NLK PB BKK

CONSERVATION AND MANAGEMENT PLAN

THE NATIONAL LIBRARY OF KOSOVO
PJETËR BOGDANI
BIBLIOTEKA KOMBËTARE E KOSOVËS

NLK

PB

BKK

CONSERVATION AND MANAGEMENT PLAN

THE NATIONAL LIBRARY
OF KOSOVO
PJETËR BOGDANI
BIBLIOTEKA KOMBËTARE
E KOSOVËS

This project was funded by
the Getty Foundation

Published with the assistance of the Getty Foundation as part of its Keeping It Modern initiative.

CONSERVATION AND MANAGEMENT PLAN

THE NATIONAL LIBRARY OF KOSOVO **PJETËR BOGDANI**

BIBLIOTEKA KOMBËTARE E KOSOVËS

OCT. 2017 PRISHTINA, KOSOVO
KOSOVO ARCHITECTURE FOUNDATION

INDEX

ACKNOWLEDGEMENTS

On behalf of myself and the Kosovo Architecture Foundation team, I would like to thank the Getty Foundation for providing the financial support and guidance necessary to conduct this project. Through their program: "Keeping It Modern" this project was possible. It comes at a critical time for the health of the National Library as there are numerous systems such as the roof, windows, moisture protection and plumbing that are failing. We would also like to thank the "Keeping It Modern" team led by Antoine Wilmering, and his colleagues Cynthia Querio and Candace Wai, as well as, Jodi Chang and Katie Underwood, for their amazing support throughout the implementation of the project. The team must thank the Kosovo Ministry of Culture, Youth and Sports and in particular Veton Firzi, General Secretary of the Ministry for their unwavering support, cooperation and guidance. I must also thank Fisnik Durguti and the Radio Televizioni i Kosoves archive team for their kindness and help in identifying and giving us permission to use old footages of the Library.

A special gratitude goes to Martino Stierli, the Philip Johnson Chief Curator of Architecture and Design at the Museum of Modern Art, for his advise and guidance in KAF's application for the Grant. As well as to Farrokh Derakhshani, the Director of the Aga Khan Award for Architecture, for his immeasurable support, counsel and mentorship to myself and to the Foundation.

We would also like to thank the managers, librarians and caretakers of the library. In particular Dr. Fazli Gajralku, Director of the Library and Rudina Tahiri, assistant to the Director, for their cooperation and welcoming the team to every corner of the library. Thanks must go also to the caretakers of the Library, technician; Hizri Bekolli, environmental technician; Remzi Demolli, electrician and Valdet Hoti, media technician. It was evident throughout our investigations they take great pride in the library. Without their daily efforts over the past 30 years the building would have suffered greatly. The entire staff assisted us in our efforts to understand the functioning of the building, users, values and condition from the roof to the sub-basement. They were always available.

Last but not least we must thank the Library Architect Andrija Mutnjakovic for his unlimited support for the project and for the KAF Team, we are truly grateful that we had the honour to spend time and work together with such a brilliant mind.

Our work on the library has attracted attention of decision makers, community leaders, users of the library and university students, local and regional conservation experts, and what made us extremely happy the attention of numerous regional and global media outlets. This emphasised to the local & regional authorities the importance of preserving modern architecture, the work organisations such us KAF have to play as well as the importance of the Getty Foundation's Keeping It Modern initiative.

Sincerely,
Bekim Ramku
& Kosovo Architecture Foundation Team

KOSOVO ARCHITECTURE FOUNDATION

The Kosovo Architectural Foundation is a non-profit, non-governmental organization based in Prishtina, Kosovo dedicated to spirit of creating and preserving unique architectural spaces. KAF initiated and directs the well-known Kosovo Architecture Festival; an annual event attended by thousands of individuals with lectures from world-renowned architects and architectural conservators. KAF is also the founding member of the Future Architecture Platform, the biggest pan-European & Global architecture platform. Through the Kosovo Architecture Festival & the FA Platform, KAF has been able to educate the architects, students, young professionals as well as the general public in the importance of modern architecture and its preservation.

www.kosovoarchitecture.org
www.futurearchitectureplatform.org

In late 2015 KAF became concerned with the deteriorating condition of the Library and contacted the Kosovo Ministry of Culture, visited the site and initiated the search for funding. After the visit to the site with Martino Stierli, the Getty Foundation and their "Keeping It Modern" grant program seemed ideal. Together with Architect Rand Eppich, a grant proposal was written and circulated. This was submitted to the Getty and cumulated in the successful grant and inclusion in the list of buildings for 2016.

It has been our privilege to work toward the conservation of the Kosovo National Library - an icon of modernity and a significant building for Kosovo. Through this project we have been able to assess its condition as well as educate young professionals and the public and to make aware its significance to Prishtina, Kosovo and the World.

KOSOVO ARCHITECTURE FOUNDATION TEAM

This conservation plan is the result of a large and dedicated team of architects and students. For one year from August 2016 the extended KAF team explored, documented and assessed every corner of the library with the intent to discover its vulnerabilities. During the year the KAF team and its collaborators, while producing this document have undertaken a Rapid Condition Assessment report, a workshop with young professionals and students of architecture, a documentary, an exhibition, a specialized tour of the Library, as well as produced the application documents designating the Library part of the Permanent Protection List of Cultural Monuments in Kosovo.

The extended KAF team included the following individuals:
Bekim Ramku, Architect, KAF Director
Nol Binakaj, Architect, KAF Deputy Director
Andrija Mutnjakovic, Architect of the Library
Rand Eppich, Architecture Documentation Expert
Rudina Voca, KAF Art Historian
Yllka Pacarizi, KAF Architect
Feray Dervis, KAF Architect
Skender Shala, Electrical Engineer
Besart Osmanaj, Water Engineer
Gresë Musliu, Architect
Gentiana Pallaska, Architect
Elmedinë Morina, Architect
Bora Kelmendi, Architect
Vlorjan Pacarizi, Architect
Learta Stavileci, Architect
Driton Begisholli, Architect
Kosovare Sadiku, Architect
Teuta Hasani, Architect
Fulin Dervis, Architect
Anda Batalli, Architect
Fjolla Mulliqi, Architect
Alma Pacarizi, Architect
Arbëri Tasholli, Architect
Qëndrim Begisholli, Architect
Luiza Hoxha, Architect
Filloreta Tafarshiku, Architect
Derya Kaçka, Architect

THE GETTY FOUNDATION
KEEPING IT MODERN

Modern architecture is one of the defining artistic forms of the 20th century. Set free from traditional structural requirements, architects and engineers used experimental materials and novel construction techniques to create innovative forms and advance new philosophical approaches to architecture. The crowning achievements of modern architecture, from Walter Gropius's Bauhaus buildings to Ludwig Mies van der Rohe's Seagram Building and Lucio Costa and Oscar Niemeyer's Brasilia have come to symbolize the broader 20th century ideals of progress, technology, and openness.

Today this modern architectural heritage is at considerable risk. The cutting-edge building materials and structural systems that define the modern movement were often untested and have not always performed well over time. Heritage professionals do not always have enough scientific data on the nature and behavior of these materials and systems to develop the necessary protocols for conservation treatment. To address these challenges, the Foundation developed Keeping It Modern, an international grant initiative that continues our deep commitment to architectural conservation with a focus on important buildings of the twentieth century.

Keeping It Modern will support grant projects of outstanding architectural significance that promise to advance conservation practices. Grants focus on the creation of conservation management plans that guide long-term maintenance and conservation policies, the thorough investigation of building conditions, and the testing and analysis of modern materials. In select cases, grants may support implementation projects that have the potential to serve as models for the conservation of other 20th century buildings.

http://www.getty.edu/foundation/initiatives/current/keeping_it_modern/

ABOUT THE GETTY FOUNDATION

MISSION

The Getty Foundation fulfills the philanthropic mission of the Getty Trust by supporting individuals and institutions committed to advancing the greater understanding and preservation of the visual arts in Los Angeles and throughout the world. Through strategic grant initiatives, it strengthens art history as a global discipline, promotes the interdisciplinary practice of conservation, increases access to museum and archival collections, and develops current and future leaders in the visual arts. It carries out its work in collaboration with the other Getty Programs to ensure that they individually and collectively achieve maximum effect.

HISTORY

The Getty Foundation (initially called the Getty Grant Program) was established in 1984 in the belief that philanthropy is a key ingredient in carrying out the mission of the J. Paul Getty Trust. The Getty Trust is an international cultural organization that includes the Getty Conservation Institute, Getty Foundation, Getty Research Institute, and J. Paul Getty Museum. Drawing on our unique position as a grant-making entity within the larger Getty Trust, we utilize the expertise of all the Getty programs as well as colleagues in our fields to identify areas where grants can make a difference.

Since our inception, the Foundation's signature grant programs have made art history more interdisciplinary and international; created models for the practice of conservation emphasizing the importance of planning and training; increased access to museum and archival collections, most recently in digital form; and nurtured a generation of new leaders in the visual arts. To date, the Foundation has developed, assessed, awarded, and monitored over 7,000 grants in more than 180 countries. You can find highlights of these grants on our anniversary map which underscores our geographic range, and browse these records in our online grant database.

For more than two decades, the Foundation practiced "over the transom" grantmaking according to defined program categories with regular submission deadlines. Then in 2008, partially in response to the economic downturn but also in accordance with shifting institutional priorities, we switched to strategic philanthropy and have since made our grants according to initiatives designed to address defined problems in art history, conservation, and museums. While economic conditions can affect our annual budget as was the case after 2008, the Foundation's grantmaking is guided primarily by the Getty's strategic priorities.

The Getty has been the only major foundation that supports art history and conservation on a fully international basis. We have always defined the term "art" very broadly, to encompass all times, all places, and all media. And we believe in the importance of the quiet work that goes on behind-the-scenes but is absolutely necessary for public projects to succeed: research, conservation, and interpretation. These values have guided us well, and we look forward to sharing our continuing work.

INTRODUCTION

Few modern buildings connect the past and present as flawlessly and span multiple cultures as expressively as Kosovo's National Library in Prishtina. Reflecting on the region's diverse heritage and distinct cultural spirit, Croatian architect Andrija Mutnjakovic (b. 1929) sought to create an authentic national architectural expression when he designed the building in 1971.

Constructed with in-situ cast concrete, marble floors, and white plastered walls, and topped with 99 translucent acrylic domes, the library is reminiscent of buildings from Byzantium and the Ottoman Empire. Despite its unified historic forms, the structure is unmistakably modern. Mutnjakovic used new materials to evoke ancient architectural tropes, most notably the exterior aluminium lattice-wrapping, which can be interpreted either as a fishnet or a veil pointing to the area's two predominant religions. Although reception of the design was mixed when the library opened in 1982, the building is now regarded as an extraordinary example of late Yugoslav modernism and a beloved space in the community.

While the building's interiors suffered damage during the Kosovo War (1998–1999), its exterior escaped the conflict relatively unharmed. However, over the past several years, the building has begun to show signs of aging, most evidently though water ingress that required ad hoc repairs. Moving forward, a team of conservation specialists addressed the lack of knowledge about the building, studying and assessing its performance with the support of a Getty Foundation grant. They analysed every aspect of the building, including consulting with the architect on historic documents and his own personal knowledge of the design. Their research created a comprehensive record of the building's past and current conditions, which resulted in the preparation for the nomination of the library as a national cultural site. This project will serve as a model for modern building documentation in the region and will be shared with the public through an exhibition and a documentary. The project also raised awareness for preserving 20th century architecture through a series of workshops for students and young professionals in the field.

This Conservation Plan is only the first step and is intended to guide the future activities, investigations and prioritize interventions. It describes the condition of the Library, assesses the damages and their severity as well as surrounding features that contribute to its current state. It also includes a values assessment and a statement of significance. The above also formed the foundation for the nomination of the Library as a national landmark.

INSTITUTIONAL HISTORY

KOSOVO LIBRARY 1944 - 2010

The first central library institution in Kosovo was founded in Prizren seven decades ago, respectively in December 1944. During these decades this institution changed its name several times and had several phases of development.

During the period 1953-1962 the functions of this institution have been substantially reduced to the administration of primary service, while the library as a public institution, ceased to operate. Due to this discontinuity in development, the establishment of this institution is marked on the year 1944 as well as 1962. In 1946, the Library began to receive obligatory copies of books printed in Serbia. After the decision to close the Library (1952), the collection was taken over by the Miladin Popovic (now Hivzi Sylejmani), Municipal Library in Prishtina. Ten years later, the Library was reestablished, and its initial collection was made up of the books from the Library Center of Kosovo and the Institute of Albanian Studies in Prishtina, as well as of donations from various institution and individuals. In 1963 it again began receiving an obligatory copy of works published in Serbia, and as of 1965, of works printed in the whole of Yugoslavia.

Previously being known as the Regional Library (1944-1963) and The Provincial Library (1963 to 1970), when the University of Kosovo was founded in 1970, the Library began functioning as a university library and became known as the National and University Library of Kosovo, with its headquarters in Prishtina. Since then it has been devoting special attention to collecting all printed works and carrying out bibliographical research in the field of Albanian and Balkan studies.

REGIONAL LIBRARY (1944-1952)

Regional Library was founded in 1944 in Prizren. With this decision, for the first time in Kosovo begins the history of modern library as a result of socialist revulsion. The library started the activities without inherited funds, because, Kosovo never had a library tradition. The library's fund for books was formed by publishing operations of the time. Since 1946 the library begins to take a copy of the compulsory publication from the territory of Serbia. One of the primary tasks of the library was the organization of the libraries network of schools, regions and cities. This was one of the preconditions for the establishment and development of contemporary educational system as well as for the social and economic transformation of Kosovo. This orientation was very important in the development of knowledge and science. In1947, the library moved to Prishtina. While in 1952 the decision to abolishment the activities of the regional library was taken, and its funds were sent to the city library "Miladin Popović" in Prishtina.

CENTRAL LIBRARY (1956-1962)

After the establishment of the Cental Library in 1956, Kosovo once again earns an institution that performs some of the functions of the previous Regional Library. But the activities of this center were essentially of an administrative character. It was focused on the establishment of the Kosovo Library network, provided professional services as well as professional trainings for Kosovo librarians. During 1959, 1960 and 1961 the Library also started publihing the "Nasha Praksa" bulletin in Serbo-Croatian.

PUBLIC PROVINCIAL LIBRARY (1962-1970)

In the late '50s and early '60s, after the establishment of the first high schools and faculties in Kosovo, the re-establishment of the regional library become a more important need for the Country. The re-establishment of Kosovo's Central Librarian Institution also accelerates the first law on libraries for PR Serbia (10.11.1960). The Regional Library was established in 1961 by the decision of the Provincial Council. The reestablished Library began its works under the Central Library which stopped activities in January 1962. The initial fund of books was established by modest funds from the previous Center as well as the books from the scientific section at the City Library "Miladin Popović", funds from the former Institute for Albanian Studies, funds of the Pedagogy School Library of Prishtina as well as donated books from the National Assembly of Yugoslavia.

NATIONAL AND UNIVERSITY LIBRARY OF KOSOVO (1970-1984)

The Public Provincial Library received its name The National and University Library of Kosovo in 1970. Although this change of name was an expression of the further development of the same institution, the period of 1970 can be considered as a special period for the history of this institution as during this time the library was advanced to a higher position of importance and expanded its activity, it acquires the status of a national library. The Library was established with the intention to impart general education and culture, and help the professional and scientific work meet cultural needs in other areas. The library performed the function of the central library of Kosovo; scientific library; a multilingual library; as well as the Prishtina University library. During this period the library experienced an intensive development. During the 70's it became evident that the old building of the library, with 1,200 m2, the rapid expansion of the Library's stock, the development of the library services and the growing needs of users made the construction of a new library building imperative. In 1974, The Assembly of The Socialist Autonomous Province of Kosovo adopted the decree on the Construction of the National and University Library of Kosovo. Work on the building began in 1974 and the new Library was inaugurated on November 25th, 1982.

THE LIBRARY SINCE 1982

From the inauguration of the new building in 1982 till 1990 the Kosovo National and University Library saw a steep rise of its importance, mainly due to the rise in the volume of books, readers, researchers, employees and activities organized there. During the years 1990 to 1999 when Albanian speaking readers and workers where barred from entering the building, the Library that changed its name into the Central Library of Kosovo and Metohija, due to a low number of readers using the facility saw its importance diminished. At one point during the late 90's part of it was also used as a Military Base.

Today the Kosovo National Library Pjeter Bogdani, is Kosovo's biggest library and an important cultural, scientific research and educational center not only for Kosovo. From its creation in 1962 till today, the Kosovo National Library witnessed a monumental development. The library, which is viewed by the local population as the epitome of educational and cultural emancipation of the Albanian population in Ex-Yugoslavia, is and probably will be for a long time, the most important educational institution for the Albanian speaking population in the region.

FIGURE 1 - The first Library staff.

THE CONTEXT

During the 1960's the Albanian population in ex-Yugoslavia, which was the third largest ethnic group, still didnt have a University in its language. Although higher education institution existed in Kosovo since 1958, they where part of the Belgrade University all instructions were in Serbo-Croatian.

As the demands for greater autonomy and self-governance by the Kosovo Communist League grew in the 60's, which were followed by extensive protests throughout Kosovo in 1968. The Yugoslav Government granted the request for the creation of the first Albanian speaking University in Yugoslavia. Although the creation of the Prishtina University was seen as a sign of prosperity and education by the ethnic Albanians, this was strongly opposed by local Serbian members of the Communist League. The first faculties to be established in the newly formed University were the engineering, medicine, law and philosophy.

As the needs to accommodate the new University were immediate the local government moved fast to allocate space and funds for the University campus and the students dormitories. Bashkim Fehmiu was the first architect and urban designer at that time in Kosovo was commissioned to draft the masterplan for the new campus. Fehmiu was earned his diploma in architecture engineering in 1958 in Belgrade was the founder of the Prishtina Planning Institute which became the single most important planning institute in Kosovo.

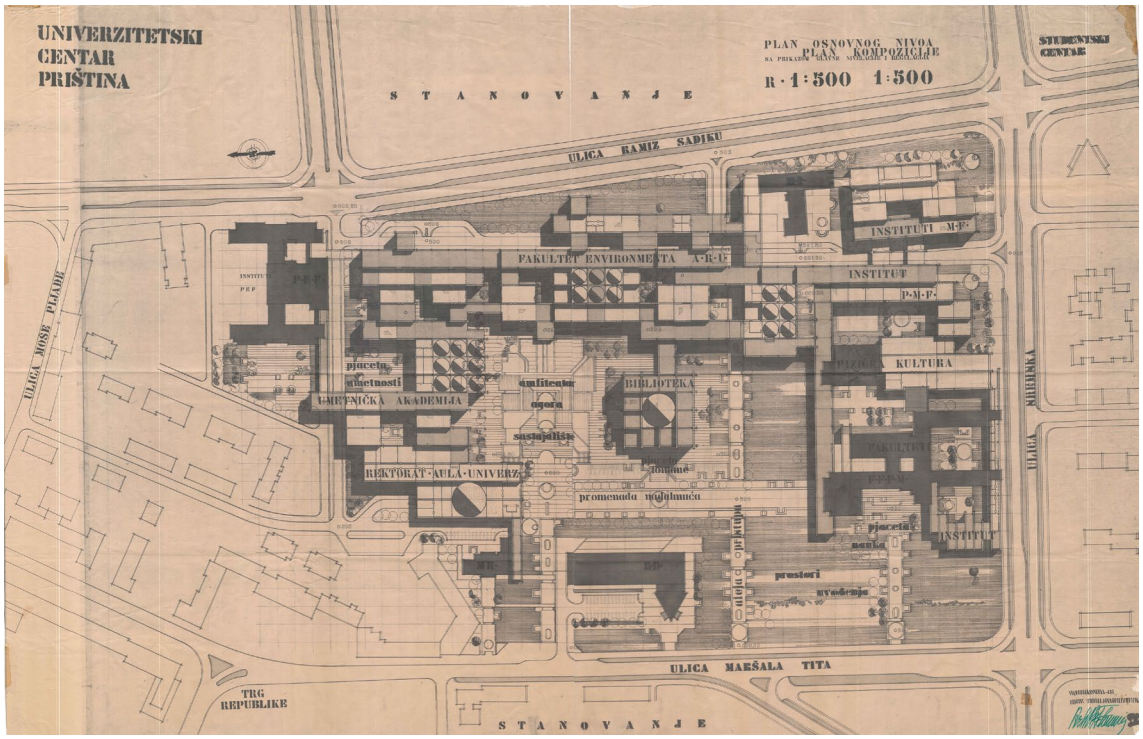


FIGURE 2 - Blueprint of the masterplan by Bashkim Fehmiu

Although he was given a very short period of time to come up with the design for the new campus, Fehmiu who was a regular CIAM delegate drafted a met like structure that would accommodate all the newly formed faculties in the campus. The campus where the main faculty buildings were interconnected by long corridors, in its core had a central square which had two main architecture structures in the campus, the amphitheater and the library. Fehmiu envisioned that the built structures would be of a modular character that could expend if needed and would also have domes so that the inner spaces would be filled with zenithal light. For the planning of the Prishtina Campus Fehmiu was consulted by Bogdan Bogdanovic, and was assisted by Rexhep Luci, Miodrag Pecic, Ranko Radovic, Dimitrije Mladenovic.

In 1970 the city of Sarajevo organized a competition for the design of the new "Peoples Library" that would serve the city and the university. There Fehmiu saw a perfect match for the project of the Kosovo University Library. A young Croatian architect, Andrija Mutnjakovic, proposed an interesting concept that was inspired by architectural features commonly found in these regions religious buildings, the cube and the dome. Fehmiu managed to convince the local leaders as well sa the director of the Kosovo National Library to commission the young Croatia architect for the job as his design fitted well with the overall campus concept Fehmiu developed. Mutnjakovic vas given a project brief and the campus masterplan and was asked to produce the concept design that would follow the guidelines set by Fehmiu's masterplan. Mutnjakovic's concept for the library, although not supported by all, received great support from the local architecture community as well as the Library Director Ismet Spahiu and Bashkim Fehmiu. Following is the unedited narrative developed by Mutnjakovic on the concept for the Kosovo National Library.

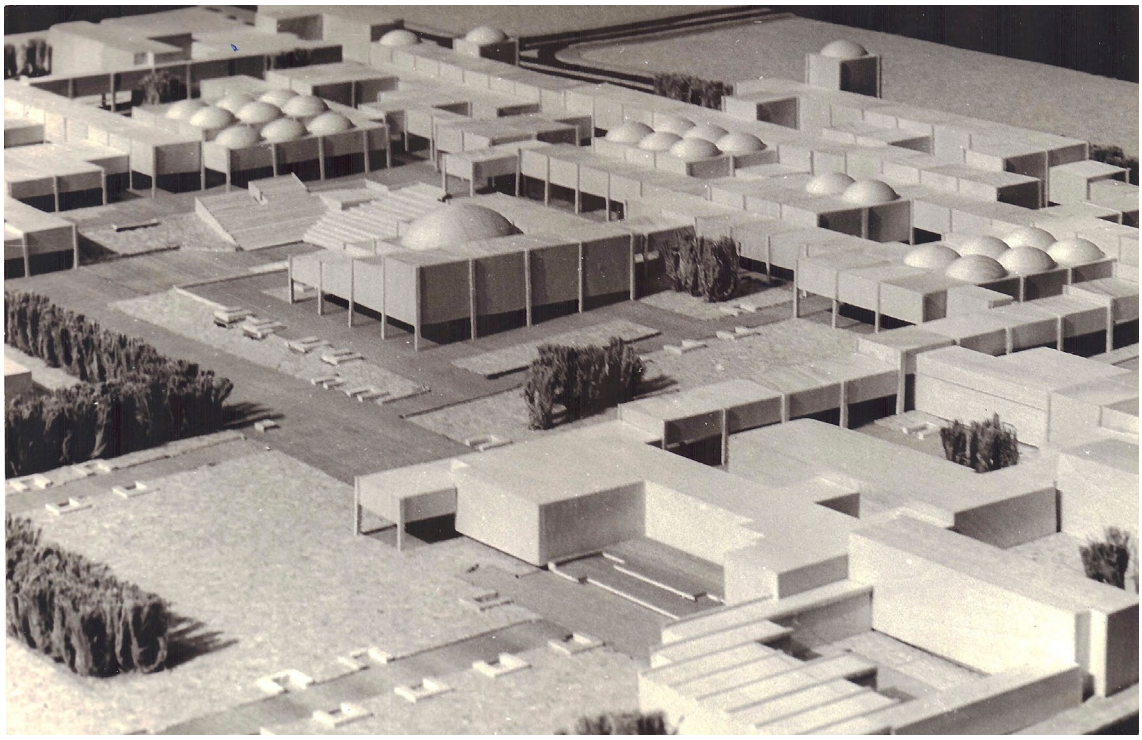


FIGURE 3 - The Prishtina University Campus Model by Bashkim Fehmiu

THE CONCEPT

The building of the National and University Library should be a culminating expression of our architecture. its landscaped planning, its environment, and interior demand that the articulation of space, its compact structure, shapes, light and shade, and elevation, should carry associations of the traditional buildings of this region. the motifs of cubes, spheres, and columns represent a contemporary application of the autochthonous architectural inspiration of the people.

Planning and technical aspects of the building of the National and University Library in Prishtina.

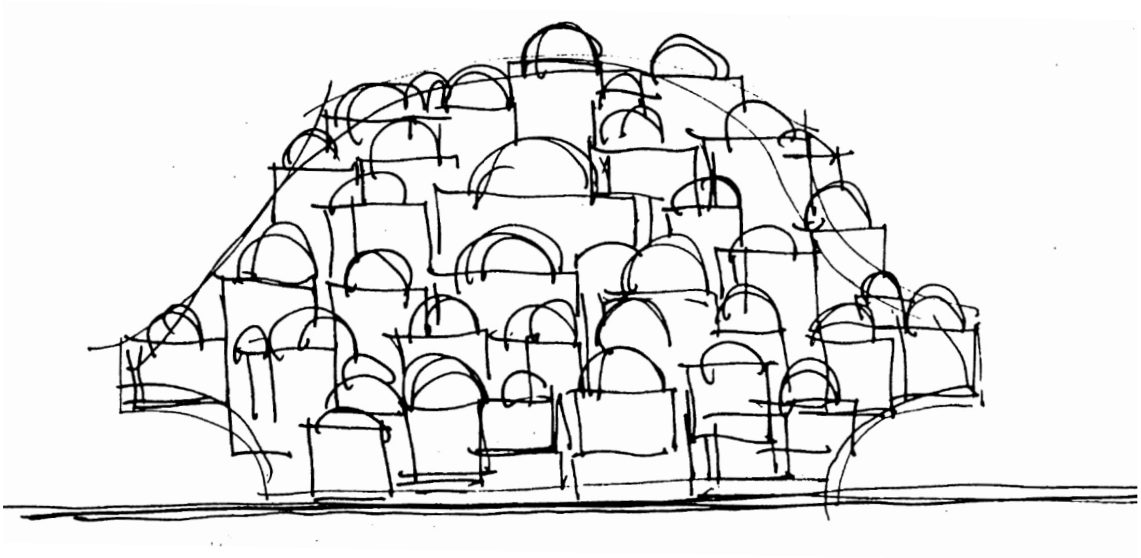


FIGURE 4 - Initial drawings for the Library by Andrija Mutnjakovic

SUMMARY

The “new regional” style in modern architecture was adapted for the new library, as a solution of the problem of alienation, into which the “international style” of modern architecture has fallen. The “cubic-spheric” motif common to the traditional architecture of all the ethnic groups in Kosovo, was chosen as an expression of the spirit of place. The dome construction is used as an appropriate method for the best illumination of the library. The modern facade is also a derivative of the cupola construction, with appropriate regional motifs.

CONCEPTION

The contemporary architectural interpretation of regional styles is one of the conceptual achievements in modern architecture. Since the modern “international style” has flooded the world with impersonal, uniform building, the progressive functional style has undergone a crisis. Academic theoreticians have issued warnings about the present alarming situation, and, following the research of some first-class modern architects, we may anticipate changes in the future development of architectural theory and practice. Future architecture, while accepting the functionalist principles of the purity of function and construction, will take into account a much more important factor: man, with all his cares, habits and customs, regional individuality, historical, religious and social traditions.

This new architecture can be observed in many places in every continent. A pioneer was Alvar Aalto, who initiated the search for national expression which later developed into “Finnish Architecture”. Similar trends in the fifties could be seen in nearby Denmark, and the work of Arne Jacobson. The same ideas were adapted to different environments and habitations in other parts of Europe. The BBPR (Lodovico Barbiani di Belgioso, Enrico Peressutti, Ernesto N. Rogers), combined regional traditions with modern functionalism. Undoubtedly, it was Japanese architects who combined most successfully national expression and modern functionalism. Perhaps this comparison between the Matzumoto castle (16th century) and the Taisekiji monastery, (1960s), designed by Kimio Yokoyama, can best show the beauty of this creative architecture. The work of Japanese architecture has constantly built upon this marriage of style, contributing to the architecture of the world, as well as to that of their own country. Their much-admired work has influenced building in our part of the world too.

Besides some artistic plagiarisms, and the unreflecting use of the “international style”, the search for an authentic national architectural expression bore fruit early in the work of Neidhardt, Dobrović, Ravnicar, the “Zemlja” group (Ibler, Galić, Horvat, Kauzlarić), whose work stands up to the highest international criteria.

REGIONALISM

The indigenous regional architecture of Kosovo must here play its part. The wealth of Kosovo's architecture, with its strong Byzantine and Turkish influences, is evident in both Moslem and Christian buildings, in the mosques of Sultan Fetah and Sinan Pasha, and in the Patriarchate of Peć and the Monastery of Graćanica. A common characteristic of these buildings is their identical treatment of space: a square area of the building covered by a dome. In their details of shape, plane treatment of walls, and the application of iconographic elements and their decoration, these buildings have marked architectural characteristics in common. There is an expression of space quite different from that formed in Roman, Gothic, Aztec or Khmer culture.

SYMBOL

Thus we may come to an easily recognizable symbol which expresses the spirit of the region of Kosovo. This "sign" is appropriate and valuable for the modern materials and buildings, as are the regional notations of Finland, Italy, Japan, Mexico and others. There are other examples of traditional shapes adapted to modern usages, and also of square-spherical architecture. Neidhardt's researches are important, yet we have perhaps too readily jumped to foreign influences, instead of finding inspiration from our own place. And it is interesting that for the union of Byzantine and Islamic architecture, we can look to America, where Philip Johnson adapted Byzantine forms in his search for ways to soften the sharp contours of modern architecture.

FIGURE 5 - Gracanica Monastery

FIGURE 6 - Sultan Fatih Mosque

SPACE

Accepting thus the modern possibilities for cubic-spherical architecture, and accepting the "sign" as a starting point, we can follow this spatial conception to its application. Again, historical examples (the Peć Patriarchate and the Turkish baths at Prizren), offer us models for meditation. The squares and the rectangles express the spatial composition of the building. The monumental composition, appropriate for its age, can hardly be prescribed for our own time which has lost its feeling for the symmetry of hierarchies, and embodies its gentler conception of life in softer forms.

The decay of the old stiffened forms has been well expressed in the work of Ellsworth Kelly. Kazimir Malević anticipated this development, in stressing the need for the primacy of sensitivity, for the spiritual experience of the rhythm of abstract geometrical figures and forms. In this way he discovered new kinds of formal beauty, which now have become the expression of our century. Victor Vasarely has developed this movement, creating a new synthesis between intellect and intuition. In this way "planetary folklore" instituted its firs important "plastically structuralist" program, thus opening the path towards cybernetics. "Its work", says Abraham A. Moles, "although performed by hand, is the very model of the modern calculating machine".

Here we reach a critical point in our modern understanding of shapes. Can we believe it is possible to establish a causal link between the cubic-spherical and its spatial treatment and the formal achievements of modern art? The formal expressions of the autochthonous historical architecture of Kosovo can be interpreted in the most modern architectural forms.

EXPRESSION

The plan of the National and University Library of Kosovo was sketched according to this concept of architectonic shape. This building is a principal monument in preserving the essence of national identity, transmitting its inspiration to new generations. The form of the building has an important part to play in this mission. The building must also express its function.

CUPOLA

The shape and the functional treatment of the main inner area (the reading room) is conditioned by the physical and the psychic needs of the reader. The concentration of the reader demands quiet and enclosed spaces. The outside environment – street and park – is an important influence. Sustained reading also requires even and intensive lightning. The physical and psychic demands of the reader were answered in the dome construction. In this way space is rounded, and lighting is both close to the reader and even.

Equal illumination has been achieved in many famous world by means of domes, as in the Library of Congress in Washington, the National Library in Paris, and the British Museum Reading Room in London, and also in certain modern libraries, as in the university libraries of Kiel and Dublin.

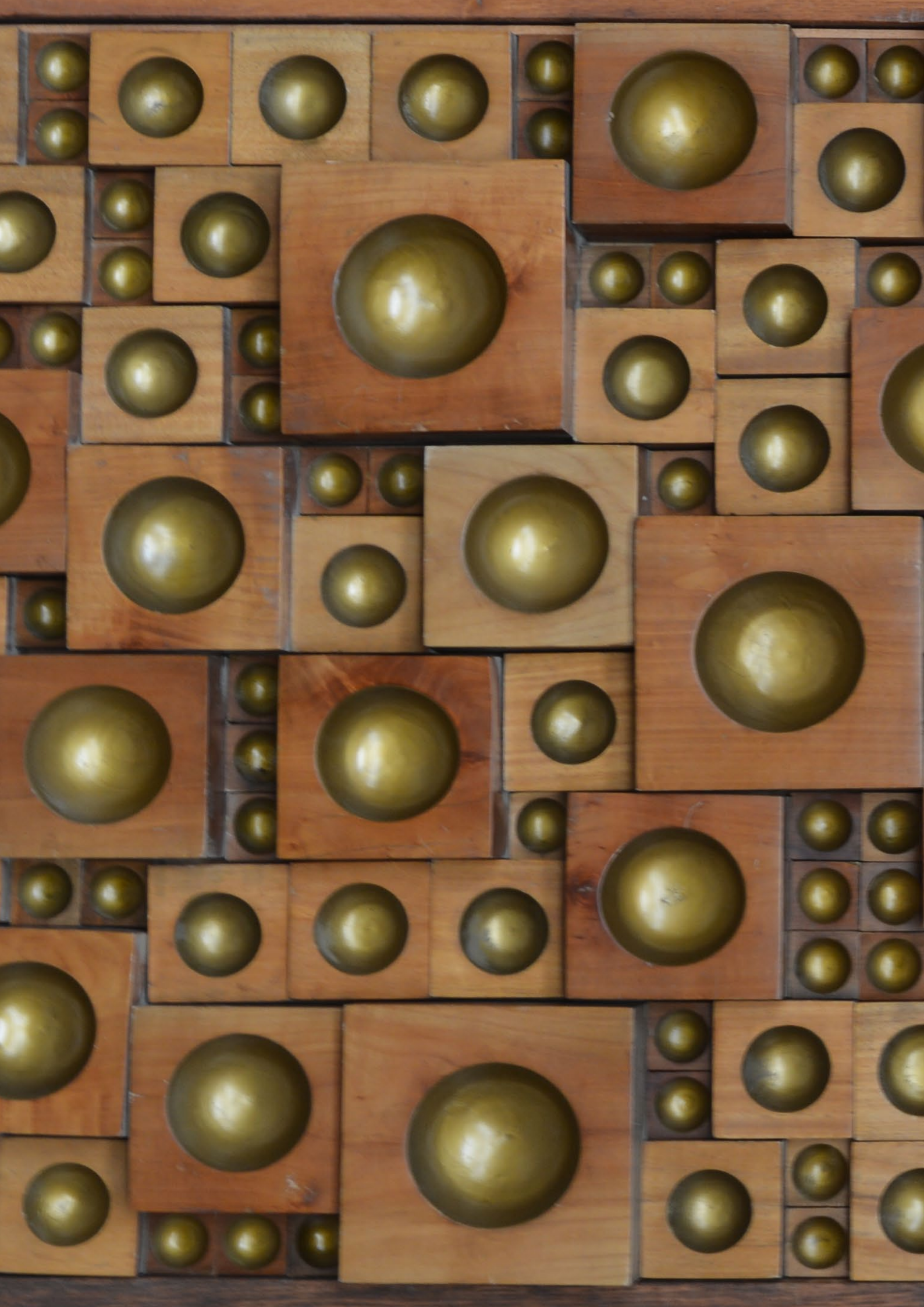
FACADE

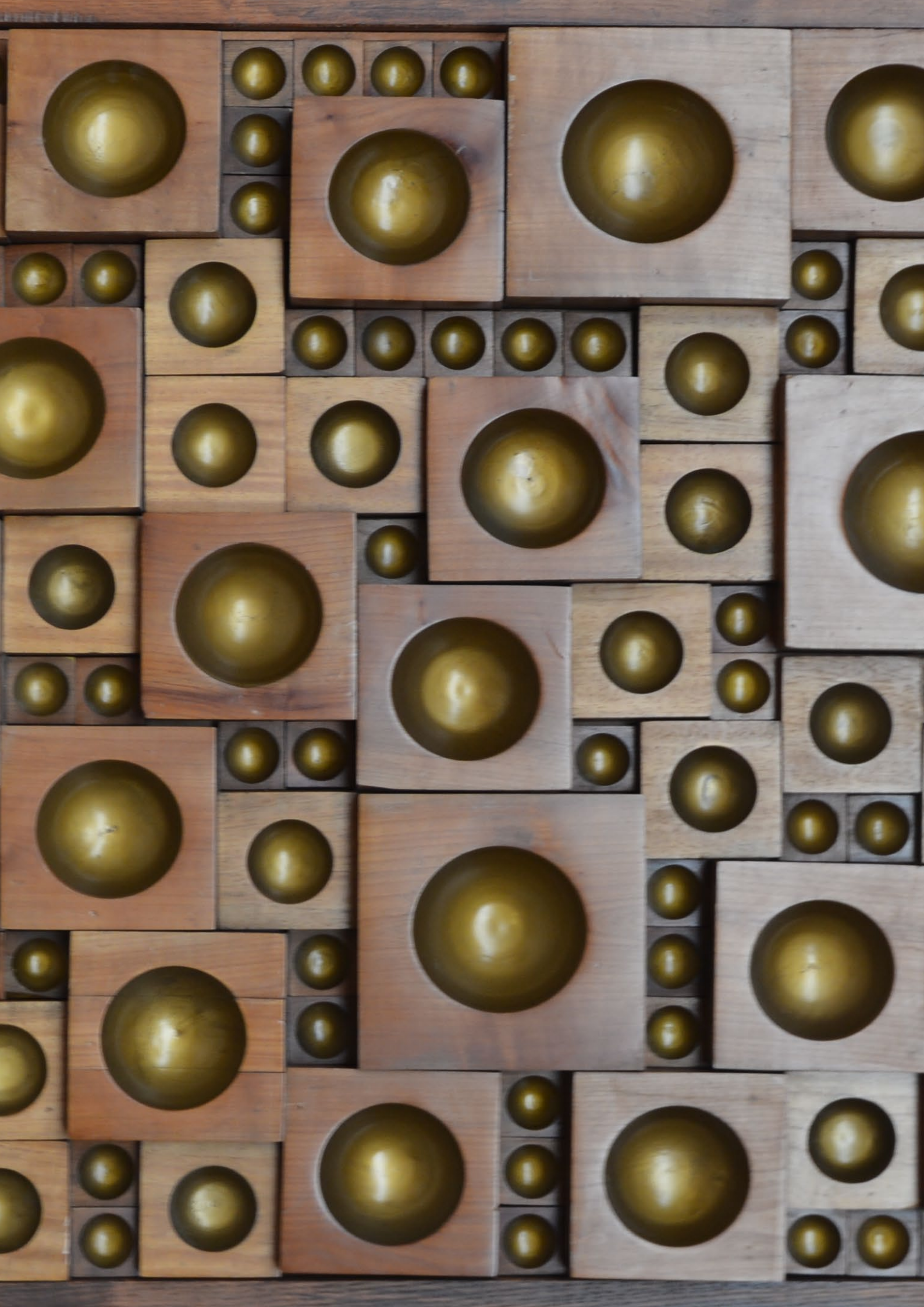
The facade of the building was intended to assist the internal illumination of the space, to provide also a certain shade, and protection against the hot summer sun. Such shade was also required to create a more intimate atmosphere for reading, and has been
achieved by the Brise Soleil system of hexagons installed on the facade. Such hexagonal motif has been used on other important buildings in the world, as for example on the Lenin Museum in Tashkent.

FUNCTION

The interior of the building resembles an atrium, built around the catalogue room. Such a space conception is common in modern libraries. The two floors of catalogues are lose to the reading rooms, the rest areas, and also to large and small halls for Lectures, and an exhibition hall. The reading rooms are distributed of different floors according to their size and importance. The small reading room (for 100 readers) and the large reading room (for 200) are on the first and second floors respectively. On the second floor there are special reading rooms for history, rare books, geography, graphics, music, films and microfilm recordings and periodicals. On the third and fourth floors – the quietest part of the library – are carrels for research workers, and on the ground floor, with immediate access from the street, is the Braille reading room. All reading rooms are connected to the catalogues and the stacks. There are two communication systems: one for the internal distribution of books, and one with lifts and staircases for the staff and public. The stacks have been placed in two basements, partly for safety reasons (in case of natural catastrophe, or war), and also for the economical creation of appropriate climatic conditions, and for the most economical use of space.

The technical auxiliary equipment is mainly on the ground floor and partly underground. Staff offices are on the ground floor. The public rooms of the library (the main entrance, staff entrance, goods entrance, and rest areas) are on the ground floor. The administrative offices are on the first floor, with a special entrance and two links with the catalogue rooms, and are connected by a staircase with all the reading rooms and the stacks.





THE INTERVIEW

Interview with Andrija Mutnjakovic (A.M)
By Bekim Ramku (B.R) and Nol Binakaj (N.B)
August the 12, 2016, Zagreb, Croatia

A.M
I love having a pen in my hand.

B.R
For sketching?

A.M
Yes, some kind of a burden, one has to have something in his hand, its something like the rosary beads, it was created for this.

B.R
Yes, so a man can occupy himself with something.
Could we start?

A.M
Of course we can.

B.R
Maybe as a first question, how did it come about, how were you approached regarding the library in Prishtina?

A.M
Well my initial contacts started during my student years when I and Bashkim Fehmiu were good friend, considering that as students we would meet in Belgrade, Zagreb or Sarajevo so we knew each other and get together since we were students, as young architects at that time me kept many of the contacts. We spent a lot of times having these talks and some sympathies were created.
So when he drew the general urban plan for Prishtina, respectively, the zone surrounding the library, he suggested that a certain number of those buildings have zenithal illumination, as one of the best ways to illuminate working areas, and those zenithal illuminations he imagined would come from domes glass domes, thus this was indicative during our contacts.

A further reason was the fact that a year ago I did the competition for the Sarajevo library where I actually tried to use that typical element of Balkan architecture or rather regional architecture, meaning the cube covered with a dome which in my mind is a unique element in this part, so what Bashkim did in urbanism, spaces with domes.

FIGURE 3

I thought that this was a great element that could express our regional architecture, based on these symbols, the cube and the dome, using those elements, I came up with the space, respectively the project for the Sarajevo library.

This didn't get through, the prize was won by a modern project, in fact more or less a classical-modern project, but on the other hand a new concept for a library was born. Later I found out that Bashkim saw the project and that he though that this concept was close to his idea for the students center, respectively that city, that small city in the center of Prishtina.

As I was told, he insisted with the director of the library Ismet Spahiu and the Prishtina general public, and that he thought that such a library, with such symbols would be suitable for Prishtina as well.

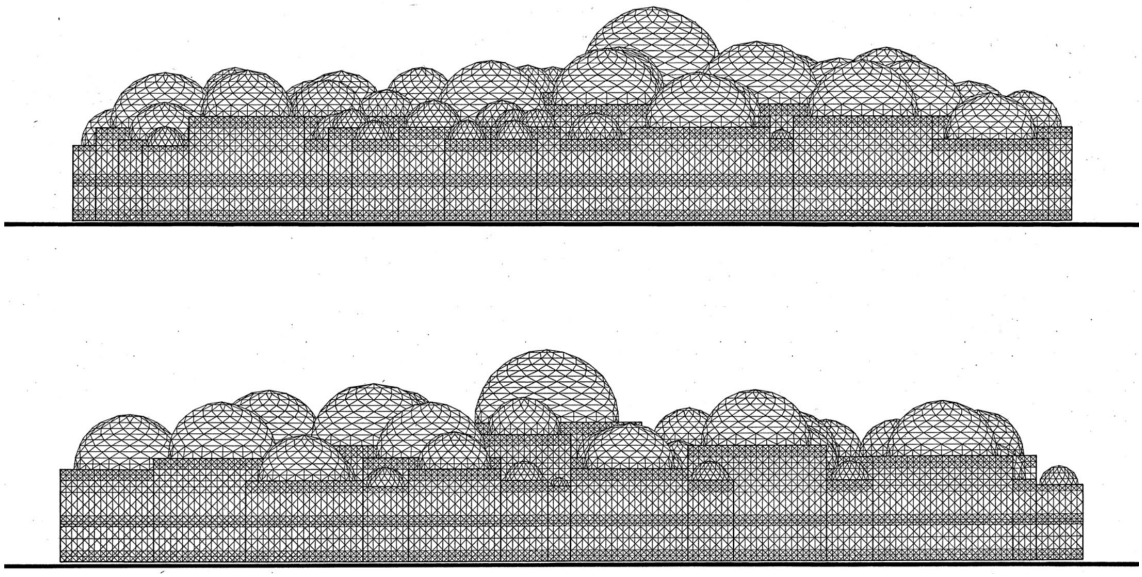


FIGURE 7 - Elevations of the Sarajevo Library competition entry by Andrija Mutnjakovic

B.R
Can you tell us, if you still remember the dates, when was your first contact with the library staff, when did the project start to be drafted?

A.M
The first contact was in August 70's, 1970, first talks were during the Autumn 1970. First serious work, contracted work, on the first library project was in the beginning of 1971. I did a different version of the library from that in Sarajevo, in fact the Sarajevo library was smaller in square size and because the site was bigger I thought that it should only have a ground floor and a basement, and in that way the reading rooms would be close to the ground and together with the zenithal illumination would simply be attached to the ground.

However the location that was given in this project was such that it couldn't spread horizontally, but rather it had to grow vertically. I must admit that I was glad about this because now I had more opportunity to simply play more, so the building could play vertically, now we had 4 floors the vertical dimension now was 4 floors high and not only ground.

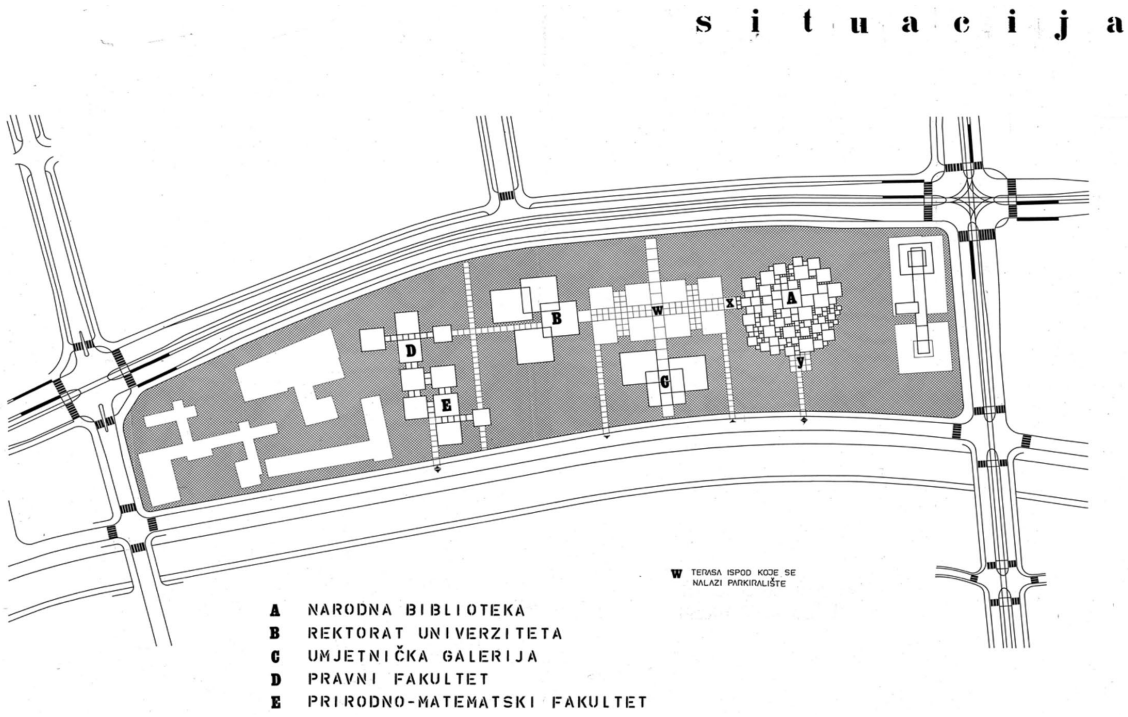


FIGURE 8 - The site plan for the Sarajevo Library, Andrija Mutnjakovic

That situation, if I may say that difficult situation was in my favor and made it possible to create a far more suprematic form, far more qualitative formation.

B.R
Wanted to ask you, when you though about the material for the building, we often hear that almost all of the material was from the Ex-Yugoslavia, is that the truth? I mean apart from the domes, is the rest produced in Yugoslavia?

A.M
All of the constructive elements were based on local material regardless if this local material was cement, iron, stone or other similar elements, what's from outside, is the domes which were not produced in the country, they were made locally by a company called "Glas" but the material was unusable for such quality of work, in that time nobody was producing plexiglas domes in Yugoslavia, and secondly the technology equipment, air condition, heating, airmail, etc. These are all elements which were purchased outside, even in this cases Rade Koncar as a company from Zagreb was the mediator that implemented parts of the work.

B.R
You were telling us about the domes, who did them?

A.M
I wanted to speak a bit more about the project. With my suggestion, the project I worked on. I must mention this that the first project, the first concept of the project from which the model was made and which was presented in the meeting of the council who was taking the decisions, and which included Bashkim was the one that suggested that my composition was not harmonious.

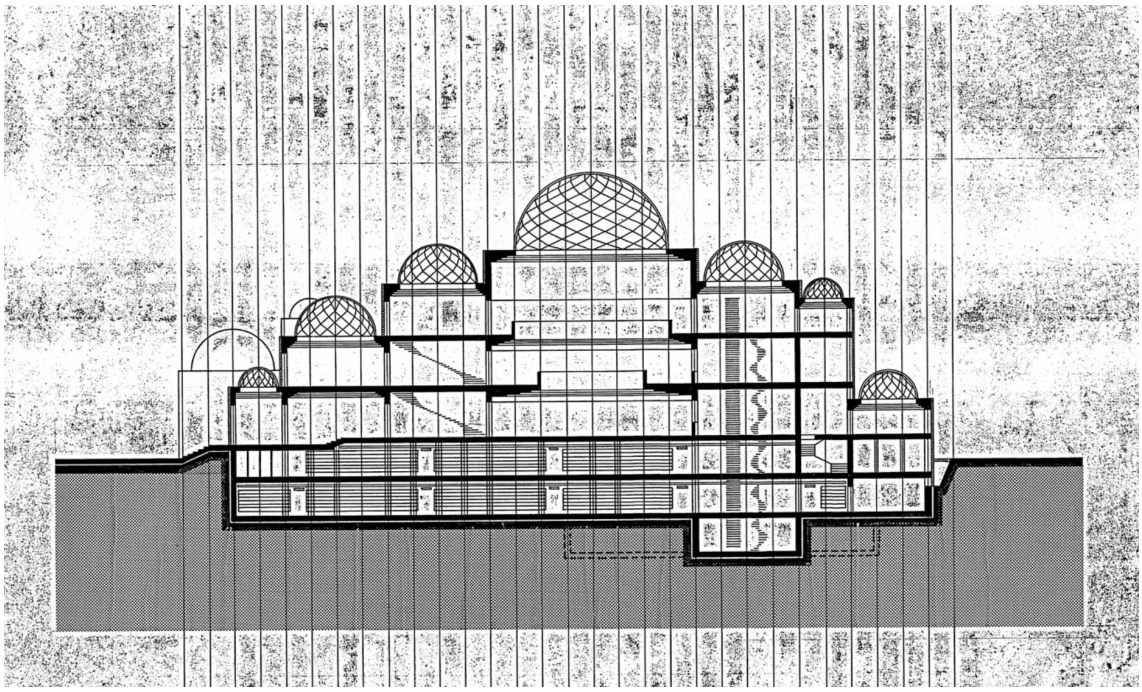
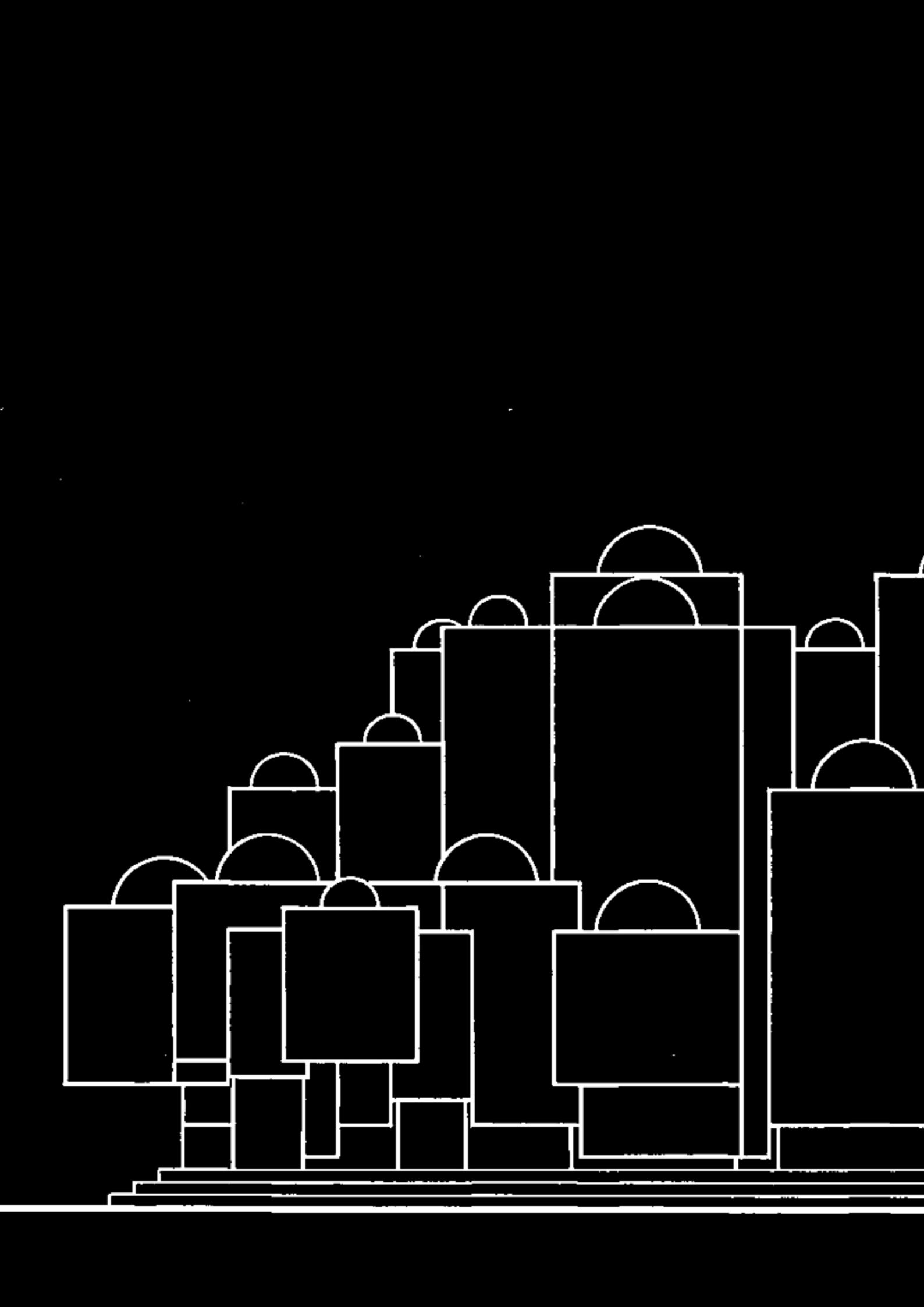
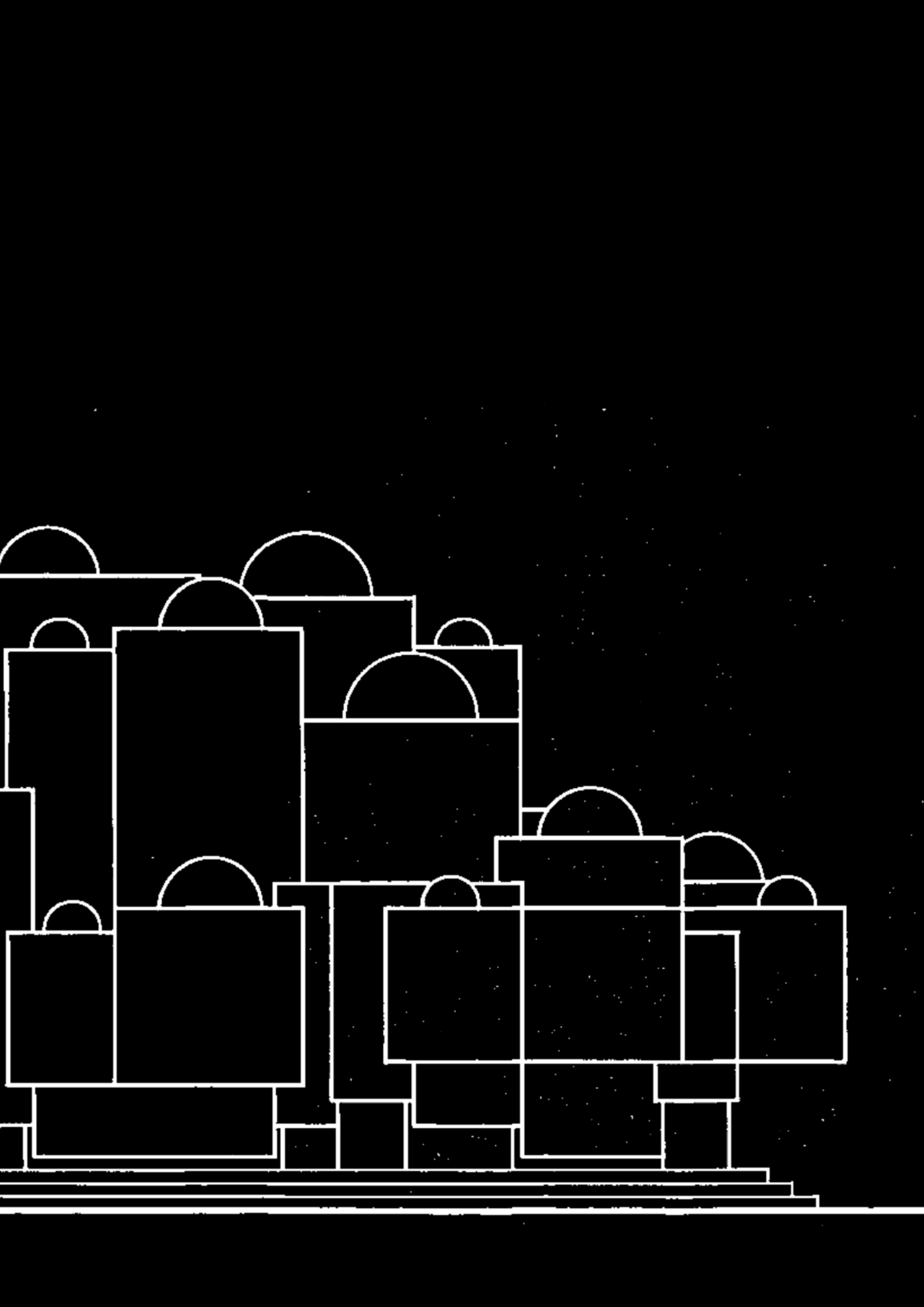


FIGURE 9 - Section of the first concept design for the Prishtina Library, Andrija Mutnjakovic

I was going for the logic of the Mosques, for a symmetric composition with a grand central dome as the dominant feature. They thought that this looks too much like the Church architecture and that it would be a good idea if this central part would be decomposed and we should create a free composition based on what at that time was very trendy also in the world of sculpture. After that I produced a second scheme, who's figure ground was almost identical to the first scheme, apart from the above floors which were arranged in that way that we got a really free sculptural composition.

The library project, because I was in Zagreb, I suggested that the architectural part of the project be done in Zagreb, simply because of the direct contacts i can have with them. Together we decided that the project would be drafted by Centroprojekt for one fact, which was important, they had a very strong architecture office in Zagreb, and a very strong installation engineering one in Belgrade. So this was a good combination, to do the architecture in Zagreb and all of the installation part in Belgrade, because the contacts while implementing the project were much easier between Belgrade and Prishtina rather than having it done by a different organization in Zagreb or Croatia.





B.R
Can you tell us about the construction, you know the construction company that built the library? A Kosovar company?

A.M
Yes, Ramiz Sadiku.
Ramiz Sadiku took over the complete contract where they had the complete documentation with all the elements, with all the installation phases. Ramiz Sadiku took over the duties as the main contractor, the architecture, the engineering, and the role of the coordinator of works of the other companies who did the infrastructure, the installations, and the technological machinery. The supervision of the construction was done by the civil engineering faculty in Prishtina, with its professors who lectured in the relevant subjects, that was a team of about 10 supervising engineers, from all subjects from structural engineering up to plumbing and sewage, heating, electrification and so forth. Professors that taught those courses where the supervisors in the construction of the building.

B.R
Can you tell us more about the exterior stone where did you get the idea, I think you mentioned the shrine?

A.M
Yes, just remind me of what was the name of the shrine

B.R
Sultans shrine

A.M
Sultans shrine

N.B
Sultan Murat's shrine

A.M
Yes sultan Murat's shrine. One thing, which maybe is not, connected that much to the library but to the way how I think about architecture and construction. I always thought that when ever one travels to a foreign Country he should eat the local food and enjoy it. This is a simple truth, I always thought that when you build in a given location the building should be constructed using elements belonging to that location. For example in Zagreb numerous building were constructed using the local stone, this greenish stone. That's why I thought, in the case of the library for surfaces needed to be covered by stone which meant exterior walls and facades and the base of the whole library should be covered using local stone. While we were discussing this issue, one of the days they sent me to the Murat's shrine to see this use of the local stone, typical in that region, where large tile like stones two meters by 50 to 60 centimeters where embedded in the ground with which they were creating fences. That in a way informed me that this is a strong material, and in that shrine I saw the whole vicinity was fenced by these stones, and that even the roofs of the houses were covered with that stone.

I got interested in that stone and they informed me that this stone is prone to pealing but that this process lasts for centuries thus it wasn't concerning. That's how I decided to use the stone to cover the walls. There was another thing about that stone, the stone is of the rustic typology and naturally can be found in a tile like shape that's why there is no need for the stone to be reshaped as its shape is tile like and it could be used as it is found to cover the facade i.e. cover surfaces. The stone as it is has better qualities then when it needs to be cut in pieces and than applied, that stone loses it's identity, that's why this was another reason why I should use that stone. This gave character to the walls, these walls were no longer walls constructed of mechanical materials, it gave structure to the walls and we know that walls with structure are more visually appealing then plain walls covered by stones that lost their souls once they were cut.

B.R
I think you wants mentioned it was supposed to be much thicker?

A.M
No I was speaking about the base and the exterior walls that wasn't done as specified in the project. Around the building there is a slab that extends for some 8 or 10 meters, when the library was opened that slab was not covered by stone but it was a concrete slab, the tiling of that slab came much later at the time when I was not part of the project anymore. But they used very thin stone tiles which got broke after a while. In this kind of buildings you have to consider that sooner or later a car or a truck will show up, I mean even though these areas are called pedestrian they in fact are not pedestrian surfaces, they are access roads for fire trucks, that's why these surfaces need to be as durable as any road and not as a pedestrian zone. This element was not respected, it was covered as if it was a garden walkway and not like a proper road.

B.R
And who designs the central part of the hall covered in stone?

A.M
That was me I designed that.

B.R
And what about the walls?

A.M
Well about the walls, the idea was to use the Illyrian buttons, the two spiral's. I felt that this element which can be found in Kosovo but also in Dalmatia, in fact in Illyrian areas. These buttons were very characteristic for Illyrians, that's why when we discussed to use symbols I thought that this associating Illyrians with the library would be very welcoming. That's why I suggested that even the Library's symbol should be a reinterpretation of this button, and that this should be used as the library's symbol. I thought the best place to display this symbol would be the walls above the central hall, this was done by one of your goldsmiths, what was his name, it is in the book.

B.R
Yes, we'll have to see it

A.M
I can't remember now, you'll find it in the book

B.R
And what about the stair walls, the stone mosaics on the walls?

A.M
On the side, you mean the covers?

B.R
It looks like a mosaic on both sides using small pieces of stone, it has a rhythm some figurative expression.

A.M
No that I do not remember, is it also in the book?

B.R
yes let me check

A.M
I must have forgotten about that, all of the hall was done by me, and you can find that in the material I gave you.

B.R
This part, maybe you cant see it well here, but live it looks much colorful and beautiful

A.M
These are not panels?

B.R
No no, it looks like a mosaic, made of colored stone.

A.M
Yes, yes, its pieces of stone arranged as a mosaic.

B.R
But maybe you can talk more about the interior, about your approach?

A.M
I really don't remember this at all.

FIGURE 10 - The Illyrian spiral found throughout Kosovo and other Illyrian regions

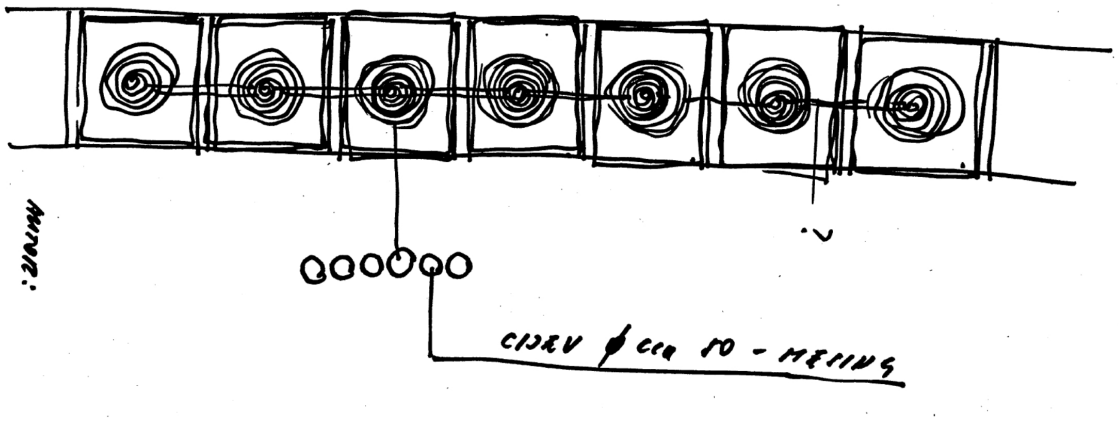


FIGURE 11 - The sketch for the second floor fence facing the main hall, Andrija Mutnjakovic

B.R
We were intrigued by this...

A.M
This part I remember but that one no

B.R
Do you know if maybe it's an artist?

A.M
Yes, most probably yes.

B.R
But you don't know who it may be?

A.M
No, I have completely forgotten about this part, maybe I'll find it in one of my drawings.

B.R
Maybe you have it stacked somewhere.

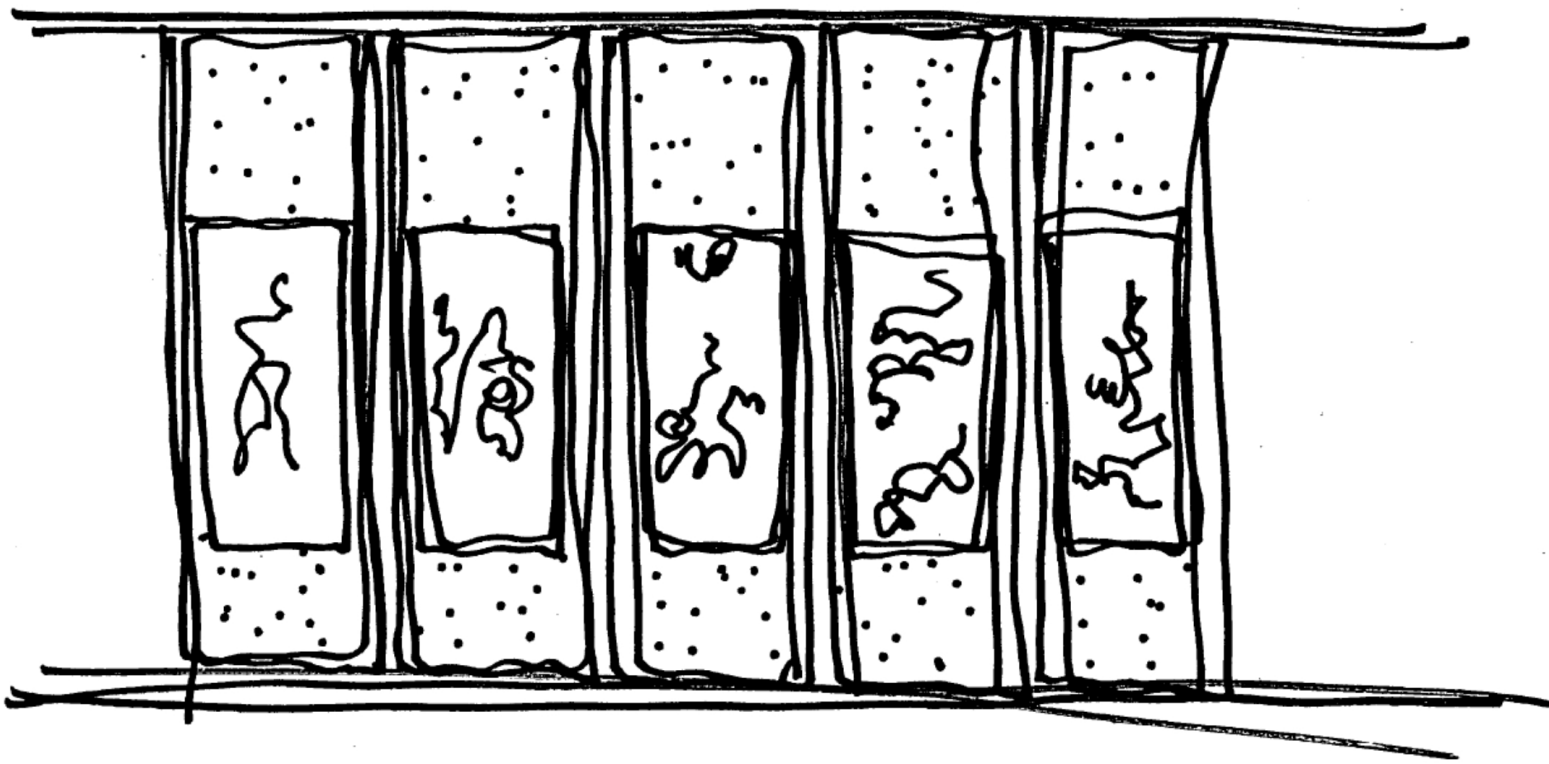
A.M
Don't know, I have spoken to local artists, you have the list of names, so that the panels used around the hall's, which now are covered in textile and serve as sound buffers, my idea was for those panels to be given to local artists so that they could be revived, so this idea existed and I held those talks and there where some sketches produced so its possible that this is also part of that.

B.R
Probably that's the case, they look planned.
The second question I wanted to ask you, the stones used are probably all from Kosovo, who worked on them?

A.M
No, they are not all from Kosovo

B.R
No?

A.M
No, we didn't have that much colorful and rich stone, but the scheme and the choice of stone was given by me.



OKVIRI: DRVO (STANDARDNO)

PANOI: EMAJL

CRTEŽ (MOTIVI IZGRUDE)

RUNOR: ROBICI

FIGURE 12 - Sketches for the main hall surround panels, Andrija Mutnjakovic

B.R
I wanted to ask you about the furniture as well, did you design it by yourself?

A.M
Yes, the whole furniture was design especially for the library and everything was done according to my drawings, all of the pieces were designed by me and all of them had detailed drawings. In a way I wanted to achieve two things with the furniture, in fact its something I saw in older libraries. Firstly I though that the back rest of the chair should be high, that's usually found in older libraries, for a simple fact that people pass by in the space between the tables and chairs all of the time, and I thought that this part needs to be tall so that it would protect the reader from hand movements or something similar, so this was the first element which I though needed to me done. And the second element regards the table, in a way I wanted to create a bit of privacy for the table, that's why I chose to put those side panels so that the reader could concentrate on the table and not turn every time one passes by, so one can concentrate on the work done at that table. This were in my opinion two important elements from which the design was influenced. The interior space was in a way adapted from the Zagreb library, the Zagreb National Library, the old National Library, had that leather layer covering the top of the tables, so that was used as an inspiration for the library tables, so its not wood but its covered in leather, so that when one touches the table gets that soft and warm feeling, when one's hands touch the tabletop material.

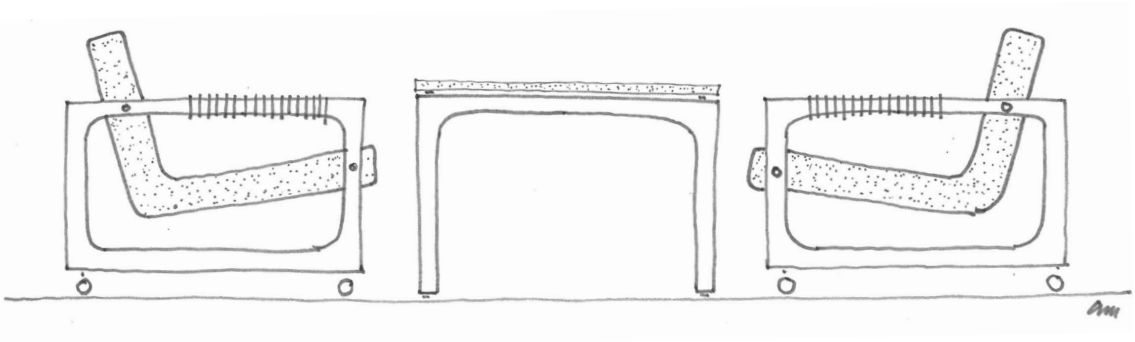


FIGURE 13 - Sketches of Library administrative furniture, Andrija Mutnjakovic

N.B
But also the reading rooms where composed in a way that they create this level of privacy

A.M
Yes, in fact those elements, the cubic elements of different sizes, made possible this space game, which is a result of the of the construction system. I tended not to create large reading hall's, but have it fragmented into smaller spaces so that you never have that big space that tends to feel uncomfortable, and you always have a corner, one always has his small corner, his small piece of universe where he can think, work, where he can simply concentrate on the book in front of him and not be distracted by a scene of 20-30 rows of tables as in the case of many reading rooms around the world.

B.R
Where did the inspiration for the mesh around the building come from?

A.M
Well there are two reasons. One of the reasons is I think that buildings of this character don't have curtains, curtains simply don't belong there, you can have curtains but I felt that a public building such as this one should not have any curtains. But somehow you had to shutter the sun.

The second element was the sun-breakers, but sun-breakers, I always looked at them as very technological as an element and it was never dear to me. I didn't want an industrial product put on the building, that immediately dehumanizes the building. And the third element was that there is a need for, I thought of putting glass bricks with a sole functional reason for the inner spaces to be filled with sunlight, that was the functional reason for the glass bricks. But those glass bricks I think would feel uncomfortable, at least at that time maybe today they wouldn't but in that time I think it would feel uncomfortable to have the feeling that there is no interruption between the interior and the exterior space.

So that way of thinking is practically present in all Churches, be those orthodox or catholic, in Kosovo or in central Europe, simply the Church understood that that conflict between the interior and exterior space should be soften. So this was the second element that I wanted to achieve. the combination between those three elements lead me to believe that its best if in front of the facade there was a mesh which in a way will serve as sun-breakers and which will soften that conflict between the interior and exterior light, and which will give a character to the building itself, a uniqueness to the building, something that could never be achieved with industrial sun-breakers which are produced in a factory.

B.R
Initially, you told us that you thought they should be made of concrete?

A.M
Well I was thinking that because the building is all made of concrete, I though that this part should be made of concrete as well, in the end those sun-breakers in the old churches are made of stone. And in this case they couldn't have been produced from stone, thus I was thinking, a stone church has stone sun-breakers. I was thinking the same, a concrete house should have concrete sun-breakers that was the logic. I also drew that detail in a 1/2 scale, there is this drawing of the complete panel which cover the full height of one of the elements in fact when I brought that drawing the constructor was very afraid of that, firstly from the work that was needed to be undertaken as this was all plastic. They were afraid of this and in fact after some time I came to a conclusion that maybe they are right, maybe I am overloading the building with this concrete element, although I must admit that I wasn't that sure in the quality of the work at that time, and I wasn't sure in the maturity of that concrete, I was afraid that maybe the rebar would be exposed and corrode, that this would need constant repair works. When I understood all of the technological problems this could cause I decided to go for a material that is absolutely safe, that we could say it would last for a millennium. In my understanding the most suitable and cheapest material was the poured aluminum.

There was an alternative for the mash to be based on a hexagonal shape considering that the shape of Church windows there are hexagonally shaped. So I tried to use that element again in a bigger scale.

The initial idea was for them to be produced from aluminum panels which were produced by machines, but I was very afraid that those panels would terribly reflect the sun, because they are shiny (polished), so I said that this material needs to be matte and the only way to produce a matte material was through pouring. So I created this obstruction which was produced from poured aluminum, luckily at that time there were still factories that were still working with pouring & casting, and I'm not talking about those that worked on artistic works, but those that worked as craftsman, at that time there was still a need for aluminum casting, for machine parts, and so forth.

So there was such a factory in Krapina near Zagreb, which was specialized in casting aluminum. I went and talked to them, they produced samples and I saw that this works. After that we produced the molds where we poured each model individually, each model had its own mold, there are around 70.000 pieces and 8 or 9 types of different profiles. From the empty hexagon, to the one divided into 3 pieces, or more pieces, than the corner models, the positive corner model, the negative one, and so forth. So in a way that whole structure connected into one whole.

N.B
When the structure was over what was the impression, the perception of the people that worked with you, regarding the facade, the form?

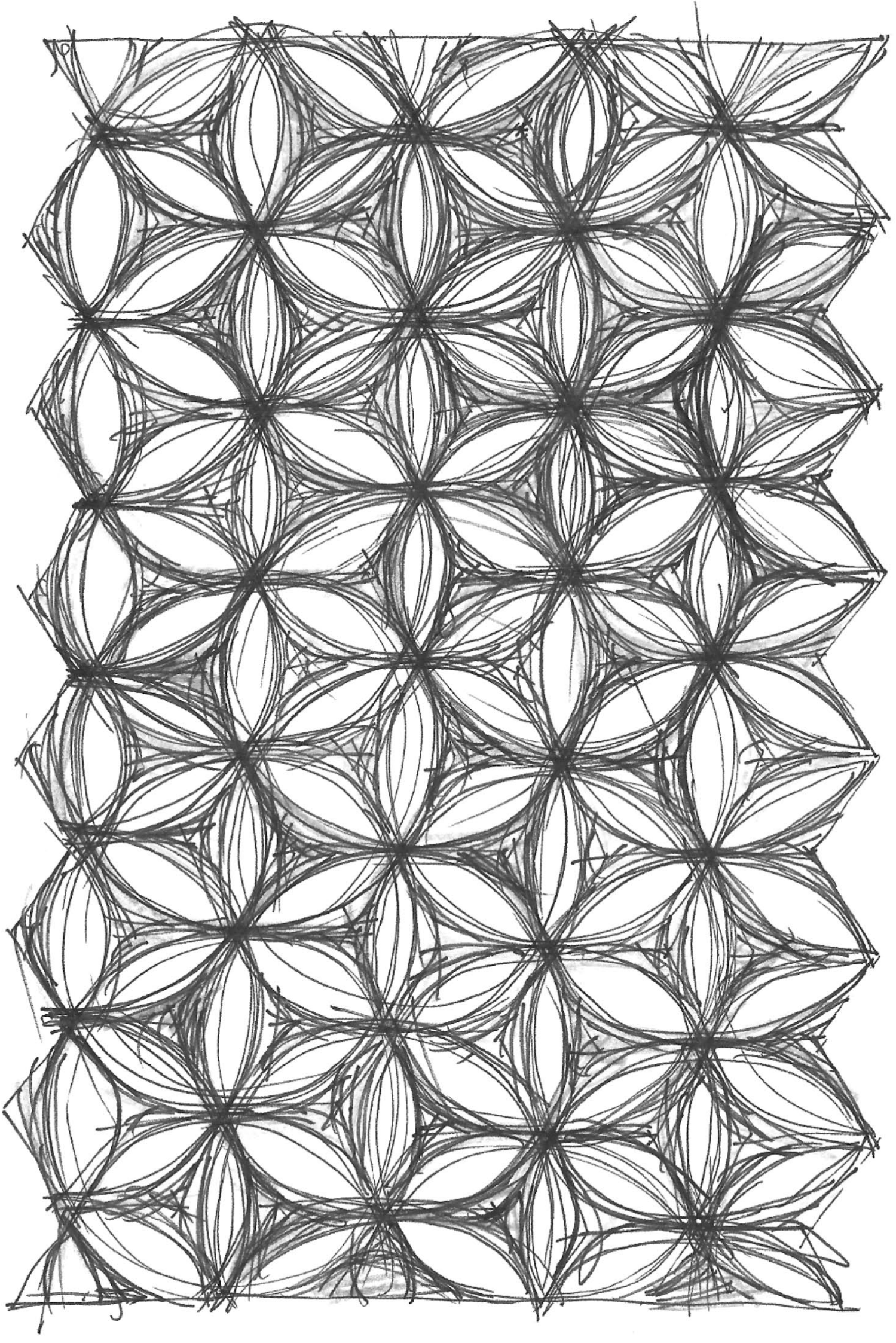
A.M
Well I must admit, that the team that worked on this followed it correctly, but I must say they were very positive, they were satisfied with the work, they understood that there is something logical being created and that this, to put it in a more simple word, is becoming an interesting shape. And later that was shown, in my understanding, that these one-off treatment of the facade proved to be very qualitative, this was some 5-6 years before unison facade movement showed up no matter if its of a smooth material or covered by fabric or other. This is in a way a predecessor of the later unison facades now used a lot around the world.
Are you aware of this? I have prepared this, the Birmingham library

B.R
In Birmingham?

A.M
Yes, it was even written how the Birmingham library is copying it.

N.B
It even has some motives from those road fences, if you remember them, those round shaped fences in Prishtina? Yes, yes the ones in the streets.

A.M
True they look the same.



B.R
Can you tell us more about the domes, you insisted for them to be produced in Germany?

A.M
Yes, we raised this issue, in fact at that time in Croatia and in the whole of Yugoslavia fiberglass cupolas were produced, but they had 2 things missing, firstly they didn't let in the light and secondly they where prone to damage when exposed to UV rays. After 5 to 6 years these surfaces would simply crack from the UV rays the glass wool would be dissolved and that it turn would jeopardize the health of the whole city.

So I firstly had to convince them that we can't have those domes and that they have to be made of plexiglas, plexiglas is a stronger material, it doesn't get damaged by UV rays.

So there was firstly this discussion, what kind of domes? The first ones were produced in the country, while nobody was producing plexiglas. A team of us went, faculty professors, the director and me, around Europe visiting different producers in Italy, in Austria, in Germany and France, to see who and what they are producing and what they can offer to us.

I must say that everyone was a bit surprised that someone has an order for 99 domes, that was I think a big sensation for any producer and was a big deal to get that job.

However I organized the visit in that way that in the end we go to Hamburg and visit the Kopperschmidt company. I had information's regarding that company, in fact the founder in the 1904 invented plexiglas, he made the plexiglas as he was a chemist, during his chemical examinations, he came across plexiglas. That's why I said I would rather work with someone who knows that material by heart rather than with tailors that simply buy the material and than patch it. On the other hand these guys produced the material and themselves tailored and produced the domes.

My last argument was that this famous plane, German plane in the Second World War, Messerschmitt, had a plexiglas dome, that was the first time plexiglas was used in aviation, in particular in such a sensitive example as it is with this case, at that time it was considered that its the most sophisticated fighter plane much more advanced than the English, American or Russian.

Further at that time, some 2 years before, Airbus showed up as one of Europe's aviation achievement and Kopperschmidt did the windows for them. It showed the even in latest technology, with such a sensitive machine as an airplane, a project of such importance, they hired Kopperschmidt to do the windows. On that they gave me a list of reference works, with some 100 domes they did around the world, ones that had large dimensions, ones that covered winter gardens and other alike.

And the last element, the constructive element they used for the domes, those supportive ribs, they used the plans from a top technology architect at that time, they used his geodesic dome as their constructive system, at that time this was viewed as the most advanced system for domes, mathematically most advanced system.

B.R
You told us about Kopperschmidt how you chose them, who decided in the end which material should be purchased, like in the case of the domes, was that the Director?

A.M
There was a supervising body, the whole team had to decide on it, there where consultations with the supervisors, and in the end of course the Director had the final word. The sum was pretty high, about 1.4 Million German Marks if I'm not mistaking, the remaining funds. And for that time this was a large sum of money, so even the council had to take a decision on this issue, and the Director would sign it in the end.

B.R
What was the final price tag for the building?

A.M
No, I don't remember this. Just the domes. Maybe I can find that in the final cost estimates I showed you before?

N.B
But you were satisfied with the implementation of the work?

A.M
Yes, that what I thought of doing was realized indeed. The only change was the exterior cladding (mash), which I think came out all right. I think it's totally fine that they didn't accept the first option, that this is a constructive collaboration as one calls it today, which in fact made me more noble.

B.R
Also regarding the insulation, they didn't go with the best option?

A.M
Yes true, I mean the insulation in the underground levels were not done well, I mean it wasn't done with the best materials, you couldn't find them here at that time. You again were supposed to import them from Germany, or other places. At that time you had this rubber material and we did it with those bitumen sheets, an unstable material.

N.B
When was the last time you visited Prishtina?

A.M
Some 3, 4 years ago.

N.B
What were your impression from the visit, from Prishtina and the Library?

A.M
I was firstly surprised when I visited the Library that it looked the same as when I left it 30 years ago, and that it endured for several decades and that nothing has changed, it looked like it was constructed Yesterday. It made me very happy as it showed me that I found the way to build how its supposed to.

I was scared to go in the building as I knew everything that happened there, what it went through, the war, I was afraid that it was destroyed from inside as in the case of hotels in the Adriatic coast.

I was very surprised that the users, even the occupiers, respected that space and that it wasn't all scribbled on or broken. I think from the inside it looks all the same, in particular when I saw the reading hall it looked like I did it Yesterday.

The stone floors are all maintained well. I must admit that in the case of the dividing panel walls I wasn't that rigorous, in their insulation. I wanted for them to be stronger and have better insulation qualities dividing the spaces, but also in this case it was all reduced to simple space dividers, without any acoustic insulation qualities.

The ceiling was done in Zagreb in Samobor, they are those polyester ceilings from fiberglass, they are molded here in Zagreb and then they were assembled there, but the ones that produced them also installed them, the order was for installing them, not just delivery. That material was good for interior use as you don't have UV rays that could destroy it, it is a stable material. It enabled me to, in a simple way cover the ceiling. In the upper part you always have installations that usually get covered with suspended ceiling. This for me was the simplest way to resolve this issue, with wooden laths you have to align them and construct supports and other stuff. These were large panels that were easily screwed, besides they are very easy to dismantle, you simply unscrew them and they don't get destroyed, than screwed again, because in the case of these installation you have to intervene very often. So its fitting to construct these ceiling in a way so that one can access the installations and not destroy the suspended ceiling. This is often not done and one has to destroy the suspended ceiling to access the installations.

But I wanted for the building to be technologically advanced, I mean so its easy to be maintained, thats why I also did the mechanical floor, so that all pipes are distributed in that floor, you don't have any distributed pipes through the building, in the reading rooms, you don have them in the lower floors which are not all boiler rooms, so the half floor was done to horizontally distribute all of the pipes.

And the vertical ones ran through those small cubical shafts 2 by 2 meters which served for the vertical pipes, meaning the main verticals, the horizontal installations from all of the Library which is 50 by 50 meters would be spread through the mechanical floor and then they would be distributed through the already set vertical shafts in different segments based on the need.

B.R
You were telling us before you did the foundations that you had to do a thing, not sure how you call it?

A.M
A pot.

B.R
Yes a pot.

A.M
Well at that time, technologically speaking, that was the only option to do it, the building had 3 underground floors, that's circa 12 meters, actually in some parts even deeper, that's a vertical column which weights heavily on the ground, because of this we had to construct this pot. On top of that there were also strong underground streams, so we also had the problem of resolving the stream issue.

That's why we constructed the 12 meter deep pot around the 50 by 50 square on a thick reinforced concrete plate 1 meter deep. In that way we divided the library space from the surrounding land and surrounding streams. Now this part was insulated from inside, and in that way we got a safe pot that eliminated water infiltrations and land slides, and there now we could safely construct the library, and lay the foundation on the meter thick reinforced concrete base 50 by 50 meters big.

There was also a buffer layer in between, but I am afraid that during construction which is connected to damaging materials such as rebar. I am afraid that during the construction of the secondary walls there were damages, which later manifested in water ingress. Maybe attention wasn't given that much to this issue on the walls but also on the floor. So the water surfaced, I remember that immediately after construction it surfaced, but I suggested that we insulate it again from the inside, as in the case of insulating syphon's which are submerged in the sea and water, they are insulated from inside and these are quality material, light coatings and are thin. And I think that, if this was not done till now, this should be done as a solution.

Also I suppose that this material installed some 40 years ago with which we insulated the roofs was not a permanent material with a guarantee and most probably it should be changed with these current materials that are virtually leak-proof. I think that the simplest way to do this is not to touch the existing one but just cover it with the new layer and install these new rubber materials which are not sensitive to the lower surfaces, it doesn't have to be flat and it can easily be mended with layers. They are very elastic and even if you have movement of surfaces they can withstand that and not as in the case of the old ones that would crack. We did this last year in our roof here, you can still see some signs of it. We put a new thermal insulation and the new rubber surface, don't know the name now you have different names for them, every factory has a different name for it.

B.R
When was the first time you realized that your building is unique? Were you ever aware that you designed, build a unique building?

A.M
Well when I was designing it I knew that something like this doesn't exist in the world, I was totally aware that this is a new approach. New approach in the use of new symbols, new unit, a new approach where the building didn't have a pre-planned facade, but it was composed, I was laying the units as needed based on the floor plan, and not based on a pre-imagined form where one needs to cram all of the space, this was shaped based on the content. If you need more space you just add a unit, so it grew with the project. I always tended for the public spaces, the reading rooms, no matter in which floor, be placed in such way that they permit zenithal light, and that spaces that remain underneath them be used as secondary spaces, like storage or similar.

They where telling me that I managed, there was this article on Oris, that I managed to do the impossible. In that time it was informel as a movement from one side and on the other new tendencies with those different metals and games that show up, that where in fact connected to geometric forms, and informel has free shapes, these new tendencies had these forms. And that with the cubic elements I succeeded in realizing informel, I can show you in the other room what this means.

Here, the best representative of the informel movement here in Croatia was Ivo Gattin, with whom we were very close friends. This is his work, that informel, he was the most radical representative of this movement, as some framed their work and than put the free form inside it, but he didn't even want to frame his work, as you can see it here.

This may look simple, but it takes a lot of effort to do this, to produce these layers, these colors that are shown, to do this structure it wasn't an easy job, at that time I worked with him on this and I truly experienced informel as my own.
I worked on geometric forms in the frame of these tendencies.

A.M
Can I also tell you a story, related to the library, to me an interesting story.
Drago Ibler used to have an architecture workshop, national architecture workshop, as a kind of a post graduation studies, these where painting, sculpture and architecture studios, this was at the arts academy not at the architecture school.

So did Drago Ibler as a top architect at the time and internationally renowned, he lived in Switzerland and than came to Croatia, they named him as an architecture professor at the Art Academy and that's how this studio was formed.

I worked for 3 years at Ibler's, and one thing, there is one thing that he taught me, something I liked very much. In fact Ibler never liked drawing, we were working on all of his projects, and those were big projects, but he would mostly talk like this (holding his pencil backwards), rarely the proper way, and he would always arrive at the studio saying I have an idea. And than he would try and explain his idea, we had to understand that and then draw it, than he would come and say: you are this thing and that thing, you can't understand at all what I want, and so forth, but in the end we would draw them so he would be satisfied, and these were some beautiful houses we were doing, I don't remember well now but they were the Moscow embassy, then Tito's villa in Porec, the Hospital in Karlovac, then the Theatre in… not really important now.

And during that time he would always talk to us, that the house can't be drawn, the house needs to have an idea. And this stuck with me, that the house needs to have an idea, that's why when I was thinking of the Sarajevo library I had an idea, not a project but an idea, an idea of a building that would be part of a regional characteristic with all of what we already discussed.

So I always look for an idea, all of my buildings arose from ideas, only than I would draw them. That's why the Prishtina library is an idea, an idea of researching regional architecture as a base for creating contemporary architecture, and that through architecture one could in a way show the identity of the user and to create a shape that didn't exist, as we were always searching for shapes that didn't exist. So this is the idea for the house. This sum of ideas is the Prishtina library.

THE ARCHITECT

Andrija Mutnjakovic worked of both architectural design and town planning and is a prolific of the theory and history of architecture. He was born in Osjek, Croatia in 1929, where he finished secondary school, and than he graduated from the Faculty of Architecture in Zagreb. He attended a specific type of postgraduate study at the State Master Workshop for Architecture, organized by Professor Drago Ibler at the Academy of Fine Arts in Zagreb. He is a member of the Croatian Academy of Arts and Sciences.

His professional career in architectural design and town planning has regularly been followed by extensive theoretical explanations which can be classified into four groups:

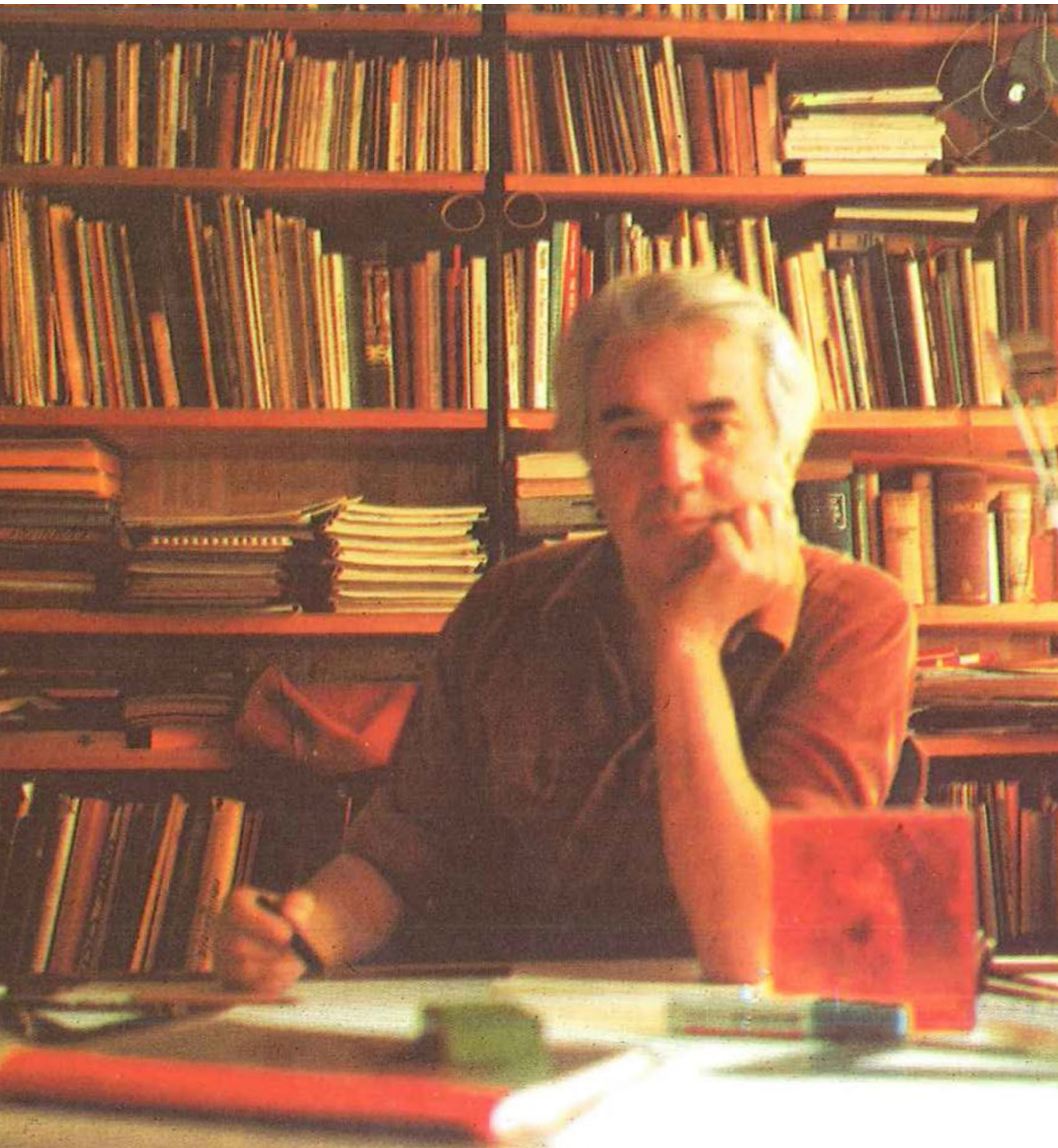
- Research into new regionalism as an essential factor in giving rise to teh identity alienation. Architectural achievements: the National and University Library of Kosovo in Prishtina, the Red Cross Center in Novi Vinodolski, the Union Center on Mount Medvednica, the School of Music Varazdin, Primary School Granesina in Zagreb, tourist resort Duga uvala nera Pula, the Catholic School Center in Zepce. Projects: National Libraries in Sarajevo, Teheran, Damascus and Algeria, the National Assembly in Algeria, the Kosovo Academy of Science and Arts, City Center in Tel Aviv, the Student Center in Vukovar, and others.

- Persuit of bionic design as an alternative to abstract setup of square buildings and towns. Projects: Youth Center, Zagreb, the Academy of Arts and Sciences in Kosovo, Prishtina, Tresnja Theatre in Zagreb, residential rrea in Osjek, Belgrade and Bratislava, City Centers in Tel Aviv, Zagreb and Belgrade, apartment buildings Zelendvor in Zagreb, department store Trap in Posusje, shopping center Bijela Lada in Osjek and others.

- Research into the kinetic features in the formation of houses and residential areas as a communicative relationship between people and the structure. Projects: Family Villa in Hollywood, residential area in Luxemburg, a floating house for Terra exhibition in Wroclaw, Saint Paul's Church in Split, Family House for Reggio Emilia, Venice Pavilion, City Center in Milwaukee, and others.

- Restoration analysis of architectural heritage as a component of contemporary ambience. Town planning: the historic core in Zagreb, the Old Town in Zagreb, Kaptol Zagreb, residential area Marash in Prizren. Prijects for monuments: the Revelin Fortress from 1539 in Dubrovnik, Orphanage from 1820 in Zagreb, Villa Zidanica, 18th century, Zagreb, Castle Dios, beginning of the 20th century, Daruvar. Archutectural achievements: the Old City Hall from 1720-1911 in Zagreb, the Turkish residential area from the 19th century in Prishtina, Student Hostel in Mount Medvednica (by Stjepan Planic), and others.

FIGURE 14 - Andrija Mutnjakovic in his studio



Extensive research on the theory and history of architecture is contained within about fifty articles published both in national and international periodicals, in a number of books, mostly printed in two languages, which can be classified in groups:

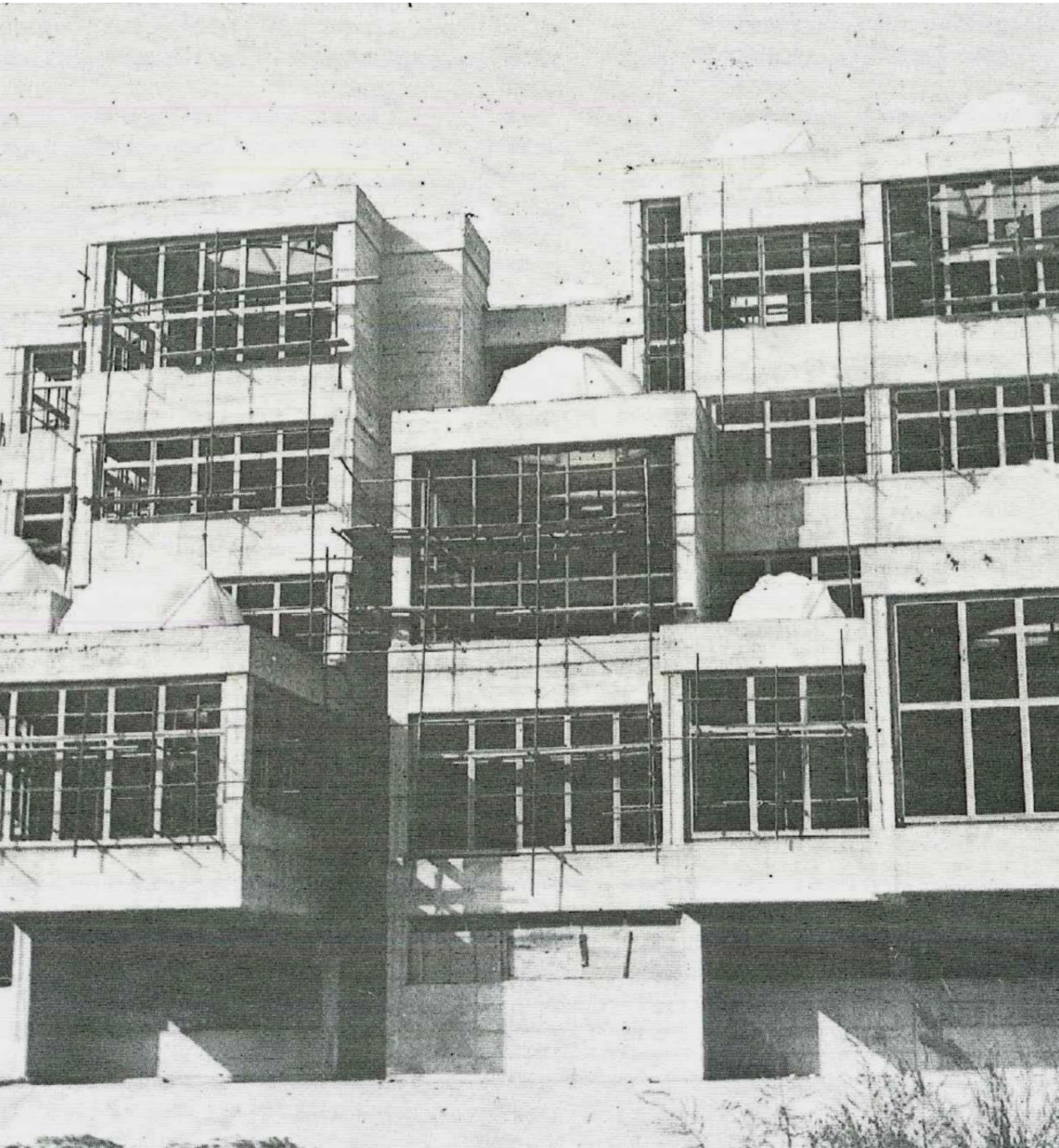
- Creating concept, editing and writing forewords for almanacs on historical research: Kornelije Budinich, Architectural Studies, Pula 1984; The Arch of the Sergji, Pula 1989; Vladimir P.Goss, Pre-Romanesque Architecture in Croatia, Zagreb, 2008; Danica Pinterovic, Mursa, Osjek, 2014; and others.

- Educational topics: Do you know to reside? Zagreb 1964; Cultural and Social Centers in Croatia (co-author Ivan Rogic), Zagreb, 1984; Gimnazija Lucijan Vranjanin (grammar school), Zagreb, 1993.

- Theoretical research on architecture and urbanism: Biourbanism, Rijeka 1982; The ndemic Architecture, Osjek, 1987; The Tertiary Town, Osjek, 1988; The Architectural Bionics (group of authors), Moscow, 1990; The Kinetic Architecture, Zagreb, 1995; and others.

- Analyses of cultural heritage: Vasarski Theatre, Zagreb, 1993; Andreas Alexius Epirota (Albanian), Prishtina, 1981; The Early Renaissance Torn, Zagreb, 1991; The Ducal Palace of Urbino, Zagreb, 1992; The Happy Town, Zagreb, 1993; The Architect Josip Picman, Zagreb, 1997; The Restored Curch in Croatia, Zagreb, 1997; Andrea Alessi, Zagreb, Zagreb, 1998; Architect Luciano Laurana, Zagreb, 2003; The Architectonics of Pope Sixtus V, Zagreb, 2010; The Ideal City, Zagreb 2012; The Church of Saint Jerome, Zagreb 2012; and others.

FIGURE 15 - The Library building under construction



VALUES STUDY

An important part of the study of any historic place is to understand its values. As part of this report these values were explored. Below is a summary that outlines the underlying values that assisted in drafting the statement of significance.

THE NARA GRID BASED ON THE NARA DOCUMENT ON AUTHENTICITY

ASPECTS	**DIMENSIONS**			
	Aesthetic	Historic	Social	Scientific
Form and design	Domes and cubes with an aluminum skin are a distinctive feature not present elsewhere therefore it was a new forma and design	Represents and reflects the history of the region but interpreted in a new modern form in the cubes and domes	The exterior plinth form allows for informal meetings and the center atrium is a design focus and meeting place	The skylights were a unique form and the only geodesic dome of this type. It still represents a unique form
Materials and substance	The heavy materials of cast in place concrete are offset by the light translucent domes and aluminum skin a unique aesthetic value	These types of materials were not used before in combination in Kosovo and are well executed setting an example of workmanship	following the idea Gesamtkunstwerk or integral design is included in all aspects of the building including furnishings, lighting and finishes	Structural steel reinforced concrete cantilevered forms and aluminum rapid casting. This was a new model of construction
Use and function Location and setting	The natural light is ideal for reading and study rooms. The artistic value of the domes contribute directly to the use and function as a place of learning	contains the largest collection of book in Albanian in Kosovo it also contains historic manuscripts	It is an important social gather place set in the center. Frequently used as a place demonstrations	Use to study all sciences. Within the stacks are important reference material in the Albanian language
Tradition, techniques, and workmanship	Workmanship is of the highest quality in the aluminum skin and formwork for the concrete	The library form is a traditional dome over a cube this is repeated in many other structures in Prishtina	following the idea gesamtkunstwerk or integral design is included in all aspects of the building including furnishings, lighting and finishes	The reinforced concrete cantilevers were pushing the limits of construction at the time and have survived well
Spirit and feeling	Solid and stable but also light and inviting	The domes feel part of the region but in a new material and form	The place is alive with all segments of the community – students, faculty and citizens	IT feels as a place of learning for science but also the humanities

The Nara Grid Koen van Balen, APT Bulletin: Journal of Preservation Technology / 39:2-3, 2008

STATEMENT OF SIGNIFICANCE

The National Library of Kosovo "Pjetër Bogdani" (Biblioteka Kombëtare e Kosovës) is significant for is numerous underlying and overlapping values – to many different communities. It is important to the history of the people of Kosovo as one of the major repositories of knowledge and as a center of learning for multiple generations. It is one of the largest resources of publications in the Albanian language and also shelters historic materials from three periods: the Ottoman, Yugoslav and independent Kosovo periods. Its location in the center of the university campus as well as the center of Prishtina along with its open spaces has given it high social values as a gathering place for the people of Kosovo.

Many protests and demonstrations have begun here and it will continue to serve this purpose. It also has social value for individuals or small groups as a meeting point to study or visit the city. The library has a number of historic links given its architectural forms of cubes and domes to both Byzantine and Islamic religious buildings but is a reinterpretation of these forms in modern materials and building techniques. Its solid well-built construction follows the idea gesamtkunstwerk or integral design serves as an example of the level of complete design and workmanship possible in Kosovo. The finishes, furnishings, materials and details were thought of as a work of ideal art that is comprehensive in all its elements. This integrity and authenticity are largely intact. This is an important value today given the often inadequate construction methods employed in contemporary buildings.

CONSERVATION PHILOSOPHY

Because the Kosovo National Library is an important structure the following Conservation Philosophy has been drafted to serve as a guide for its conservation. The Conservation Philosophy and Intervention Principles are written to ensure a professional, international standard for conservation. They will guide future work to conserve the aesthetics, values and historic importance of the monument. They have been drafted to align with international standards of conservation but adapted for the local context.

RESPECT FOR VALUES – These have been studied and will be widely disseminated. One such value is the integrity including finishes and furnishings. Therefore it is important to only touch the library as lightly as possible to preserve the original fabric, authenticity and values. The proper texture, colour and appearance of any patches on the walls, recovery of lighting fixtures and retention of original finishes. This includes reinstallation and conservation of original furnishings.

MINIMAL INTERVENTION - Only undertake repairs where absolutely necessary for both short and long term stability, moisture protection and visitor safety. Any elements that require replacement must be identified and the causes of deterioration must be studied and understood and addressed before replacement. Maintain reversibility in any intervention when possible and reverse existing inappropriate interventions.

COMPATIBLE MATERIALS - only compatible materials using the same or similar design motif, colour and properties should be used.

TESTING - Test all original materials to thoroughly understand their properties and attributes in order to understand what kind of new materials should be used. Test all new materials and any proposed treatments.

DISCERNIBLE INTERVENTION - all interventions will be slightly discernible form the original materials. This will be marked and documented in a subtle manner.

INTERNATIONAL STANDARDS - all work will conform to all international conservation practices and charters. These are listed in the Bibliography.

MAINTAIN USE – iconic buildings such as the library that are used and known are protected. Therefore unused or underused spaces should be adapted and made available for use. This includes upgrade facilities including handicapped access and signage.

SUSTAINABILITY - Prepare for longer term conservation project including manual for maintenance, list of priority items, protection of fragile area, etc. Control the water on and around the roof, basement and site, improve drainage. Remove harmful vegetation on the plaza and and site particularly around drainage. Prevent mechanical damage to remaining elements. Maintenance plan. Write a maintenance and visitation plan.
KNOWLEDGE - Create records and documentation that can be easily followed and serve as a record of all works. This includes locating historic documents and the creation of a bibliography. All work will be communicated and shared with all stakeholders.

FIGURE 16 - Spiral service stair

EXECUTIVE SUMMARY

Overall the library is in good condition. However there are numerous problems that must be addressed. These problems are understandable in such an avant-garde building designed in the 1970s and created in the 1980s that also experienced a lapse of maintenance due to war and tough economic times. Below is an executive summary of the findings. For more detailed information and images see the following chapters.

STRUCTURAL

1. The building is sound with no structural failures, differential settlement, deformations or cracks. Even with substantial cantilevers.

2. Steel reinforced concrete, the main structural system, is in good condition with the exception of several minor issues with the concrete cover over the steel reinforcing bars at the exterior corners and at points of prolonged water infiltration or plumbing leakage. At the exterior outside corners there is exposed reinforcing steel that is oxidizing. This was an original deficiency during construction of insufficient concrete cover inside the formwork. This has led to spalling of the concrete exposing the rebar to water and the freeze thaw cycle. While not serious it should be address as the problem will only lead to structural issues in the future.

MOISTURE INFLITRATION – this is the most serious concern of the building.

3. Roof and storm drainage system. The roofing system and built-up flat bitumen roof has failed. While the initial details and materials of the roof were adequately designed, the roof is past its performance lifetime. There have been numerous patches over the years including the metal flashing but the roof must be addressed as a whole system.

4. A complete redesign of the roof membrane, flashing, insulation, slope and drainage must be conducted. This includes the drainage system of cast iron pipes which bring the storm water into the interior of the building. These are also failing at the joints in nearly all 64 locations. Most notably the roof is failing along the major expansion joint that runs vertically through the entire building and horizontal from north to south. In addition there is an insufficient slope, no backup water drainage system and no control of water from the scuppers from level to level.

5. Water infiltration in the Basement, Cellar and Mechanical levels from the walls, floor and plaza above. This is grave as these two levels contain the book stacks including the rare book section. This is due to the suspected failure of the surrounding waterproof membrane outside the building and the continued presence of high groundwater. Before the construction of the library it was noted that there was a nature stream flowing across the site. There was a gap constructed between the exterior walls and floor of the subterrerian levels but this has failed.

6. Skylight domes do not seem to be a source of water infiltration. These were replaced approximately 10 years ago including the translucent plastic panels and aluminium structure. These have adequate flashing and do not appear to be creating major problems. However the skylights over the vertical chases are not secured and several are broken allowing direct ingress of rain water into the lower levels.

PLUMBING – this is the second major concern of the building

7. The public toilets on most levels are not up to current standards and on the ground floor have largely failed while the toilets in the administrative places are not adequately functioning.

8. Hot water is not available in the upper floors of the building during summer as the supply pipes were not used for many years leading to significant corrosion.

INTEGRITY / AUTHENTICITY

9. The building, its furnishing, finishes and spaces are largely intact. This is rare for a structure of its age not to undergo significant alterations. However, this is not the case in some areas

10. The American Corner has significantly altered their space and has plans for another project. ANY design must conform to the motif of the original design.

11. The fourth floor has also been significantly altered with non-appropriate interventions. While these are largely reversible there are also life safety issues in the stair railings to the new mezzanine.

12. The bar on the ground floor has also been altered but not significantly.

13. Furnishings and finishes are at great risk as their values are not recognized and their condition is only fair. For the most part, are also in their original locations. These could easily be removed and the overall integrity of the library as a whole would be compromised. These should be repaired and recognized for their value as contributing to the time of the library.

FIGURE 99

THEFT or vandalism are serious concerns.

14. Entry into the building through the vertical chase system is possible. The building has numerous vertical chases for plumbing, electrical and ventilation that communicate throughout the building. Several of these are not secured at the ground floor with access doors to the exterior. Entry into the building book stacks and rare book room could easily be accessed. In addition these chases are also accessible from within the building through unlocked doors. While there are guards and video cameras this may not be always sufficient.

15. The exterior skin structure of the building provides for easy access to the roof of the building. It is easy to climb and the vertical chases could be accessed from the roof as the skylight covers are not secured to the roof curbs.

16. The basement level is not secure. The ventilation openings into the basement space where the air conditioning condenser is housed are secured but could easily be opened. This space then provides a horizontal ventilation shaft opening into the book stacks and thus access into the rare book room.

ILLUMINATION

17. The light levels are inadequate within the reading rooms at night. The current light levels range from between 11 and 50 lux while the minimum standard for reading is between 250 – 400 lux.

18. The original light fixtures are largely extant. However these are in disrepair and many have missing light bulbs and diffusion covers. Some of these have been replaced including on the 4th floor and café bar.

19. The fixtures on the exterior are at the end of their lifetime. They are exposed to the elements so this is understandable. It is very important that these be replaced with similar fixtures as there are many dark obscured areas at the exterior of the library and there could be a risk of crime.

20. During investigations it was noted that the electricity costs are quite high for the Library. A solution needs to be investigated.

FIRE SURPRESSION / ALARM SYSTEM

21. This is also of concern. While there is a fire suppression system in place in the book stacks this is most likely not functioning.

22. It is unknown the last check of the smoke detectors and alarms.

23. Exit signs are not functioning. This is important for the complicated circulation of the library especially for visitors unfamiliar with the circulation within the building.

24. Nearly all of the fire extinguishers were recently charged and this is an indication of the level of care of the in library maintenance staff.

APPEARANCE

25. The building is performing well however a cleaning is appropriate. This includes the aluminium grid skin, the exterior walls and site in general and interior.

26. Several of the interiors require maintenance and replacement with appropriate finishes. This is understandable given the age of the library. Selection of replacement finishes must be carefully made with consideration of the original materials, colours and design.

27. The original wood windows require cleaning, sanding, patching, sealing and refinishing.

SITE

28. Drainage on the site is not controlled sufficiently. The drains around the library are blocked by rubbish and this could lead to water infiltrations into the building.

29. The site is in the centre of the university campus and is a major circulation route. There are many loose stone finishing elements that are of concern.

30. The parking is largely uncontrolled at the southeast corner of the site including circulation..

31. Disabled access is insufficient and must be improved.

PRIORITIZATION OF INTERVENTIONS

The Kosovo National Library is in relatively good condition. However it does require work especially to protect the largely intact interior finishes, furnishings and books. Therefore it is helpful to begin to prioritize future interventions based upon this initial condition assessment. These were decided upon during the on-site condition assessment and are a balance between protection, perceived budget, access and continued use of the building. Following is a simple summary of the prioritization in two levels, the first one is related to the Conservation policies/ recommendations, and the second level is related to the conservation interventions.

These prioritization's have been made to manage the future pressures facing the National Library, and indicate how the Conservation Principles should be applied to particular elements and spaces.

As new situations arise, these policies and recommendations should be revisited, new ones generated and superseded ones removed.

THERE ARE THREE TYPES OF CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES
Strategic opportunities identified; future consent required;

REFURBISHMENT AND ALTERATIONS
Specified changes to fabric; currently require listed building consent;

MAINTENANCE AND MANAGEMENT
No change to fabric; no listed building consent required;

In relation to the prioritization of the interventions the team has set a simple summary in three categories, red – urgent, yellow – desirable and green – future interventions as to the level and necessity of interventions required:

RED

Critical elements that must be addressed in this project.

- Moisture penetration from the roof, roof drainage, broken and loose vertical chase skylights.
- Moisture penetration from groundwater into the cellar and basement that house the book stacks include the rare books
- Vehicle access and control on site
- User safety on the fourth floor mezzanine level
- Toilet improvements throughout the library including drainage from the water closets, faucets and utility closets. This also includes new hot and cold water supply
- Testing of the fire suppression system in the cellar and basement book stacks
- Illumination levels, lighting – conservation and possible replacement with more energy efficient fixtures (LED)

YELLOW

Elements that are important but must be decided upon given the budget

- Limited removal of inappropriate recent interventions. Mainly on the fourth and fifth floors. But this also includes the American Corner.
- Disabled access from the parking into and within the building – this includes floor surface transitions
- Clean, sand, patch, seal and refinish the wood windows
- Securing access into the building from possible theft

GREEN

Elements that must be placed into a future project

- Didactic visitor signs, guides and instructions
- Conservation of the period appropriate clocks
- Conservation and reuse of the period appropriate furnishings
- Security cameras
- Improvement in the conservation labs

PRELIMINARY RECOMMENDATIONS

There are numerous preliminary recommendations that the team has shared based upon the condition assessment. The condition assessment made it possible to identify preliminary recommendations, in order to define the conservation philosophy and set the scope of the interventions. These following preliminary recommendations described bellow served as the basis for developing conservation policies and interventions described in the condition assessment, conservation & management chapter of the document.

ROOF – A new roof must be designed and installed. This includes installation of backup drainage systems, increased slope of the roofs, new drainage seals, additional insulation and control of water at scuppers. This requires additional investigations, planning and testing of materials. This new roof MUST BE INSTALLED BY A QUALIFIED CONTRACTOR with an acceptable track record of roof installations, insurance and a multi-year warranty.

GROUNDWATER – must be reduced from around the building. This could be accomplished through the installation of a network of shallow wells or pipes designed to pump the water from around the building before it reaches the exterior walls of the basement and cellar. INVESTIGATIONS INTO ELIMINATING THE GROUNDWATER MUST BE CONDUCTED. Reduce irrigation near the building, increase ventilation in the vertical shafts and space between walls.

FIRE ALARM and **DETECTION SYSTEMS** – must be tested and upgraded. This includes the fusible links in the basement stacks and all smoke detectors and alarms.

ILLUMINATION – luminaries and fixtures require replacement. There have been many technological advances recently in illumination for buildings. Namely this includes light emitting diodes or LED. These consume less energy, are small, come in a variety of colours and can easily be installed within the existing historic fixtures. For a building such as the library proper illumination is essential for study. Exterior illumination is necessary for safety.

DISABLED ACCESS – should be provided from the parking area to within the library. The disabled parking should be enforced and the path clearly marked and clear of obstacles including the construction of a new wheelchair ramp.

PLUMBING – toilets should be renovated. This should seek to retain all original finish materials as much as possible but including new hot water supply and drains. Designated toilets should be adapted for disabled use.

SECURITY – mechanical access doors must be locked and secured to prevent unwanted entry at the exterior and interior at all levels. This also includes the skylights at the roof.

APPEARANCE – clean and repoint the façade including aluminum framework. While not essential the library would benefit from a cleaning and detailed meter by meter inspection. This could be accomplished through low pressure water but must be tested beforehand.

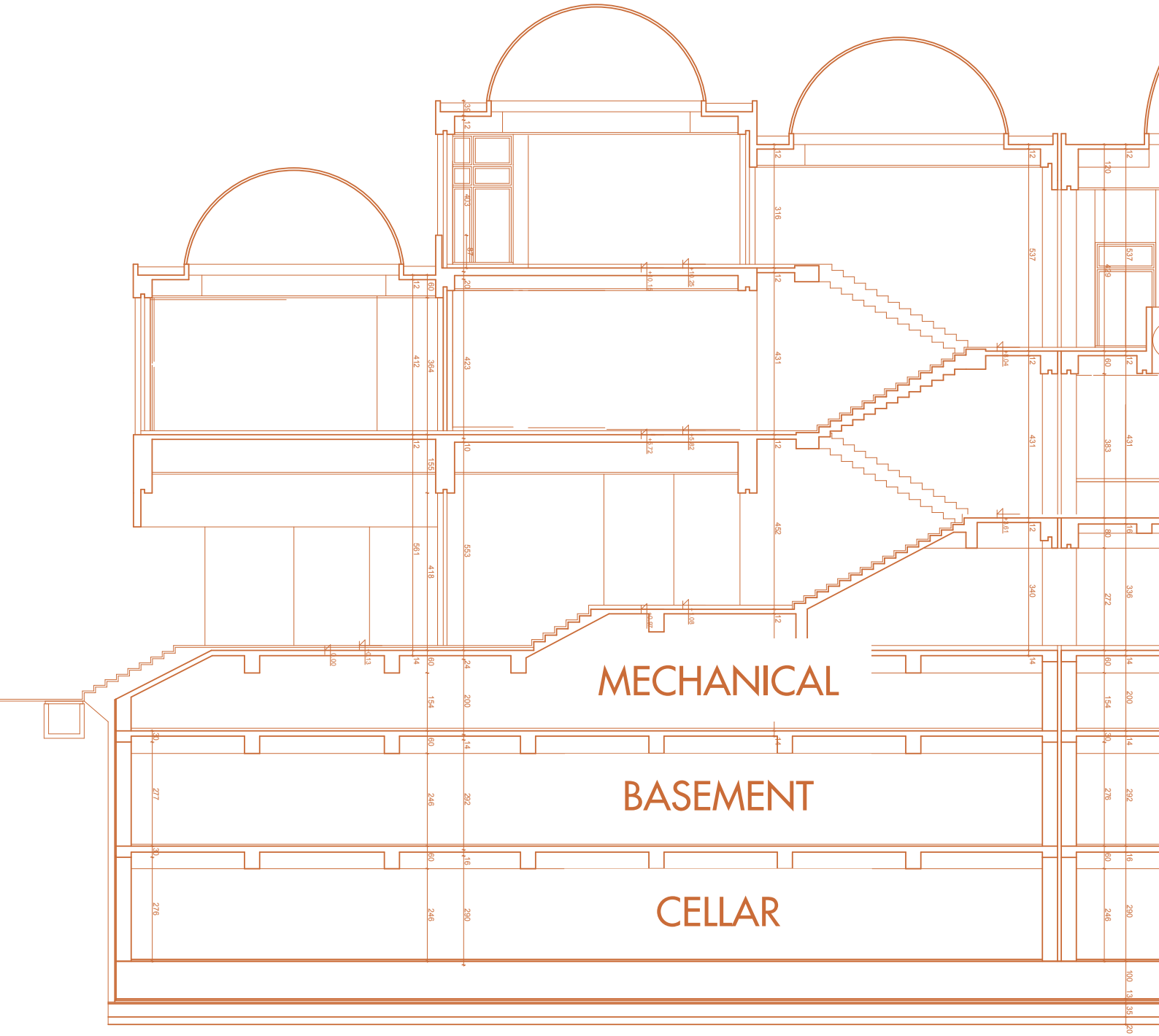
INAPPROPRIATE ADDITIONS – the additions at the fourth floor should be removed. Design guidance should be provided to any future changes to the American Corner.

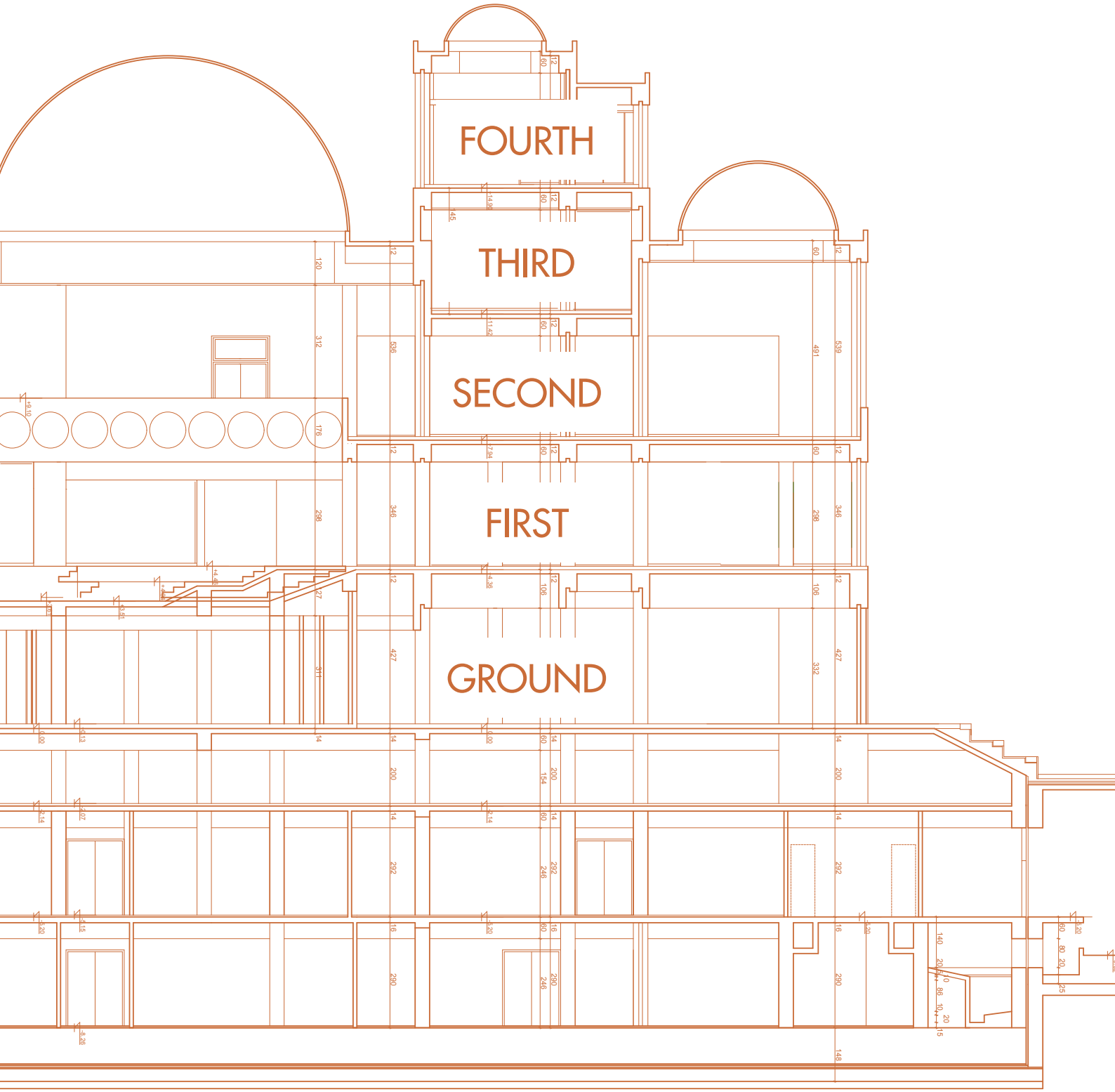
CONDITION ASSESSMENT, CONSERVATION & MANAGEMENT

This rapid condition assessment is the first step in a much larger more comprehensive project. The goal of this report was to quickly identify areas that required further more in-depth study. The second goal was to conduct a workshop and introduce young architects to the building, its values and condition assessment. The final goal was to begin to communicate with directors and decision makers about the condition of the library. Funding cycles are usually quite long and the team felt it necessary to be prepared should there be questions concerning intervention budgets.

This assessment was possible using two different methods: either by building system such as moisture protection or by physical spaces. The team chose to describe the condition using both because division by physical spaces allowed for a more efficient workshop and The participants also had the possibility of seeing all systems functioning or not functioning within a single space. It will also help decision makers and funders focus on particular spaces such as the reading rooms or offices. The first section below divides the library by spaces followed by building systems. The library was then investigated by building systems such as structural, mechanical and water protection. This second evaluation required more work but allowed the team to view and discuss different aspects of the building.

FLOOR BY FLOOR ASSESSMENT




FOURTH
THIRD
SECOND
FIRST
GROUND

CELLAR

This is the lowest occupied space in the library approximately 8 meters below the ground floor. It houses the book stacks and is accessed through a number of stairs. The book stacks are divided into separate rooms and separated by fire doors. There are general book stacks with a special locked room for rare books. The books are moved throughout the space by an overhead mechanical conveyor that transports book to a central space that houses a book dumbwaiter elevator.

Overall the cellar is clean, orderly and in fair condition. The most serious condition of the cellar is water infiltration through the concrete walls from below through the floor slab, from above and from the vertical mechanical/ventilation shafts. As this is the housing for books this is of serious concern. The moisture problems are more evident on the exterior walls of from 30cm to over 1.5 m in height. Moisture also infiltrates the cellar through the walls of the vertical shafts and through the slab of the floor below. It is suspected that the water infiltrates the concrete floor slab and moves horizontally until a seam in the concrete is reached and then drops down onto the book stacks below. The staff have installed plastic sheeting above the book stacks in an attempt to keep the books dry. In several places near the exterior walls and shafts there was standing water on the floor and this has resulted in oxidation of the base of the painted steel metal shelves. The staff have installed at the lowest point in one of the vertical shafts a sump pump. It was observed that in this shaft there is approximately 30 cm of standing water. The pump was automatically operated but this mechanism has failed and now it is activated manually. An additional concern is that in several locations the structural reinforcing steel has begun to oxidize and damage the concrete. This is limited but should be addressed.

FIGURE 26-38, 40

FIGURE 17 - Illustration of identified problems in the cellar

During investigations on site and a study of the original construction drawings there appears to be a double construction for the walls and floor of the lower levels. The intention was clear, to isolate the basement from groundwater. However this has failed. This could have failed for several reasons:

1. The gap was not constructed at all or not constructed properly.

2. The gap is too small

3. There are physical connections between the walls and floor are allowing water to flow through capillary action across this gap.

4. There is an overabundance of water and this gap is serving as a reservoir

5. There is condensation from water vapour within the gap on the inside wall

In investigations on site a vertical shaft was discovered at the entry with standing water in the bottom with a fairly new sump pump. It was explained that this is the water collected from around this gap between the walls and floor. The maintenance personnel explained they pump this water up and use it for irrigation of the lawn and shrubs surrounding the library. They stated that in the wetter months they can pump "from 8 in the morning until 8 at night" for 12 hours continuously without interruption. This in effect takes the ground water and puts it back into the ground possibly creating a cycle of adding water back into contact with the structure.

The second concern in the cellar is the fire suppression system. Through conversations with the librarians and building technicians it is known that this is no longer functioning. This includes the C02 gas system, fusible links to close the doors and fire/smoke alarms.

The Rare Book room is kept locked and contains the rare books. It is in better condition than the other rooms containing the book stacks but still vulnerable. While locked entry is possible via the mechanical book conveyor system that enters the room at the ceiling level.

Document changes via infrared camera system to monitor any interventions to determine if they are preventing water from entering the structure.

Dewatering systems could include excavating around the entire building and installation of an external drainage system but this could be cost prohibitive. Horizontal dewatering systems could be a possibility. The library is not adjacent to any other structures therefore equipment access, permissions and available space would not be an issue. This brings up a number of question including: What type of system? Horizontal or a series of shallow wells? Costs? And what is the effectiveness? Given these questions it seems appropriate to conduct additional investigations into the exact nature and makeup of the soil, if there are companies in the region experienced to carry out this work and the time to observe the effectiveness. This could also be combined with proper sealing of all openings at the roof, doors and other areas where water enters directly into the basement. In addition the landscaping around the library could be altered at the surface with swales, channels and other means to reduce water from around the building before it enters the ground.

CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- The fire suppression system should be altered, with a compatible system to the existing one, enabling minimum interventions in the ceiling and walls of the cellar.

REFURBISHMENT AND ALTERATIONS

- The floor of the cellar should be refurbished, using the same material and color range.
- The stack shelves to be refurbished, especially the lower part due to the steel oxidation from the water penetration.
- Walls should be repaired in the parts and areas effected by raising dump. Cracks and pulverized surfaces to be cleaned and patched with the cement mortar.
- Coating of the walls and ceilings to be done with eco emulsion paint, with a color range fitting to the existing ones.

MAINTENANCE AND MANAGEMENT

- Periodical checking of vertical ventilation shafts for the collection of standing water.
- Automatic sump pump to be tested and maintained periodically.
- Document changes via infrared camera system to monitor any interventions to determine the effectiveness of preventing water from entering the structure.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Eliminate water infiltration into the lower levels. This conservation measurement is consisted of several actions to be implemented:
  - Dewatering systems need to be deployed around the site to reduce the ground water infiltration into the cellar. It's a less expensive option than excavating and re-water proofing the exterior cellar and basement walls. The system includes building the series of expansion wells/ mechanical shafts that collect the water, especially in the Eastern part of the building. This dewatering system could include sump pumps and shafts inside the vertical mechanical shafts.
  - Seal the plaza level as the lower levels protrude beyond the perimeter of the structure. Investigate sealing products and repoint all pavers.
  - Reduce irrigation near the building as this removes water from the subsurface but then only adds it back.
  - Investigate ventilation within the wall gaps.
- Close all shaft skylights at the roof and exterior plaza level as rainwater is directly entering from the roof above.
- Check all plumbing connections for leaks – repair and maintain.
- Install new light bulbs, energy efficient options such as LED.
- Check and update fire suppression system including all fire/ smoke alarms and fusible links to automatically close the fire doors. Service all fire doors.
- Secure rare book room from ingress via the mechanical book conveyor.
- Close and lock all access points to the vertical shafts above in the public areas and outside spaces.

YELLOW

Elements that are important but must be decided upon given the budget;

- Improve air circulation via vertical air shafts. Investigations should be carried out to install exhaust fans to improve circulation and evaporation of the cellar and basement levels. There is one air shaft that vents the kitchen at the ground floor level and this shaft contains little moisture.

GREEN

Elements that must be placed into a future project;

Document changes via infrared camera system to monitor any interventions to determine if they are preventing water from entering the structure.

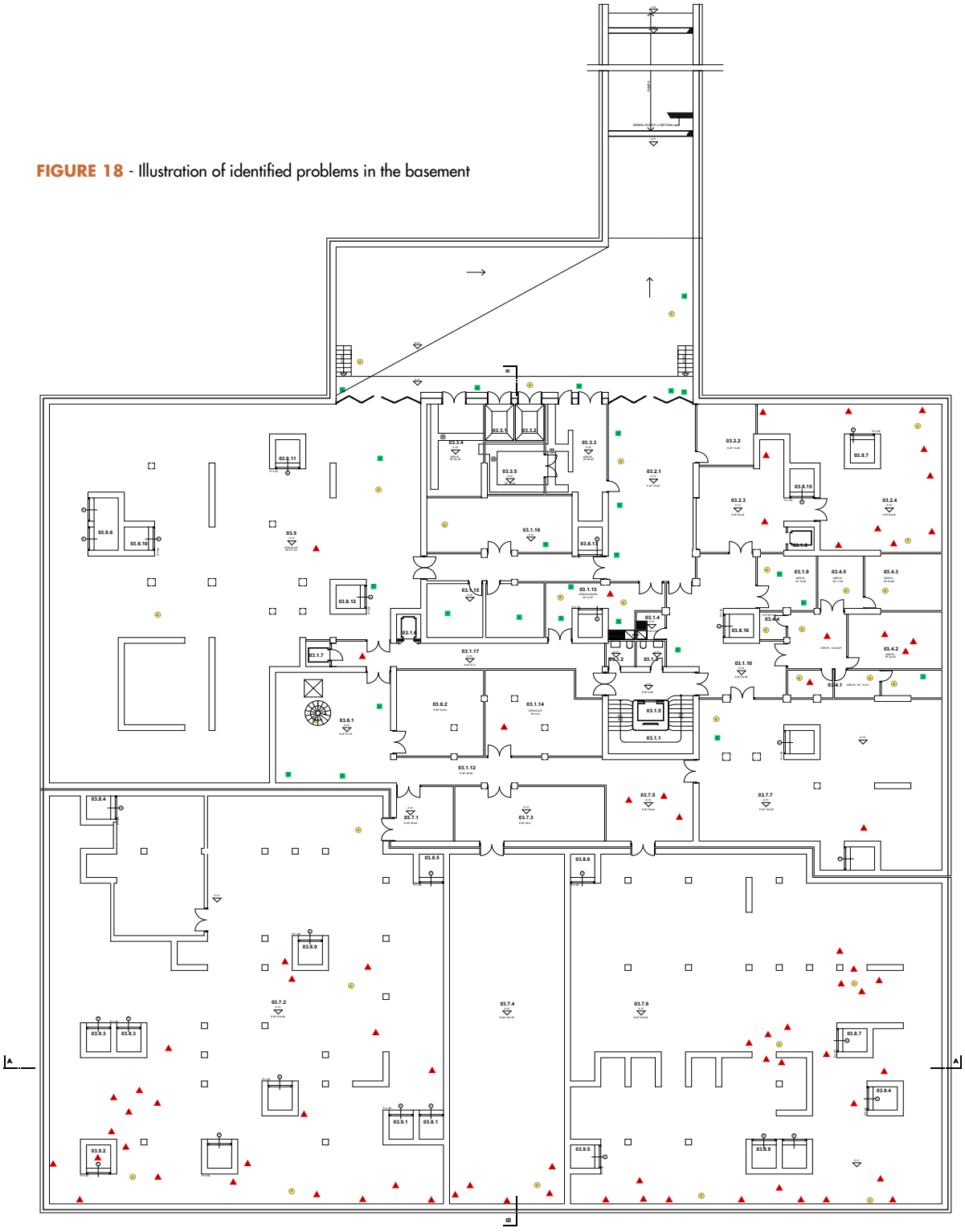
BASEMENT

The basement level just above the cellar serves the same purpose as the cellar. In addition houses some book and periodicals as well as the mechanical heating, ventilation and air conditioning systems, emergency generator, condenser for the building. It also houses general storage spaces, technician offices and other less used spaces. The area that contains the air handling systems is fairly clean and new equipment has been recently installed. The new equipment includes 2 new air handling units and a new air conditioning compressor. The area was largely asbestos free due to these new installations (see section on mechanical). There is a loading dock access for vehicles that includes a ramp.

The basement level has similar concerns as the cellar below. That of water infiltration through the exterior walls as well as vertical shafts. Every penetration of the wall below the ground level shows signs of water infiltration. The loading dock ramp has 2 channel drains at the top of the ramp but these are susceptible to being blocked. It appears that a new channel was added after the original demonstrating that this is a weak point for water entry into the basement. There are 6 horizontal ventilation openings underneath the new air conditioning compressor. There are horizontal protection from fall grates but these are somewhat weak.

FIGURE 39, 41

FIGURE 18 - Illustration of identified problems in the basement



CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- The fire suppression system should be altered, with a compatible system to the existing one, enabling minimum interventions in the ceiling of the cellar.

REFURBISHMENT AND ALTERATIONS

- The floor of the basement should be refurbished, using the same material and color range.
- The stack shelves to be refurbished, especially the lower part due to the steel oxidation from the water penetration.
- Walls should be repaired in the parts and areas effected by raising dump. Cracks and pulverized surfaces to be cleaned and patched with the cement mortar.
- Coating of the walls and ceilings to be done with eco emulsion paint, with a color range fitting to the existing ones.

MAINTENANCE AND MANAGEMENT

- Periodical checking of the equipment related to the electrical power/generator, air handling units and air conditioning compressor.
- Storage of the historic/authentic furniture in proper way, classification according to the types for future refurbishment and usage.
- Document changes via infrared camera system to monitor any interventions to determine the effectiveness of preventing water from entering the structure.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Investigate site dewatering systems and improved drainage as per cellar. Measurements same to the cellar level. Seal all possible openings to prevent water infiltration.
- Clean storage spaces of excess debris.
- Secure horizontal barriers above the new air conditioning compressor. This could be an entry point into the library.
- Clean debris in loading dock area.
- Secure horizontal openings for ventilation.
- Check functionality of the emergency generator. Ensure there is sufficient diesel for 2-3 hours. Service and create a maintenance schedule.
- Store historic furniture properly.

YELLOW

Elements that are important but must be decided upon given the budget;

- Improve air circulation via vertical airshafts. Investigations should be carried out to install exhaust fans to improve circulation and evaporation of the cellar and basement levels.

GREEN

Elements that must be placed into a future project;

- Document changes via infrared camera system to monitor any interventions to determine if they are preventing water from entering the structure.

MECHANICAL

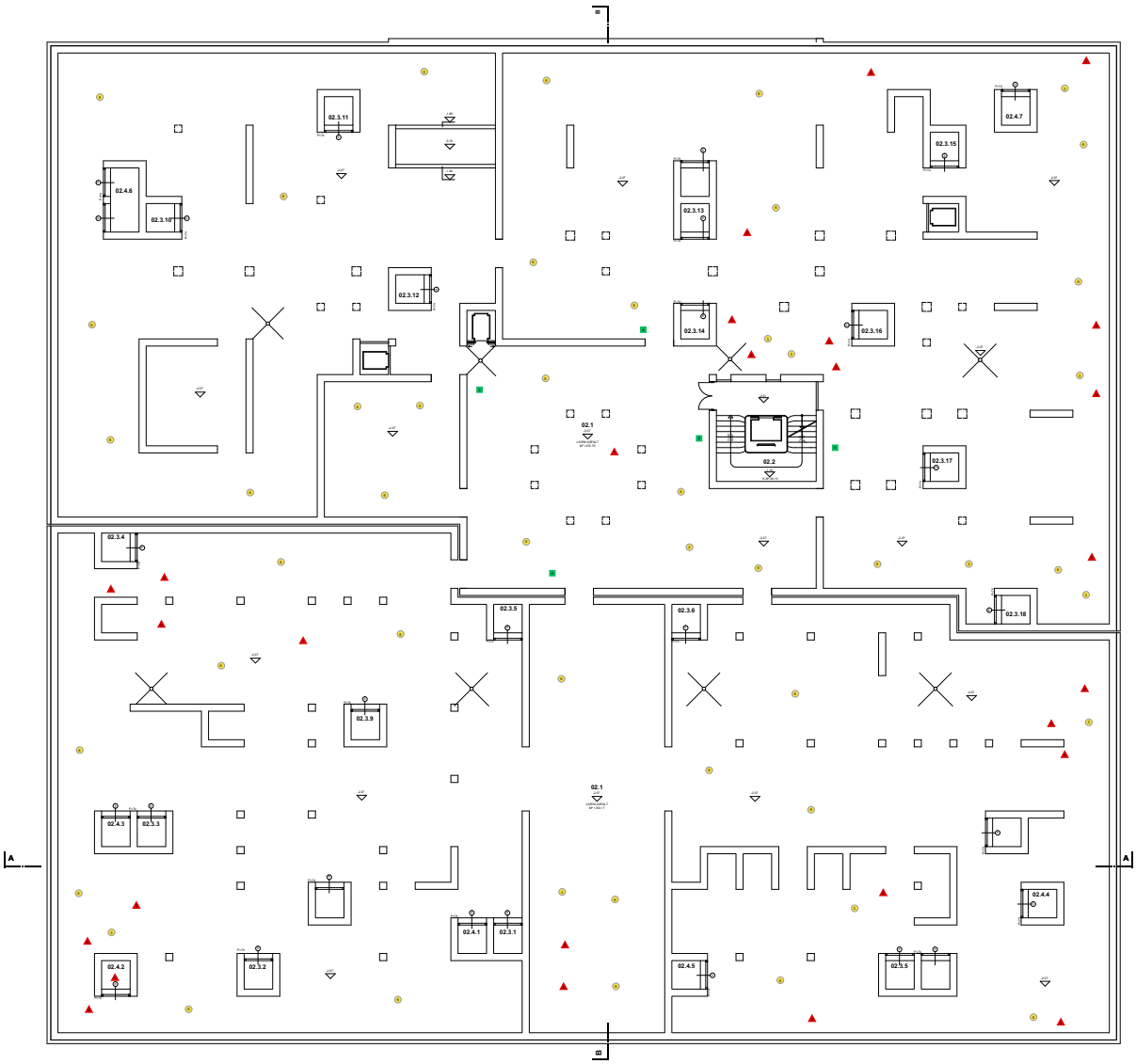
The mechanical floor is situated between the basement and main ground floors and provides ample space for the forced air ducts for heating and cooling, plumbing and electrical services. It is accessed via the stairwell that services the administration portion of the building as well as through several trapdoor access points from below.

In general there are no serious issues with this floor as it is not for public access. However several issues must be mentioned. Like the floors below there is water infiltration through the exterior walls and slaps. However, this space is also under exterior spaces on of the main areas (plinth) outside – so there is water infiltration also from the floor slab above. There are many corners and this water percolates through the slab below. While this is in smaller quantities than in the cellar walls nevertheless it is a source of water entering the building. The floor of the plinth while protected from the cantilevers of the building above still receives sufficient rain water driven by wind and the slope of the floor is negligible. The other sources of water infiltration come from the exterior walls and vertical shafts but also from the leaking plumbing of the toilets above. There are recent plumbing connections and the past leakage has oxidized the steel reinforcing rebar below the floors of the toilets. In addition a number of these plumbing connections are inadequate and show signs of leakage.

The light system has failed and this has reduced the ability to regularly inspect the floor and the mechanical systems. The vertical access openings are in poor condition with only one in good condition because others are obstructed by recent additions to the ventilation ducts. In addition this floor is not secured and the access points are open.

FIGURE 42-47, 51

FIGURE 19 - Illustration of identified problems in the mechanical floor



CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- Alteration of the plumbing system, in accordance with the existing one. The possible change of the material from casted iron to PVC fixtures.
- Install new industrial light system with sufficient illumination.

REFURBISHMENT AND ALTERATIONS

- Patching the concrete in the ceiling of the mechanical floors, in the areas affected by the leakage of the water from the poor plumbing fixtures, expansion joint of the floors and intersection between floor slabs and exterior walls.

MAINTENANCE AND MANAGEMENT

- Periodical checking of the plumbing and electrical system.
- Periodical checking of the air ducts of heating and cooling system.
- Periodical checking and cleaning of rain gutters at the plaza level that receives sufficient rainwater driven by wind and the slope of the floor.
- Document changes via infrared camera system to monitor any interventions to determine the effectiveness of preventing water from entering the structure.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Seal the expansion joint at the mechanical floor to prevent the water infiltration.
- Check all plumbing connections for leaks and install new plumbing connections in order to prevent water leaking from the toilets at the level above.
- Access doors and panels must be serviced and kept locked. To be used only by authorized personnel.
- Verify the floor slabs underneath the toilets to determine structurally sufficiency, remove oxidation, paint with anti-oxidation paint and patch the concrete at these points.
- Investigate and test coatings on the plaza level to block water infiltration from above. This must also include repointing of all the paving stones.

YELLOW

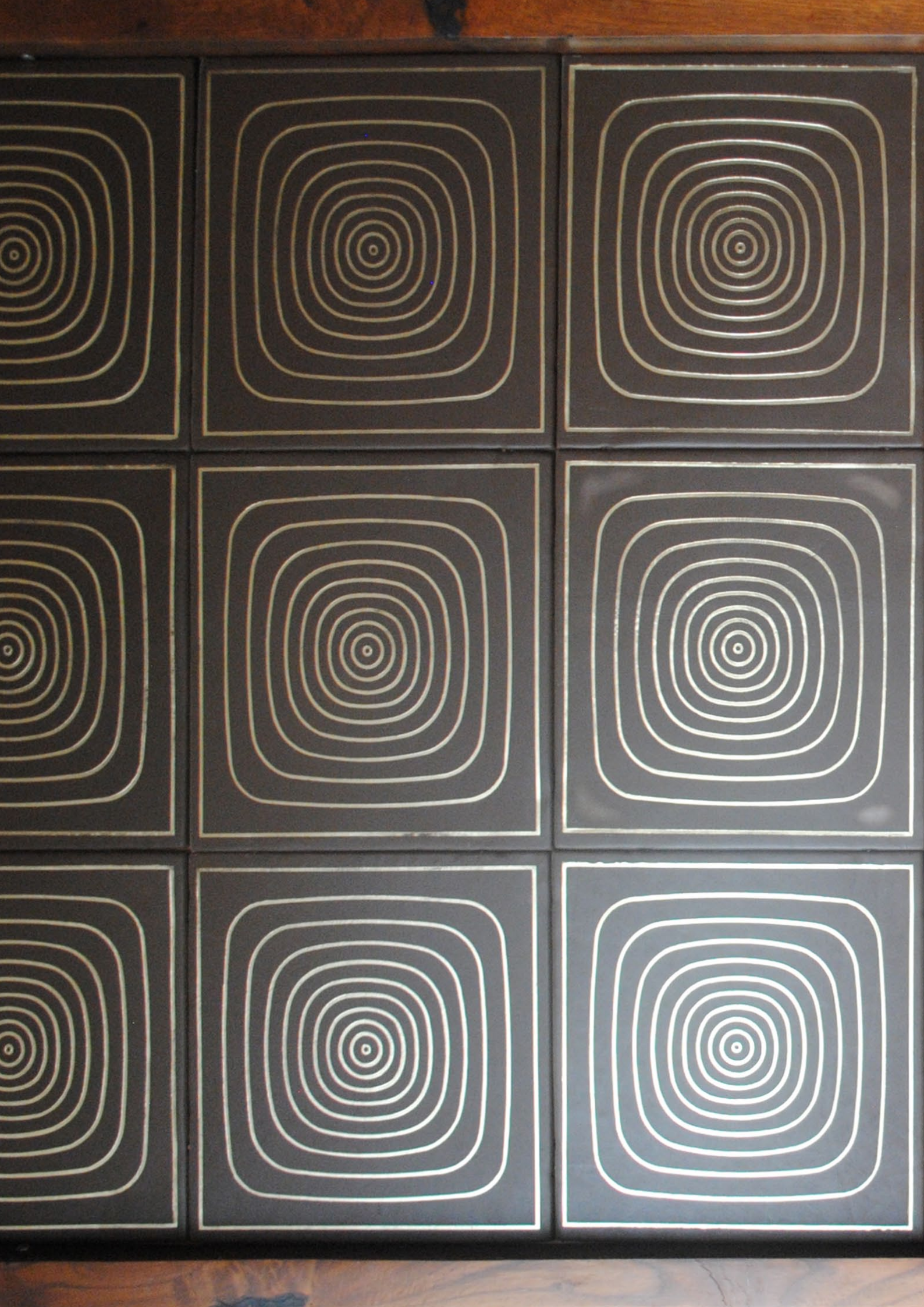
Elements that are important but must be decided upon given the budget;

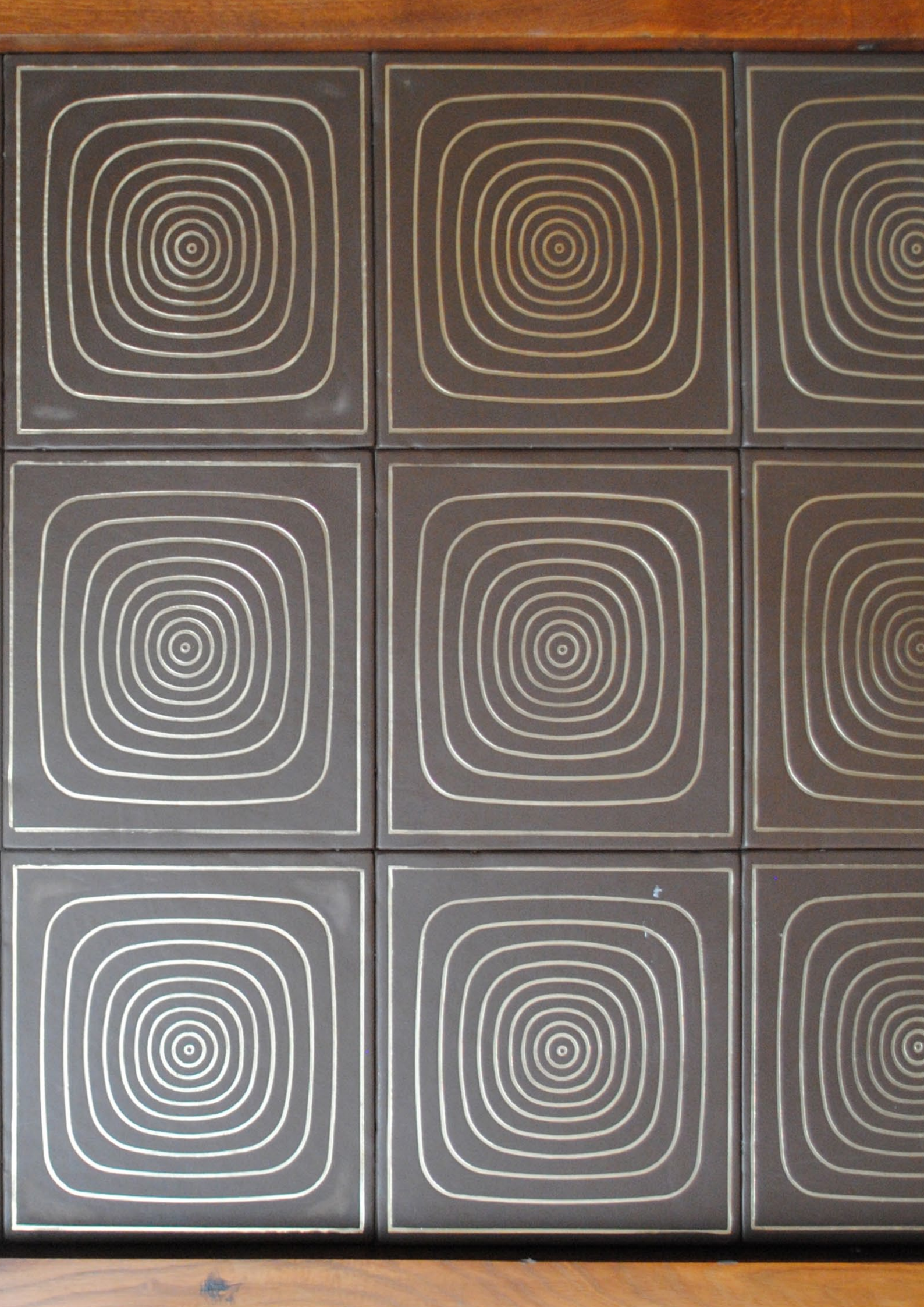
- Install new light system to properly inspect the mechanical, plumbing and electrical systems. This would make it easier to search and address potential problems. Additional light bulbs are necessary to provide sufficient illumination and must be industrial to prevent the eventually damages.

GREEN

Elements that must be placed into a future project;

- Document changes via infrared camera system to monitor any interventions to determine if they are preventing water from entering the structure.





GROUND FLOOR

The ground floor is the entry and service floor located under the main first floor. It contains the kitchen and dining room, the bar or café, toilets, offices, conservation labs and book binding room. It is accessed by descending from the first floor.

In general it is in good condition but there are issues. The finishes are worn and need replacement with sympatric or original materials. This includes the carpet, tile repairs and painting. It also includes replacement of the light bulbs as per the rest of the building. The conservation labs do not have ultraviolet rated glass and this has been stated as a problem.
Several windows are broken and should be replaced. The café bar has used inappropriate materials and illumination.

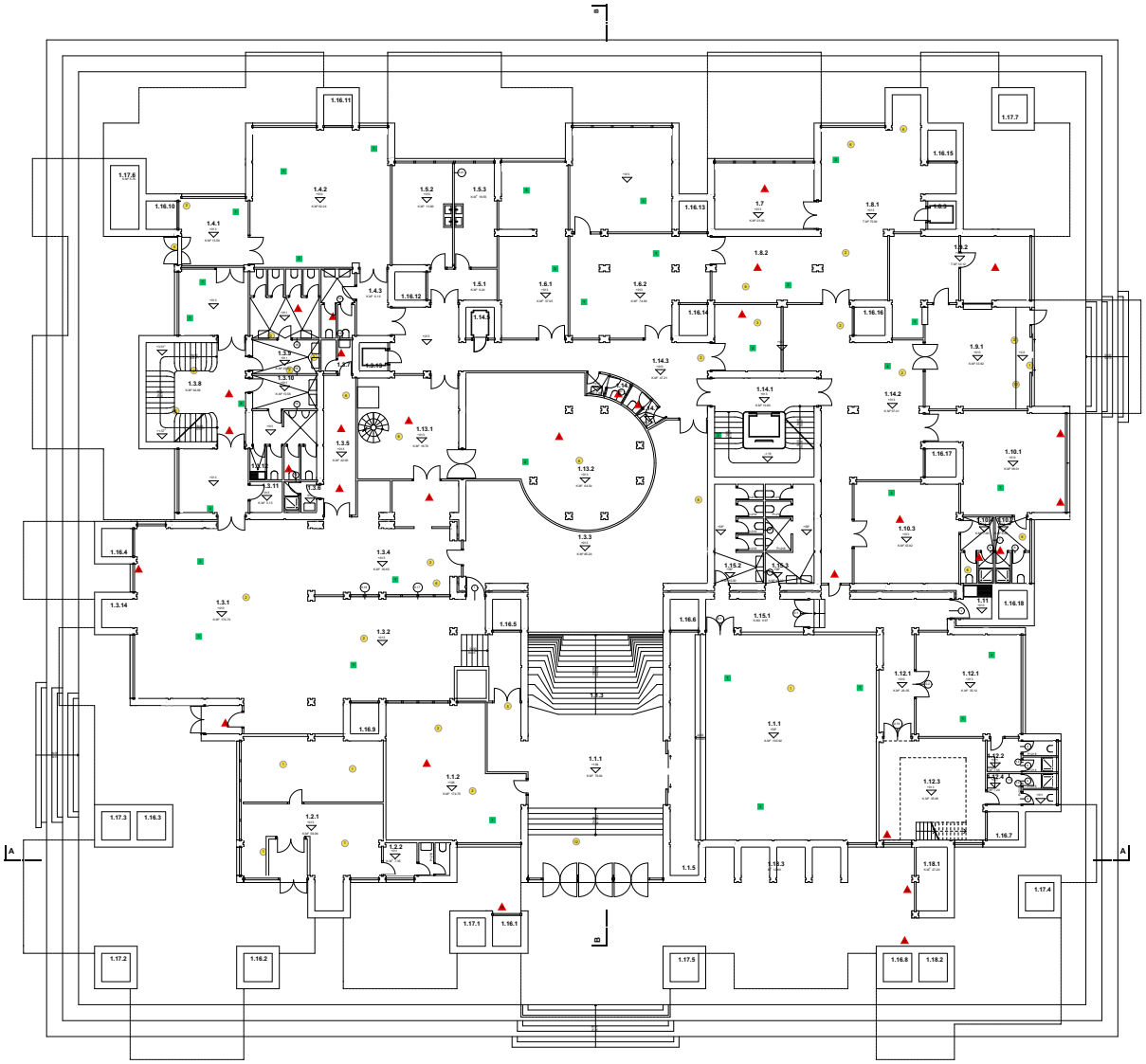
The most serious issue is the inappropriate intervention in the "American Corner." This is one office suite in the southwest corner of the library that has been upgraded with materials, doors and finishes not appropriate to the building. Through interviews it is understood there will be additional changes to this office suite.

ELEVATORS

Currently only one elevator is functioning in the building. The mechanical and electronic control systems were changed approximately 5-8 years ago and this elevator functions well. However the other elevator has not functioned for many years. The book elevator seems to be functioning and in use.

FIGURE 48, 50, 53

FIGURE 20 - Illustration of identified problems in the ground floor



CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- The changes in the interior design by the American Corner needs to be addressed, any project or changes has to be inline with keeping original materials and design motif of the library.
- The café bar interior design needs to be changed inline with keeping original materials and design motif of the library.
- Toilets need to be altered with new plumbing system and fixtures, keeping as much as of the original tiles and elements. The replacement of the elements should be compatible with existing materials inline with the design motif of the library.

REFURBISHMENT AND ALTERATIONS

- The finishes are worn and need replacement with sympatric or original materials. This includes the carpet, tile repairs and painting.
- The light system should be replaced in accordance to the usage of the spaces and efficient consumption of the electrical power. The finishes should be produced and installed from original materials and design motif of the library.

MAINTENANCE AND MANAGEMENT

- Periodical checking of the plumbing, electrical and light system.
- Periodical checking of the air ducts of heating and cooling system.
- Proper maintenance of the public toilets.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Select appropriate finishes and replace and repair. Paint.
- TOILETS new plumbing and repair finishes.
- Replacement of the light bulbs as per the rest of the building.
- Upgrade and replace all electrical connections.
- Replace broken glass.
- Clean the graffiti's in exterior walls.
- Consult the Ministry of Culture to any changes to the American Corner. Ensure that any project or changes is in keeping with the original materials and design motif of the library.

YELLOW

Elements that are important but must be decided upon given the budget;

- Upgrade the kitchen equipment.
- Upgrade the conservation labs including new equipment and UV rated glass.

GREEN

Elements that must be placed into a future project;

- Develop a budget and recommendations for placing this elevator back in use.
- Upgrade the conservation labs including new equipment and UV rated glass.

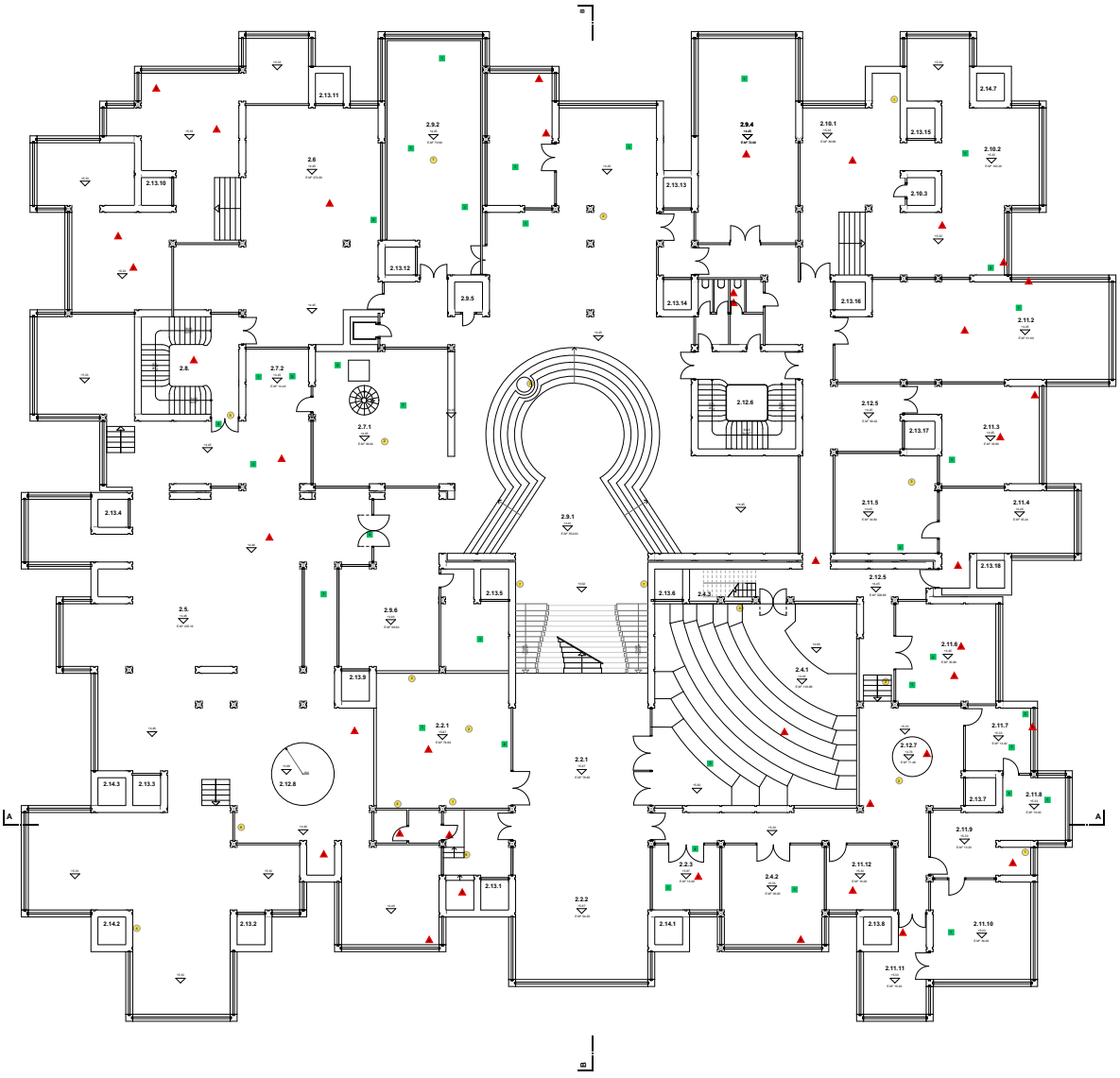
FIRST FLOOR

The first floor is the main entry, circulation and gathering space of the library. It also houses the library reference desk, offices and main reading rooms. This is the most dramatic space of the library and offers visitors an inspiriting two story entry under the main dome. Radiating out from the entry and rotunda the circulation is both horizontal and vertical. Off the main space are the library reference desks, card catalogues, meeting and reading rooms. It is known as the first floor because to enter the building one must mount a series of stairs. To descend to the ground floor auxiliary stairs must be used.

Overall it is in very good condition even with heavy use. The decorative stone is in very good condition with minor chips and breaks of normal wear. The entry doors are in good condition although only one is ever opened. The ceiling and other finishes are also in good condition given their heavy use. Three issues stand out on the ground floor. The other issue, common throughout the building, is the illumination.

FIGURE 49, 52, 54-56

FIGURE 21 - Illustration of identified problems in the first floor



CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- N/A

REFURBISHMENT AND ALTERATIONS

- The light system should be replaced in accordance to the usage of the spaces and efficient consumption of the electrical power. The finishes should be produced and installed based on the original materials and design motif of the library.
- Electrical system needs to be upgraded accordingly to the usage of contemporary equipment by the users. The finishes should be produced and installed based on the original materials and design motif of the library.
- Refurbishment of the damaged original furniture. All reparations to be done accordingly with original materials and design motif of the library.

MAINTENANCE AND MANAGEMENT

- Periodical checking of the authentic furnishing, especially in the areas with the public usage.
- Periodical checking of the plumbing, electrical and light system.
- Periodical checking of the air ducts of heating and cooling system.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Increase light levels in the reading and study rooms. They are currently inadequate for users.
- Install new electrical fixtures for using contemporary electrical equipment by users.
- Lock and secure all mechanical vertical shaft access doors. Remove the asbestos panels inside these doors.
- Select appropriate finishes and replace and repair. Paint.
- Upgrade and replace all electrical connections

Upgrade the conservation labs including new equipment and UV rated glass

YELLOW

Elements that are important but must be decided upon given the budget;

- Redo the new inappropriate openings introduced in the windows. Current built is from PVC, while the new openings should be reproduced from pine wood, with the dimensions and detailing provided by the current conservation plan.

GREEN

Elements that must be placed into a future project;

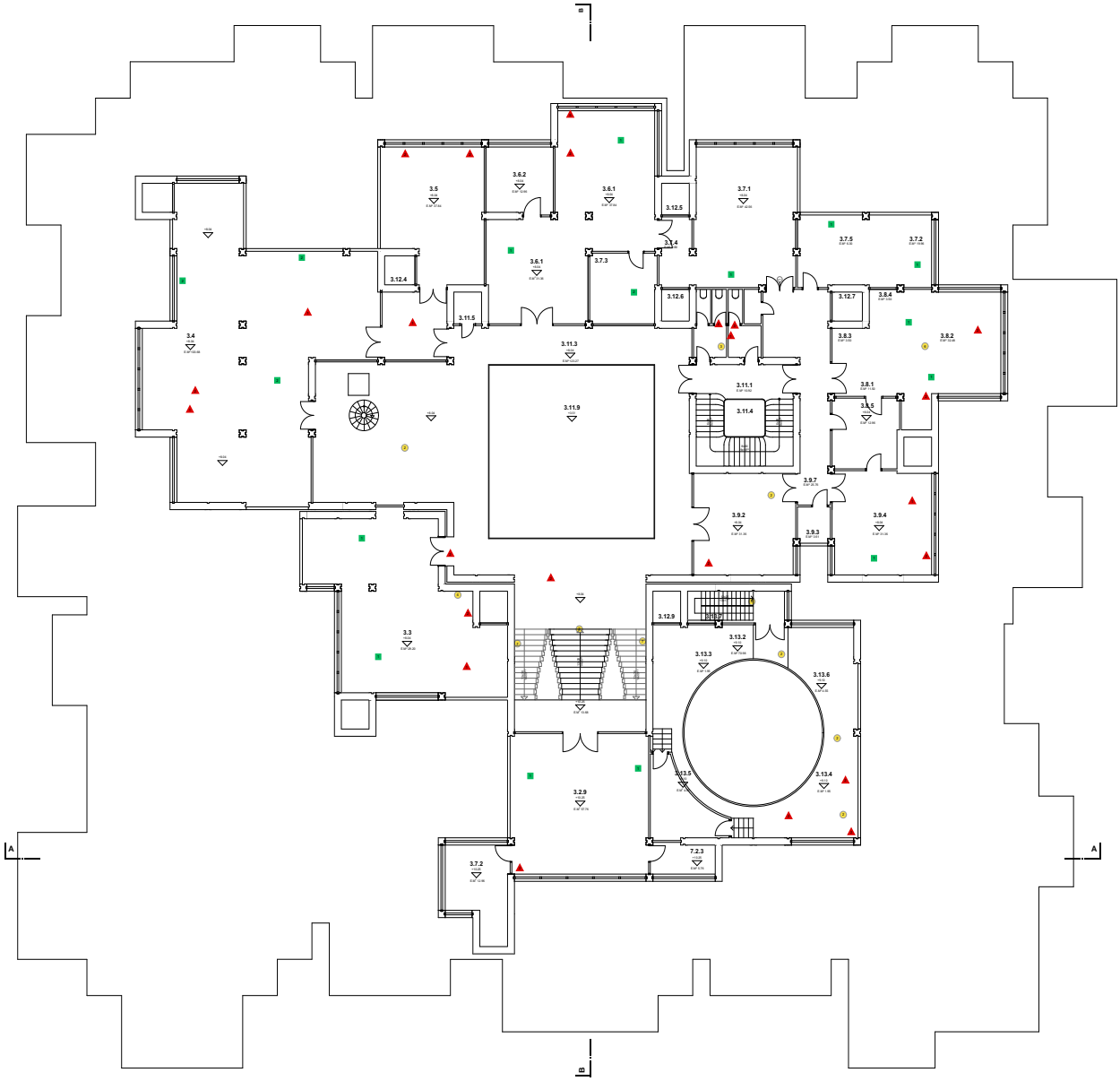
- Upgrade the conservation labs including new equipment and UV rated glass.

SECOND FLOOR

The second floor houses meeting rooms, offices and small reading rooms. It has two dramatic balconies one that is open to the public that looks into the main atrium and another that is closed to the public over the main auditorium. Overall the second floor is in good condition in the public spaces. The balcony that is above the main auditorium is closed to the public and has serious water infiltration issues.

FIGURE 57

FIGURE 22 - Illustration of identified problems in the second floor



CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- N/A

REFURBISHMENT AND ALTERATIONS

- The light system should be replaced in accordance to the usage of the spaces and efficient consumption of the electrical power. The finishes should be produced and installed based on the original materials and design motif of the library.
- Electrical system needs to be upgraded accordingly to the usage of contemporary equipment by the users. The finishes should be produced and installed based on the original materials and design motif of the library.
- Refurbishment of the damaged original furniture. All reparations to be done accordingly with original materials and design motif of the library.

MAINTENANCE AND MANAGEMENT

- Periodical checking of the authentic furnishing, especially in the areas with the public usage.
- Periodical checking of the plumbing, electrical and light system.
- Periodical checking of the air ducts of heating and cooling system.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Increase light levels in the reading and study rooms. They are currently inadequate for users.
- Install new electrical fixtures for using contemporary electrical equipment by users.
- Lock and secure all mechanical vertical shaft access doors. Remove the asbestos panels inside these doors.
- Select appropriate finishes and replace and repair. Paint.
- Upgrade and replace all electrical connections

Upgrade the conservation labs including new equipment and UV rated glass

YELLOW

Elements that are important but must be decided upon given the budget;

- Redo the new inappropriate openings introduced in the windows. Current built is from PVC, while the new openings should be reproduced from pine wood, with the dimensions and detailing provided by the current conservation plan.

GREEN

Elements that must be placed into a future project;

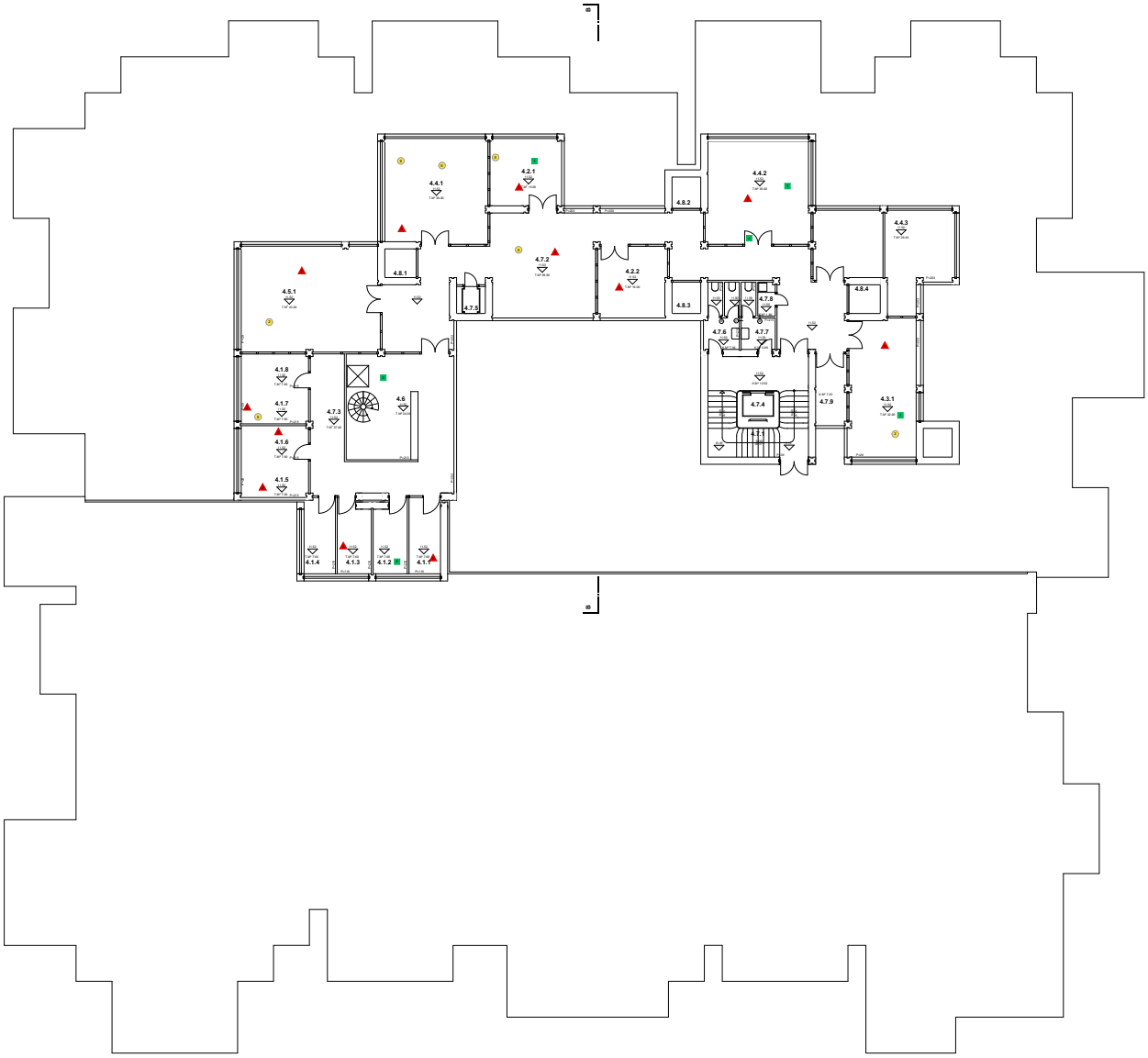
- Upgrade the conservation labs including new equipment and UV rated glass.

THIRD FLOOR

The third floor largely houses private offices of the library staff and reading rooms. The finishes and furnishings are largely intact. The main issues are the infiltration of water from the roof and roof drainage system. Other issues include lighting.

FIGURE 58-59

FIGURE 23 - Illustration of identified problems in the third floor



CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- Place the balcony into use. This could be a very dramatic space to view lectures or presentations. It should be open to the public. The furniture placed can be contemporary design influenced by the design motif of the library.

REFURBISHMENT AND ALTERATIONS

- The light system should be replaced in accordance to the usage of the spaces and efficient consumption of the electrical power. The finishes should be produced and installed based on the original materials and design motif of the library.
- Electrical system needs to be upgraded accordingly to the usage of contemporary equipment by the users. The finishes should be produced and installed based on the original materials and design motif of the library.
- Refurbishment of the damaged original furniture. All reparations to be done accordingly with original materials and design motif of the library.

MAINTENANCE AND MANAGEMENT

- Periodical checking of the authentic furnishing, especially in the areas with the public usage.
- Periodical checking of the domes, its joints and construction.
- Periodical checking of the plumbing, electrical and light system.
- Periodical checking of the air ducts of heating and cooling system.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Repair the roof to prevent future leakage in this area.
- Repair the damage to the ceiling, walls and floors of the balcony above the main auditorium.
- Change the furniture in the small auditorium. Reproduce the chairs according to the authentic design.

YELLOW

Elements that are important but must be decided upon given the budget;

- Change the carpet in the small auditorium. It is past its lifetime and inappropriate to the design motif.
- Redo the new inappropriate openings introduced in the windows. Current built is from PVC, while the new openings should be reproduced from pine wood, with the dimensions and detailing provided by the current conservation plan.

GREEN

Elements that must be placed into a future project;

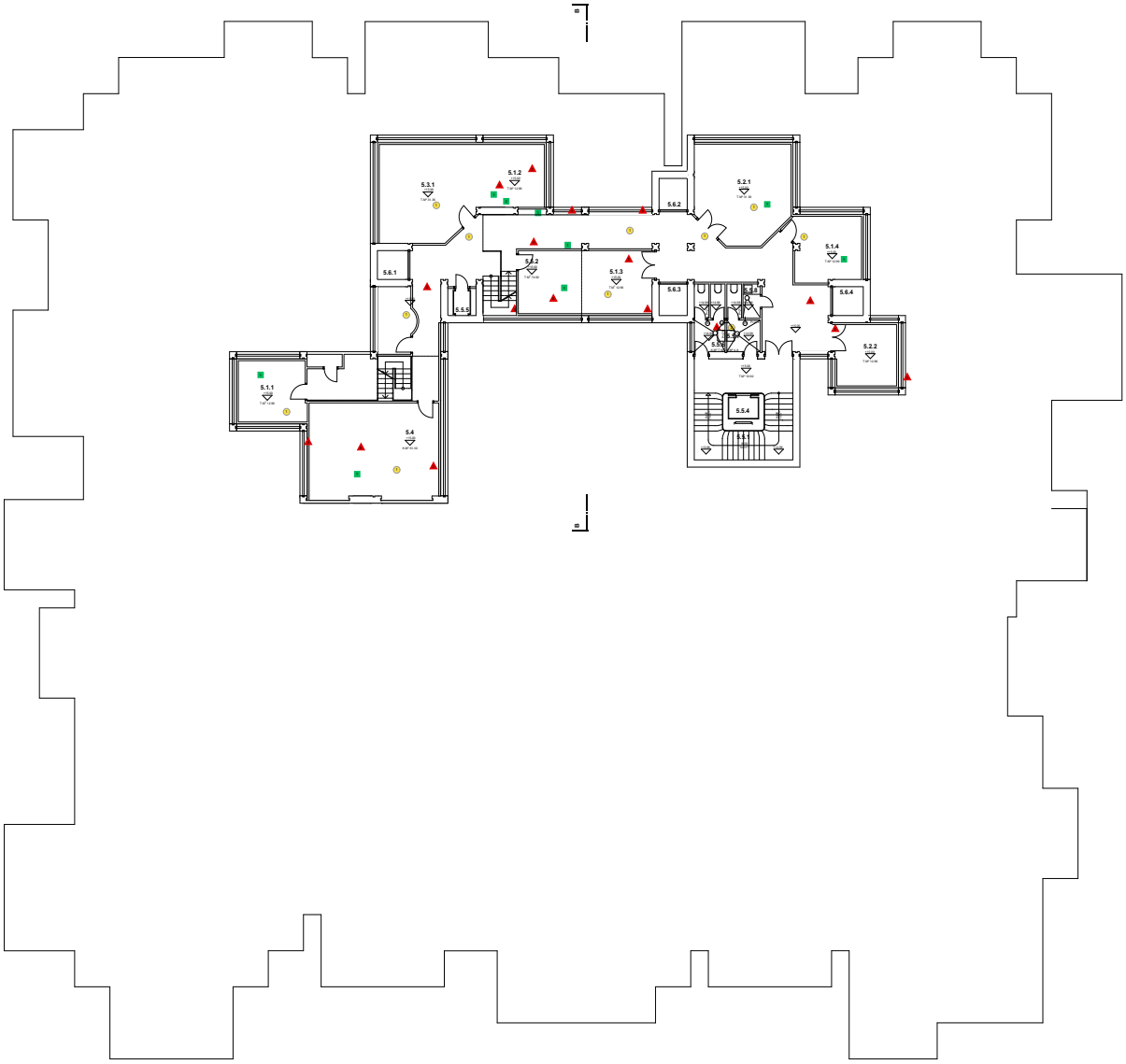
- Place the balcony into use. This could be a very dramatic space to view lectures or presentations. It should be open to the public.

FOURTH FLOOR

The fourth floor is similar to the third floor in that it has a smaller footprint and is mainly for administrative offices. However the fourth floor has been significantly altered. This space of the building was leased out to a private company that then executed significant changes. This new construction inside the fourth floor created two mezzanine levels within two domes that have dangerous insufficient guardrails. Overall these changes have altered the space and detracted from the original intent of the architect. These alterations are largely reversible and block many window. Beside these alterations the other main issues are significant water infiltration from the roof, roof drainage system and broken windows and deteriorated window frames/seals.

FIGURE 60-65, 67

FIGURE 24 - Illustration of identified problems in the forth floor



CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- A private company that rented the space for administrative offices has significantly altered the fourth floor. This space of the building was leased out to a private company that then executed significant changes. New construction is introduced inside the fourth floor creating two mezzanine levels within two domes that have dangerous insufficient guardrails. These changes have altered the space and detracted from the original intent of the architect.
- Alterations are largely reversible, therefore additions can be removed and the space can be turned into its initial stage, according to the original drawings, and still leased to the companies for office space in order to get revenues for maintenance of the building.

REFURBISHMENT AND ALTERATIONS

- Remove reversible alterations, complete the interior with the reproduction of the missing elements;
- The light system should be replaced in accordance to the usage of the spaces and efficient consumption of the electrical power. The finishes should be produced and installed based on the original materials and design motif of the library.
- Electrical system needs to be upgraded accordingly to the usage of contemporary equipment by the users. The finishes should be produced and installed based on the original materials and design motif of the library.

MAINTENANCE AND MANAGEMENT

- Periodical checking of the domes, its joints and construction.
- Periodical checking of the plumbing, electrical and light system.
- Periodical checking of the air ducts of heating and cooling system.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Immediately block access to the mezzanine levels or erect barriers on the guardrails and stairs to prevent falls.
- Block access to the mechanical areas of the building such as the elevator equipment room above the elevator. This is currently open and can be accessed.
- Repair the roof to prevent future leakage in this area.
- Repair the damage to the ceiling, walls and floors damaged by water leaks.

YELLOW

Elements that are important but must be decided upon given the budget;

- Reproduce the missing interior elements according to the authentic design.
- Reproduce lighting fixtures according to the authentic design.
- Redo the new inappropriate openings introduced in the windows. Current built is from PVC, while the new openings should be reproduced from pine wood, with the dimensions and detailing provided by the current conservation plan.

GREEN

Elements that must be placed into a future project;
Reproduce the furniture according to the authentic design.

ROOF

Given the complex architectural forms and design motif of numerous domes over individual cubes the roof is one of the most complex areas of the building. It is also the source of the biggest problems for the library. Each cube roof must be individually drained. This is accomplished in two ways. 1) The higher roof drains via a scupper to a lower roof and 2) the lower roofs are drained into approximately 65 vertical drains. These drains bring water into the building which is then discharged via the mechanical level into the city storm drain system. The condition of the roof is very poor. While there has been continuous maintenance and membrane patches with some new flashing the water infiltration remains a serious problem. The skylights with their plastic and aluminum frames were completely replaced approximately 10 years ago so the problem lies mainly with the flat built-up bitumen membrane roof and flashing. There are numerous problems with this roof system. Each of these is a potential source of significant water infiltration.

1. The dividing walls between the cubes must each have individual flashing and coping

2. Each of the 99 skylights requires its own curb and flashing

3. Many scuppers drop water uncontrolled onto vulnerable areas.

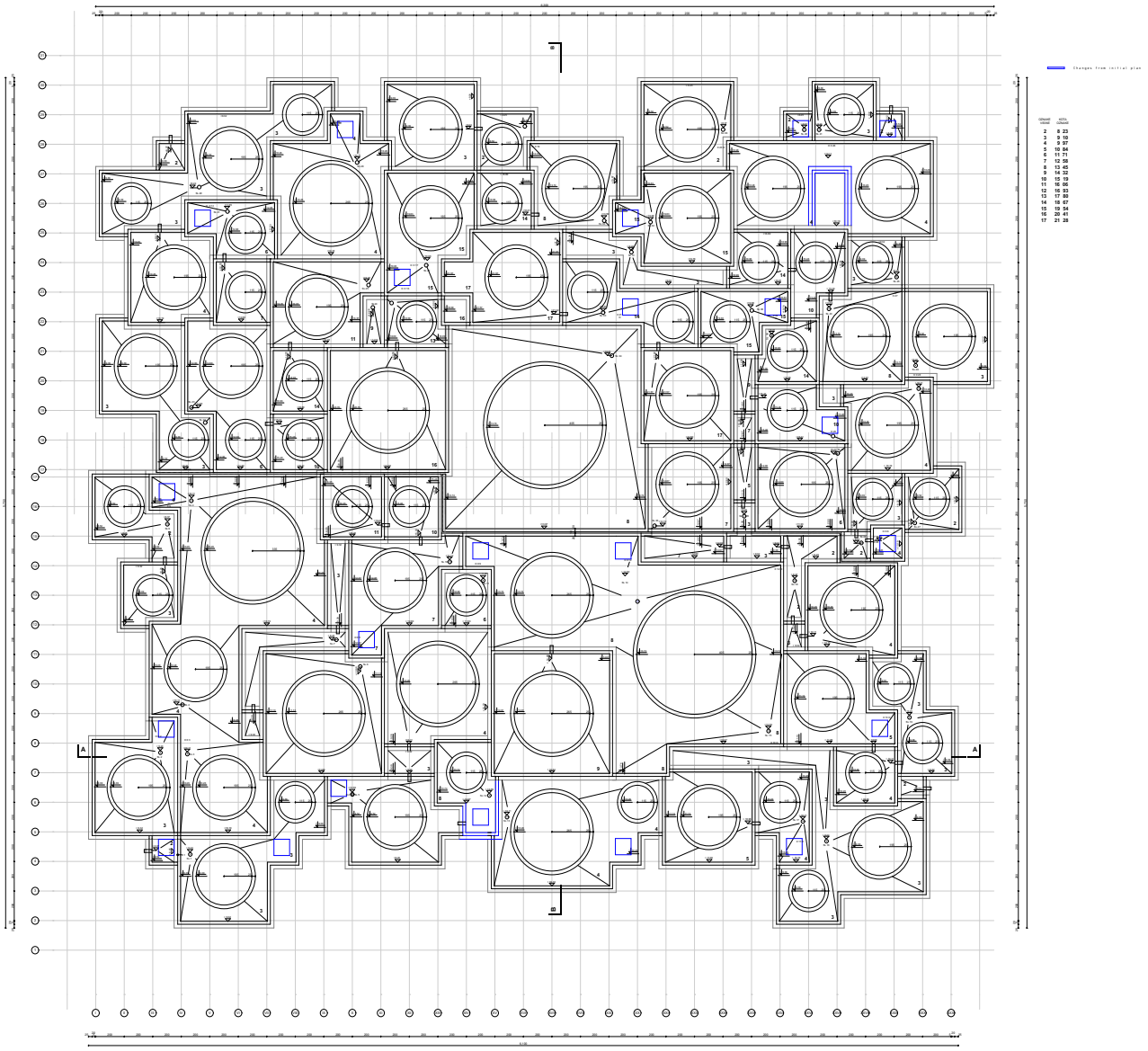
4. The main expansion joint that runs vertically through the entire building from north to south is effectively a channel that allows water to enter the entire structure

5. The cast iron drains with a (suspected) lead sealing that bring water into the building have failed at the 90 degree turn allowing water to leak between the roof structure and ceiling.

6. Some small vertical mechanical shaft skylights are broken, cracked and all are not secured. This allows rain water to directly enter the cellar and basement.

FIGURE 66, 68-75

FIGURE 25 - Illustration of identified problems in the roof



The original roof was well designed and executed however there are numerous problems related to this original design. These are as follows:

1) PITCH or slope of the roof is insufficient. It is approximately less than 1% to the drains. This is not adequate and should be improved where possible to 2% slope. This would have the added benefit of improving the thermal properties of the roof.

2) NO OVERFLOW BACKUP. In all parts of the roof there is only a single drain. Should this become blocked for any reason there is no back up system. This could be easily addressed through a redesign.

3) DRAINS OVER VULNERABLE AREAS. In several places drains direct water to areas that are vulnerable to leaks. This includes over access doors, over windows, near building expansion joints, etc.

4) UNCONTROLLED DRAIN FROM HEIGHT. This occurs in several places and drops water from over 2 meters uncontrolled. This damages nearby windows, flashing and expansion joints. Movement of this water must be controlled.

5) INSUFFICIENT FLASHING AND LACK OF CANTS. While most of the roof has sufficient flashing in several places this was not originally correctly installed and there is a lack of 45% cants that allow water to penetrate the vulnerable areas between the vertical parapets and horizontal surfaces.

6) MAINTENANCE ROUTE. There are no places for maintenance workers to walk other than on top of the built-up roof.

In addition to all the above mentioned problems there are also numerous mechanical (air conditioners) additions with direct holes in the walls that also allow water to enter. These are also not secured but only resting on the built up roof. Also, the lightening protection system has fallen in numerous places and must be reinstalled.

Each “cube” of the roof must be measured, investigated and roof designed. This is essentially a design and installation of 99 roofs not one. There are the standard built-up asphalt- impregnated felt bitumen roof system as originally installed or newer systems such as an elastomeric roof membrane. To align with the conservation philosophy the same type of built-up roof should be installed, however, the newer type of membrane roofs are also in keeping with the original design motif of the architect and could be acceptable. The team could get in touch with the original architect to discuss what could be acceptable.

ELASTOMERIC/PLASTOMERIC ROOF MEMBRANE:

- Sheet materials applied to the roof in a single layer. They require less on-site labor than built-up roofing and are usually Elastomeric/Plastomeric Roof Membrane:
- Sheet materials applied to the roof in a single layer.
- They require less on-site labor than built-up roofing and are usually more elastic and, therefore, less prone to cracking and tearing.
- They may be affixed to the roof with adhesives, by the weight of a gravel ballast, by fasteners concealed in the seams between sheets, or with mechanical fasteners that do not penetrate the membrane.

Some types of elastomeric/plastomeric roof membranes include the following: Neoprene (polychloroprene), PVC (polyvinyl chloride or vinyl), Polymer-modified bitumens and fluid applied membranes. All of these alternative types of roofs have advantages and disadvantages.

NEOPRENE (POLYCHLOROPRENE)

- A high-performance synthetic rubber compound applied in sheets ranging from 0.030 to 0.120 inches thick and joined at the seams with an adhesive.
- Vulnerable to attack by ultraviolet light; therefore, it is usually coated with a protective layer of chlorosulfonated polyethylene.
- Vulnerable to aromatic solvents and strong oxidizing chemical.
- It may be fully adhered to the roof deck or partially adhered, with aggregate ballast to prevent wind uplift.
- EPDM (ethylene propylene diene monomer):
  - The most widely used material for single-ply roof membranes.
  - A synthetic rubber manufactured in sheets ranging from 0.030 to 0.060 inches thick and joined at the seams with an adhesive.
  - Vulnerable to petroleum products and plastic roofing cement.
  - It may be fully or partially adhered, or used in a protected membrane roof.

FIGURE 76-77

PVC (POLYVINYL CHLORIDE):

- A thermoplastic compound commonly known as vinyl.
- Relatively inexpensive.
- PVC sheets for roofing range from 0.032 to 0.060 inches thick and are joined at the seams either by solvent welding or hot air welding.
- Vulnerable to ultraviolet radiation, petroleum products, and coal tar.
- It may be fully or partially adhered, or used as a protected membrane.
- Chlorinated polyethylene and chlorosulfonated polyethylene sheets:
  - Vulnerable to petroleum products.
  - Not compatible with PVC.
  - Highly resistant to ultraviolet deterioration and can be manufactured in light, heat-reflective colors.
  - Used on roofs where aggregate ballasting is unacceptable for reasons of appearance or excessive slope.

POLYMER-MODIFIED BITUMENS

- Vulnerable to petroleum products, hydro-carbons, and some chemicals.
- Formed into composite sheets with various other materials.
- Some are intended to be laid loose, others to be adhered to the roof deck or insulation.

FLUID APPLIED MEMBRANE

- Used primarily for domes, vaults and other complex shapes that are difficult to roof by conventional means.
- Applied usually in several coats using a roller or spray gun. When it cures, it forms a rubbery membrane.
- more elastic and, therefore, less prone to cracking and tearing

CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

Elastomeric/Plastomeric Roof Membrane:

- Sheet materials applied to the roof in a single layer. They require less on-site labor than built-up roofing and are usually Elastomeric/Plastomeric Roof Membrane:
- Sheet materials applied to the roof in a single layer.
- They require less on-site labor than built-up roofing and are usually more elastic and, therefore, less prone to cracking and tearing.
- They may be affixed to the roof with adhesives, by the weight of a gravel ballast, by fasteners concealed in the seams between sheets, or with mechanical fasteners that do not penetrate the membrane.

REFURBISHMENT AND ALTERATIONS

- The dividing walls between the cubes must each have individual flashing and coping
- Each of the 99 skylights requires its own curb and flashing
- Many scuppers drop water uncontrolled onto vulnerable areas.
- The main expansion joint that runs vertically through the entire building from north to south is effectively a channel that allows water to enter the entire structure
- The cast iron drains with a (suspected) lead sealing that bring water into the building have failed at the 90 degree turn allowing water to leak between the roof structure and ceiling.
- Some small vertical mechanical shaft skylights are broken, cracked and all are not secured. This allows rain water to directly enter the cellar and basement.
- PITCH or slope of the roof is insufficient. It is approximately less than 1% to the drains. This is not adequate and should be improved where possible to 2% slope. This would have the added benefit of improving the thermal properties of the roof.
- NO OVERFLOW BACKUP. In all parts of the roof there is only a single drain. Should this become blocked for any reason there is no back up system. This could be easily addressed through a redesign.
- DRAINS OVER VULNERABLE AREAS. In several places drains direct water to areas that are vulnerable to leaks. This includes over access doors, over windows, near building expansion joints, etc.
- UNCONTROLLED DRAIN FROM HEIGHT. This occurs in several places and drops water from over 2 meters uncontrolled. This damages nearby windows, flashing and expansion joints. Movement of this water must be controlled.

MAINTENANCE AND MANAGEMENT

- INSUFFICIENT FLASHING AND LACK OF CANTS. While most of the roof has sufficient flashing in several places this was not originally correctly installed and there is a lack of 45% cants that allow water to penetrate the vulnerable areas between the vertical parapets and horizontal surfaces.
- MAINTENANCE ROUTE. There are no places for maintenance workers to walk other than on top of the built-up roof.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Design, testing and installation of a completely new built-up roof.
- New insulation to improve the slope to 2%. This may require additions to existing parapet walls or creation of new parapet walls in some locations. It will also improve the thermal properties of the roof.
- New roof membrane. The existing bitumen 3 layer built up roof is well beyond its lifetime. There have been numerous patches but a comprehensive solution is necessary. This new roof could, if appropriate, be more in keeping with the ideas of the original design motif.
- Installation of overflow scuppers or drains. This will allow water to exit should one drain become blocked.
- Installation of gutters and downspouts to control the water from the scuppers – these could be easily hidden due to the aluminum grid skin. This will control the water around vulnerable areas and prevent dropping water from heights.
- Raise the height of the flashing and curb cants on the roof at the parapet walls.
- Investigate the seals of all down tubes of the drainage system and reinstall or reseal.
- Install a maintenance path for workers. This will prevent workers from stepping on the new roof.

YELLOW

Elements that are important but must be decided upon given the budget;

- Reinstall the lightening protection system
- Insulate, close and seal all mechanical openings
- Replace or secure all skylights above the vertical mechanical shaft openings. Test installation of exhaust fans over vertical mechanical shaft in the place of several skylights to improve ventilation in the cellar and basement levels.
- TEST all installations

GREEN

Elements that must be placed into a future project;

- Clean, repair and paint all areas that have been subjected to water stains
- Securely mount all air conditioning units. They are currently not secure.

SITE

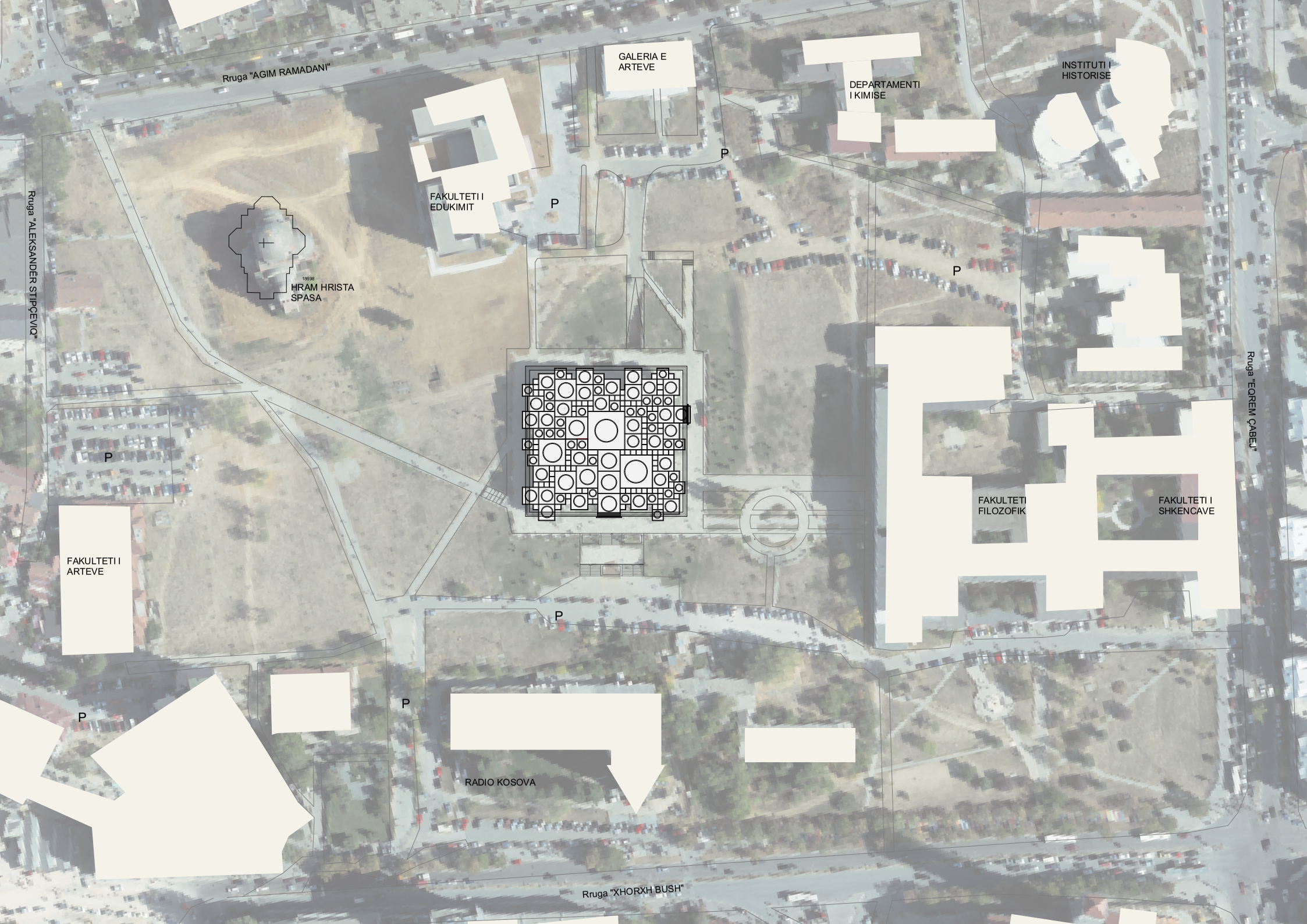
The National library of Kosovo is at the core of the University campus and the city of Prishtina. Surrounding the building are open public spaces (or so have to be used). Toward the north and south are other university buildings and to the west is the public television building with the National Gallery of Kosovo to the east. The public space surrounding the library is important as it serves as pedestrian circulation, public recreation and allows the building to be viewed from a distance.

Included in the area surrounding the library are three main parking lots. The parking lot to the west is at the main entrance to the building and principally serves the entire university. The parking lot to the east is divided into two zones and serves the library as well as the university and National Gallery. These two parking areas are paved with curbs and controlled access while the third parking area, to the southeast, is more informal, uncontrolled and unpaved. All of these parking spaces are not necessarily for library users or staff but seem to serve as day long parking for other university buildings. Use of the two formal parking lots is restricted and can only be accessed with a specific pass card. There is only one disabled parking space within the parking lot at the National Gallery (see section on disabled access). The paving material used for the parking lots is interlocking brick and is not in keeping with the original design of the site.

It would increase the use of the library if library user could park at one of the existing parking spaces.

At the plaza there is stone tiles and at the parking lot concrete cubes. Plaza is mostly with 50x50 and 25x50 stone tiles and mostly insensitively fixed and badly damaged. The upper part of the plaza at the entrance of the building the tiles are mostly in a good condition but needs some power cleaning as the same situation as the façade cover of the stone part. Plato at the north side is mostly used and the damage is more evident. The circulation is dense during the day around the plaza but is used by passers less people use it during the night time, due to the unsecure feeling because of the lights mostly not working. Lights is another problem, not working in some places and missing in some other, also there are parts complete dark around the building. The benches also are damaged and in some places there is the need to add new ones. There are no rubbish bins which makes it hard for people to keep it clean around. A lot of the urban furnisher are found at the basement storage.

FIGURE 78-81


Rruga "AGIM RAMADANI"
GALERIA E ARTEVE
DEPARTAMENTI I KIMISE
INSTITUTI I HISTORISE
FAKULTETI I EDUKIMIT
Rruga "ALEKSANDËR STIPÇEVIQ"
HRAM HRISTA SPASA
Rruga "EQREM ÇABEJ"
FAKULTETI FILOZOFIK
FAKULTETI I SHKENCAVE
FAKULTETI I ARTEVE
RADIO KOSOVA
Rruga "XHORXH BUSH"
P

CONSERVATION POLICIES / RECOMMENDATIONS:

POTENTIAL CHANGES

- Design a new plan for the site including a planting scheme based upon the original design of the architect. The trees to the south which have just been planted will overtime obstruct the view of the library. They should be removed.

REFURBISHMENT AND ALTERATIONS

- PARKING – include additional disabled access spaces and design a route to enter the library. Include short term parking spots outside the main entrance to increase use of the library. Design a new parking lot to the southwest where there is currently informal parking.

MAINTENANCE AND MANAGEMENT

- Stop irrigation on the plants and lawns on the uphill (south and east). This removes ground water but then adds this ground water back into the water table.

Recommendations for the interventions necessary to be implemented:

RED

Critical elements that must be addressed in this project;

- Clean the existing atmospheric drainage in order to secure the flow of storm water.
- PAVING - install new patches and secure all loose stone pavers within the plaza. These must be sealed and secured as there are lower levels underneath and water is penetrating through the paving into the structure.
- Installing new route for disable access, based on reversibility of the elements as a design and material used.

YELLOW

Elements that are important but must be decided upon given the budget;

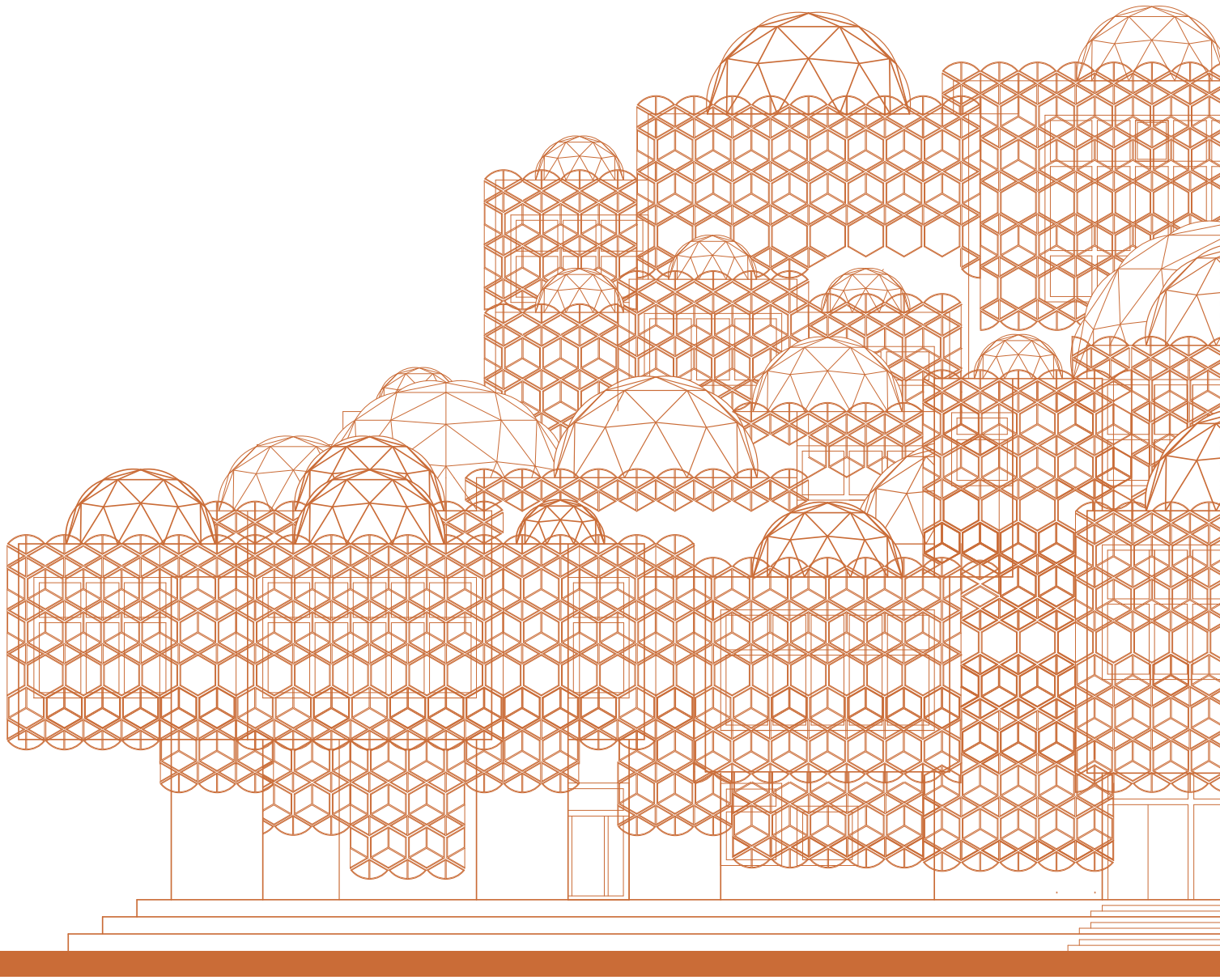
- Remove concrete patches from the pavers in order to stop the degradation of the original stone material.

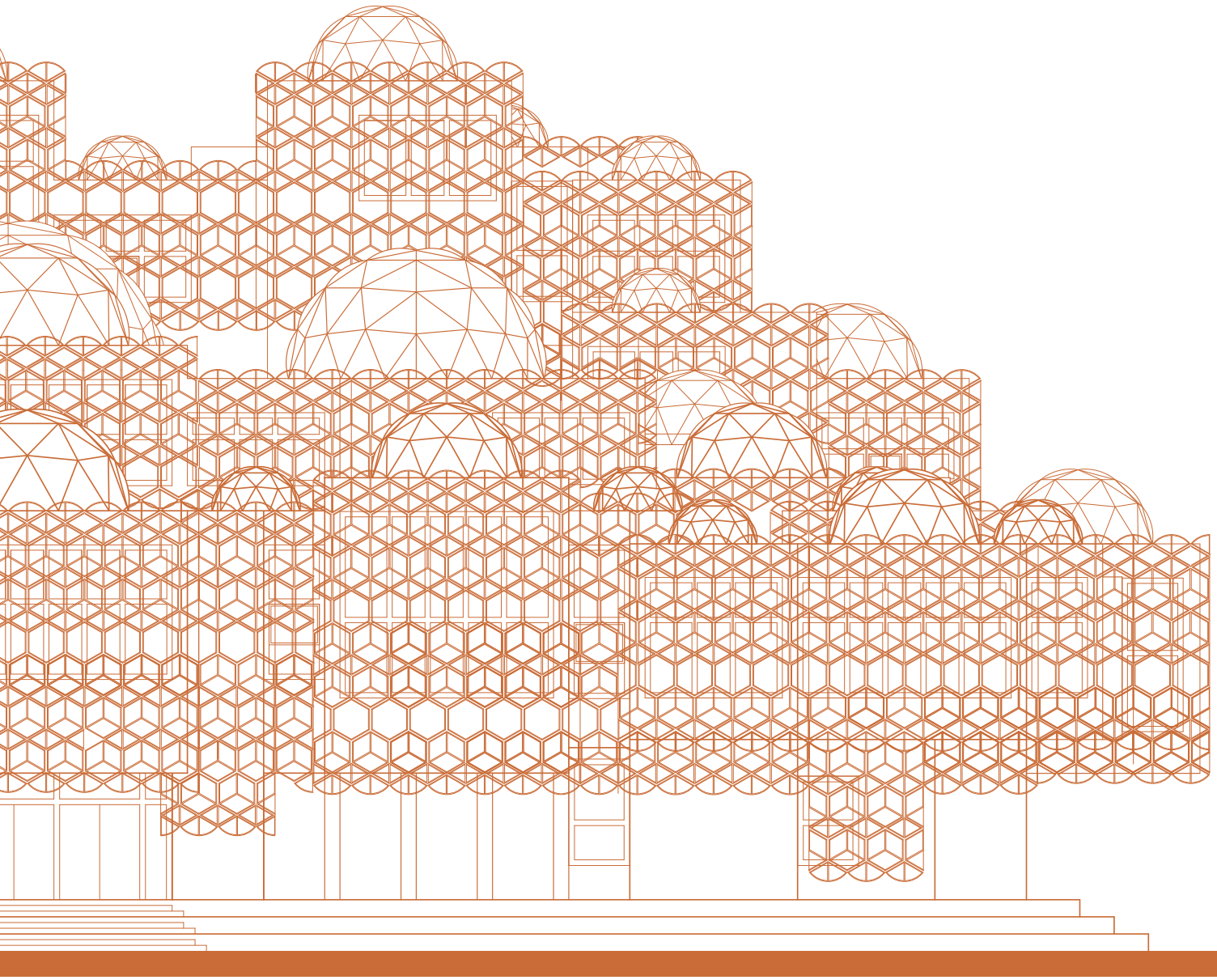
GREEN

Elements that must be placed into a future project;

- Realization of new parking lot in the southwest of the building.

BUILDING SYSTEMS ASSESSMENT





DOME

One of the unique character defining feature of the Kosovo National Library is its domes. The Library´s 99 domes made up of triangular translucent plastic panels sent into aluminum frames make the building a distinctive landmark in Prishtina. The exterior appearance of numerous "white bubbles" draws one´s attention and peeks interest when approaching the building. The interior spaces are flooded with soft, diffused natural light to create a unique ambience. In the reading rooms ample light is provided for study while in the central atrium sunlight is reflected off the decorative stone floor. The domes of various sizes are located on different levels of the building allowing natural light throughout.

The dome's structure is created from extruded aluminum sections joined together through bolts and welds. This structure is strong, light and highly detailed and holds in place white translucent plastic panels.

Approximately 10 years ago all of the library´s domes, including the aluminum structure and plastic panels were replaced. There does not seem to be significant water infiltration at the aluminum joints or between the plastic panels and aluminum. The entire dome assembly sits upon the original concrete curb of approximately 20-30 cm. There is ample flashing over this curb of galvanized steel and the curb has a 45 degree roof cant. All seem to be well constructed and of good condition with no significant water infiltration.

FIGURE 82-84

GRID COVERING

National Library has a grid covering that wraps around the façade made up of approximately seventy thousand individual connected elements. This is one of the unique character defining features of the building. The main module shape of the grid is hexagonal, but also has rounded convex and concave modules that wrap in and around the corners, at the commencement and terminus of the building. The grid does not begin from the ground floor, but it is installed from about one meter above the plinth and ascends to the roof of each cube. The original design was to create this grid in concrete but because of the weight and cost of the formwork it was decided to make it from aluminum. The team does not know the exact composition of the metal if it is aluminum or an aluminum alloy.

The grid is in very good conditions, except that it has accumulated dirt and stains and some sections on the roof have been removed. One issue observed during the assessment is damage to the concrete and stone cladding of the façade where the grid is mounted to the building. The elements that have been removed from the roof have made some sections unstable and should be reconnected. Some individual connections have failed and need repair but in general the metal is in good condition. This grid is largely attributed to conserving the original façade and fenestration from changes over the years as it was too difficult to remove.

PRELIMINARY RECOMMENDATIONS:

- Conduct cleaning low pressure water test to clean the grid at the same time as the façade. Clean the grid.
- Reinstall the grid at the roof sections to re-secure these sections.
- Analyze the archival documentation and conduct tests to determine the exact nature of the metal to ensure the correct bolts and connections to avoid future galvanic action between dissimilar metals.
- Inspect all connections for corrosion during the cleaning including bolts and mounting points

FIGURE 85-91

INAPPROPRIATE INTERVENTIONS

Since the library was completed there have been several major and minor interventions. These range minimal maintenance interventions, such as filling the damaged stone paving in the surrounding plaza to major space interventions such as the American Corner and complete 4th floor renovation Smaller but other intervention is the new addition in the reception area. Minor interventions were undertaken during different periods, in different parts of the 1st, 2nd, and 3rd floor that involve changing of some of the wooden toilet doors and changing office windows to PVC. This section will describe these interventions.

INTERIOR

The most dramatic intervention visible to users of the library was made on the ground floor at the entry and is the transformation of the former checkroom and wardrobe into the "American Corner" Library. This space was altered with new aluminum doors, new finishes and furnishings. There are additional plans to further transform this space.

The interventions on the 4th floor which occurred in 2001 when a private telecommunication company leased the space. The modifications included new partitions due to office organization changes and this resulted in the original materials and windows begin covered over with gypsum board. Other new materials include laminate flooring of wood and epoxy. The existing furniture was replaced and new working spaces were added, such as a kitchen and a new office arrangement. The most noticeable interventions are the two mezzanine floors added on the 4th floor. These contain a common space and kitchen. These new improvised mezzanines represents life safety issue with illegal and unsafe guardrails. A further intrusive intervention is the addition of added walls which blocked the existing windows while at the same time reducing the amount of the natural light. The aesthetics of the new intervention in this area are not consistent with the building's original concept design, consequently creating areas that stand out from the architect´s original intent. The design of these new interventions are considered to be out of context and disrespectful to the overall spirit of the original design motif.

Additional images and details can be seen in the section under the fourth floor.

FIGURE 92-93

PRELIMINARY RECOMMENDATIONS:

- Contact the managers of the American Corner and work with them to explain the original design intentions. Intervene in their future plans to create a more harmonious space.
- Contact with the original leaseholders of the 4th floor. Determine if they can remove their inappropriate alterations.
- Remove the inappropriate interventions. The original finishes and windows are largely intact behind the later alterations.
- Create guidelines for any future alterations or interventions
- Identify replacement materials and techniques for worn, damaged or missing materials such as those on the plaza. This includes salvage of any floor tiles from the basement levels in unused spaces as these are not open to the public.

FURNISHINGS

Like all the constituent elements of the National Library of Kosovo, the furnishings were given great importance during the designing stage. The entire library was through to be an integrated whole. It is for this reason they are important to the building. All furnishing are designed by the architect and produced at 'Tefik Canga' factory in Ferizaj. The architectural team designed different types of furniture according to the space and use they would serve: Reading room desks and chairs, exhibition tables and shelves, coffee tables, reception desks, bookshelves and cabinets, armchairs, document drawers, auditorium seating, clothes hangers, etc.

Every piece of furniture was designed in detail, with great importance in the aesthetics, functionality and produced with high quality materials. Most common material used is wood- oak, combined with leather or vinyl in some specific furniture such as chairs, armchairs, table tops, auditorium seating and desks; while in some other Plexiglas is included, such as desks in some reading rooms. Their shape is made of simple and elegant lines giving a very strong impression to the eye, and are very useful at the same time.

Given that the authentic furniture was use for more than 50 years, they are in poor condition and in need for immediate maintenance. The furnishing have largely ignored and not understood in context resulting in an underestimation of their importance, in many areas the original furniture is out of use or completely removed and exchanged with the new furniture. New furnishing is mostly inadequate and made of very low quality materials and not in keeping with the design of the building. Even after all these changes, most of administration offices are in need for more furniture and they are overloading the authentic ones. In other parts there are completely out of use furniture that could be very useful to those in need.

While the users of the furniture disagreed with the decision of new furniture, they kept some of the old furnishing thus making a mix of types, styles and materials upon which they were made thus resulting in a disjointed interior space. While interviewing some of the employers of the library, they all agreed and wanted the old original furniture back by considering them as more functional. So the previous quiet environment of the interior spaces which was made by the original furniture, is now a big inappropriate mix of the old and new furniture, thus giving mixed feelings, mood and impression about the space.

FIGURE 94-99

FINISHES & ORNAMENTATION

Finishes & ornamentation, as well as furnishings, in the National Library of Kosovo are of a special concern as they can be considered essential to the integral design by the architect Mutnjakoviq. This is best exemplified by the term Gesamtkunstwerk which means a total work of ideal art that is comprehensive in all its elements. Finishes and furnishings are the most exposed to wear and tear and are easy to replace with inappropriate elements. Therefore, their conservation is important to the overall spirt of the design.

The finishes can be separated into three groups: 1) public spaces, 2) administrative offices and 3) functional utilitarian areas. Ornamentation will also be described.

PUBLIC SPACES – the public spaces contain more durable finishes with floors of inlayed stone, plaster walls and plaster or formed plastic false panel ceilings. The walls in the readings rooms are of wood frames with infill texture while the small auditorium contains vinyl embossed wall coverings. The large auditorium is unique with thousands of wood cubes and inverted domes. This is ideal for the acoustics of both rooms. Guardrails on the stairs are of wood and glass. As the finishes in the public areas were designed to be more durable given their frequent use they are generally in good condition. The exceptions are the carpet floors in the auditoriums which have been replaced with inappropriate carpet. The public toilets with finishes of natural stone have suffered the most given their frequent use and leaking plumbing and inadequate repairs.

ADMINISTRATIVE OFFICES – The finishes are more modest in these spaces with plaster or wood panel walls, preformed false ceilings and tile floors. The walls and ceilings are largely intact with their original materials. The exception is the carpeted floors. These have been replaced in most spaces except the offices on the 1st floor and areas of the 2nd floor. Here the carpet is worn but intact. The ceiling finishes in all areas have been damaged by leaking water and are stained. The offices on the fourth floor have all been replaced (see section on inappropriate alterations).

UTILITARIAN SPACES - These spaces include the cellar with the book stacks, the basement and non-public circulation. The floors are either unfinished concrete or epoxy with painted walls and ceilings. Some of the semi-public spaces such as the service corridors have tile floors. These areas have suffered the most damages mainly caused by moisture but this is less significant as they were not considered in the original design, understandably, as essential as the public or administrative spaces. However in some of the unused basement areas there is ceramic tile that could possibly be reused in other areas.

ORNAMENTATION – the ornamentation was also considered during the design of the library. This includes wall mounted sculptures and other artwork. An archival search is still in progress to determine which elements are still installed in the library and which are missing. In the intervening years additional artwork has been added but, in general, it is in keeping with the design motif.

FIGURE 100-114

DISABLED ACCESS

During the time of design and construction of the National Library of Kosovo the requirement concerning disable accessibility was not taken into account, thus the building today does not possess the advantage of equal access for all. Today the standards are different. Therefore it is necessary to introduce measures which make this structure accessible to the disabled. This includes clearly marked and enforced parking, a clearly defined route of access, ramps with appropriate safety measures and door access points.

Fortunately there is ample parking near the library toward the west and east. The western parking lot is closer but substantially lower making access through the main entry to the library more difficult. The parking situated in the eastern side is slightly further but closer in height, however, disabled patrons but must enter through the administrative entrance. While not ideal it does not distract from the monumental main entry, allows administrative staff to assist if needed and is much closer to the elevator.

Unfortunately there is only one designated space for disabled parking at the eastern parking lot. This is clearly marked on the paving and with a sign however there are three problems: 1) disabled parking is not enforced (it was observed every day of the study), 2) disabled persons must cross the traffic flow and 3) one space is not sufficient for the needs of the building. Fortunately, there is ample space to add disabled parking and the cost is not unsurmountable.

Another serious limitation is that the route from the parking into the Library is not free of barriers. The curbs of the sidewalk near the parking on both sides are about 15cm high and do not have the necessary minimum zero change in levels for wheelchairs. The site around the library is made of stone tiles which have been damaged through weathered with time, and have not been replaced. Some repair work has been done in patches, however this has also deteriorated rapidly. This makes the route unfriendly to persons with disabilities especially due to the uneven pavement surfaces and missing stone tiles. A layout of tactile slabs has also never been installed on the site or inside the building, which is vital to people who are visually impaired, especially as far as unaided access is concerned.

As previously mentioned the building itself is on a raised plinth with a considerable number of stairs around the base and a ramps was not included in the original design. A ramp of access for wheelchairs has been added recently which in no way respects the original design but fortunately is on the rear elevation. Several elements in this ramp are missing including a handrail, for unaided access and wheel curbs. The stability of the ramp structure is questionable with an inadequate foundation that has fractured. In addition the entry route to the building itself has been blocked by planters, the door threshold of approximately cm and an interior stair of over 6cm, all of which act as barriers for the disabled.

Finally, additional barriers exist within the Library through the multiple levels of the original design. The floors plans in themselves are outlined in such a way that they have many areas which can only be reached by a considerable number of stairs or elevated platforms, be it the reading rooms, the auditoriums, or the offices. However, the elevator is functioning and is of suitable dimensions for equal access and provides access to many areas of the building. One of the positive features that could be found inside the building regarding persons with disabilities is that there is a book stock and a cabinet for the visually impaired, as well as an official of the library that works towards helping them. The last significant barrier is that the toilets do not allow access for the disabled.

These circumstances are not only restrictive for students who should be able to use the library and its assets to their advantage, but to possible employees as well. Solving this problem for the whole building might prove a rather complicated task but immediate low-cost measures could be easily implemented that would allow access to 70% of the library. This impact would be meaningful in many aspects, adding a whole new dimension to the edifice.

PRELIMINARY RECOMMENDATIONS:

- Demarcate with paint and signs 2 additional parking spaces at the eastern parking lot near the sidewalk
- Work with campus or city police to strictly enforce disabled parking
- Cut the curbs, modify the thresholds and eliminate any barrier over 1 cm in height from the parking lot to the interior elevator. Move planters from the administrative entry.
- Stabilize and secure the paving from the parking lot to the administrative entry
- Adapt or replace the existing disabled wheel chair ramp. Add curbs for wheels and handrails.
- Construct new, appropriate ramp at the interior of the administrative entry.
- Install tactile surfaces for the visually impaired at the administrative entry
- Promote and use the disabled study desk.
- Train library staff to acknowledge and manage disabled patrons.
- Adapt the ground floor toilets into disabled access with new water closets, increased space, grab bars and other measures.

FIGURE 115-116

ILLUMINATION

Like other elements of the building the illumination, both exterior and interior, was designed to be integral with the building. Following is a description and assessment of the condition of the fixtures and recommendations.

EXTERIOR

There are two types of exterior illumination. The light standards in the plaza surrounding the library and those underneath the cantilevers. In general the light standards are in good condition and all but two of the numerous standards are extent. Not all are functioning however it seems they have been maintained as this is a transit point in the center of campus.

The illumination underneath the library´s cantilevers consists of simple overlapping florescent tubes connected with exposed electrical conduit. The effect of this light at night is impressive. It gives the effect of the building floating within the plaza. However, these light fixtures are not in good condition. While they have been maintained they are exposed to the weather and many have failed and are oxidizing. Fortunately they are easy and relatively inexpensive to replace. These lights are very important because the form and layout of the building creates dark corners and without this light they could be dangerous.

INTERIOR

The interior lights are of four types. As with other elements of the library the light fixtures repeat the design motif therefore they are important. They are also important given the function of the library. The lighting levels at desktops in the reading rooms during the day are adequate due to the skylights and natural light. However at night the lighting levels are far below standard. Typical light measurements taken at night were between 11-53 lux. The recommended reading levels should be 250-500 lux. This is because many fixtures have failed in the reading rooms and also the other spaces. While the bulbs have failed many of the designed fixtures remain intact.

FIGURE 117-126

PRELIMINARY RECOMMENDATIONS:

- Conduct a full inventory of all working and non-working light fixtures including the light bulbs and electrical connections. Determine the most significant spaces and a rating system for importance of the light fixture – i.e. Library main entry, reading rooms.
- Investigate funding sources to supply grants or low interest loans to replace the lighting with energy efficient lighting. Test this energy efficiency and conduct a financial analysis for the payback period of initial cost (materials, equipment and installation) vs. energy savings
- Collect all removed plastic diffusers and store in one place for future re-installation – include in the above mentioned inventory. Include a condition assessment of all plastic covers.
- Design a new energy efficient LED lighting system and search for funding for installation. Retain the original design and plastic diffuser and reinstall.
- Replace all external light fixtures (Exterior Type #2) under the cantilevers of the building including the exterior electrical conduit and connector boxes.
- Remove the 4th floor lighting fixtures that are inappropriate and replace with new appropriate fixtures.

While the abundant natural light comes into the building during the day because of the skylights this is not the case at night. It is suspected that illumination levels at desktops are below standard in the reading rooms. Therefore a program of replacing the illumination is necessary. There is a wide variety of LED bulbs and fixtures that would work in the Library. This would require additional investigations, design and testing to determine the correct replacement in terms of function, energy efficiency, availability and cost. In addition there needs to be a prioritization and program of fixture and bulb replacement. One suggestion is first the reading rooms followed by public spaces, offices then exterior and utility spaces.

FENESTRATION

DOORS AND WINDOWS

The arrangement of doors and windows on the elevations of Kosova National Library follows proportionally and completes the dynamics of its volumes. The windows that go from floor to ceilings, and the domes provide enough illumination and on the other hand the aluminum structure helps on reflecting the superfluous. Designed by the architect together with other furniture and finishes and produced by a local manufacturer, doors and windows are part of the building's authenticity. Original windows on the building are fixed light double glass paned windows with composite structure; steel profiles covered by oak timber frames.

The overall condition of the doors and windows in the building is fair. There are signs of wearing from weathering; mostly outdoors, lack of maintenance, a few loose and decayed joints and most common; inappropriate interventions trough time. Doors and windows are generally sound and well performing, but need repair and stabilize in order to stop further damaging.

This are the problems that the doors and windows face, found during evaluation of the existing physical condition:

- Decayed and rot wood caused by moisture from condensation(most common on north and west side), especially the windows that face the roofs
- Weathering through time with lack of maintenance, there are also no drip edges that wood protect the windows from the water coming through walls
- A few double paned glass cracked, brittle and cracked putty around the pane glazing affecting the window pane insolation
- Window units replaced with new opening window casements, for natural ventilation at offices are done with inappropriate material and are noticeable on the elevations
- For new air condition installations there were drilled holes on the windows
- Nails, curtains, wiring cables
- Inappropriate interventions that reflect on the building authenticity: forth floor(mezzanine)-fenestration covered with new wall panels, First floor-"Qendra per zhvillimin e karieres"-colored door and American Corner- door and window replaced with new ones
- Missing doors, replaced with new different ones or colored with different colors
- Closed accesses to library, some even with new wall and cages

FIGURE 127-133

PRELIMINARY RECOMMENDATIONS:

- Existing wood cladding over the steel window frame must be cleaned, sanded, patched, sealed and treated particularly at the sill level. Elements that have deteriorated must be replaced. Reseal the connection between the wood window and sill at all levels.
- Continue inspection and a maintenance plan for the windows must be put into place
- Doors must be kept unlocked and panic bars installed to ensure safe exit in the event of a fire or emergency
- Main original entry door must be unlocked, refurbished and a weather seal installed to improve energy efficiency. This includes the hinges, locks and handles.
- Interior doors require maintenance and refinishing

MECHANICAL

The following section contains information concerning the mechanical systems in the Kosovo National Library. The scope of this section was to inspect the mechanical equipment and was carried out on site during 26th-30thof September 2016. Considering that most of the mechanical equipment was produced in 1977 it is in relatively good condition. The technical room where the hot water boiler, the heating and ventilation systems are located at the basement level.

HOT WATER

When the domestic hot water system was first installed there was a central boiler located in the basement which heated water for the entire building. After some years this boiler was damaged and fell into disuse. A new boiler was installed in 2005 but because the hot water pipes were not in use for a long period the new boiler was not connected to the entire system. Therefore the toilets and kitchens on the upper floors do not have hot water in the warmer months. It is understood that in the winter months when hot water is delivered to the library for heating that they are supplied with hot water. This is not understood exactly and will need to be investigated further.

HEATING

The building is heated with a hot water forced air system. Hot water is delivered from a central plant in the city during the winter months that then passes through 7 air handling units that force hot air throughout the building via the vertical chases. Because the hot water delivered from the city contains impurities such as sand and small particles it was creating problems with the small heat exchange pipes within the forced air system. So the maintenance workers of the library installed a filter system and since then they have had no problems. The rapid assessment team thoroughly checked the pipes to determine if they were covered with asbestos insulation, but during recent repairs all of the insulation has been replaced with foam. Older hot water pipes did have fiberglass insulation covered with aluminum protection. Most asbestos was removed from the building but still exists at some of the vertical chase doors.

FIGURE 134-136

FORCED AIR SYSTEM/ AIR CONDITIONING

The forced air system, which can also be found in the technical room of the basement, consists of six original air handling units (forced air system), five of the original are still functioning. All the pipes in the ventilation system were in a good condition. In 2015, after a donation from the Ministry of Culture, Youth and Sports, two new forced air units/systems were added. This provides a total of 7 forced air handling systems. Because hot water is only delivered to the library in the colder months on a set schedule many occupants of the building believe that this system does not work and are cold during the transition period and have installed electrical heaters. However the system works quite well. The individual electrical heaters are not very efficient and are a possible fire hazard.
In addition there is a new air conditioning condenser installed in the outside portion of the basement next to the loading dock that provides chilled water to the air handlers and during the summer months it supplies cool air throughout the building. The entire system is controlled by a new digital control system. In addition to this cooling system individual zones of the library contain their own air conditioning condensers and air handling units. Most of these are not secured and poorly installed. It is suspected that these were installed before the new central system.

GENERATOR

There is one emergency diesel generator in the basement that provides electrical power in case of electrical outage. This seems to be in good working order but it should be tested. It is also unknown how long this will function and how much diesel is available given an emergency.

In conclusion the condition of the mechanical equipment was overall in good condition. The portable electrical personal heaters should be addressed as well as the zone air conditioning units.

PLUMBING

The water and sewage installations/plumbing fixtures are original. The water supply pipes were made of galvanized steel which overtime is prone to oxidation while the waste water were made with cast iron. Some of these have been changed but both supply and waste water systems are inadequate.

Most of the pipes are corroded throughout the years, and incapable to function according to the needs and standards. They cannot handle the pressure from the city water supply. Furthermore, for more than 10 years, there was no hot water, and most of pipes were out of function allowing them to corrode. The risk of reusing them is high, and there were cases of collapsed pipes and water penetrating into the basement and cellar, the levels where the original copies of the books are stored. Other issue noticed, is related to the initial installation of the pipes, especially the parts where the plumbing fixtures were connected by using some type of mastic that seems to have weakened the connections between the supply and waste water systems. The toilets and bathrooms are very badly deteriorated including those in the public and administrative areas. This is due to age, lack of proper maintenance and care. Another noticed issue is due to the small number of maintenance staff – there is no water and sewage maintenance profile/professional on the staff of maintenance.

The cast iron gutters, that collect the water from the roof, are other serious concern. Based on the initial inspection the vertical elements are in a good condition, except the horizontal elements, where the debris and gravel from the roof has been deposited, making it difficult the flow of the water. In some cases some parts of the pipes made from cast iron have been replaced by PVC elements, and because these materials are not sealed well there are leaks. These installations are one of the main things that concern that the library maintenance staff, and according to them one of the priorities for future interventions.

PRELIMINARY RECOMMENDATIONS:

- Upgrade fixtures in all TOILETS with new plumbing and repair finishes. Retain as much as possible of the original finishes.
- Investigate the roof downspouts and test new seals on the elbow joints.
- Trace all sewer pipes and investigate all leaks. Prioritize and repair all

FIGURE 137-141

ELECTRICAL

The electrical systems seem to be in fair condition but there has been significant deterioration over the years. The main electrical panels have undergone some upgrades through the years and may outlets, particularly in the reading rooms have ceased to function. There are exposed junction boxes throughout the library, notably in the floor. There are also missing switches. In addition many circuit boxes are not securely mounted and with open covers.

PRELIMINARY RECOMMENDATIONS:

- Contract with an electrician to inspect the entire structure for function, code compliance and hazards.
- Test all circuits, circuit safety breakers and create a diagram of functioning electrical systems in the building. Test for GFI Ground Fault Interrupters at all electrical outlet locations near plumbing and in floors.
- Close all exposed electrical wires, especially in the floors and toilets
- Securely mount all circuit boxes, close and lock all covers.
- Refurbish the electrical outlets in the reading rooms. They were originally installed in the floors and have since been blocked. This would aid students with their electrical needs for computers.

INDEX FIGURES GALLERY

26

27

28

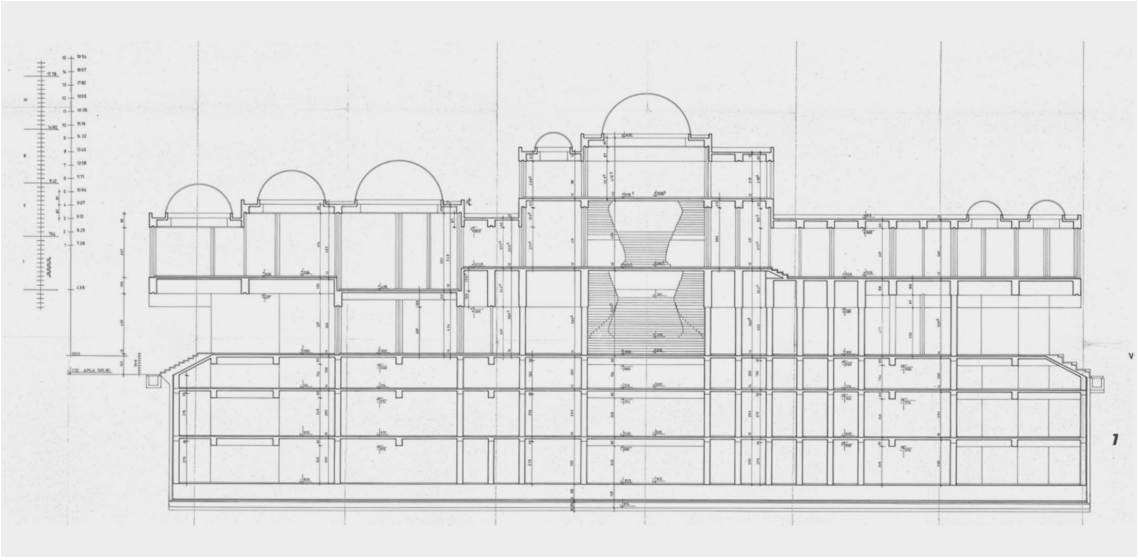
29

30

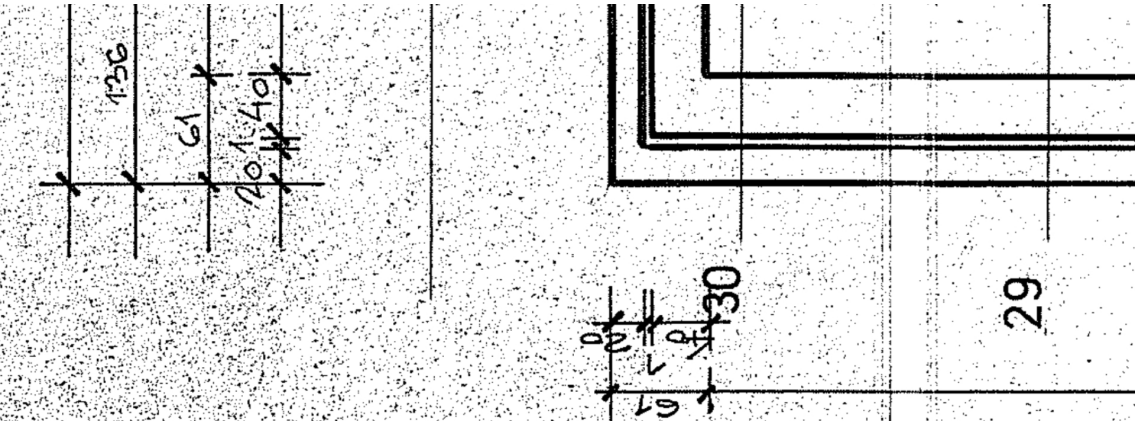
31

32

33



34



35

33

FIGURE 26
plastic sheeting above the book stacks

FIGURE 27
water infiltration through the exterior wall at 2m above floor

FIGURE 28
Water infiltration at a vertical mechanical / ventilation shaft

FIGURE 29
water damage on floor and stack shelves

FIGURE 30
oxidation of the steel shelves - the books have been removed from the lower shelves

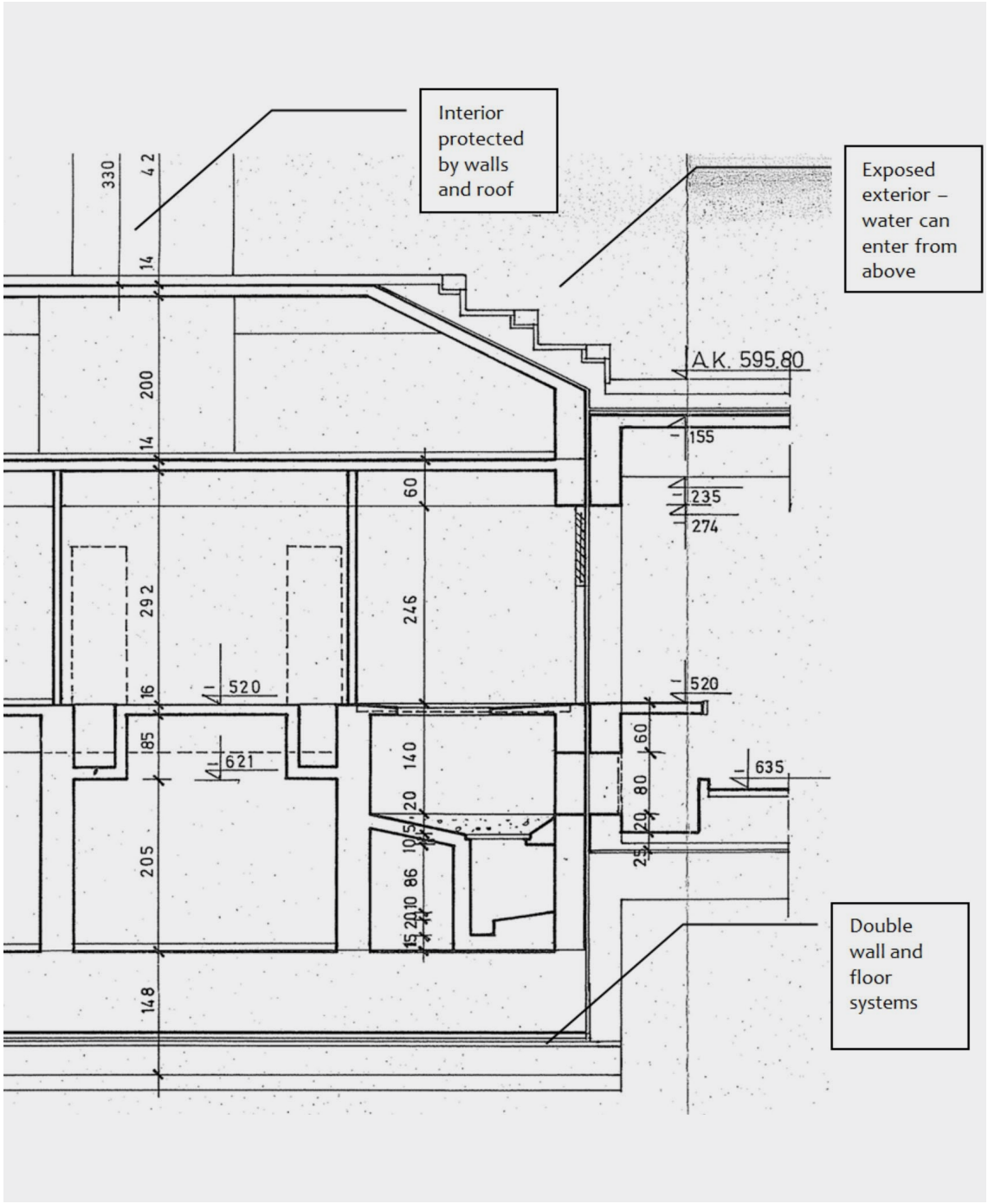
FIGURE 31
vertical shaft with standing water and sump pump

FIGURE 32
Vertical shaft near the main entry with standing water in the base and a relatively new sump pump

FIGURE 33
irrigation pipes and outlets installed by maintenance personnel – these exist all around the building

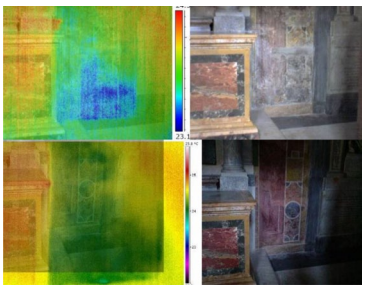
FIGURE 34
The overall original section clearly shows the double construction in the floor and walls of the lower levels. However a detail drawing of this construction was not found

FIGURE 35
Original plan drawing showing the double wall system in the lower levels. The dimension reads 1cm but this could also be 10 cm which seems more likely. It is unknown how these were interconnected.


Interior protected by walls and roof
Exposed exterior – water can enter from above
Double wall and floor systems
A.K. 595.80
330
42
14
200
14
292
16
185
205
148
60
246
155
235
274
520
621
520
140
20
10
5
86
10
20
15
60
80
20
25
635

36

37

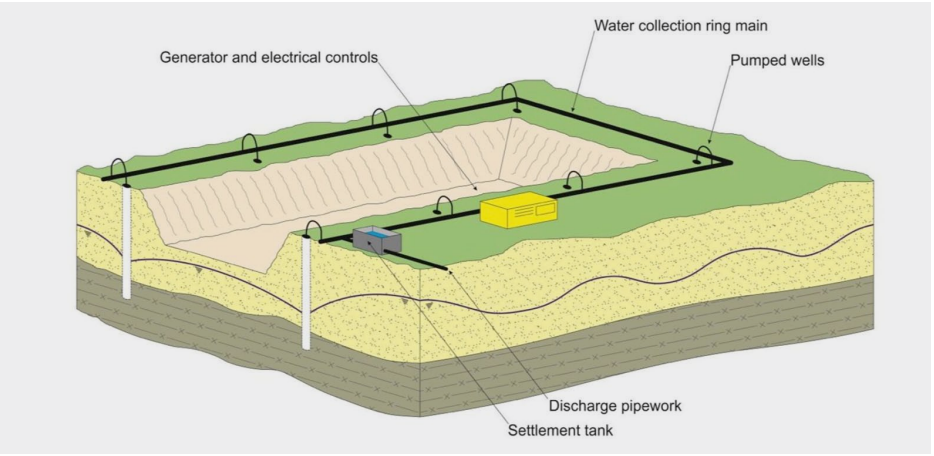


38

39

41

42



40

43

44

FIGURE 36
Detail section showing the double wall and floor system. The lower levels also protrude out from the perimeter of the building therefore water can enter from the plaza above

FIGURE 37
fire suppression system

FIGURE 38
high infrared photography conducted to determine if moisture reduction systems are effective

FIGURE 39
emergency electricity diesel generator

FIGURE 40
horizontal dewatering systems are designed to reduce groundwater around excavations. In addition interior "wells" with sump pumps could be installed within the vertical mechanical electrical shafts without disturbing the existing floor

FIGURE 41
the loading dock area with new air conditioning compressor in the background

FIGURE 42
water accumulation on the plinth outside above the mechanical floor

FIGURE 43
Access panel into mechanical floor

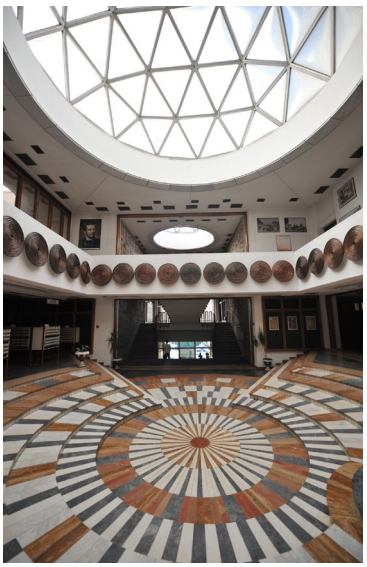
FIGURE 44
Evidence of water leaking through the slab

45

46

47

48

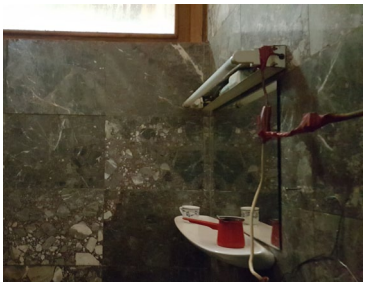


49

50

51

52



53

55

57

58

56

54

FIGURE 45
Expansion joint at the mechanical floor where the team was informed was a major source of water infiltration

FIGURE 46
electrical conduits installed at the ceiling of the mechanical floor are generally in good condition

FIGURE 47
locations where PVC drainage pipe at connection to toilet above and connection to original cast iron drain. Note the concrete reinforcing steel bars have oxidized

FIGURE 48
ground floor toilets are largely nonfunctional with numerous leaks from supply and drainage pipes as well as missing finishes and exposed electrical wires

FIGURE 49
main rotunda on the first floor of the library

FIGURE 50
Lighting fixtures misaligned with missing light elements

FIGURE 51
water infiltration at intersection between floor slab above and exterior wall

FIGURE 52
Main reading room flooded with light from above with the dome skylights

FIGURE 53
dangerous exposed electrical connections in areas with standing water

FIGURE 54
Small auditorium on the first floor

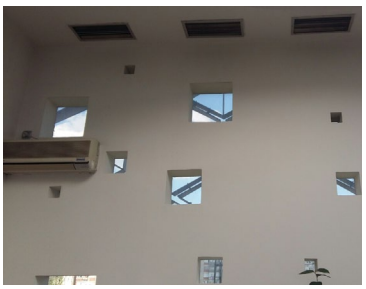
FIGURE 55
The main reading room receives sufficient light to sustain indoor tropical trees

FIGURE 56
The original design of the small auditorium on the first floor

FIGURE 57
Main auditorium on the first floor from the second floor balcony

FIGURE 58
Head librarian´s office. Note the mixture of original furnishings and replacement desk

59

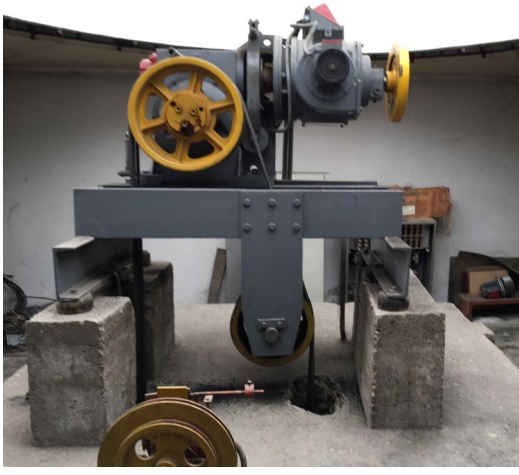


60

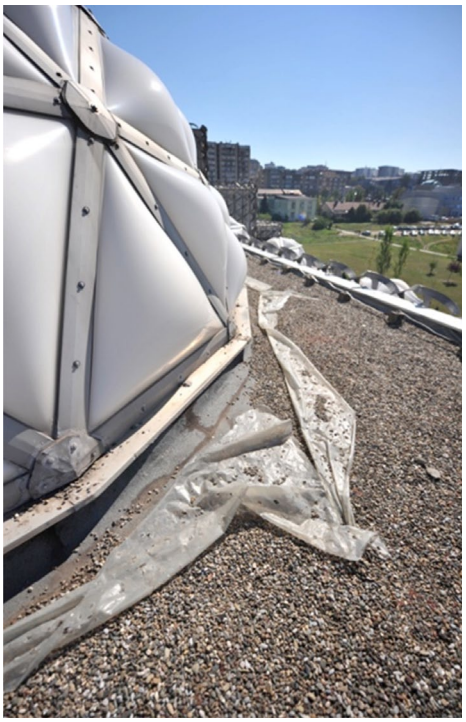
61

62

63

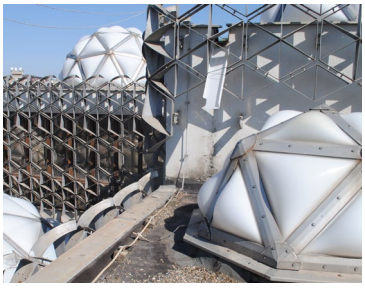


64



66

65



68

70

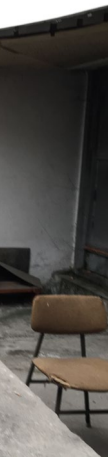
71

69

72

73

74



67

FIGURE 59
The second floor balcony in the main auditorium has significant water damage to the wood floors and is currently closed except for translation and audio visual support

FIGURE 60
Alterations in the 4th floor cover the original windows to create a new inappropriate design

FIGURE 61
New alterations at the 4th floor include inappropriate colors

FIGURE 62
Inappropriate light fixtures have also been installed. This image also shows water damage to the new finishes

FIGURE 63
Mezzanine level additions do not have the necessary safety standards for the guardrails

FIGURE 64
Alterations include inappropriate materials such as glass block walls and aluminum window and door frames

FIGURE 65
Deteriorated wood cladding over steel window frame - mainly on the north side

FIGURE 66
Sections of the roof have been addressed but improperly. Here the plastic temporary membrane has failed as it is not UV protected

FIGURE 67
elevator equipment at the fourth level. This equipment and controls were replaced approximately 8 years ago. There is only one functioning elevator in the library.

FIGURE 68
uncontrolled water dropping from over 2m onto the roof below has caused a failure in the wall and roof membrane. Maintenance workers have installed a temporary extension to the scupper but this must be addressed.

FIGURE 69
the vertical distance and flashing are not sufficient at the access door

FIGURE 70
The flashing in many areas has failed and there is a separation between roof layers. There is also lack of a 45% cant or transition between the horizontal roof and vertical parapet wall

FIGURE 71
The scupper above drains water directly over the door and flashing below the door. This is an original design flaw and must be addressed.

FIGURE 72
Ventilation fan top of the vertical mechanical shaft over the kitchen keeps this shaft dry. It should be investigated as this is a possible solution to improve air flow circulation in order to vent excessive moisture from the basement and cellar.

FIGURE 73
only single vertical drains direct water off the roof without backup system. This is a potentially critical failure.

FIGURE 74
Mechanical systems have been poorly installed with open holes. Not only does this permit water to enter the building but also significantly reduces thermal properties. This will eventually lead to a failure of the wall and further water infiltration.

75

76

76

77

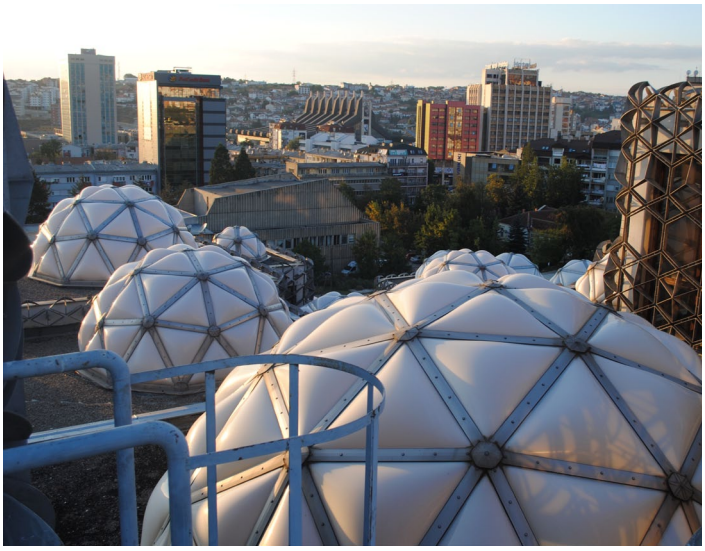
78

80

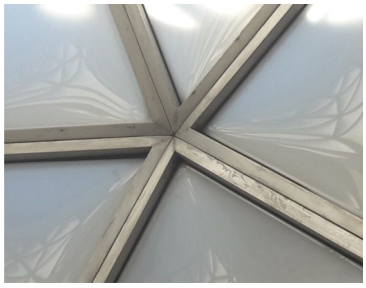
81

83

81

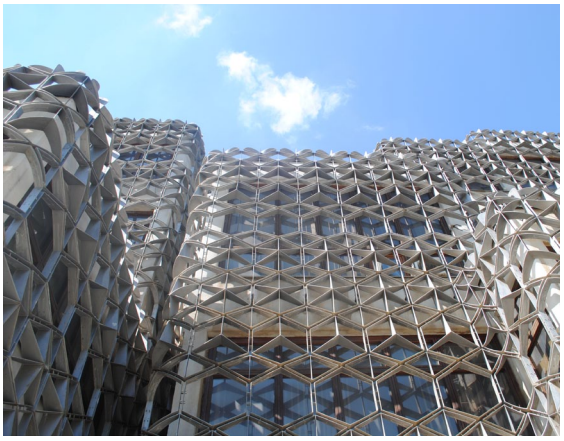


82



84

85



86

79

87

88

88

88

FIGURE 75
A main point of failure with the roof drainage system at the joints between the cast iron downpipes within the building. The seal between the vertical drain on the roof and the elbow or 90% transition to horizontal has failed. It is suspected this is lead and it has corroded allowing water to penetrate the building.

FIGURE 76
a typical built-up bitumen roof during installation and after. There are many contractors in Kosovo that are experienced with this type of roof.

FIGURE 77
elastomeric cool roof reflective coating, while more expensive these types of roofs could reduce energy costs over time.

FIGURE 78
blocked surface drainage

FIGURE 79
unplanned parking at the southeast

FIGURE 80
Paving stone of the plaza where it meets the interlocking brick of the parking lot

FIGURE 81
Left - concrete patches when inserted neatly is sensitive to the original stone pavers. Right - inappropriate and inadequate concrete patches in the plaza pavers

FIGURE 82
The dome's structure is created from extruded aluminum sections joined together through bolts and welds. This structure is strong, light and highly detailed and holds in place white translucent plastic panels.

FIGURE 83
a view of a dome from the interior

FIGURE 84
Detail of the joint connection of the aluminum frame

FIGURE 85
details of the grid at the corners and windows

FIGURE 86
Aluminum grid surrounding the façade

FIGURE 87
the aluminum grid from inside the library

FIGURE 88
The connection of the grid to the façade. Small cracks have been observed in the stone and concrete at this connection point along with staining, most likely due to differential thermal expansion and contraction

89

90

91

92

93

94

95

95

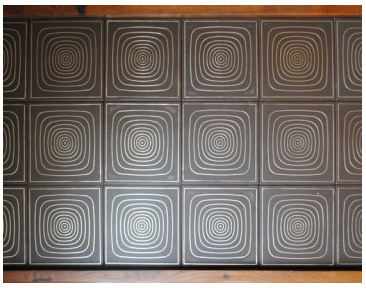
95

96

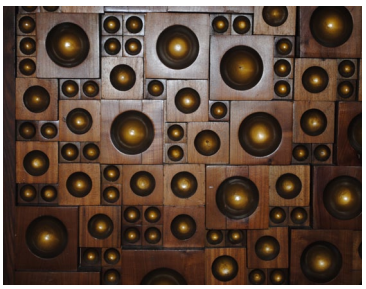
97

98

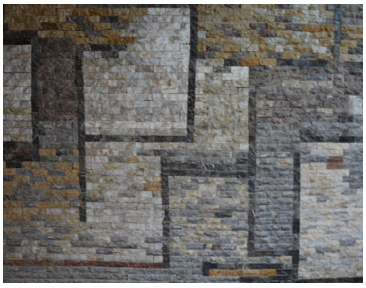
99



100



101



102

103

FIGURE 89
detail of the connections between grid modules

FIGURE 90
detail of the curve at the termination of the grid at the ground level. It also shows the connection through the stone veneer to the concrete behind.

FIGURE 91
a detail of galvanic action at the grid covering that was removed from the roof and placed around the ventilation shafts at the ground plaza level

FIGURE 92
New extruded inappropriate aluminum storefront windows and doors at the main entry for the American Corner

FIGURE 93
inappropriate interventions have covered the existing windows with an entirely new design motif. Thankfully the original windows and finishes are largely intact behind these additional walls.

FIGURE 94
The design motif extends to shelves

FIGURE 95
Lounge, desk study and office chairs display a variety of forms but with similar materials and design motif

FIGURE 96
the main auditorium seating remains original and contributes to the overall design.

FIGURE 97
The design includes large elements such as the skylight domes and small elements such as individual drawer pulls

FIGURE 98
Modern furnishing are not in keeping with the original design motif

FIGURE 99
The original chairs are more in keeping with the interior spaces than the new replacement chairs

FIGURE 100
WALL - vinyl finishes as originally designed from the second auditorium. The design motif of a circle inside of a square is repeated with gold embossed on vinyl.

FIGURE 101
WALL - The wood block three dimensional wall covering in the main auditorium. It provides excellent acoustic dampening.

FIGURE 102
WALL - detail of the stone wall surface finish in the main atrium

FIGURE 103
WALL - Stone surface finish on the main stair in good condition

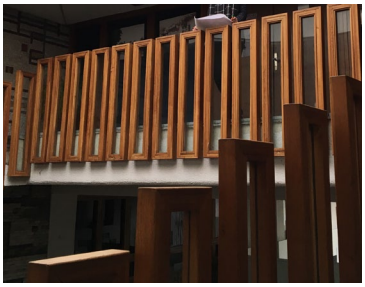
104

106

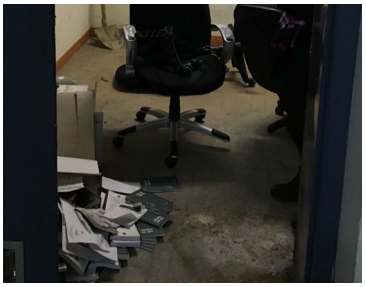
105

109

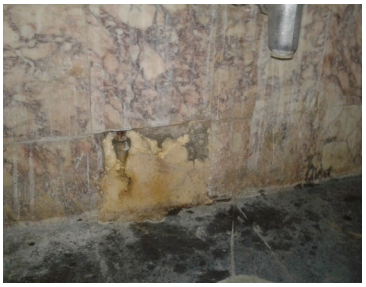
107



108



112



110

111

113

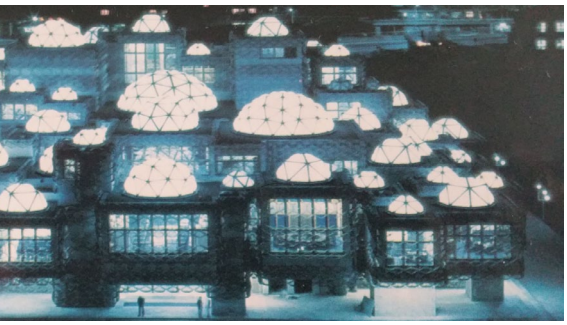
114

114

114

115

116



117

FIGURE 104
FLOOR - stone pavers at the exterior of the library

FIGURE 105
FLOOR - polished marble stone floors in a variety of colors in the public circulation spaces

FIGURE 106
FLOOR - The marble stone floor under the main dome. It is in very good condition

FIGURE 107
FLOOR - the epoxy floor in the reading rooms

FIGURE 108
The wood and glass balustrade in the main atrium

FIGURE 109
FLOOR - Original carpet still exists in some 3rd floor corridors and offices. Again the motif of a transformative square into a circle is repeated

FIGURE 110
FLOOR / WALLS The stone finishes in the toilets have survived well but are not in good condition due to water and poor repairs.

FIGURE 111
The plaster ceilings and false ceiling panels have water staining in most administrative spaces

FIGURE 112
Floor tile in the basement service area

FIGURE 113
Wall - painted white plaster textured surfaces throughout the library

FIGURE 114
the sculptural interconnected metal circles and the metal filigree artwork in the main atrium

FIGURE 115
current disabled access ramp at the East side of the Library. It does not have wheel curbs, handrails and is unmarked.

FIGURE 116
main monumental entry with parking on the west side

FIGURE 117
the illumination levels soon after the library was completed in 1981

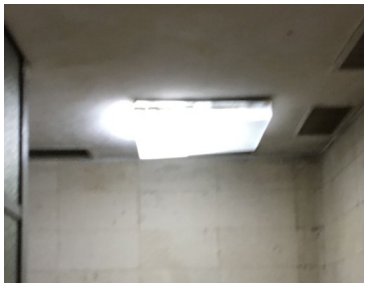
118

119

120

121

122



123

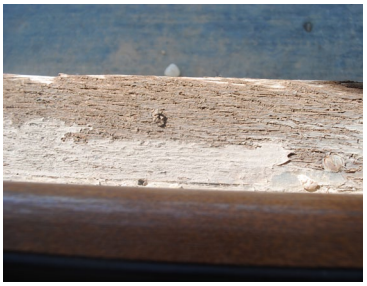
124

125

126

127

128



129

130

131

FIGURE 118
EXTERIOR TYPE #1 Spherical globe five light standard

FIGURE 119
LIGHT TYPE #1 - Circular lights over open areas repeat the dome motif in many spaces. The light levels in many spaces and circulation routes is inadequate.

FIGURE 120
These lights are in many areas intact but require maintenance and upgrades. These are of varying diameters

FIGURE 121
many plastic panel diffusers have been removed and are inappropriately stored throughout the building

FIGURE 122
EXTERIOR TYPE #2 linear florescent tube

FIGURE 123
LIGHT TYPE #3 - Square. These were surface installed in the service corridors

FIGURE 124
new inappropriate can lights inserted in place of the circular light fixture under a skylight

FIGURE 125
LIGHT TYPE #2 - Single circular panel set inside a square. Installed in corridors and office. Most of these fixtures are intact but require maintenance, upgrades and replacement panels.

FIGURE 126
LIGHT TYPE #4 Exposed fixture. These are in the non-public spaces of the building and are of a variety of models. They are less significant than the lights in the public spaces

FIGURE 127
replaced original doors with aluminum frame doors at the administrative entrance

FIGURE 128
existing front doors blocked.

FIGURE 129
detail of the wood cladding in an original window – largely in good condition but requires maintenance and a new finish

FIGURE 130
Some of the original doors are blocked or locked and no longer in use.

FIGURE 131
replacement PVC plastic operable windows with faux wood grain finish. These have been installed in nearly every floor of the library. While not original in form or material they are useful for ventilation.

132

134

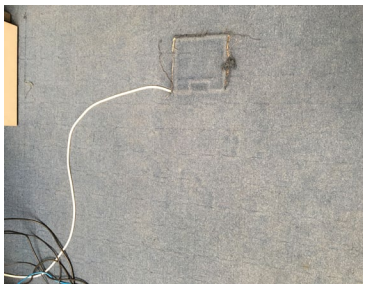
133

135

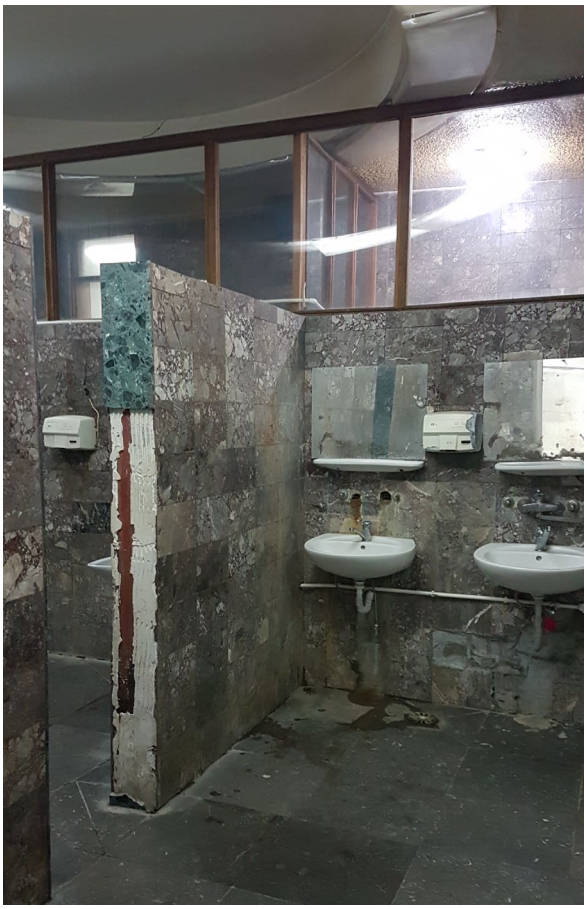
137

136

139



138



140

141

FIGURE 132
Original steel double glazed windows with painted wood cladding – this also shows one of the original entry doors blocked with concrete masonry units.

FIGURE 133
The wood cladding over the steel window frames is largely in good condition. However, particularly on the north side of the building, the wood has deteriorated due to the continued presence of moisture and rot is present

FIGURE 134
emergency diesel electrical generator

FIGURE 135
Existing domestic hot water boiler - it currently only serves the lower levels of the library

FIGURE 136
new air conditioning unit

FIGURE 137
dangerous exposed electrical wires at the toilet on the ground floor

FIGURE 138
electrical outlets in floor of reading rooms have ceased to function

FIGURE 139
junction boxes inside vertical chases but are not securely mounted

FIGURE 140
Toilet on the ground floor. Most supply and drain pipes are currently leaking

FIGURE 141
exposed junction box in floor of basement

CONCLUSIONS

The National Library of Kosovo “Pjetër Bogdani” (Biblioteka Kombëtare e Kosovës) is significant for is numerous underlying and overlapping values. It is at the center of the University, Pristina and Kosovo for knowledge, research and social life. It represents the historic architectural forms of the region in new materials and with new ideas. It also represents an ideal of integrated architectural design that included finishes, furniture and artwork. It is a well-used and functioning building necessary for the social and educational life of the community. It is also a well-respected building and citizens generally take pride in such a unique structure. Knowledge of this significance must be passed on to future generations. Therefore it must be conserved along with all its individual elements.

Overall the National Library of Kosovo is in good condition. There are no major structural issues such as deformation, differential settlement or cracking. There are minor areas at the bottom of the cantilevers where the reinforcing bars are exposed and these require treatment.

However there are more serious issues that must be addressed. This includes water infiltration from the roof. The flat built-up roof membrane, flashings, copings, scuppers and drains are all failing. There have been remedial actions over the years but it is time for the roof to undergo a redesign and new roof to ensure the building will last for another 40 years. The roof must undergo a redesign that will add additional insulation, increase the drainage slope, provide better control of water from the drain scuppers and provide backup roof drains should there be a blockage.

There are also serious issues with water infiltration into the basement and cellars of the building. From the reports that emerged during the archival research this has been a problem since the beginning. While excavation of the entire perimeter of the basement is cost prohibitive there may be other solutions such as a series of shallow wells or channels to dewater the site. Such well can also be installed within the building inside the vertical ventilation shafts. This requires testing and documentation but could be less invasive and more cost effective than new water proofing of the basement walls.

In addition the façade must be addressed. This includes cleaning and repointing of the stone cladding, cleaning the exposed structural members and the aluminum grid. The original wood windows and doors must all be cleaned, sanded, sealed, primed and painted. This will ensure that they remain with the building.

Illumination is also a major concern. Light levels are inadequate for study in the reading rooms. These investigations recorded readings of below 20 lux at night in the reading rooms while the minimum is between 250 and 500 lux. In addition the light levels in other areas of circulation such as the main stair are also insufficient. The light fixtures must be preserved as they are an integral part of the design of the library. These can be preserved and upgraded with the use of new technologies such as LED and smart control systems. This will also significantly reduce energy costs currently estimated at 3000 euros per month.

Furniture, finishes and ornamentation is also a serious concern. These elements are important as they were designed specifically for the library. They are at risk because they wear faster and must be replaced. Furniture is also easy to replace and there are many instances of new inappropriate furnishings.

The toilets require upgrades and replacement of water closets, faucets and plumbing. This should be done keeping as much as possible of the original fixtures and finishes. One or or toilets must be converted for disabled access.

All of these proposed interventions must be thought out and prioritized with a search for available funds to begin immediately. What has been discovered and proposed in this report are expensive interventions, but less expensive compared to upcoming further damages should they not be addressed.

Disabled access into the library is also an important consideration. This includes the parking, enforcement of the parking and a path including a ramp into the building.

In conclusion, the library is in good condition but the above issues must be addressed to ensure conservation of this important monument.

BIBLIOGRAPHY

1. National and University Library, by the Kosovo National Library, 1984

2. Contemporary Vernacular Architecture: Byzantine-Islamic Architecture, Andrija Mutnjakovic and Borut Bencina, 2015

3. Ramiz Sadiku Monography, GIK Ramiz Sadiku, ExportProject and Albert Kestelec, 1980

4. HAER Documentation Guidelines, NPS.

5. Recording, Documentation and Information Management for Conservation of Heritage Places, Robin Letellier, Werner Schmid and Francois LeBlanc, Getty Conservation Institute, 2007

6. Oris 99, The Prishtina Library, 2016

IMAGE CREDITS

CHAPTER IMAGES

Spread 1
(page 2/3): Rand Eppich

Spread 2
(page 10/11): Rand Eppich

Spread 3
Drone Image (page15): Fitim Shala

Spread 4
(page 28/29): Bekim Ramku

Spread 5
(page 34/35): Andrija Mutnjakovic

Spread 6
(page 45): Andrija Mutnjakovic

Spread 7
(page 61): Bekim Ramku

Spread 8
(page 71): Rand Eppich

Spread 9
(page 72/73): Kosovo Architecture Foundation

Spread 10
(page 88/89): Bekim Ramku

Spread 11
(page 102/103): Rand Eppich

Spread 12
(page 112/113): Fitim Shala

Spread 13
(page 123): Kosovo Architecture Foundation

Spread 14
(page 126/127): Kosovo Architecture Foundation

Spread 15
(page 136/137): Rand Eppich

Spread 16
(page 146/147): Rand Eppich

Spread 17
(page 167): Rand Eppich

IMAGES

Figure 1 (page 19): Kosovo Architecture Foundation

Figure 2 (page 20): Andrija Mutnjakovic

Figure 3 (page 21): Andrija Mutnjakovic

Figure 4 (page 22): Andrija Mutnjakovic

Figure 5 (page 24): Kosovo Architecture Foundation

Figure 6 (page 24): Kosovo Architecture Foundation

Figure 7 (page 31): Andrija Mutnjakovic

Figure 8 (page 32): Andrija Mutnjakovic

Figure 9 (page 33): Andrija Mutnjakovic

Figure 10 (page 39): Andrija Mutnjakovic

Figure 11 (page 39): Andrija Mutnjakovic

Figure 12 (page 41): Andrija Mutnjakovic

Figure 13 (page 42): Andrija Mutnjakovic

Figure 14 (page 53): Andrija Mutnjakovic

Figure 15 (page 55): Kosovo Architecture Foundation

Figure 16 (page 59): Rand Eppich

Figure 17 (page 75): Kosovo Architecture Foundation

Figure 18 (page 81): Kosovo Architecture Foundation

Figure 19 (page 85): Kosovo Architecture Foundation

Figure 20 (page 91): Kosovo Architecture Foundation

Figure 21 (page 95): Kosovo Architecture Foundation

Figure 22 (page 99): Kosovo Architecture Foundation

Figure 23 (page 105): Kosovo Architecture Foundation

Figure 24 (page 109): Kosovo Architecture Foundation

Figure 25 (page 115): Kosovo Architecture Foundation

Figure 26-33 (page 148): Kosovo Architecture Foundation & Rand Eppich

Figure 34-35 (page 149): Kosovo Architecture Foundation

Figure 36 (page 150): Kosovo Architecture Foundation

Figure 37-44 (page 151): Kosovo Architecture Foundation & Rand Eppich

Figure 45-141 (page 152-165): Kosovo Architecture Foundation, Rand Eppich & Bekim Ramku

APPENDIX

All appendix material is provided separately

A. Sarajevo National Library design concept, Andrija Mutnjakovic, 1970

B. Prishtina Library Concept design, Andrija Mutnjakovic, 1971

C. Preliminary Design Concept Brief, Andrija Mutnjakovic, 1971

D. Images and Sketches, Andrija Mutnjakovic 1971-82

E. Detailed design of the interior fixtures and furniture, Andrija Mutnjakovic 1971-73

F. Main Implementation project with engineering, Andrija Mutnjakovic & Centroproject 1971-82

G. National and University Library of Kosovo, Mehmet Gerguri, Adem Bllaca, Shkelzen Maliqi, Radovan Kompirovic, Haxhi Vokshi, Dragoljub Petrovic, Sevdie Ahmeti, Bedri Hysa, 1984

H. Ramiz Sadiku Monography, GIK Ramiz Sadiku, Exportproject and Albert Kestelec, 1980

I. Contemporary Bernacular Architecture: Byzantine-Islamic Architecture, Andrija Mutnjakovic, 2015

J. Furniture Schedule, Kosovo Archiecture Foundation, 2017

K. The Site, Library Material, Changes from the Original Project and Identified Problems, Kosovo Archiecture Foundation, 2017

L. The Site, Library Material, Changes from the Original Project and Identified Problems, Kosovo Archiecture Foundation, 2017

M. Electric Installations, El.Eng. Skender Shala, 2017

N. Insulation and Irrigation, W.Eng. Besart Osmanaj, 2017

O. Arts at the Library, Kosovo Architecture Foundation, 2017