# MUSEUM HISTORICUM BOSNIAE ET HERZEGOVINA

The Historical Museum of Bosnia and Herzegovina: Preservation of a Modernist Gem in Sarajevo

## DIPLOMA PROJECT

Czech Technical University in Prague Faculty of Architecture SS 2023/2024 Ateliér Efler Supervisor: doc. Ing. arch. Tomáš Efler Student: Bc. Verda Mesihović



CZECH TECHNICAL UNIVERSITY IN PRAGUE Faculty of Architecture

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Czech Technical University in Prague, Faculty of Architecture
DIPLOMA PROJECT APPLICATION FORM

Name and Surname: Bc. Verda Mesihović

Date of Birth: 16.9.1997.

Academic Year / Semester: 2023/24 Summer semester

Department Number / Name: 15114 Department of Architectural Conservation

Diploma Work / Diploma Project Leader: doc. Ing. arch. Tomáš Efler

Diploma Work / Diploma Project Theme - title in English language:

The Historical Museum of Bosnia and Herzegovina: Preservation of a Modernist Gem in Sarajevo

Signature of the Diploma Work / Diploma Project Leader: (

The Student's Declaration:

I declare that I have fulfilled all the diploma work / diploma project initiation requirements stipulated by the "Study Plan" and "Study Rules" at the Faculty of Architecture, CTU in Prague.

Signature of the Student Merihanic Verda

CZECH TECHNICAL UNIVERSITY IN PRAGUE

International Office Thákurova 9, 166 34 Prague 6, Czech Republic



Czech Technical University in Prague, Faculty of Architecture

ASSIGNMENT of the Diploma project

Master degree

Faculty of Architecture

Date of Birth: 16.9.1997.

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Diploma Project Theme:

See the Application Form for DP

## Assignment of the Diploma Project:

1/description of the project assignment and the expected solution objective

The Historical Museum is one of the symbols of Sarajevo's modernist architecture and one of the unmistakable symbols of the city. It was realized according to the vision of Boris Magaš, Radovan Horvat and Edo Šmidihen and has been functioning since 1963. In November 2012, the museum building was declared a National Monument of Bosnia and Herzegovina. The building complex consists of exhibition halls, a floor with a central exhibition space, and an inner garden, a plateau, the administrative part of the building, depots and workshops. It is characterized by slender steel columns that support a huge, but seemingly floating, cube of reinforced concrete, that is above the glass-enclosed main entrance. The Historical Museum is valuable not only for its architectural expression but also for the exhibits it contains about Bosnia and Herzegovina.

The goal of the work is to propose a vision to revitalize the Historical Museum site, find a place and a sustainable function for the future, and at the same time to preserve and enhance its architectural qualities and historical value.

Construction program: The Historical Museum will be revitalized with regard to the current requirements of a conference and cultural center, whose functional program will develop the original idea of a museum with additional auditorium, workshop areas and proper depot units. The building will include a large hall as well as multifunctional and variable smaller spaces. Included in the concept will be the facilities (in the form of warehouses, testing and technical equipment), administration, and services enlivening public spaces in the vicinity. The goal is to rethink the layout and functional functioning of the area in a broader context, as well as the elaboration of selected building details.

2/description of the final result, outputs and elaboration scales

Drawing of wider relations 1:10 0000-1:25 1000 Design situation, wider urban plan 1:500-1:1000 Plans, sections and views 1:100-1:500 Details (structures, facades) 1:25-1:50 Interior and exterior visualizations

Accompanying administration in the usual breakdown and scope All parts of the diploma project will be submitted in accordance with the decree - i.e. a portfolio in two copies, a CD with the project, the diploma student's declaration, the assignment, A1 sheets for the exhibition of diploma theses. Scales of drawings and models will be specified with the diploma project leader during the work.

3/list of further agreed-upon parts of the project (model)

Physical model of the part 1:100-1:500

To this list further attachments can be added according if necessary.

Date and Signature of the Student: 09.2.2024. Mesihand Verda Date and Signature of the Diploma Project Leader:

7.4h

Date and Signature of the Dean of FA CTU:

Acknowledgements

I am profoundly grateful for the support and opportunities provided to me during my Master's studies. First and foremost, I would like to express my deepest appreciation to the Czech government for the generous scholarship that made my studies possible. This financial support has been instrumental in my academic journey, allowing me to focus fully on my studies and professional development. I am also immensely thankful to all the professors who have been part of this enriching learning experience. Their dedication to teaching and their willingness to share their knowledge have significantly shaped my academic and personal growth.

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Finally, I am grateful to my family and friends, whose presence and support have been my comfort and solace throughout this journey. They have been there for me unconditionally, providing encouragement and laughter along the way. To all who have contributed to my studies—thank you from the bottom of my heart. Your support has not only made this educational journey possible but has also made it a truly memorable and impactful experience.

- Introduction and Context 9
  - Analysis 24
  - Original Drawings 31
- Analysis of the Current State 49
  - References 65
- MUSEUM HISTORICUM BOSNIAE ET HERZEGOVINA 71
  - Sources 108

CONTEXT



#### Sarajevo

Sarajevo is a longitudinal city, located in a valley surrounded by Olympic Mountains. It is the capital city of Bosnia and Herzegovina. Some of the areas of the city in the broader context were proven to be inhabited since the Neolithic period. After which many periods have been present on these lands, including: Illyric, Roman, Slavic, Ottoman, Austro-Hungarian, Yugoslav and independent country Bosnia and Herzegovina. The periods in focus below, are the ones that had most influence on the urban growth and architecture of the city. The capital went through more historical socio-political periods, but not all of them left a mark in terms of the architecture and urbanism. The beginning of the urbanism as we know today and cadaster was brought to the area with Austro-Hungarian Empire (1878-1914). The development stagnated between two World Wars, during the Kingdom of Yugoslavia (1918- 1940). The era of Socialist Yugoslavia, particularly the period of preparation for the 1984 was very important for development of the city. Sarajevo as a city was formed by Isa-beg Ishaković in 1462. The chronology of the city since its founding corresponds with linear consecutive shift in styles and typologies, as the town has been developed.





- 1.1 University of Sarajevo (UNSA) campus
- 1.2 High School (Druga gimnazija Sarajevo)
- 1.3 High School of Applied Arts
- 1.4 High School (Prva gimnazija Sarajevo)
- 1.5 Faculty of Law, UNSA
- 1.6 Academy of Fine Arts, UNSA
- 1.7 Faculty of Philosophy, UNSA
- 1.8 Faculty of Mechanical Engineering, UNSA
- 1.9 Faculty of Science, UNSA
- 1.10 High School of the Environment and Wood Design
- 1.11 Electrical Engineering School for Energetics
- 1.12 High School of Economics
- 1.13 High School (Treća gimnazija Sarajevo)
- 2.1 Main Railway Station
- 2.2 Supreme Court of Federation of Bosnia and Herzegovina
- 2.3 Sarajevo Canton Government, Sarajevo Canton Assembly
- Ministry of Education of Sarajevo Canton, Municipality Center Saraj 2.4 Presidency of Bosnia and Herzegovina
- and Constitutional Court of Bosnia and Herzegovina
- 2.5 Ministry of Foreign Affairs of Bosnia and Herzegovina
- 2.6 Cantonal Prosecutor's Office of Sarajevo Canton,
  - Penal and Correctional Institution



#### **Ottoman Empire period**

Before the Ottoman period, there was a period of Kingdom of Bosnia and the capitals changed and they were: Jajce, Visoko and Bobovac. In 1415 Sarajevo was mentioned as Vrhbosna and during the Ottoman period Sarajevo became the capital of Bosnia and Herzegovina. During this period, the urban structure of the city was based on the principle of organizing residential groups - mahale (mahalas), spatially and functionally connected to specially organized business zones. Mahalas were spatially rounded and defined units. This territorial organization was abolished in 1883 and a new division into seven districts was introduced. Some of the main characteristics of residential units (houses) within mahalas were that the houses had a ground floor (more public) and first floor (private), there was a fence (to create a clear distinction between private and public), a garden and a fountain and/or šadrvan (Bosnian - public fountain) used for hygienic purposes. The central place of business and trade was in nowadays Baščaršija (Baščaršijski Square), Bezistan (Bedesten) and streets such as Zlatarska ulica (Goldsmiths street), Kazandžiluk ulica (Kazandzhiluk street). After the Ottoman period administration, in the Austro-Hungarian period, the urban unit became a residential street.



Map of Sarajevo during the Ottoman Empire period <u>https://www.arhivsa.ba/wordpress/?tag=urbanizam</u>

#### Austro-Hungarian period

The Austro-Hungarian Empire was ruling over Bosnia and Herzegovina between 1878 (Berlin Congress) and 1918 (the end of World War I). During this period, there have been drastic changes in terms of urbanism. Many foreign architects were creating different buildings in different styles and one of the most important architects of that period was a Czech architect Karel Pařík. During this period they were attempting to find a specific style for the region that combined its eastern-influenced past and westerninfluenced present. The buildings were made higher and bigger than in the previous period and the city grew mostly in the west direction, in accordance possibilities due to the terrain complexity. During this period many administrative, commercial and residential buildings were erected. These include the National Theatre, Post Office, Presidential Building, City Hall, National Museum, Sarajevo Brewery, cinemas, hotels, churches, schools and other significantly important buildings. During this period some of the newly used things were tramways (1885 - horse tram and 1895 - electric tram), cadaster, many roads, public lighting, railway and among many other things water system as well. Changes during this period were: industrialization, development, adaptation to Western culture and post-feudalism economic and social changes. The three most obvious and biggest changes in Sarajevo that occurred with the arrival of Austria-Hungary are: changes in the political structure of the city, architectural style, as well as changes in the educational system.



Map of Sarajevo during the Austro-Hungarian period <u>https://www.arhivsa.ba/wordpress/?tag=urbanizam</u>

#### **Yugoslavia period**

Between the two world wars, Sarajevo was on the Yugoslav margin and stagnated. After the First World War, Sarajevo also experienced significant demographic changes. The most important thing is that Sarajevo was no longer the main administrative center, it was equaled with other regional centers or, since 1929, Banovina centers and there are almost no major infrastructural activities. It lagged behind the attention that the new Yugoslav regime paid to the development of Belgrade, Zagreb and Ljubljana. The city stagnated economically (it is estimated that 944 shops were closed in Sarajevo between the two world wars). Only a few larger buildings were built, the most significant of which are certainly the Sephardic temple (today the Bosnian Cultural Center) and the building of the Hipotekarna Banka (where the Central Bank is today, in Titova Street). The city fell into poverty and discontent. Before the outbreak of the Second World War, Sarajevo had about 90,000 inhabitants, which is almost twice as many as at the end of the First World War. It seems paradoxical, but this increase in population was not the result of the economic growth of Sarajevo, because the city was in economic decline, but a combination of a series of other circumstances (implementation of agrarian reform and the like), which directed residents from other parts of Bosnia and Herzegovina (but also Yugoslavia) towards Sarajevo. It was calculated that in 1941, more than half of the inhabitants lived in the city who were immigrants, not born here. This had its own impact on life in the city and changes in relations between local communities. Sarajevo was the second largest city in the NDH (Independent State of Croatia), but it was on the margins in terms of influence on events. It is a fact that Sarajevo elites supported the collapse of Yugoslavia, the arrival of the Germans and the foundation of the NDH.

There were different opinions and disagreements between the ruling regime and the Sarajevo authorities, who tried to distance themselves from the policy of the NDH (attempts to save the Roma by appealing to their affiliation with Islam), but they failed to prevent the Holocaust, in which almost the entire Jewish population of Sarajevo disappeared. The Sarajevo elite made compromises and did not have the courage to resolutely oppose fascism and the NDH. After 1945, Sarajevo became the true center and capital of Bosnia and Herzegovina. Sarajevo has grown demographically (according to the 1991 population census, there was more than 500 000 inhabitants) and spatially. This caused housing shortage that needed to be solved and following it more units of different consequently needed functions were required. The construction of new administrative buildings, stadiums, parks, factories, schools, colleges, sports halls, cinemas, widening of streets opened up new development perspectives. The new residential districts were built in a socialist spirit with uniformed buildings, with more stories than buildings from the previous periods. They served to solve housing problems and opened up opportunities for additional development of the city, although there was presence of not legal construction that left the impression of insufficient planning. Residential neighborhoods created with the purpose of solving housing shortage were usually built on flat terrain, but one of the exceptions is the Ciglane (nowadays one of the elite neighborhoods of the city) neighborhood that is a result of attempting to solve the housing shortage problem on a hilly terrain. Sarajevo was significantly modernized during the 1970s and 1980s. The city was the YU rock music and political humour capital, some of the the best films of those times were shot in it.



Provisional plan of Sarajevo of with public, significant buildings, streets and railway from 1932. Source:<u>https://www.arhivsa.ba/wordpress/?tag=urbanizam</u>

#### Winter Olympic games 1984

Mojmilo Olympic village was built to accomondate delegations for the Winter Olympic Games '84. It has been made as part of the city's social housing scheme and contains 639 apartments that could host approximately 2400 people in three-bedrom flats. These were made available to families in need of permanent accommodation afterwards. Accommodation for the largest and most diverse operative group was provided in one part of Dobrinja, an area of 265 ha that was already planned for the housing. Dobrinja is located south of the Mojmilo Olympic Village and close to the Sarajevo International Airport. Its capacity was over 8500 beds in 2100 housing units, in over 90 buildings. The buildings are arranged in 18 rows and have complementary facilities in ground floor space of over 20 000m2. The Village Mojmilo is located south of Alipašino polje residential area. This part of the city was built as an urban extension, required due to the city's growth, around 5 km west of the city center. The neighbouthoods Mojmilo and Dobrinja were made with respect of the context of the existing neighbourhoods and existing planning documents. Significant buildings from the given period were: Koševo Olympic Stadium, Zetra Olympic Hall, The Skenderija Center, Mountain Igman Olympic Ski Jump Complex, The Bobsled & Luge Track on Trebević Mountain, Dobrinja Olympic Village, Mojmilo Olympic Village, Mountain Igman Olympic Village & Hotel, Hotel "Famos" at Bjelašnica Mountain, Hotel "Borik" at Mountain Igman, Hotel Vučko at Mountain Jahorina, Hotel Jahorina at Mountain Jahorina, The Holiday Inn at Sarajevo, Sarajevo Radio & Television Building, Đuro Đaković Housing Complex (Ciglane) and Press Center at Bjelašnica Mountain.

#### Post-war 90s and 2000s

Eight years after the Olympic Games, Sarajevo was under the longest siege of a capital city in the history of modern warfare. Besides the damage and demolishment of the previously existing objects, other problems occurred as well. After war there were many demographical changes in comparison to the prewar situation. Many individual family houses were built without a building permit, many on landslides and not in accordance with the urban plan designed in the mid-sixties. There were also issues with apartment ownership, as a result of the former socialist regime in which people would be granted state owned flats, which by law from early 2000s were given back to the refugees, even though they were granted to other owners in the late 1990s. Capitalism brought new architectural and urbanistic issues to the city. There is an issue of whole neighborhoods with buildings up to 13 stories that disrupt the air circulation of the entire city and are a huge strain on the existing infrastructure. This complex disturbs one of two main wind corridors in the city. Besides this issue, these new neighborhoods do not include any greenery and were purely made to accommodate as many people and parking places as possible, not even providing sun in most apartments, due to the huge building proximity to one another. Buildings neighborhoods from all previous periods had green areas incorporated into their design, as well as needed facilities in residential areas. These buildings were made with granted building permits, but the public interest considered while creating them is questionable. These were built in a huge empty plot, so the public did not complain until the construction and it was too late. Nowadays, in the inhabited and existing neighborhoods, the inhabitants are not allowing building up green areas within the city and huge buildings on the riverbank (that would also interrupt air circulation). This is of huge importance, but previously there was not this need from the population, because science, knowledge and public interest were more important than capital.

#### Conclusion

The city of Sarajevo went though many different socio-political situations and eras. Each of them left a mark on the current appearance of the city. The development was highly influenced by the social factors. Each period brought something new to the architectural and urban context of the present times. During most periods what was before was respected. That is also the reason why many different styles can be found in Sarajevo and architects from many different countries were involved in its creation and development. In accordance with the needs of the each period new buildings and neighborhoods have been created. During the Ottoman Empire era the focus was business/trade, during Austro-Hungarian period culture and infrastructure elements were advanced, during the period of Yugoslavia many workers were accommodated and facilitated with required/needed facilities. Each of these caused changes on all levels, such as: economical, cultural, architectural, social and other. On the other hand, War and post-war period, as it was a disaster, it caused negative changes in on all levels.

## **Basic data**

## Situation of wider relations

## **Building identification data**

### **Construction data**

Name of the building: History Museum of Bosnia and Herzegovina (former Museum of Revolution) Site of construction (address, descriptive numbers, cadastral territory, land plot numbers): Zmaja od Bosne 5, Sarajevo 71 000, Federation of Bosnia and Herzegovina

### Information about the builder

The documentation is processed for study purposes.

### Data on the developer of the project documentation

Documentation processor: Bc. Verda Mesihović Supervisor: doc. Ing. arch. Tomáš Efler

## **History Museum of Sarajevo**

Historical museum was founded in 1945 as the Museum of National Liberation. From then until 1950, it was housed in the premises of the Ethnographic Department of the National Museum of Bosnia and Herzegovina. The institution changed its name to Museum of the People's Revolution of Bosnia and Herzegovina, during the same period. Museum was transferred to the Sarajevo City Hall building in 1956. At the beginning of its formation, the main activities were focused on the collection of materials from the entire territory of Bosnia and Herzegovina. The objects were collected by volunteer activists and active participants in the national liberation struggle. Until 1963, the Museum was located in seven rooms (administrative rooms and a depot) of the City Hall. Larger exhibits were housed in the Railway Workshop in Sarajevo. In 1949, the Museum occasionally organized exhibitions that were held in other locations. At the beginning, the Museum had no professional staff, but in the 50s and 60s, historians, art historians, photographers and architects were employed. Their gathering coincides with preparations for the construction of a dedicated building, and preparations for the creation of a permanent installation. In 1964 the building was built and the architects were: Boris Magaš, Edo Šmidihen i Radovan Horvat. The building of the Museum of Revolution (Historical Museum of Bosnia and Herzegovina) represents one of the most significant achievements of Bosnian architecture from the second half of the 20th century.

### Basic data about the History Museum of Sarajevo

### Location

The building of the Histor Museum of Bosnia and Herzegovina (Museum of Revolution) is positioned in the area belonging to the Marijin Dvor neighbourhood in Sarajevo. The building plot is delimited by street Zmaja od Bosne on the northern side, stream Sušica and National Museum on the eastern side, Vilsonovo Šetalište (Willson's Alley) on the southern side, on the western side are positioned two buildings – Importanne Center (shopping and residential building) and UN House. The building is positioned on a building plot number k.č. 3361/1 i 3361/2, k.o. Novo Sarajevo I (novi premjer) z.k. uložak br. 1475, 85, 203 i 255 Municipality Novo Sarajevo, Federation of Bosnia and Herzegovina.

#### **Building description**

The building is built on a stone surface with total dimensions of 70.00 x 44.20 m, which is located at the level of the raised ground floor. The main entrance to the Museum is located in the east, where there are stairs covered with Brač white marble. The stairs lead to a rectangular area raised 2.00 m above ground level, which is partially covered by a cube in the northern part of the building.

A skeletal system with 9 load-bearing steel columns (grooved into reinforced concrete foundations) is supporting the closed cube at floor level. The cube carries nine regularly spaced cross-section columns that allow an overhang on all sides and is position in the northern part of the building. The perimeter walls of the cube on the first floor are formed using iron profiles covered with panels and insulating materials, and the cube is covered with marble stone slabs on the outside. The floor of the cube on the north side is accessed by a staircase with a width of 2.10m. There is a central exhibition hall supported by 9 cruciform steel columns and this space is designed without structural partitions (with the exceptions are the fenced staircase and the central space for access to the flat roof (1.70 x 5.50m). The perimeter walls of the cube are lined with white gypsum boards and above is a suspended ceiling above which the installations are made. The cube is covered by a walkable flat roof, that is accessed by a metal ladder from inside the building. On the peripheral parts of the flat roof, beveled glass walls (angle 45°) are placed on the steel structure, through which lighting is carried out. The parapet of the flat roof is full and 1.50m high. Other parts of the building in the south are covered by non-walkable flat roof.

A transparent parallelepiped (69.50 x 9.08m), at the ground floor level, towards the south side, extends to a part of the building (16.38 x 10 ,60m) in the east-west direction. In the western part, the space is occupied by an inner garden (48.00 x 15.70m) that is located at the basement level. At the same level, in the east and south, there are open green areas. The building has a basement (with inner garden, raised ground floor and first floor). The total area of the internal premises (basement, ground floor and first floor) is 1447.50m2.

The entrance to the interior is in the northern part of the parallelopiped through double-winged glass doors with metal frames (1.60 x 2.20m). The ground floor is enclosed by glass walls and is completely transparent to the exterior. It is defined by five cross-shaped steel pillars (30 x 30 cm), located on the perimeter and inside the space itself. The internal dimensions of the ground floor under the cube are 8.90 x 24.00m. This space consists of a foyer with dimensions of 6.75 x 24.00 m, where the front entrance with a porter's door is also located, and a raised part on the west with dimensions of 2.15 x 24.00m. In the southwest part are stone stairs (4.37 x 4.20m) leading to the cube. To the south the rest of the parallelopiped extends in the north-south direction. The rest of the building, apart from the cube, is made of reinforced concrete with wide glass walls made of black locksmithery. The roofs of the buildings can be accessed by steel ladders placed inside or outside the building. The approach surfaces and the external staircase are covered with rough marble slabs, and the representative halls in the interior with the same material, only with fine finishes (exception is the lecture hall - covered with laminate).

The western side of that part of the parallelopiped there is a corridor with a width of 2.25 m, while towards the east there are rooms for different purposes with a width of 6.60 m. There is a lecture hall (6.60 x 12.00m) and on the southernmost exhibition hall (9.00 x 14.40m). That hall is cantilevered out in relation to the rest of the building in a length of 10.00m and is supported on three pairs of steel pillars (circular section 35cm).

To the north-west of the exhibition hall, a part of the building (connected vertically) positioned in the eastwest direction with dimensions 16.38 x 10.60m. A corridor with width of 180cm occupies the central part of this space and on the north and south are spaces of different widths 4.20m. To the south there is a library (87m2) and to the north is the curator's office (12.00m2), facing the inner garden. In the southeast, side stairs are positioned, that lead to the first floor of the part of the building placed in the east-west direction. The dimensions and layout of the first floor correspond to the dimensions of the ground floor below.

The basement can be accessed via two internal staircases (the cube and the southern part of the building), and it is also possible to access it directly, from the green area in the south. The shape and dimensions of the basement correspond to the shape and dimensions of the ground floor parts oriented in the north-south and east-west directions. The basement part, oriented in the north-south direction, has a longitudinal corridor (width 1.80m) on the east side and rooms for different purposes (workshops, warehouses, photo labs, archives and other spaces) with a width of 6.42m and window openings to the inner garden on the west side. On the southernmost side, there is a part of the basement oriented in the east-west direction, which is accessed from the ground floor by side stairs. In that area, there was a warehouse on the eastern side and a boiler room, but nowadays is adapted into the "Tito" tavern (11.40 x 9.80m), on the western side. These parts of the basement are separated by a 3.75m wide passage that provides access to the inner garden.

The inner garden (48.00 x 16.30m) is surrounded on the west side by a 4.00m high wall. On the southeast side of the garden there is a concrete area (23.50 x 3.00m) and on the northwest side there is an area (20,50 x 5,00m), where the weapons from the Second World War are exhibited. Next to the wall on the western side, there is a raised surface at a height of 2.00m with a width of 2.00 m, which is accessed by stone steps.

Description of the exterior

The northern façade faces the Zmaja od Bosne street and on it are clearly distinguished one-story cube covered with white marble slabs and the glazed part of the raised ground floor. The cube is supported by a cantilever on the glass volume of the ground floor in the central part of the composition and on the sides on free-standing steel pillars placed in the exterior.

The central part of the glazed volume of the ground floor is closed by a concrete wall covered with black stone slabs. At the level below the raised ground floor, a wall facing the street was built, lined with white stone slabs.

On the western side the height of the wall is 4.00 m and on the eastern side its 2.00 m. In the background, on the west side, there is a glazed volume of the southern part of the building. The northern end of the western facade is identical to the northern end of the eastern facade, apart from the ground floor level being continuously glazed, without an entrance.

On the eastern facade, under the cube resting on steel columns, there is a glazed volume, where the main entrance to the Museum is located in the middle part. To the south of the main entrance, along its entire height, there is a full wall with a width of 4.00 m, lined with black stone slabs. Towards the south, on the ground floor level, there is a glazed facade area, on which there is a side entrance to the Museum. On the southernmost side, the glass volume is cantilevered out and rested on three steel columns.

On the south side, there is a closed facade of a parallelepiped oriented in the east-west direction. In front of the facade there is a 4.00m high wall covered with white stone slabs which separates the inner garden from the plot in front. The southern facade differs from the other facades in that it is possible to fully see the basement level, where a 3.75 m wide passage towards the inner garden stands out in the middle. On the western side, there is a pair of double-winged openings, which were used to access the boiler room. There is a glass surface of a parallelepiped oriented in the east-west direction, above on the west side. On the east side, there is a closed facade surface cantilevered on a pair of steel columns. In the background, it is possible to see a cube covered with stone slabs, as well as the access stairs to the east. Description of the internal spaces

Offices and the library are covered with parquet or itisons, and other rooms (toilets, warehouses, workshops, archives and other rooms) are covered with ceramic tiles and linoleum. The internal staircase towards the cube is stone, supported on reinforced concrete slanted beams, and the secondary staircase to the south is reinforced concrete.

Load Bearing Elements and Ceiling Heights

The thickness of the outer walls is 30cm, and the inner walls are 12cm and 20cm. The heights of the areas in the building are: basement 2.60m, ground floor under the cube 4.50m, ground floor of the building on the south side 3.20m, cube on the floor 3.90m and the floor of the southern part of the building 3.20m. The thickness of the load-bearing slab above the basement is 30cm, slabs under the floor cube 1.00m and slabs under the floor of the southern part of the building 45cm.



The Museum of Revolution building, 1964 Source: <u>https://www.researchgate.net/figure/The-Museum-of-Revolution-building-1964-Source-Courtesy-of-Commission-to-</u> <u>Preserve fig2 321232611</u>

ANALYSIS

STRENGTHS	WEAKNESS
<ul> <li>Aesthetic appeal: Museum architecture is attractive and contributes to the overall impression of visitors.</li> <li>Functionality: Well-designed architecture facilitates the efficient flow of visitors through exhibition spaces.</li> <li>Innovative design: Creative and innovative architectural elements contribute to the museum's unique identity.</li> <li>Adaptability: Many events of different kinds are hosted in this Museum.</li> </ul>	<ul> <li>Technical problems: Older or poorly maintained architecture lead to technical problems, such as water leaks, roof damage, heating problems and problematic installations.</li> <li>Spatial limitations: Lack of sufficient space for storage of exhibits and spatial limitations of for exhibiting of many exhibits.</li> <li>Lack of regulated outside space: A part of outside exhibits is just placed in the open.</li> </ul>
OPPORTUNITIES	THREATS
<ul> <li>Reconstruction and upgrade: Architectural changes or upgrades can provide an opportunity to improve the functionality and appeal of a museum.</li> <li>Interactive elements: Integrating modern technologies and interactive elements into architecture can enhance the visitor experience.</li> </ul>	<ul> <li>Financial challenges: High maintenance costs or the need for reconstruction can be a financial burden for the museum that is not funded by the government at a proper level</li> <li>Competition with other museums: If other museums are more attractive, have more less technical problems, are in better state and can exhibit more exhibits to attract visitors.</li> </ul>









Connections to the surrounding streets for pedestrians



## History of the Museum

Architecture of Bosnia and Herzegovina from the period from 1945 to 1995, can be divided into seven periods:

1. First post-war reconstruction (1945-1948)

2. The 1950 Consultation of Yugoslav architects in Dubrovnik - demanded a complete rejection of the dogma of "socialist realism" based on Soviet models (1949-1958)

3. The country's economy and culture had a high level of development. The rate of industrial growth of Yugoslavia was among the first in the world. This was reflected in Bosnia and Herzegovina and Sarajevo, where a large number of high-quality social buildings were being built - with a strong affirmation of local designers (1959-1965)

4. The state ban on investing in high-rise buildings had a negative impact on architectural design and caused stagnation. Only the construction of buildings, which began before the ban was exempt (1966-1970)

5. Aesthetic pluralism (reaction to the uniformity of architectural expression) had a great influence on the disintegration of all the dogmas that had reigned until then and postmodernism was embraced (1972-1980)

6. High-quality facilities intended for the XIV Winter Olympic Games were designed and built in Sarajevo (1981-1990)

7. A period of definitive stagnation when a large number of professionals left the country due to war (1991-1995)

The building was constructed during the third period, when a great economic momentum was felt, which also affected the fields of culture (including architectural creativity). During that period, experts who came from other areas and were building in Sarajevo gradually left and the school of the Sarajevo Faculty of Architecture took over and had many significant achievements, including the area of Marijin Dvor. This area becomes a place where a new architectural expression was created, at the point where the historical and new parts of the city meet. In 1958, a competition was announced for the construction of the Museum of the Revolution and Sarajevo became the drew great interest for architects from the former Yugoslavia. The first prize was awarded to representatives of the then Zagreb school, three young designers Boris Magaš, Edo Šmidihen and Radovan Horvat.

In 1954, the urban prerequisites for the construction of the Museum of the Revolution were created, as a part of a competition for the creation of a conceptual urban solution for Marijin Dvor. In that competition, Juraj Najthart and his associates were awarded the first prize. They provided a solution provided for the construction of individual buildings. In addition to the National Assembly and the existing National Museum, the plan provided for the facilities of the National Library and the Museum of Liberation (later Revolution/History). Construction Company "Vranica" from Sarajevo carried out the construction from October 1959 and was completed in July 1963.

The first permanent exhibition of the Museum was officially opened to the public on ZAVNOBIH Day, November 25, 1966. In 1973, the current director Nedim Šarac signed the Proposal of the program for the completion of the Museum of the Revolution of Bosnia and Herzegovina (construction of the second stage), which was never implemented. In 1975, on the occasion of the 30th anniversary of the Museum's work, the President of the SFRY, Josip Broz Tito, awarded the Museum of the BiH Revolution with the Order of Brotherhood and Unity with a Golden Wreath.

During the last war in Bosnia and Herzegovina (1992-1995), the Museum was located near the front line and considerable material damage was caused to the building. The remaining staff of the Museum continued their work in such circumstances and managed to save the largest part of the collections. In 1998, certain works were carried out to repair the building.

From 1996, about 40 original exhibitions of the Museum's curators from different periods of Bosnia and Herzegovina's history have been realized. Since its foundation, around 400,000 museum objects of different value for the history of Bosnia and Herzegovina have been collected. There are several collections in systematization of museum objects: collection of photographs, collection of works of art, collection of archival documents, collection of three-dimensional objects, museum library, art history department – Marian Wenzel and documentation center. The History Museum of Bosnia and Herzegovina organized 165 museum exhibitions and three permanent museum exhibitions. At the beginning of the second decade of the 2000s, the building of the History Museum of Bosnia and Herzegovina was neglected. The heating installations were not working and the roof was leaking. In February 2012, heavy snowfalls further worsened the condition of the flat roof, and the collapse of part of the roof structure of the main exhibition area (the cube) was prevented by urgent intervention.



Interior and a part of the exhibition in the Museum (historic photo) Source: <u>https://muzej.ba/muzejske-price/gdje-se-krije-muzejski-jez/</u>

O RIGINAL D R A W I N G S



Original drawing - First floor plan



Original drawing - First floor (heating and ventilation)












Original drawing - scale scheme of lighting fixtures



Oriainal drawina - scheme of liahtina fixtures and installations











Original drawing - First floor plan











Original drawings - Elevations



Original drawings - Elevations



Original drawings - Elevations

ANALYSIS OF THE CURRENT STATE























-1.1 Lack of storage; refurbishment of the stairs railing needed

-1.2 Lach of storage; facilities not managed properly; door in poor condition

- -1.3 Lack of storage; refurbishing of walls and ceilings needed
- -1.4 Lack of storage; refurbishing of walls and ceilings needed; doors in poor condition
- -1.5 Lack of storage; refurbishing of walls, ceilings; facilities not managed properly; windows in poor condition
- -1.6 Lack of storage; refurbishing of walls, ceilingss, flooring; door in poor condition;
- facilities not managed properly
- -1.7 Lack of proper storage; refurbishing of walls, ceilingss; windows in poor condition; facilities not managed properly
- -1.8 Lack of storage; refurbishing of walls, ceilingss, flooring; door in poor condition; facilities not managed properly
- -1.9 Refurbishing of walls, ceilingss, flooring; facilities not managed properly
- -1.10 Lack of storage; refurbishing of walls, ceilingss, flooring; door in poor condition; facilities not managed properly
- -1.11 Solving the cause of the problem outside (the room is below the Museum entrance platform), refurbishment of the whole room























-1.12 Solving the cause of the problem outside (the room is below the Museum entrance platform), refurbishment of the whole room

- -1.13 Lack of storage; facilities in poor condition; refurbishing of walls, ceilings and flooring
- -1.14 Lack of storage; refurbishing of flooring; discontinued refurbishment of the area
- -1.15 Refurbishment of flooring
- -1.16 Refurbishment of flooring
- -1.17 Refurbishment of flooring
- -1.18 Refurbishment of flooring
- -1.19 Satisfactory state
- -1.20 Refurbishing of flooring; doors and windows in poor condition
- -1.21 efurbishment of stairs, flooring; doors and windows in poor condition; lack of proper exhibition space for the exhibits
- -1.22 Refurbishment of stairs, flooring; doors and windows in poor condition; lack of proper exhibition space for the exhibits























- 0.1 Satisfactory state; lack of storage
- 0.2 Satisfactory state; refurbishment of doors
- 0.3 Flooring refurbishment, doors in poor condition
- 0.4 Flooring refurbishment, doors and windows in poor condition
- 0.5 Flooring refurbishment, doors and windows in poor condition
- 0.6 Lack of storage; refurbishing of walls, ceilingss, flooring; door in poor condition; facilities not managed properly
- 0.7 Flooring refurbishment, doors and windows in poor condition
- 0.8 Flooring refurbishment, doors and windows in poor condition
- 0.9 Flooring refurbishment, doors and windows in poor condition
- 0.10 Flooring refurbishment, doors and windows in poor condition
- 0.11 Satisfactory state























# **GROUND FLOOR**



### 0.12 Satisfactory state

- 0.13 Satisfactory state; windows in poor condition
- 0.14 Satisfactory state
- 0.15 Satisfactory state
- 0.16 Satisfactory state; windows in poor condition
- 0.17 Satisfactory state; windows in poor condition
- 0.18 Satisfactory state; windows in poor condition; refurbishment of facilities
- 0.19 Satisfactory state; windows in poor condition
- 0.20 Windows in poor condition; stone elements in poor state

0.21 Windows and doors in poor condition, refurbishment of the bottom of the "floating cube" refurbishment of greenery

0.22 Windows and doors in poor condition, refurbishment of the bottom of the "floating cube" refurbishment of greenery























1.1 Corridor and offices to which it leads could benefit from full refurbishment

- 1.2 Stair railing refurbishment; facilities not properly managed
- 1.3 Satisfactory state
- 1.4 Satisfactory state

1.5 Satisfactory state; managing storage behind the curtain and providing more exhibition space

- 1.6 Satisfactory state; windows are new not matching the original appearance
- 1.7 Stair railing refurbishment, windows in poor condition

1.8 Satisfactory state

- 1.9 Satisfactory state; windows are new not matching the original appearance
- 1.10 Stairs and stair railing refurbishment; windows in poor condition
- 1.11 Satisfactory state























- 2.6 Greenery not in the original plan, possibly harming the structure
- 2.7 Platform pavement and fence ruined
- 2.8 Façade in poor condition; missing and broken stone panels; broken parts of glass; rusty metal elements
- 2.9 Main entrance stairs damaged and missing parts
- 2.10 Main stairs dangerously ruined; stone panels broken























- 2.11 Greenery damage of the structure; platform does not have original appearance; paving ruined
- 2.12 Exhibits in the open space, unprotected
- 2.13 Windows in poor condition
- 2.14 Broken glass elements, doors and windows in poor condition; grass growing from pavement; stairs damaged
- 2.15 Broken glass elements; grass growing from pavement
- 2.16 Rusty metal façade elements, windows in poor condition; broken glass elements; differences in pavement; stairs damaged
- 2.17 Rusty metal elements; broken glass elements; air conditioning unified and placed without coordination; flower pots in poor condition
- 2.18 Greenery on the platform
- 2.19 Highly damaged main entrance stairs with breakages and missing parts
- 2.20 Damage on the façade (stone elements; plaster; marble); difference in pavement; lack of storage
- 2.21 Damage on the street-facing-wall on both sides (stone panels); damaged pavement

# REFERENCES

### 5 Reference projects Desingel International Arts Campus



Source: https://www.architectural-review.com/today/desingel-international-arts-campus-by-stephane-beel-architecten-antwerp-belgium

Authors: Stéphane Beel Architecten Year: 2010 Location: Antwerp, Belgium

The deSingel Arts Campus in Antwerp, a project evolving since 1958, symbolizes a blend of architectural heritage and modern innovation. Initially designed by Léon Stynen, the conservatoire began as an open figure-eight pavilion, featuring inner courtyards. Expanded over the years, including a partnership with broadcaster BRT 2 Antwerp and later developments for the Conservatoire, the campus became a cultural hub. Stéphane Beel's involvement since 1989, beginning with designing doors, led to substantial additions and masterplanning, culminating in a building that enriches the campus with modern spaces while respecting its historical legacy. The integration of art, represented by a permanent sculpture trail since 2004, adds to the campus's dynamic cultural landscape.

The deSingel Arts Campus's evolution reflects a dynamic interplay of architecture and cultural enrichment. Over the years, the campus has not only expanded physically but also culturally, becoming a prominent center for arts and education. This growth signifies the adaptability and continuous relevance of the campus in Antwerp's cultural landscape.





Source: https://www.architectural-review.com/today/desingelinternational-arts-campus-by-stephane-beel-architecten-antwerpbelgium



Source: https://www.earch.cz/architektura/clanek/rekonstrukce-odlehcila-socialisticko-realisticky-kulturni-dum-v-ostrave-porube-1

The collaborative efforts of architects Léon Stynen and Stéphane Beel demonstrate the harmonious blending of tradition and modernity in architectural design. The campus, with its rich history and contemporary additions, stands as a testament to the enduring value of architectural and cultural evolution in public spaces.



Source: https://www.architectural-review.com/today/desingel-international-arts-campus-by-stephane-beel-architecten-antwerp-belgium and the standard standa

### 5 Reference projects The Poklad Culture House



Source: https://www.earch.cz/architektura/clanek/rekonstrukce-odlehcila-socialisticko-realisticky-kulturni-dum-v-ostrave-porube-1

Authors: PLATFORMA ARCHITEKT Year: 2021 Location: Ostrava, Czech Republic

The architectural reconstruction of The Poklad Culture House in Ostrava-Poruba, represents a remarkable transformation of a socialist cultural center into a modern, versatile social and cultural hub. The renovation involved an extensive makeover of the facility, ensuring the preservation of the original building's footprint, which is of significant cultural and architectural value.

This project was notable for its comprehensive approach, which included not only architectural changes but also interior implementation. The renovated space now includes a variety of facilities such as a large theater hall, a smaller hall, a cinema hall, multifunctional classrooms, a rehearsal hall, and a restaurant. These diverse spaces allow The Poklad Culture House to serve multiple functions and cater to a wide range of cultural activities, which had been missing in Ostrava-Poruba.



Source: https://www.earch.cz/architektura/clanek/rekonstrukce-odlehcilasocialisticko-realisticky-kulturni-dum-v-ostrave-porube-1



Source: https://www.earch.cz/architektura/clanek/rekonstrukce-odlehcila-socialisticko-realisticky-kulturni-dum-v-ostrave-porube-1

The building also features a modern and bright space that was transformed from its previous, more cumbersome state. The renovation involved the furnishing of the building with new furniture and accessories, custom cabinetry, and various decorative elements, enhancing the aesthetic appeal and functionality of the space.

Overall, the reconstruction of The Poklad Culture House is a testament to the successful modernization of a historical building, blending contemporary design with heritage preservation.



Source: https://www.earch.cz/architektura/clanek/rekonstrukce-odlehcila-socialisticko-realisticky-kulturni-dum-v-ostrave-porube-1

MUSEUM HISTORICUM BOSNIAE ET HERZEGOVINA



## SITE PLAN

1 Historical Museum of Bosnia and Herzegovina 2 New Square 3 Flags area 4 Stage area 5 UN House




existing/preserved structures
existing windows
existing coloured windows
new structures
new transparent windows





existing/preserved structures
existing windows
existing coloured windows
new structures
new transparent windows



Ground Floor Plan

10

0 1 2



existing/preserved structures
existing windows
existing coloured windows
new structures
new transparent windows



0 1 2

5

First Floor Plan







# Cross-Section D-D







# Cross-Section A-A







EAST ELEVATION

## East Elevation







## South Elevation







### North Elevation







West Elevation







East Façade Window scale 1:50



























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