Michel El Khoury Master diploma project Summer semester 2021 ARCHIP



Y Jamma VV

Figure 1: Remains of the phoenician old Harbor, Byblos 1920's-30's, unknown photographer, source: Louis Cardahi foundatio archive - personal editing

# Yesterday is but today's memory, and tomorrow is today's dream - Kahlil Gibran

We create over the time new paths, modern living and smarter cities with developed studies coordinating mostly recent new technologies. Although with tackling the history, we try to preserve the past and keep a certain identity

Preserving isn't only related to buildings and sites, it's **a whole culture behind that needs to be maintained** 

Looking into the history of my city Byblos and the rich heritage from many generations behind and the international exchange within many fields, i find a big gap between the past and the present translated in the citie's structure and this void is created over the time by the way the city is evolving and the lack of a defined basic vision behind it

Many small spaces that expresses exhibition and cultural public interests can be found in the Western coastal side of the city which is more dedicated to tourism and lacking of a defined structure that would be generated from within the whole city and a keypoint as an area where the introduction and main important activities would be hapening

Here's where the idea of a cultural hub within the heart of the city that would work as a place where many different events and activities revealing and expressing the cultural charachter of the city and as the vibrant heart that connects healthily with the surrounding elements and joins them would be crucial to preserve the identity and celebrate it's modern spreading and evolution throughout the new generations and connect again healthily and widely with the rest of the world  $\checkmark$ 

LINK

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# Cultural hub in the heart of Byblos city

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- Historical review Β.
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- Urban problematic and main dilemma D. Highway and connectivity Byblos festivals and events
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Introducing the site and location within the city

|

Intentions to the area's regeneration/interventions Cultural spaces, connections, and square including theatre

Program, urban and architectural concept idea

4

I



Figure 2: Location of the city Byblos/Jbeil in Lebanon - Ashraf Shaaban - Behance

Project site is located in the city Byblos in the northern part of Lebanon, the country that is known by the strategic location at the crossroads of culture between East and West, where the rise and fall of multiple civilizations like Phoenicians, Romans, Crusaders and Ottoman took as homeland and spread in multiple cities of the country



SITUATION

0 Site location

4 Mall

6 Old Harbor

**3** Archeological site

1

A lost area, almost abandoned, at the very heart of the city, where the main busiest roads, and city's infrastructure are located and mixed, the entrance from both North and South meets with the junction of also East (the upper part of the city where the residential character impose more and extends towards towns and villages up to the mountains) and West (the lower coastal part of the city towards the medieval and the archeological site) part of the city, creating an undefined charachter of a zone that is taking nowadays the function of roads connections, with a recently built townhall in the middle of nowhere since the public access is prevented by walking (non-friendly accessibility). On the other side of this same area, the preserved Roman road extending from the medieval part of the city, meets a connection to the tourists, where a small information building connects a parking to the pedestrian lane in That long roman road which is also disconnected from the city, being on a lower level from the parallel streets.

Town hall

- 2 Roman road
- **5** Hospital

HISTORY

Byblos is one of the main important coastal cities in Lebanon, known also under the name Gublu (the Gebal of the bible, Jbeil now) by the Phoenicians, where the alphabet was invented and firstly spread by them to the world back then. The city is known to be continuously inhabited since 7000 BC and a seafront archeological site where traces of the first generations exist is now designated as a UNESCO World Heritage site in 1984

Canaanites & Amorites: 2300 BC

Egyptians-Hittites: 1350 BC

Phoenicians: 1100 BC

Assyrians-Babylonian Empire: 877 BC

Persian Empire: 539 BC

Roman Empire: 64 BC

Eastern Roman or Byzantine Empire: 395 AD

The Islamic World: 635 AD

The Umayyad: 661 AD, The Abbasids: 750 AD

The Rein of the Fatimids: 969 AD

The Seljuks and the First Crusades: 1090 AD

Latin Crusader States: 1150 AD

The Mameluke States: 1291 AD

The Ottoman Empire: 1516 AD

The French Mandate: 1920

The Independent State: 1943



In this city lived the Phoenicians, seafaring people who served as a link between the great civilizations of the Mediteranean and the Middle East - translated from BIBLE ET TERRE SAINTE, n:50, 1962



Figure 5: BIBLE ET TERRE SAINTE, 1962



#### A) IDENTIFICATION

Nomination: Byblos

Location: North Lebanon

#### State party: Lebanon

Date: December 2, 1983

#### B) ICOMOS RECOMMENDATION

That the inclusion of the proposed cultural property on the World Baritage List be deferred until the definition by the government of Lebancon of the protected area of this large archaeological site.

#### C) JUSTIFICATION

The Phoenicians, who considered <u>Gu-blu</u> (the Gebal of the Bible) one of their oldest cities, were in no way wrong : the site of Byblos has been continously inha-bited since the Neolithic period. The ol-dest humen settlement, ca. 7,000 years old, appears to have been a village of fishermen whose numerous monocellular huts have been rediscovered.

 Toward 3,200 B.C., a new spatial organization took form : the mound was covered with houses with stone walls, while the inhumation urns, until that time placed within the living area, were The black within the living area, were shifted to the periphery of the agglome-ration where various types of funerary rituals may be observed in the large ne-cropolis. Toward 2,800, Gabal appeared as a highly structured city: enclosed by a massive fortified wall (whose cons-truction lesend attributes to the god El), it comprised a main street and a net-work of graller streets. The prosperity of the harbour -from which creats wood, indispensibles raterial for building construction and for naval yards as well as codar oil, used for the munticonstruction and for naval yards as well as cedar oil, used for the martit-fication of bodies were exported to Bypt-incited large constructions, as that of the temple of Baalat-Gebal, the godess of the city, which several pharaohs enriched with their offerings. This city, of which numerous traces still exist, was humed on 2.156 by still exist, was burned ca. 2,150 by the invading Amorites : a thick layer of ashes (in some places 50 cms.) seels off the original levels.

Approximately two centuries later, Approximately two centuries later, the city was rebuilt with new temples (the temple of the obelisks, dedicated ca. 1,900-1,600 to the god Reshef, is the most well known of this period) and the conversial relations with Exypt were re-established in all their intensi-The re-established in all their intensi-ty. Toward the middle of the Bronze Age, the treasure of the nine Royal torbs of Byblos attest to the segree of per-fection of a civilization which conceted with that of Pharaonic Bypt. On the sart chaques of the King Ahiram (National Mu-merry Reint) on incentring in Phore gradues of the king Aniram (Mational Mu-seum, Beirut), an inscription in Phoe-nician characters is addresed to even-tual grave robbers; and one may see in this curse, the proof that writing, wi-dely dispersed, was no longer the mono-poly of the scribes.

A commercial city, Byblos was a-ble to accomodate successive domination: Assyrian, Babylonian, Achaemid or Greek. During the Roman period, its commercial role declined, but the city assumed an swiment religious function : hoards of illering, as noted in the 2nd century. pilgrime, as noted in the 2nd century A.D. by Lucian of Samosata, crowded its temples which were constantly recons-tructed and embellished.

. Its decline began during the By-zantine period and continued during the Arab occupation after 636. The only time when the city recaptured score of its former importance was during the Crusa-des. Under the impulse of the Gencans, commerce made Giblet a prosperous tran-sit harbour. This renewal which is at-tented to by its walls, the massive structure of the castle of the Crusa-ders, the church of Saint John the Bap-tist and its baptistery, was without a future : Bybles declined slowly until the 19th century. ICOMOS recommends the inclusion. of

the 19th century. IOCMOS recommends the inclusion of Byblos on the World Heritage List based on criteria III, IV and VI. - criterion III : Byblos bears an excep-tional testimony to the beginnings of Pho-enician civilization. - criterion IV : from the Bronze Age, By-blos provides one of the primary examples of urban organization in the Mediterranean world.

world.

WOTLD. - criterion VI : Byblos is directly and tangibly associated with the history of the diffusion of the Phoenician alphabet (on which humanity is today largely de-pendant), with the inscriptions of Ahiram, Yehimilk, Elibaal and Shaphatbaal.

ICCNOS, taking into account the importance of the site of Byblos, recommends the definition of a wide area of protec-tion, encompassing, besides the ancient habitat, the medieval city within the walls and the areas of the necropoles.

#### ICOMOS - INTERNATIONAL COUNCIL ON MONUMENTS AND SITES

Figure 6: Scanned ICOMOS journal paper identifying Byblos site preservation and specifications of the area, 1983





Figure 7-8: Plan and section of the archeological site during the excavations of Maurice Dunand, 1926-32



The first settlement

Neolithic fishing community were the first people to settle on the shores of Byblos, which was the first settlement of the Phoenicians

This Phoenician settlement was then taken by the Persians who extended the city and its walls

The first wall was built by the Phoenicians. The city had its own important landmarks such as temples and trading centers distributed within the city fortification walls built by them which we can still find traces

They were mainly famous by creating and spreading the alphabet, the port trading for many materials like wooden cedars especially for egyptians building ships

The Persian empire extended the city walls, and had its main element, which was a temple, located near the wall and created the city center

### MAIN SUCCESSIVE URBAN SETTLEMENTS



Crusader

The city encountered its first huge attempt of extension in the age of the Romans. They extended to the outer part of the main hill and fortified the lower part. this brought more prosperity to the city

The Romans moved the phoenician wall to the opposite side and built their own temple. They extended the city's main roads through one straight path leading directly to the temple, and two perpendicular roads connecting two opposite sides of Byblos. At this time, the temple was the center of the city

They were famous in Byblos by the amphiteatre still existing part of it but moved due to the excavations to the west sea side, they also defined a structural charachter for the city roads and axis

By the end of the Islamic era, Byblos was left uncared of, and it started to extend randomly ruining the grid left by the Romans Through this era, Byblos was trying to recover and prosper, but the continuous war at that time made it slow

In the medieval era (636 - 1289 AD), the old city was left as it was and the new city extended to the northern side fortifying itself with a new wall and creating the city's port. At this time the cathidral became the new city center

The main big monument left by the Crusaders and preserved until now is the Castle built using in some part for the structure and fortification, the granite cylindric elements from collonnades left by the Romans

Roman



Introducing the highway

by building the khan and the Souk-Market which was mostly about mini shops

The Ottoman empire (1516 -1918 AD) changed the whole rhythm of expansion the city beyond it. The concept of the center changed from being based on a ,religious element to becoming the most economically viable part of the city

The highway excavation works and construction had back then the purpose of linking the whole country's cities parallel to the shore side and longitudinally from North to South. This brought the dilemma in Byblos, where the city has been divided into East and West. The only available links are tight bridges constructions that aren't pedestrian friendly, especially at the entrance of the city where the elliptic bridge is at the same level of this small hill part, but unfortunately isn't used properly and healthily for easy public usage and accessibility



Figure 9: Byblos urban evolution, Assadourian 1986

A very quick construction spreading through the years, especially after the highway construction after 1983

Buildings started to be located more and more closer to the highway and spread into the East side mainly as well as North and South due to the ease of commute that the highway brought. On the East side the plots costs are cheaper, and the more up to the hill, the wider the view angle towards the sea becomes as well as the lower the temperature during summer. All these facts played a role into more East constructions where more greenery and new codes were applied that kept a certain limit of space allowed for mass buildings and a strict dminimum distance between buildings





Figure 10: Aerial view of Byblos, Jbeil municipality, 1967



Figure 11: Aerial view of Byblos, Jbeil municipality, 1990



Blue color area shows the mostly densed cities in Lebanon with more than 1000 per sqm back in 1997. There isn't a clear trusted recent studies that provides density within byblos city, although the whole country witnessed a huge Syrian migration after the civil war in Syria that started 10 years ago. F:13



Figure 13: ACS Lebanon study 1997, dar IUARIF





The graph F:14 shows the lands ownership within mostly the West side of the city. It's remarquable that public ownership has very minimal percentage of 7% while DGA properties are mainly the highway part and land above it, the archeological site which represents the government ownership and control over these areas. To note that the municipality of Byblos can suggest projects whether urban, architectural and others, but would need the parliament approval and signature



Track 1: Diversify tourist economy Track 2: Expand tourism toward the East Track 3: Integrate Jbeil in a regional tourism network Track 4: Promote local production in the artisanal

Track 5: Invest in dynamic market for the youth

### Improve the urban environment

- Track 1: Create an efficient transportation plan
- Track 2:Develop and integrated public transportation system
- Track 3: Promote alternative modes of transp
- Track 4: Protect existing natural assets
- Track 5: Develop public spaces in the upper part of the

- Enhance social involvement
- Track 1: Improve participation at the neighborhood scale
- Track 2: Explore other forms of participation Track 3: Involve the residents in the events of the
- Track 4: Support activities initiated by resident

Track 5: Improve and diversify facilities for residents

#### Build an integrated governance

Track 1: Adopt an urban policy approach Track 2: Create a database to lead informed policies Track 3: Continue on building a city strategy

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> The CHUD program seeks to enhance the economy through tourism and thus to improve visitors facilities. The projects proposed in the mid-2010s are oriented towards both tourism and residents (Sarkis Urban Projects, 2016).



Highlited parts of F:15 shows mainly after the studies that there's a need for an inclusive city, by inserting interventions that would transform over the time the city into a whole rather than two parts East and West now that works almost separately

I see these informations as very importnt and influencing and intend to be using these studies results as a basic idea and start for my whole general project idea, suggestion and interventions



Figure 18: Economic centers of Byblos, 2017, Byblos municipality

	(old studies)	2000s (CHUD studies)	Mid-2010s (Municipality studies)	2015s (Jbeil resilience strategy)	I
TOPIC	<ul> <li>Heritage conservation.</li> <li>Uncontrolled city development.</li> </ul>	- Tourism oriented economic development based on heritage.	- Accessibility, mobility. - Connecting the city.	5 "pillars": - A connected city - A resource efficient city - A peaceful city - A cultural city - A thriving city	-Econo -Urban society -Gover
SCALE	Mainly heritage site and old city.	Old city	Expansion toward route 13. Consideration of transportation network	Jbeil as a whole	Jbeil a shift to upper j
TYPE OF SOLUTIONS	Diverse recommendations.	Focus on physical interventions on the built environment	Focus on space and localized interventions But attempt at building a framework: "sustainable spatial development".	Comprehensive framework towards resilience Wide range of interventions.	Compr framew an incl Focus solutio govern socio-e recomi

Figure 19: Additional different studies key results over the time

# **Present** Report nomy, anism, -Civil ety engagement, ernance as a whole: toward the r part. prehensive ework toward clusive city s on structural ions, mance and o-economic

mmendations



Urban problematic and main dilemma URBAN PROBLEMATIC

Figure 20: circulations car oriented and parkings

Figure 21: Noise and accessibility barriers

Figure 22: existing pedestrian path and bridge exclusively ued for people that already got into the elliptic area by car

Public transportation, walking and cycling are not the main objectives within big and small-scale projects in Lebanon, at least in the practical and real life; many studies and projects aimed to work on this urban level for a healthier, sustainable and more community friendly districts and cities, however very few successfully attained even a small part of this work during construction phases. Social-political aspects here play a big role in achieving such level, and since the government is more directed into corruption for many years now after the end of the countries> civil war that lasted 15 years and ended in the 90s, and since the elections of municipality members and many other public related sections and syndicates are directly related with the parties taking control of the whole country's arteries, the decline of many fields especially ones related directly to a healthier communities like urban planning and architectural design in producing developed guides and codes didn't witness any remarkable updated evolution since then.

Besides the 1983's highway construction that divided the city into two different zones and cutting the resilience between East and West, the city's fast development over the last years increased mobility which brought congestion, high emissions and poor air quality in addition to keeping both parts working differently in many ways such as economically and connectivity. Many studies by universities, individual firms and NGOs with the collaboration of Byblos municipality worked on minimal changes over the last years to enhance developing the city policies like working on its internal transportation systems, studies and ideas for the streets and connection level as well as introducing new strategies. Enhancing by mean developing the city infrastructure in a way to create a link between the citizens and the city's elements like environmental inclusion, equity and public spaces, connect adequate areas and functions and integration of smart mobility concepts in a progressive way to build policies and behavior change for a more sustainable city.

For this purpose, I intended as a part of my design to resolve these connections within the project area elements, as well as how and where it can be spatially related to the city in the urban and architectural level, as simple and direct as possible, to create a more friendly character but also a vivid area that can bring life and activities into the space. The square is opened towards all directions, working as a meeting point and the main connections creating the vibrant heart of the city. Byblos festival & events



ogical site in the back. Ii

Despite the economical benefits that Byblos festival brings to the city through the summer festivals that attracts international artists and many visitors and tourists especially from neighbouring countries to attend these special events, many problems comes with the whole concept of this festival, like the location which blocks the public free circulation and usage of the beach for a large area north and south of the location for security reasons the organisers believe, while the Lebanese law prohibit any construction or limitation of the shore. Another problem is the traffic that it broughts and starts from the highway to the elliptic entrance and down to the medieval part, this also blocks the ability for cars need to access from East towards any direction using the elliptic road bridges. Not to forget the area built on every summer



Figure 25: Flower festival taking place on a rented parking area, Beiruting magazine,2015



66

Figure 27: Event taking place on the Roman road, edging with the southern parallel road and lack of preservation respect, livelovebyblos, 2015



Figure 28: Flower festival during spring time, taking place on a rented parking area, Beiruting. com, 2013







Byblos city lacks of resilience, cultural and public open spaces for it's residents and visitors, playgrounds, square in the center, a place to contribute and connect the cities elements and introduce them by starting from the very center and entrance point of the city, as well as exhibition areas and expression, places to meet around the year, discuss projects, suggest proposals, workshops and seminars, education and artistic wider spaces translated architecturally by exterior and interior multipurpose spaces, gallery and theatre that can serve all the above requests and needs for the citie's residents, and as a member of this community that lived all his childhood there and studied in the very heart of the medieval part of it, i suggest a regeneration of the elliptical bridges, where the center of both East and West part are disconnected by the highway, and where a townhall is recently constructed, to remerge both areas by a platform built over arched concrete tunnel over this part around 270 meters long and 24 meters for width, and by this idea it would be more pedestrian friendly, with public spaces, providing the mentioned functions for a cultural hub as well as other mix residential/businesses that would be located North and South of the area, this would make the whole idea economically viable since the new available plots with the adding of the old ones owned by the government would be a benefit for investors to work with. and would cover the cost of building the tunnel part at least

Intentions to the area's regeneration/interventions proposa





The proposed reconnection can be built with arch shaped precast reinforced concrete, for a fast in-situ positioning, with the same height of the replaced bridges which is 5,5 meters in order to keep the same level for both parts of the plot, and maintain the same level of the highway.

This area would represent around 27 % oh the whole elliptic existing shape which is 24,500 sqm, with the advantage of expanding the plot area by removing the north and south concrete bridges since it wouldn>t be necessary to keep anymore and merging more fluidly into the city,s arteries.

The simple reconnection would resolve a big part of the idea while the length of the whole site would be providing accessibility between the previously separated parts and more flexibility in the above construction area design.



C.I.P. Cr -C.I.P. or Precast Typical Section Footing



Figure 31: Google maps image showing the view from over the existing north bridge towards the south



Figure 32-33-34-35: Precast concrete arches for tunnels, source: reinforcedearth.com

Common TechSpan arch profiles.



FROM ROADS INTO STREETS CONNECTIONS

1.5

1.20



FROM ROADS INTO STREETS CONNECTIONS



#### Precedents

#### By MVRDV Sometimes, the joy of a building is in how you move around it.

The Ku.Be House of Culture and Movement offer the Flintholm neighbourhood a dynamic meeting point for people of all ages taking part in a wide range of activities. The project is a novel typology, developed out of the response to a brief that asked only for a building that would bring people together and improve their quality of life. Health, culture, leisure and education blend smoothly to create a spectacular architectural experience and popular destination. The six primary volumes that comprise Ku.Be, distinctive in colour and materiality, each accommodates a unique programme. But its between these volumes where the real fun happens. The route through the building focuses on encouraging and fostering alternate forms of movement. For example, the Labyrinth gets people on their hands and knees clambering through a three-dimensional network of cubes from the second to the third floor. Slides and firefighters poles offer a fast way to get back down. A net that spans several floors and hangs suspended over voids affords young, active users a tactile landscape by which to discover the building. More standard ways of moving around are provided in order to cater to all ages and abilities, but even in these routes, a visual connection is maintained throughout Ku.Be. With its variety of dynamic in-between spaces, what would otherwise be a simple, mindless journey through the building turns into an exploration and discovery of movement.

This project spaces and connection between them is very influencing to me, the multipurpose rooms, the voids and the visual connections between spaces makes it very public and user friendly, it also has enough natural lighting and connection to the outside.



















A square that offers multipurpose cultural and community complex



Flexible exhibition areas



Connection Green spaces Playgrounds

HOUSING

# MULTIPURPOSE HALL & STUDIOS

Theatre interior/exterior Utilities Articulated units

# Market

food art & craft

Management administration





### **BUILDING EXPRESSION**



Cantilivered theatre, symbolicly looking into the historical part of the cit, centred with the axis of the roman road that is connected with the crusaders castle built with an amount of reused Roman elements that were a part of the Roman era setIments in the coastal part of the city and the urban expand towards the East generating the first city.s masterplan. This cantilivered theatre is also designed in that way to symbolise the preservation of the rich heritage, connecting to it without touching physically or harming any of it.s elements

The function chosen for this Western part of the project is related to the cultural events where the expression of the new world of art, technology, and all possible cultural varieties meets with the historical one, marking the point where the extension of the past begins and mixes with the present

On the other hand, the exterior theatre with the shift towards the existing Eastern connection of the city starts also from the same point by a simple rotation towards the Eastern existing main connection towards the upper part of the city, there, the volume and the the void that represents the infinity of imagination, overlaps and by these two directions towards the East forms together a small cultural district in the very central part of Byblos, meeting with the townhall that extends with it.s alphabet museum into the new designed library where all the composition together forms the very public area of the square where residents and visitors would meet and use the different created elements of the space

PAST LINK BETWEEN FUTURE WEST EAST PRESERVED HERITAGE FLEXIBLE NEW WORLD

DEVIATIONS, OPENINGS TOWARD NEW DIRECTIONS

CONCEPT

### INFLUENCE FROM THE CITY STRUCTURAL ELEMENTS, SPACES AND MATERIALITY



Spaces between shops and souk tragectory as well as in many parts between houses were charachterized by the PASSAGES in between for circulation, sometimes covered and others semi-covered; these passages, ramps and stairs leads down towards the lower part of the city and connects to the main elements like archeological site and harbor.

For materials its popular in Lebanon and especially in the old coastal cities like byblos the use of sand stones, it has been used in the medieval part of the city, the houses especially Ottoman era, as well as reproduced in the new contemporary architecture

Other materials would be wood for doors, windows, decks and pergolas as well as steel for railing and other elements. Wood and steel were generally painted in brown or other colors











## TYPOLOGY











# LONGITUDINAL SECTION













## NORTH EAST PERSPECTIVE







First physical model ideas



# BUILDING POSITION WITHIN THE SQUARE



