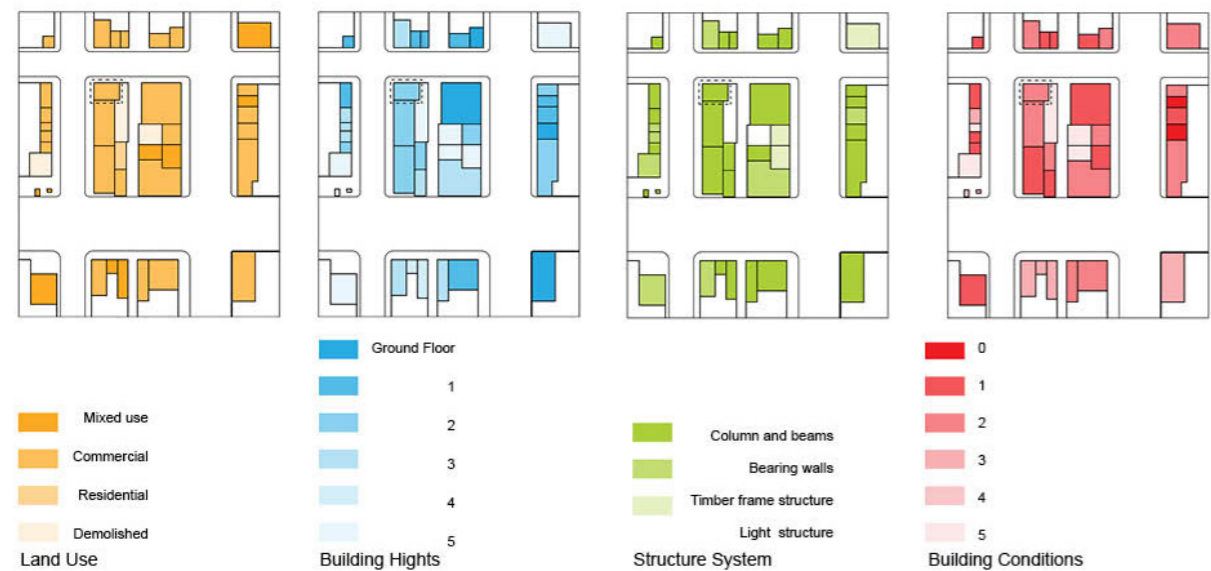


Arab quarter  
harouna rasheed street





site location



urban long term plan



wooden buildings



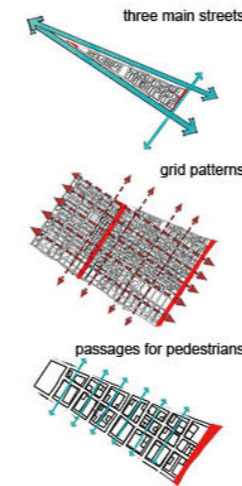
shaded pedestrian places

commercial street



future shaded haron el rashed street

green pedestrian shades



three main streets

grid patterns

passages for pedestrians

unique style for buildings

valuable wooden elements

strengths

not enough green areas narrow grid pattern

irregular colors of the building

new buildings don't respect the scale of the area nor the narrow streets

houses are so old so it may collapse

narrow courtyards make it hard for ventilation causes hygienic issues problems

old law of rent houses make it impossible to maintain the building

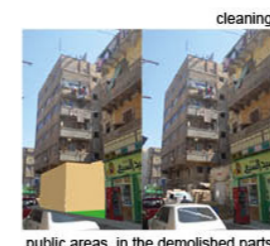
bad condition of the area make it hard to live in it, so ot turned to ghosts' city

most of people don't have the awareness of not throwing garbage in the streets

no areas for kids and pedestrians small area turn into trash dumb

expensive maintenance of wood

weaknesses



public areas in the demolished parts



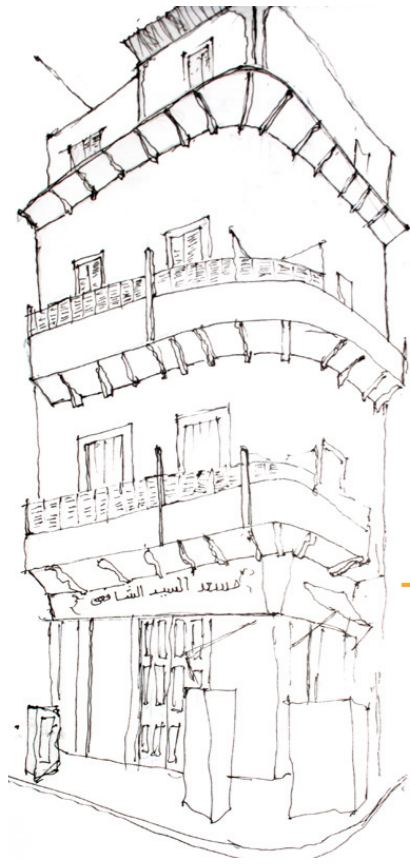
re-using wooden elements



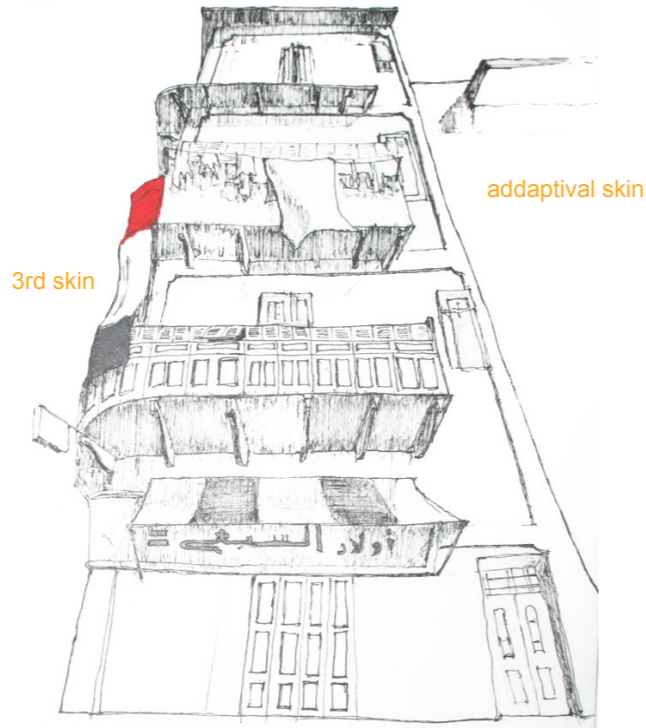
opportunities



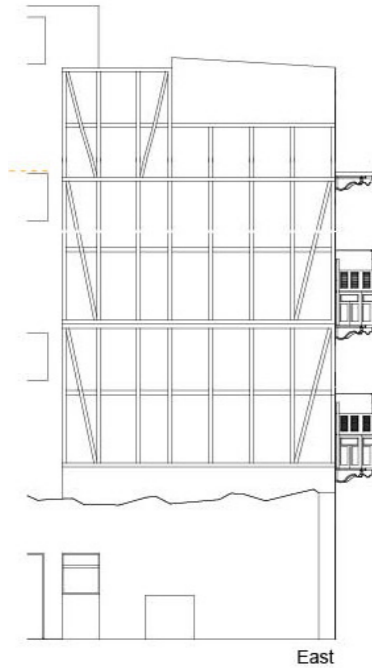
threats



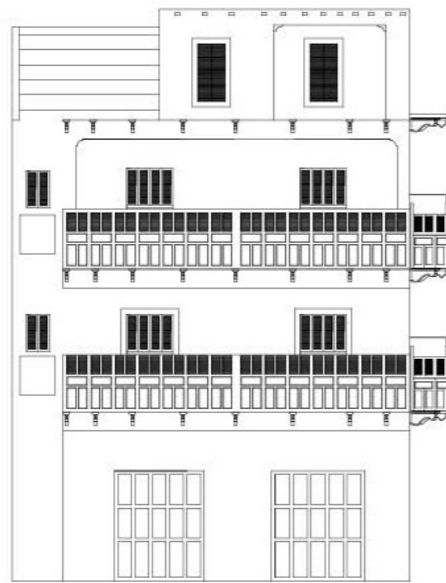
Residential Use  
-----  
Commercial Use



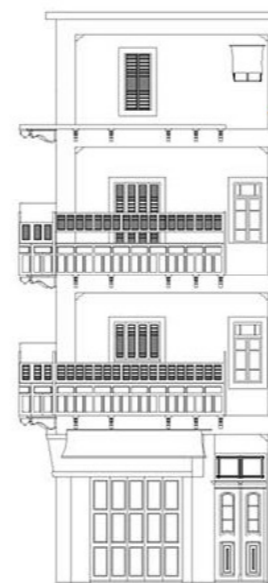
Bet El Sab'a House



East

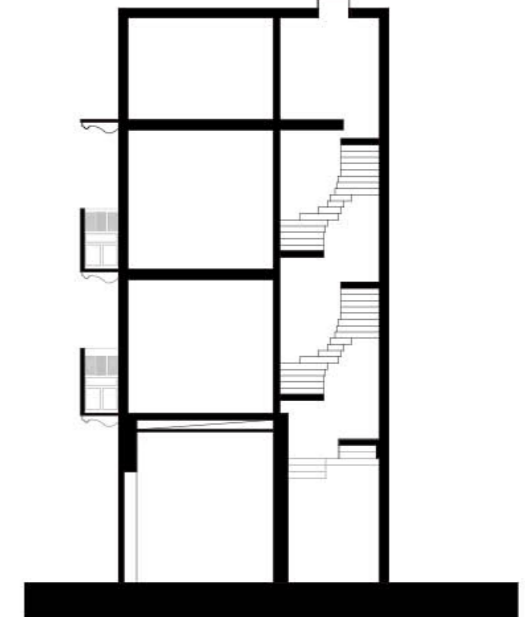
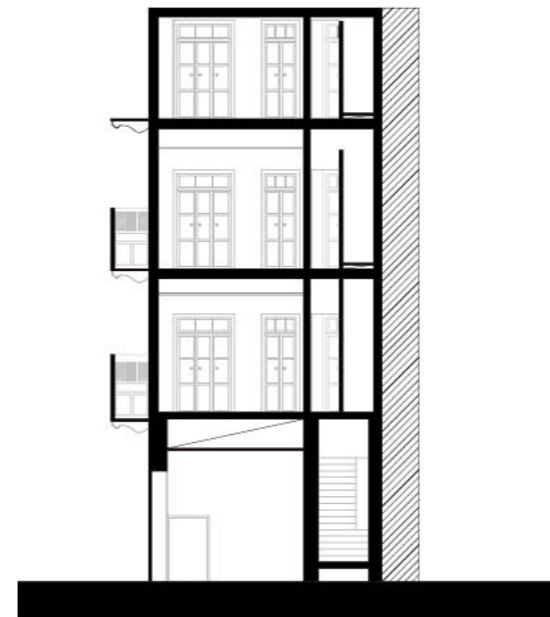


North



West

15 m



Sections

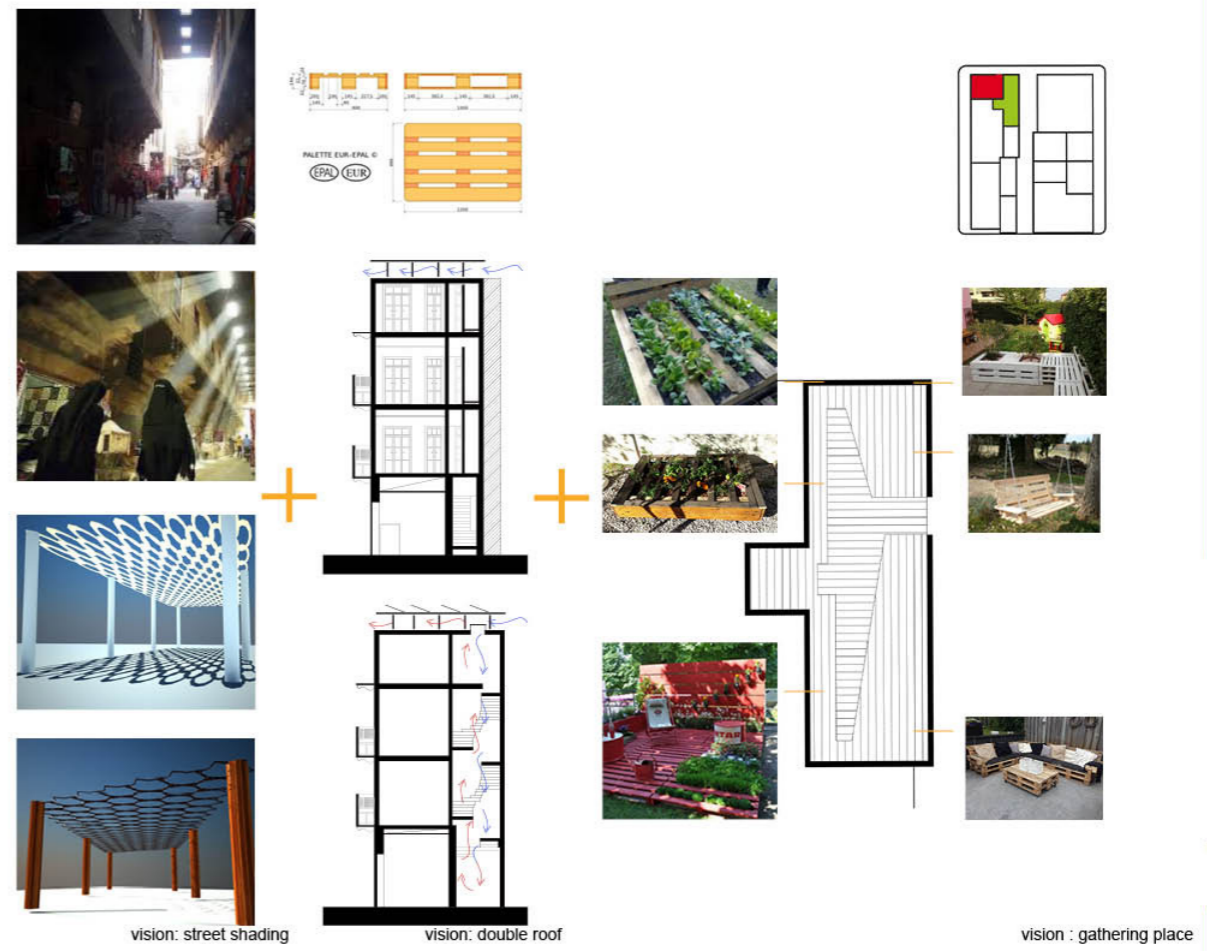
15 m



section balcony detail

elevation balcony detail

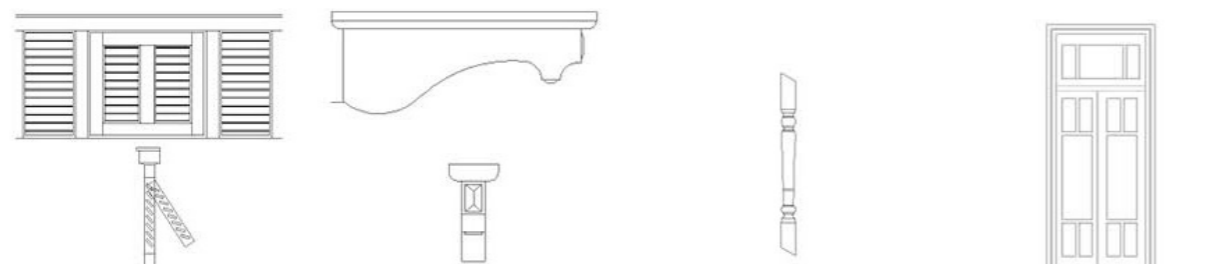
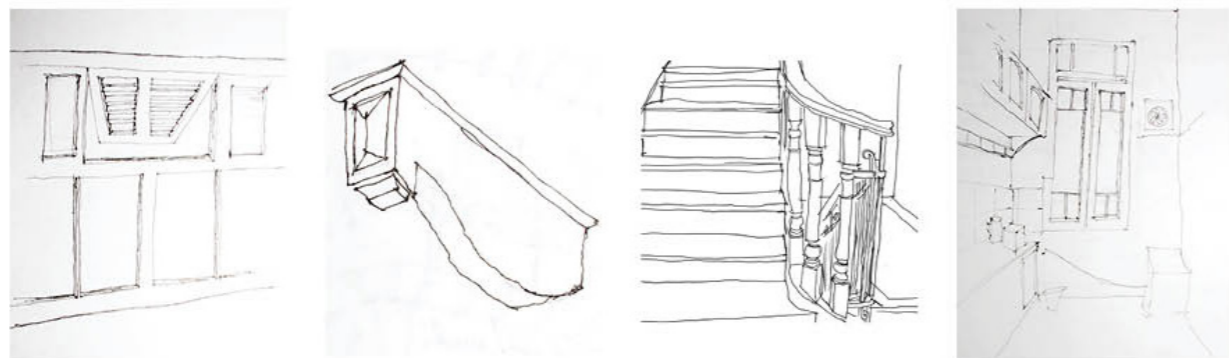
shaddad



vision: street shading

vision: double roof

vision: gathering place

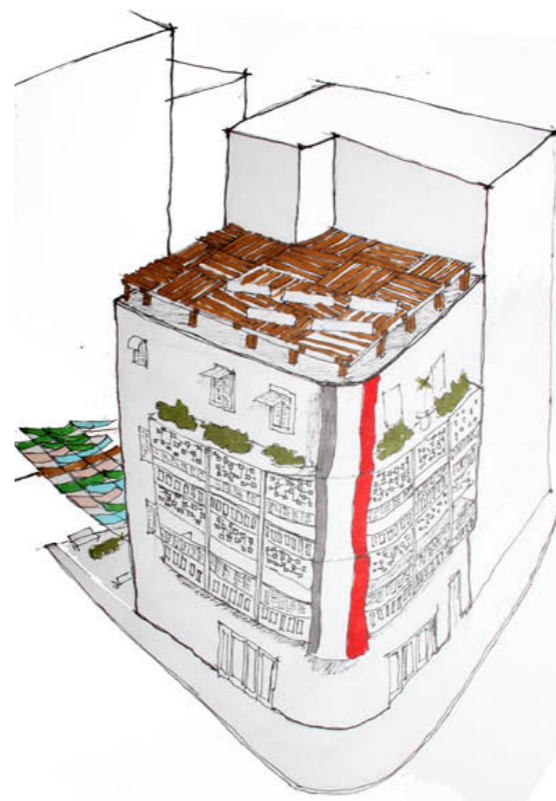


detail: balcony opening

detail: cant lever

detail: handle staircase

detail: window



connection of all visions

we - the team work - see the development of the area on four aspects (the roof, the facades, the context, the whole quarter)

starting from the whole quarter (al Arab quarter) the work will be on two sides the first one will be fixing a certain style of the area as rehabilitation of buildings will be with the same style of the area and making a regulations of style and height for the new buildings in the area .

the second side will be the work on the triangle (augina - al talaina - alghaze qatar) as a model for the whole quarter as we are going to close haroun el rashid street for the car transportation and make it for pedestrians only and for the perpendicular streets we can use as parking lots ,moreover making the street shaded and suitable places for seating areas.

when it reaches the context the work will be on using the demolished buildings plots - with the agreement of the owner to use the plot temporary in return of removing the demolished leftovers - as a semi public areas for the inhabitants as we clean without removing the existing fences , we will work on floors , furniture, urban planting and kids playgrounds from euro-Platte as it will be cheap and mobile.

so to the facades the development will be creating a second skin consists of three parts the first part is fixed and will be used as a handrail the second is fixable and moving vertically duo to the user needs of privacy and the third part will be adoptable to the external circumstances (the solar radiation and the temperature) as it could pass the sun rays through a pattern of Islamic shapes and can be shut as the user need .

ending with the roof we see we could make a second roof using euro-palette to decrease the heat on the roof specially on the additional room it will also create a natural ventilation inside and outside the building .

as we look to the future we can use "solar panels" to decrease using the regular power sources and have a further hope to make the building more environmental and nature friendly .

نحن - فريق العمل- نرى تطوير العمل على أربع جوانب (السطح ، الواجهات ، المحيط العمراني ، و الحى ككل) بدءا بالحى سيتم العمل على جزئين الاول هو توحيد الطابع العام للمنطقة بحيث تكون ترميم المباني التي تحتاج الى الترميم من خلال نفس الطراز الموجود بالمباني القائمة و وضع ضوابط لارتفاعات و الطراز القدام للمباني الجديدة.

أما الجزء الثاني فسوف يتم العمل على مثلث ( اوجينا - التالينا - الغازي قطر ) كتقودج لحى العرب بحيث يتم غلق شارع هارون الرشيد امام حركة العربات و يكون شارع تجاري كتاسواق التقليدية و جعل الشوارع المتفرعة منه كمساح للترقيات و العمل على تنظيف الشارع و إيجاد أماكن لمتعة للجلوس .

لتحلال المحيط العمراني سيتم العمل على استخدام قطع الاراضي ذات المباني المهترئة - بالاتفاق مع المالكه على استخدام قطع الاراضي مؤقتا حتى البناء مقاديل تنظيها من بقايا الهدم - لتكون فراغات شبه عامة للسكان بحيث يتم تنظيف القطع من الداخل دون هدم الاسوار الموجودة ثم يتم العمل على الارضيات باستخدام "طبليات التحميل" و تصنع مقاعد و ألعاب لتحتفل و اصمم قرايع بحيث تكون قوية للتقلية خذبة للحركة .

وصول الواجهات سيكون التطوير على خلق "جذبات" للمبنى تكون من ثلاث اجزاء الجزء الاول ثابت يعمل كدرابزين للكتابات و الجزء الثاني سيكون وحدة متحركة رأسياً وفقاً لاحتياجات المستخدم من ناحية الخصوصية و المرحة الثالثة ستكون خذبة للتقلية حسب الظروف الخارجية ( درجة الإشعاع الشمسي و درجة الحرارة ) حيث من الممكن عمل على ادخال الشمس بشكل جزئي من خلال شبكة تعطية بشكل اسمتي كما انه من الممكن غلقها حسب الحاجة

انتهاء من السطح نرى ان من الممكن عمل سطح مزدوج باستخدام "طبليات التحميل" Euro palette بحيث تقل الحرارة عن طريق الفناء خلال على سطح المبنى خاصة على الفرة الإضافية و سوف يعمل ايضا على خلق تهبوية طبيعية داخل و خارج المبنى .

و تحلها لتساقط من الممكن استخدام "الواح توليد الطاقة الشمسية" لتقليل الاعتماد على الكهرباء التقليدية و تأمل مسقط لجمال المبنى اكثر صدقة للبيئة و استخداما لمصادر البيئة كما سنطبع و غير مستهلك للطاقة .

Concept



# conclusion

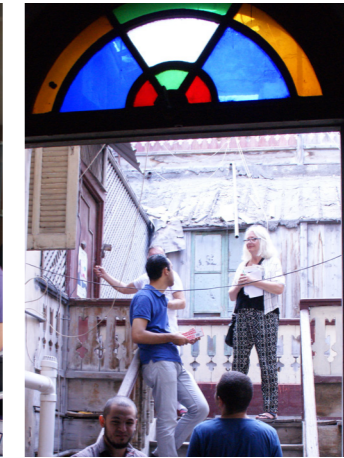
How to save the historic heritage of Port Said is a complex problem with different parameters on many levels, involving various players and stakeholders. It needs to be solved in terms of architectural typologies, construction materials and maintenance as well as regarding planning regulations, building laws and ownership structures.

This workshop was a first step to start a re-evaluation of the endangered heritage and raise an awareness with the local residents, the authorities as well as the architectural professionals while supporting the existing local heritage activist groups.

On the academic level this aim was realised with the workshop through the in-depth involvement of the students from three different Egyptian universities that may shape the architecture of tomorrow in their country.

To strengthen the appreciation and show the possibilities for re-shaping and re-activating the historic structures it would eventually need a pilot project of a built example as showcase and multiplier to be visible in the everyday-life of the city.

Juliane Jäger, Barbara Witt  
workshop coordinators BTU Cottbus



# impressions

## **German - Middle East Cooperation in Urban Design and Architecture in Historic City Districts**

**Cairo University • Alexandria University • BTU Cottbus - Senftenberg**

participating students: Mohammed Safwat • Safwat Ali • Ahmed El Ghazouly • Mohamed Ashraf El Gohary • Mohammed Ghorab • Logina Ehab • Ruaa Ismail • Heba Farid • Marleen Hoerning • Sandra Hurek • Justyna Poplawska • Miah Constanze Hutter • Josefine Schulz • Theresa Molle • Alexander Hopf • Eslam Malak • Marwa Fawaz • Dina Deiaa • Alaa Ezz • Alaa Atef • Samar Adel • Rana Magdy • Khaled Ashraf • Dina El Mazzahi • Ehab Zaagog • Heba El Hanafi • Hend Hazen • Ahmed Alef • Mohamed Ali • Hossam Abdel Khalek • Mohamed Abo Sira • Mostafa Abd El Samad • Nadeen Ismail • Maram Waleed • Rahma Maged • Mohamed Salah

supervision Cairo University: Prof. Dr. Dalila ElKerdany • Dr. Sherin Gammaz • Dr. Alyaa Al-Sadaty • Eng. Tamer El Serafi

supervision Alexandria University: Prof. Dr. Heba Abouelfadl • Dr. Lama Fouad • Eng. Ahmed Al-Zayyat

supervision BTU Cottbus: Prof. em. Inken Baller • Dipl.-Ing. Barbara Witt • Dr.-Ing. Juliane Jäger • Dipl.Ing. Christoph Wessling

guests / experts: Port Said University students and lecturers • Prof. Dr. Ahmed Amer El-Settawy, Cairo University • Prof. Ingo Helmedag, Ain Shams University, Cairo • M.Sc. Stefanie Wladika, Ain Shams University, Cairo • Pierre Marques Alfarroba, Head of Alliance Française de Port-Saïd (until 2013) • Eng. Mohamed Gohar & Eng. Mohamed Gamal, Building Department, Suez Canal Authority

**funded by the German Academic Exchange Service in the course of the DAAD-programme: German-Arab Transformation Partnership**



organisation BTU Cottbus - Senftenberg  
Faculty for Architecture, Urban Development and Design • Middle East Cooperation Unit, Prof. Heinz Nagler • Dipl. Ing. Christoph Wessling & Chair for Architectural Design, Housing and Institutional Buildings, Prof. Bernd Huckriede

**workshop coordinators / editorial texts & graphics:**  
**Juliane Jäger & Barbara Witt**

cover: exemplarily chosen wooden gallerie house in Ports Said, photograph by J.Jäger, B.Witt (2013).