

UNIVERSAL ACQUAINTANCE

Towards a contemporary view of
Mosque architecture

Mashary Abdullah Alnaim
Wael Mohamad Samhuri



Abdullatif Al Fozan
Award

FOURTH CYCLE
2020-2023

Im Namen Gottes,
des Allerbarbers,
des Barmherzigen.
Lob sei Gott dem Herrn
der Welten.
Dem Allerbarber,
dem Barmherzigen.
Dem Herrscher am Tage
des Gerichtes.
Dir dienen wir und Dich
bitten wir um Hilfe.
Führe uns auf den rechten
Weg, den Weg derer,
denen Du gnädig bist,
nicht derer, denen Du
zürnst und nicht der
Irregehenden.
Im Namen Gottes,
des Allerbarbers,
des Barmherzigen.
Ihr Menschen!
Wir haben euch aus
Mann und Frau erschaffen
und haben euch zu
Völkern und Stämmen
werden lassen, damit ihr
einander kennenlernt.
Der Edelste vor Gott ist
der Gerechteste
unter euch.
Gott hat das wahre
Wort gesprochen.

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PREFACE

This book's chosen title, **Universal Acquaintance** («لتعارفوا»), is drawn from a Qur'anic verse that reveals Divine knowledge and wisdom that resonates with humanistic philosophies. Taking 'universal acquaintance' as its starting point, this book aims to ameliorate misconceptions of a narrow image of Islam and its mosques being exclusively for Muslims.

In doing so, it endeavors to shed light on the true universal message of Islam. Not only does this concept of **Universal Acquaintance** have an epistemological dimension pertaining to how people become acquainted and come to know the 'Other', but knowing the "Other" also entails coming to know oneself. As the Prophet Muhammad said, "He who knows himself knows His Lord" – that is truly the highest form of knowledge.

In addition to fostering the 'vertical' relationship of each person with the Divine, the mosque's primary *raison d'être*, the Qur'anic concept of **Universal Acquaintance** teaches all of us to develop additional 'horizontal' relationships: we should develop relationships between people "of all peoples and nations"; that is, *everyone*. This process of mutual acquaintance in sacred spaces would potentially help ward off misconceptions, ignorance, and hostility. People are only afraid of what they do not know. **Universal Acquaintance** is thus at the core of Islam's message as a universal religion. It imbues mosque architecture with an epistemological depth and brings forth the light embodied in the first mosque in the sacred city of Medina to every city, village, and neighborhood around the world.

We might say that both epistemological and interpersonal dimensions of the mosque constitute the foundations of its architecture. Indeed, these elements may be what enable mosque architecture to escape from the hindrance of superficial obsolete traditions and embrace a broader perspective that inspires and nurtures spiritual growth, meaningful personal relationships, and culture through the vigor and vitality of new ideas and innovations. In this way, could mosque architecture become a universal language capable of enabling the idea of **Universal Acquaintance**?

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THE MOSQUE COMMUNAL

AS SPACE

The Mosque as Communal Space

Mosque architecture is too vast a topic to be fully covered in a single book. Instead, each edition of the Abdullatif Al Fozan Award for Mosque Architecture sheds light on one particular topic to draw attention to productive avenues for further academic study in the future. This book is situated within a body of critical and documentary work in the field of architecture and also aims to shed light on intangible elements of mosque construction and function, particularly with regard to social and cultural spheres. Mosque architecture is less about creating a religious monument than it is about constructing a coherent and interdependent community.

I have always been interested in the mosque as a source of social cohesion. While I've said in the past that mosque architecture should be more elaborate than that of private homes, this book focuses on a different topic: how to revive the crucial social functions that mosques serve. People are in great need of the tranquility the mosque provides, which enables worshippers to engage deeply with the space itself. In order to understand the social architecture of the mosque, and the role of this space in which people come together five times each day, it is worth taking a quick look at the history of these structures. In the mosque, the absence of a single worshipper is felt by the group, for this is a place for collective prayer. Contemporary mosque architecture aims to revive this sense of cohesiveness among the community of worshippers.

After more than a decade since the first edition of the Abdullatif Al Fozan Award for Mosque Architecture, it has become clear that mosque architecture has a social dimension that differs from that of other religious buildings. Humans were created in their diversity that they may become acquainted with one another. Mosques facilitate this innate purpose, and, as stated in the prophetic Hadith, collective prayer is twenty-seven times superior to solitary prayer. This is because prayer should serve to bring people together that they may become acquainted and draw closer together. However, since God created the whole Earth as a place of prostration and a means of purification, one can also pray at home. Once we understand the wisdom behind building the physical structure of the mosque and realize the intangible dimensions it possesses as well, then we can truly appreciate its immense social importance.

Through its rigorous adjudication of mosque architecture, the award aims to create a global network that sheds light on mosques and mosque architecture from various perspectives. From the twentieth century until the present day, some non-Islamic commentators have viewed mosques in an unfavorable, and even negative, light. Such commentators fail to grasp how the mosque serves as both a holy space and as a laboratory for architectural ideas and social dynamics, and that the behavior of isolated individuals should not be linked to Islam as a whole or mosques in general. The mosque is the house of God and fosters social cohesion, positive community dynamics, and upright conduct, while also standing as an aesthetically beautiful and architecturally innovative space. Worshippers gather five times each day to pray, which contributes significantly to promoting communal dynamics. However, specific cultural values vary across different communities, even though worshippers follow the same traditions within the mosque. In this regard, mosque architecture is fundamentally inclusive: it sets the basic parameters for religious practice and conduct without imposing a narrow mold upon diverse communities.

Saudi Arabia has been endeavoring to revitalize the life of the mosque for more than a quarter century and has currently adopted a national program backed by the state. The mosque occupies a central node in the nexus of social, cultural, and even commercial activities in the country. We cannot restore historical areas without revitalizing mosques whose worshippers have left. The intangible elements of mosque architecture are a key component in developing this field further and avoiding the downward spiral of formalist architecture that lacks spiritual depth. When we decided to develop a program for revitalizing old mosques, we looked beyond the question of technical restoration to explore social history. We discovered that becoming acquainted with one another, as set forth in the Qur'an (49:13), is central to the historical and cultural purpose of mosques. The social cohesion that the mosque creates as a daily gathering place supports the processes of place-making and collective memory.

This book examines mosque architecture from a non-traditional angle. The title, *Universal Acquaintance* ("لتعارفوا"), has deep religious, historical, and cultural resonance in Islam. The mosque serves as an inclusive, humanistic space that expresses the core ideals of Islam as a religion for all people. This lofty purpose of mutual acquaintance is embodied in mosque architecture itself. This is a brief overview of a historically rich and complex concept that deserves further attention, and this book pays homage to this legacy to foster new global dimensions of this vision. The tireless work of the Abdullatif Al Fozan Award brings international attention to mosque architecture and its contributions to the good of humanity and society.

Sultan bin Salman bin Abdulaziz Al Saud

Head of the Board of Trustees

Riyadh

January 2023



MOSQUE ARCHITECTURE

Mosque Architecture: Achieving Equilibrium between Aesthetic, Economic, and Social Elements

This book aims to shed light on the intangible dimensions of mosque architecture, both with regard to the spiritual dimensions of worship and the complex historic and social functions of mosques. The book focuses on contemporary mosque architecture as it relates to the spatial and spiritual roles of the mosque throughout history as a space for gathering and worship. The book examines the course that mosques might take in the future, i.e., whether the focus of mosque architecture should be technique and form or cultural and social elements. The book gestures to a middle road between these two approaches, just as the Award aims to further academic and professional avenues for developing mosque architecture around the world.

One of the primary goals of the Award is to promote mosque architecture that creates an appealing congregational space that provides worshippers with a sense of tranquility and peace. Mosque architecture facilitates these social connections through creating a space for worship and for fostering a connection between people and their Creator. In this way, the emotion connected to the place translates into a connection with the architecture. However, there are several challenges to achieving this goal. First of all, excessive ornateness of design should be avoided because the mosque is a space for humility and connection with others. A second issue is how to incorporate the mosque into the daily life of worshippers in order to make it a gathering place for the community even outside prayer. Third, mosque architecture should embrace simplicity and avoid the kind of expensive additions that have been incorporated into mosque architecture in recent years but are not central to its purpose. The Award has sought to address these challenges during its last four editions in order to promote architectural practices that further an appropriate balance between community needs, architectural aesthetics, and economic sustainability.

During previous editions of the Award, we have witnessed significant development in the aesthetics of mosque architecture, which required certain guidance to delineate its future trajectories. The Award has taken it upon itself to establish clear parameters for the future of mosque architecture, particularly with regard to looking beyond structural forms to rather focus on the needs of worshippers and to provide new social frameworks and solutions to the challenges that contemporary mosques face. In recent years, this has led us to focus on the social drivers of architectural form.

Architecture cannot achieve its objectives if it is not built to serve the functional purpose of the space, which in turn stems from social needs that prompt worshippers to voluntarily visit the mosque. We find that mosques are used in this way around the world, though with some variation to smoothly adapt to the local cultural milieu. The visual aesthetics of the mosque constitute a spatial point of reference for worshippers to come together, something in which the architecture itself plays a major part.

The title of this book alludes to these social dimensions of mosque architecture. We might consider the lines of worshippers within the mosque: Going to the mosque five times each day reminds us of these duties to the community. When I decided to establish this Award, I was keen on exploring how mosque architecture could inspire worshippers to spend more time at the mosque in order to become acquainted with one another. I found that when mosques provide a high-quality space with amenities and are aesthetically pleasing with unique design, they encourage people to spend more time in the space and foster social bonds. These elements have been previously overlooked by many working in the field of mosque architectural design. As a result, mosque architecture has focused less on qualitative aspects of construction and instead has produced repetitive forms that fail to look for creative solutions.

The challenge for specialists in this field is to shift how we think about mosque architecture. The Award works with specialists at both the theoretical and practical levels to achieve this key overarching goal. We might not have fully succeeded yet in this regard; we know that the path ahead is long and difficult and will require concerted efforts from all those who care about mosque architecture. Through the Award's many programs, I call upon specialists to contribute as much as they can to developing the field of mosque architecture in accordance with the cultural contexts of different regions around the world. The Award aims to support mosque architecture at the international level and to share with the world the cultural and aesthetic richness that mosque architecture contributes to human civilization.

During previous editions of the Award, we drew attention to various unique mosques and hope to highlight other mosques in the future. Our objective is not to celebrate specific structures, although they can teach us a great deal, but rather to establish a professional foundation and knowledge base from which to challenge the status quo and endeavor to change it. The Award therefore has sought to set up electronic databases that can serve as digital libraries for a global audience. These currently include three main databases: one database documenting exceptional mosques around the world ("Mosqpedia"), another focused on publications about mosques in various languages (Asfaar), and thirdly, an architectural library which contains the work of scholars, practitioners, and others engaged in this field around the world (Mnaber). We hope these databases will continue to grow over time so that they can become a key resource for mosque architecture in the coming years.

Abdullatif bin Ahmed Al Fozan

*Founder of the Abdullatif Al Fozan Award for Mosque Architecture
Khobar*

January 2023



Epistemology and the Architecture of Houses of Worship

Dr. Rasem Badran (Architect) and Hizam Kaddoura (Writer)

Architecture as the Physical Embodiment of a Civilization

Architecture constitutes a visual text. Unlike written texts, it is not overloaded with allegorical references and exegetical explanations. For this reason, as custodians of their civilization's physical embodiment, architects must keep in mind their responsibility and of the importance of producing high-quality creative work.

Architects endeavor to resolve the contradictions inherent in any composition, with regard to material and site, from both a quantitative and qualitative perspective. In the end, some will appreciate the final product, while others will find it lacking.

Architecture is plagued by anxieties around dichotomies: between presence and absence, public and private, simple and complex, open and closed, exuberant and muted. These binaries place the architect in a constant state of struggle. The architect can only resolve these contradictions through achieving harmony between the macro and micro levels of reality. Material reality is the product of such opposing forces that allow ideas to develop. Realists focus on unity of opposites, which could suggest deficiency of composition. They focus on the need to resist particular parameters and to modify them according to what is practically feasible and coherent with the surroundings.

The Nature of Architectural Works

Architecture is perhaps by nature a field where the process of its execution is marked by nerve-racking ups and downs. The architect agonizes over the feasibility of various potential solutions, whether others will appreciate their work, and whether the final result reflects the elements that shaped their process.

Architecture is complex endeavor that engages with both time and place. It reflects the dialectic between dream and reality, between possible and impossible, in ways that significantly shape the finished product. It embodies material, social, economic, and political considerations, both tangible and intangible.

These works require a passion for this give-and-take that sustains the architect through their doubts about how the composition will come together. The true architect finds more pleasure in the process than in any subsequent recognition or material reward.

Structuralism

Structuralism takes form itself as a unit of analysis. Deriving from the word "structure" in its root sense as referring to the material aspect of a building, structuralism also encompasses social, aesthetic, economic, and psychological structures as well.

The difficulty in creating architectural work lies in the need to balance tangible and intangible dimensions. These challenges require the architect to go beyond considerations intrinsic to the work in question to engage with the dynamism of the surroundings. This involves going beyond mere functionality through structural form that takes social structures as well into account. With this in mind, the structuralist approach serves as a tool for architectural analysis.

Polarity of Opposites in Architecture

Spatial dynamics provide an important lens onto the built environment, with regard to how spaces are organized according to form, function, and other physical attributes. This includes dichotomies between right and left, top and bottom, front and back, open and closed, or dark and light, all of which can serve as important critical tools. These dualities could seem oppositional at first glance, not unlike other dichotomies (near-far, small-large, finite-infinite), which can be derived from notions of distance, height, or size. There are also other kinds of oppositions in form: the curvature of circles versus straight lines, macro and micro, stationary and mobile, or narrow and wide.

All of these polarities complement rather than negate their opposites, and offer conceptual keys in employing formal elements of architectural composition to make the work more vibrant.

Between Vision and Implementation

Architecture provides the tangible foundations that bring villages and cities to life. Such structures are more than their component parts—brick, wood, cement, or steel—or practical functions alone. Architecture is rather a laboratory that creates landmarks reflecting the concerns, ambitions, and consciousness of a given society.

Because of its physical nature, architectural work is more complex and involved than theoretical, literary, or scholarly endeavors. Its preliminary blueprint constitutes a bridge between the architect's imagination and the tangible execution of the work, with regard to site, space, form, color, etc. Even after being implemented, the project retains these elements of uncertainty with regard to the extent to which it has met the needs of those using the space. Such questions come to a head in discussions about the project's effectiveness during deliberations among judges.

A Fluid Vision and Solid Execution

Architects work to turn their ideas into reality through the design process, which involves reviewing construction sketches and adding, removing, or cutting back certain elements in order to identify the best avenues by which to achieve their desired objective. These repeated revisions make it possible to achieve a relatively balanced visual composition, during the design process or even during the implementation of the work. This is the process that Hassan Fathi sometimes followed in his mud-brick architectural work.

The legendary Beethoven employed a similar method in revising his musical compositions until the last possible moment. This was at odds with the approach followed by previous classical composers like Mozart, who composed his pieces without any later changes or revisions.

We must understand that the implementation of a project is not the end of the road, but rather provides a platform for further dialogue with the past in order to foster diverse avenues for independent thinking in the future.

A Unique Semiotics

Evaluating a given architectural work requires assessing where that work stands within the progress of architecture as a whole and the extent to which it makes a new intellectual contribution arising from a particular locale and its milieu. One must also assess the extent to which the work moves beyond existing patterns within architectural style and how it creates new forms that could be replicated in sites with similar cultural, social and ecological dynamics. Additionally, judges can assess how the work employs contemporary technology to serve the specific needs of the site in question, as well as the project's economic feasibility, in order to ensure its later sustainability.

The architect's anxieties during the design process continue into the implementation stage, especially when the proposed project engages with the specificity of a place. The context of a place provides conceptual linkages that shape how the architectural work will be adapted, developed, or replaced.

Local architectural vernaculars shape the trajectory of global architecture, and their contextual innovations and knowledge contribute to the mosaic of architectural cultures around the world.

The Adjudication Process

Architectural work is evaluated by bodies which select outstanding works that enrich architectural culture. The criteria for adjudicating work are primarily tied to the functional dimension of the work in question, the viability of the project, and its engagement with the material, cultural, and social environment. Here we should mention the efforts made by administrative bodies that shape urban development projects as well as other institutions that help bring outstanding architectural projects to light. All of these entities grasp the importance of criticism as a means of drawing attention to realities or protesting living conditions, and which reflects the human capacity to create new models that reflect current developments.

One of the Al Fozan Foundation's objectives is to try to shed light on how to approach architectural structures that serve particular functional purposes, such as mosques. The foundation established an international adjudication body to assess such architectural endeavors and to provide a platform that enables adjudicators to consider diverse interpretations and understandings of mosque architecture in Islamic and non-Islamic societies across various geographical and cultural contexts. It aims to promote diverse avenues that foster discussion in order to reach a consensus about future directions that mosque architecture could take.

Secondly, the foundation hopes to develop diverse ways of thinking about the design process in order to encourage designers to delve into projects that move beyond the same dominant tropes in their particular cultural context, or tendencies towards the same approaches in mosque architecture.

Although the adjudication process should abide by the above points, the final decision about the architectural work is open to the individual interpretations of judges. Submissions will contain diverse material with regard to the semiotics of size, space and technique. Judges are also often influenced by different schools of thought, which have divergent aesthetic priorities, and by their personal preferences, which makes the visual impact of work central to final decisions about its effectiveness.

It is preferable if judges can avoid being constrained by a particular school of thought. This platform should be open to diverse projects that can guide the audience in thinking about new ways to approach the architectural design of mosques.

Semantic Connections between Prayer and Community

Verse 24:36 of the Qur'an reads: "[These niches] are in mosques which God has ordered to be exalted and that His name be mentioned therein, glorifying Him in the mornings and evenings."

When a community chooses a particular place as a location for prayer, structures are built under various names, including "mosque" (masjid), "congregational mosque" (jami), and "prayer room" (musalla). Of course, prayers can also be performed wherever a group of worshippers might gather together to pray, for as the Qur'an affirms, "Wherever you turn, you are in the presence of God" (2:115).

The plural form of the word mosque, masajid, appears in Verse 72:18 of the Qur'an, which reads: "The places of worship (masajid) are for God alone, so pray not unto anyone but God." This verse

indicates that mosques are a place for meditation and worship, since the place where we affirm our servanthood to God is a magnificent place, and God manifests Himself to us in the act of prostration.

In Arabic, the term for mosque alludes to both the physical act of prayer and the spiritual dimensions of worship. The act of prostrating oneself in prayer (sujud) is linked to the word for those performing the prayer (sajidin) and to the word for mosque itself (masjid).

From an architectural perspective, a mosque is a building that includes several elements, such as a prayer hall, a courtyard (sahn), a qibla, and a mihrab. But above all, a "mosque" (masjid) is the place where "prostration" (sujud) takes place. The word thus possesses both a tangible sense alongside its spiritual sense, expressing a state of connection with what is above through the physical act of touching one's forehead to the ground.

Some mosques are called "congregational mosques" (jami), which refers to a mosque in which large crowds (jumu) gather together (ijtama) as a congregation to pray. The Arabic noun jami' is, appropriately enough, also a verb meaning "to gather," a fitting name for the mosque whose purpose is to gather people together for a shared purpose: worshipping God.



Another linguistic element of mosques is that they will sometimes have textual ornamentation on the walls. The text is interwoven in such a way as to achieve a visual balance between positive and negative space in forming the letters, as if it were a cosmic text weaving the architecture into the material structure of the universe.

Through an appreciation of both the literal and spiritual connotations of mosque terminology, architects can add meaning and complexity to their structural composition, and further enhance the spiritual and emotional dimensions that mosques evoke for worshippers.

The Mosque as an Architectural Hub

Architecture serves as the basis for community life in the same way that trees are deeply rooted in the earth that provides the fertile soil for their existence. The built environment is constantly expanding in response to human needs. Houses of worship are key elements of this built environment, alongside markets, hospitals, schools, and homes.

A masjid is a mosque in which Muslims perform their obligatory prayers, whereas a jami' generally refers to a mosque built by an influential body in prominent areas and which serves as one of the main hubs within the city. A mosque referred to as a "great mosque" (al-jami' al-a'zam or al-masjid al-kabir) has a unique symbolic and functional significance in representing the country at the global level. Such mosques are built to hold many worshippers who might perform the Friday prayer, Eid prayers, or funeral prayers.

The qibla helps organize worshippers into lines of prayer towards the Kaaba in Mecca. These lines of worshippers follow clear and simple geometric patterns of rectangles and squares (except in the Great Mosque of Mecca itself, where worshippers form circles around the Kaaba).

The architectural space of the mosque is grounded in spiritual and social values, such as justice, equality, and fraternity, and helps to organize human relations in various ways. Prayer strengthens

social cohesion, facilitating interactions in daily life between different social classes. The architecture of the Prophet's Mosque in Medina served as a model that could be followed around the world. However, Islam arrived during an age of empires with their material opulence, and prayer lost its appropriate humility and simplicity, which had been the cornerstone of spiritual connection with God. Instead, mosque architecture expressed the prestige and power of the state, bore the names of human leaders, and paid homage to the sultan and the values he hoped to spread among the people.

Sacred Architecture

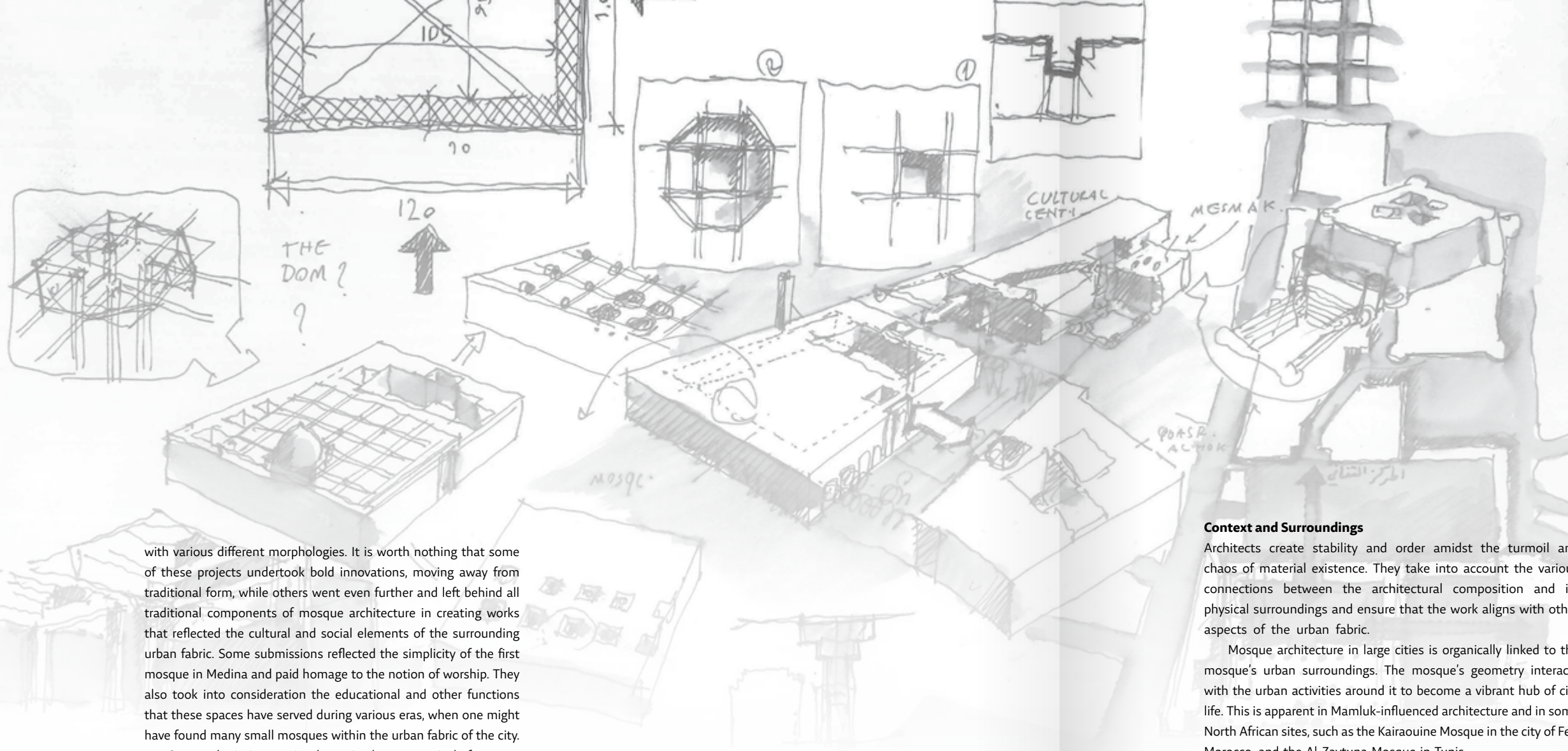
Consciousness is what sets humanity apart from other living creatures and is what drives people to create material work imbued with spiritual and sacred symbolism. Architecture attests to this elevated human consciousness of our place in time and historical space, as well as our concerns about the future. Humans are always trying to achieve a measure of equilibrium between various necessities, whether practical, symbolic, or aesthetic.

Houses of worship are sacred to believers, which lends special meaning to these places. They serve as a refuge for individual protection and communal security. Places of worship are where the soul soars, purified of the chaos and dangers of the profane world outside.

The main difference with regard to utilitarian versus symbolic dimensions is that the former relate to the rational practicalities of daily life, whereas the latter is concerned with nonrational matters that exist outside the scope of material experience.

Innovations in Creating Worship Spaces

The mosque is a crucial part of the architectural composition of Islamic societies. It is a space that can hold huge numbers of worshippers. The morphology of the prayer hall, an important interior feature of mosques, has generated significant controversy. Submissions to the Award have included architectural projects



with various different morphologies. It is worth noting that some of these projects undertook bold innovations, moving away from traditional form, while others went even further and left behind all traditional components of mosque architecture in creating works that reflected the cultural and social elements of the surrounding urban fabric. Some submissions reflected the simplicity of the first mosque in Medina and paid homage to the notion of worship. They also took into consideration the educational and other functions that these spaces have served during various eras, when one might have found many small mosques within the urban fabric of the city.

Some submissions omitted certain elements typical of mosque architecture. This included reducing the minaret to a small vertical structure equipped with speakers for the call to prayer or replacing the dome, which has long been an integral feature of mosque architecture, with other modern building styles.

This has affirmed that the tenets of Islam provide a strong foundation for humanity's openness to diversity of expression and interpretation and that mosque architecture is not limited to preexisting forms.

Despite efforts to employ modern building techniques in constructing the roofs of prayer halls in mosques, I would argue that the columns contribute a necessary warmth and fullness to the open hall and provide the worshipper with the sense of comfort they might find in their own private home, while also fostering a connection with God in prayer. Mosque architecture reflects the intended function of worship through its simple composition, which invites contemplation and reflection. Mosque architecture also aims to foster self-discovery and to contribute to igniting consciousness in a memorable way, so that the soul feels a sense of tranquility and peace away from the tumult of life outside.

One of the most important parts of creating this tranquility are the precise ratios within the architectural composition of the prayer space, which enrich the space by creating an environment for spiritual reflection. Care is taken to include openings for natural sunlight, whose rays will change as the sun moves over the course of the day. The intensity of the sunlight also varies with the seasons and strengthens the soul's connection with God.

Many previous studies have focused on the connections between architecture in Islamic societies, especially its forms of

ornamentation, and how these architectural forms serve particular functions or make aesthetic contributions according to the specific region and social milieu. The German philosopher Immanuel Kant wrote that the Islamic decorative style known as arabesque was emblematic of his notion of "free beauty." Even in his very different cultural context, Kant could see that these dimensions of Islamic architecture transcended physical form and functional purpose.

At this juncture, we might address how these art forms can enrich worship spaces through their depth of meaning and abstraction to create compositions that extend beyond material form.

With regard to the exterior of the mosque, the architect might focus on designing the roof of the mosque so that in addition to the courtyard, the prayer space is also open air, as we see with the desert mosques in the Arabian Peninsula. Architects might also experiment with new forms for courtyard spaces in designing shaded space with trees growing, as was the case with the Great Mosque of Córdoba, which enabled sunlight to filter in throughout the day through trees that resembled the colonnades found within the prayer hall. These models for the courtyard were taken into account during the expansion of one of Medina's historic mosques.

Context and Surroundings

Architects create stability and order amidst the turmoil and chaos of material existence. They take into account the various connections between the architectural composition and its physical surroundings and ensure that the work aligns with other aspects of the urban fabric.

Mosque architecture in large cities is organically linked to the mosque's urban surroundings. The mosque's geometry interacts with the urban activities around it to become a vibrant hub of city life. This is apparent in Mamluk-influenced architecture and in some North African sites, such as the Kairaouine Mosque in the city of Fez, Morocco, and the Al-Zaytuna Mosque in Tunis.

There have been some successful efforts in recent times to link worship spaces with the architectural fabric of the city as a whole, although this has sometimes focused on integrating communal prayer into the surrounding urban space while the mosque is still built to face the qibla.

The visual architectural composition of exterior and interior elements of the mosque, which serve various functional purposes, is very similar to the linguistic composition of a text. Just as letters make up a word, words form a sentence, and sentences make up a text, there are small architectural units whose meaning is dependent upon their place in the larger whole. Changing the place of one word in a sentence changes the meaning of the whole sentence. Likewise, fully understanding a text requires making these contextual and conceptual linkages between words, sentences, and imagery.

In the architectural context, visual composition shares some of these features with linguistic structures, although it differs in other regards. In the linguistic case, one tries to identify a single intended meaning for the word based on context to avoid misinterpretation. In the case of architectural compositions, there are many possible meanings and connotations that vary according to the intended purpose of the work. The exterior elements of these structures strive to reflect and align with the surrounding natural and material environment. These considerations affect the composition of the architectural work, and also partly shape the design of the interior space in order to create harmony between interior and exterior elements. There are also cases when the exterior and interior have more divergent compositions, for reasons such as changes over time in the functional purpose of the space. In such cases, the historical architectural value remains important to preserve.

Sometimes additions or changes must be made to the exterior to modernize the space. It might also be necessary to upgrade the urban environment surrounding particularly important structures. In other words, the architectural context sometimes requires developing the surrounding area in order to add greater depth of meaning to certain structures. In these cases, architecture can imbue history with new associations. These efforts can also rectify chaotic or undesirable elements of surrounding visual architecture using other methods to refine the built environment.

Architects draw upon context in their designs and innovations. This context shapes how they will arrange different architectural elements within a structure, in order to best align with the built environment of a particular region, reflect a particular era, or serve a particular functional purpose.

Context is the link between the architectural composition of a particular structure and the surrounding environment, so that the space is arranged to serve the needs of the community. If done correctly, the structure could even become a major landmark and source of pride.

This ambitious approach to architecture that has a functional purpose, retains its chosen meaning, and reinforces its intended allegorical interpretation provides us with criteria by which we can fairly and accurately judge the final work.

If an architect ignores the surrounding context, the structure will stand alone—a distinguishing feature in this age of showing off.

Although a silent art form, architecture finds its voice through the ways in which its composition reflects meaning. Contexts rely upon each other as an organizing force for their constitutive elements. Sometimes these links are only conceptual intimations in the mind and memory.

From Meaning to Absurdity

Examining local needs and specific architectural contexts makes it possible to create diverse forms. Without this, architecture becomes a generalized and automatic process with no variation among different regions of the world, as is true of much of modern work. The postmodern movement has tried to disrupt this static repetition with diversity of form to satisfy aesthetic needs through greater individual variation. However, postmodernism responded to the dull repetition of mass production with complex visual compositions imbued with meanings that did not speak to the intended audience, which led to the decline of this movement.

The experimentalism of the postmodern movement entailed a certain arbitrariness and superficial exaggeration in the borrowings of its visual composition. Those who rejected this movement created work that went to even farther extremes of absurdity to liberate themselves from all constraints of context.

This movement created artistic work that used avant-garde approaches to express the depths of human emotion. It translated dreams and ideas from the subconscious realm and embodied the spirit of an age rife with economic, political, and social crises that provoked frustration and even despair. Artists respond to the dictates of experience, which can lead them to deconstruct existing forms through poking fun at and flouting the status quo.



CRITICAL REVIEW

Universal Acquaintance and the concept of Parallel Heritage

Mosque architecture and
the development of a
contemporary notion of the
Nation “ummah”

It can be said that the importance of raising questions about an Arab/Islamic ‘architectural identity’ lies in posing a set of propositions about contemporary mosque architecture, especially regarding its existential relationship to Islamic civilization as a whole.

The idea of identity that shall be discussed here, however, is quite broad and does not stop at any past images that may be dormant in the mind. Rather, the insight of contemporary mosque architectural identity as directly related to the mosque’s *raison d’être* as a built form, and consequently how we can harness such reasons that are supposed to lead to the production of an architecture enlivened with these reasons.



1-1

1-1 قاعة الصلاة لمسجد كامبردج وتظهر
الأعمدة الخشبية الشجرية التي طورت
لتعكس فنون الزخرفة في الحضارة
الإسلامية.

It is important to note that identity cannot be reduced to just an idea or a way of thinking, nor can it be satisfied with creating physical, visual characteristics that some consider as its 'signs'. This makes the idea of identity rather problematic, both in its requirement for compatibility, and in its balance between the idea and the end-product. As a result, it is necessary that the steps leading from the idea to the product (tangible or intangible) should stem from the local cognitive system of cultural knowledge and its material capabilities.

This introduction does not attempt to present a normative prescription as to how a 'mosque identity' may be created. Nor does it delve into refuting matters of the philosophy of identity, with the challenges facing the ability of contemporary Arab and Islamic civilization to honestly and fully express its 'authentic self'.

Now although we see that these challenges as very important, we only seek in this book to present some philosophical ideas stemming from 'everyday life' values of Islamic civilization, ones which Muslims practice every day, spontaneously, representing a sort of gem or cornerstone of the Islamic philosophical and material identity.

These ideas stemming from common Islamic values is related to the *raison d'être* of the 'mosque' and refers directly to its architecture, not only in terms of form, but in terms of function: serving humanity and society. **'To get acquainted', لتعارفوا** or what we call 'Universal Acquaintance', represents an important aspect of Islamic identity. Here is a Divine emphasis that there is no identity without 'interaction' between people – without 'acquaintance' – one that may initially require a sort of clash or collision. The very idea of 'contriving knowledge' is

originally derived from this philosophy. Mosque architecture, from its inception until the present day, subscribes to this human philosophy, with a view to bringing people together, albeit allowing for the articulation of specific features of the societies to which the mosque belongs.

Let us first agree that the Abdullatif Al-Fozan Award for Mosque Architecture, since its inception, has sought to develop a steady, poised vision for the architecture of the future mosque; nevertheless, upon inception of the award and the first award cycle in 2011, it was immediately faced with the severe intellectual and professional poverty in the field of architecture, especially regarding the mosque. We have found that everything related to contemporary architecture depends on what the West produces and thinks about, and that our contribution at the level of the 'Arab and Islamic nation' (ummah) is merely reaction to resist the ever-growing sense of dependency on the West for thought leadership.

Regrettably, such reactions are often emotional, professionally incomplete, and lack intellectual coherence and rigor. Consequently, we are facing a real state of crisis for which it is difficult to find direct solutions... We must develop a sort of 'laboratory' or 'think-tank' for ideas that allows for an experimental space for architecture in general, and mosque architecture in particular. Indeed, the importance of this laboratory lies in the fact that architecture is not a collection of theoretical ideas but a material product (or portfolio of products); producing any material product requires knowledge, technique, and manufacturing craftsmanship, all of which represent the actual aspect that transfers the notion of identity from mere abstract historical wishes or preferences to a visible, lived reality.

Therefore, this introduction does not intersect with any previous ideas raised about a so-called 'Islamic architecture' or 'Arab architecture'. These rather 'compartmentalized' terms may be sharply scrutinized. We consider that one needs to think in a way different from the prevailing patterns of thought, a way that could potentially open avenues of criticism to offset the current state of thought that is loaded down with the weight of history, burdened with prejudices and ready-made mental perceptions. Through extensive readings of what is being proposed as representative of 'Islamic architecture', we found that this term presents rather ready-made results prior to giving it deep thought, thus consecrating a state of stillness and repetition (an intellectual stagnation) quite remote from the spirit of innovation. We noticed in the literature that linking contemporary mosque architecture with this term, 'Islamic architecture', means, in one way or another, replicating the lingering problem of blindly copying and pasting, hence distracting and paralyzing the mind, and thereby stifling any sort of free thinking, innovation, or renewal. That being the case, the task of this introduction is trying to construct an alternative framework for thinking about what 'Islamic architectural identity' is, not only in its visual material capacity, but as a spontaneous product of all that results from the practices of life in all its dimensions: social/cultural, political, economic, technical, etc.¹

The Contemporary Mosque: Fundamental questions about architectural identity

Our concept of identity stems from the essence of Arab/Islamic civilization. Therefore, the meaning of identity, in its Qur'anic perception, can be understood from the Divine verse: "So that you may know one another."² The principle here is both knowing and communication with the "other."

The Qur'anic discourse addresses the individual in his "mandated capacity": God made us peoples and tribes – **to get acquainted**... acquaintance being here the basis of identity.

Now before we delve into what we call a 'Qur'anic urban theory', النظرية العمرانية في القرآن الكريم, we are presumed to look closely at the means of communication that God provided man with from the beginning of creation, especially how architecture, as a non-verbal communication system, fits within the visual material fields developed by man and contributed to the formation of non-verbal communication systems.

However, identity, as a spontaneous (yet persistent) system immersed in the human mind and as an engine for acquaintance between human beings, did not stop at the visible, not even the audible or written, but rather went beyond that to the invisible and latent. Thus, the concept of 'acquaintance' became a philosophical/cultural condition that is specific to human beings, one that distinguishes them and parallels the idea of 'the mind' because acquaintance is often prompted by the mind, which acts as a device for constructing perceptions and judgments and determines the distance between 'self' and 'other'.³

In light of this view, it can be said that the urban theory in the Holy Qur'an focuses on the relationship between 'acquaintance' and

1 Al-Naim, Mashary Abdullah (Saturday, December 10, 2022 AD) "Identity: Authority of the Past and Impositions of the Future," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.

2 "So that you may know one another." Which we have translated in English as Acquaintance.

3 Al-Naim, Mashary Abdullah (Saturday, June 22, 2019 AD) "Is there an urban vision in the Qur'an?", Al-Riyadh Newspaper, Kingdom of Saudi Arabia.



2-1

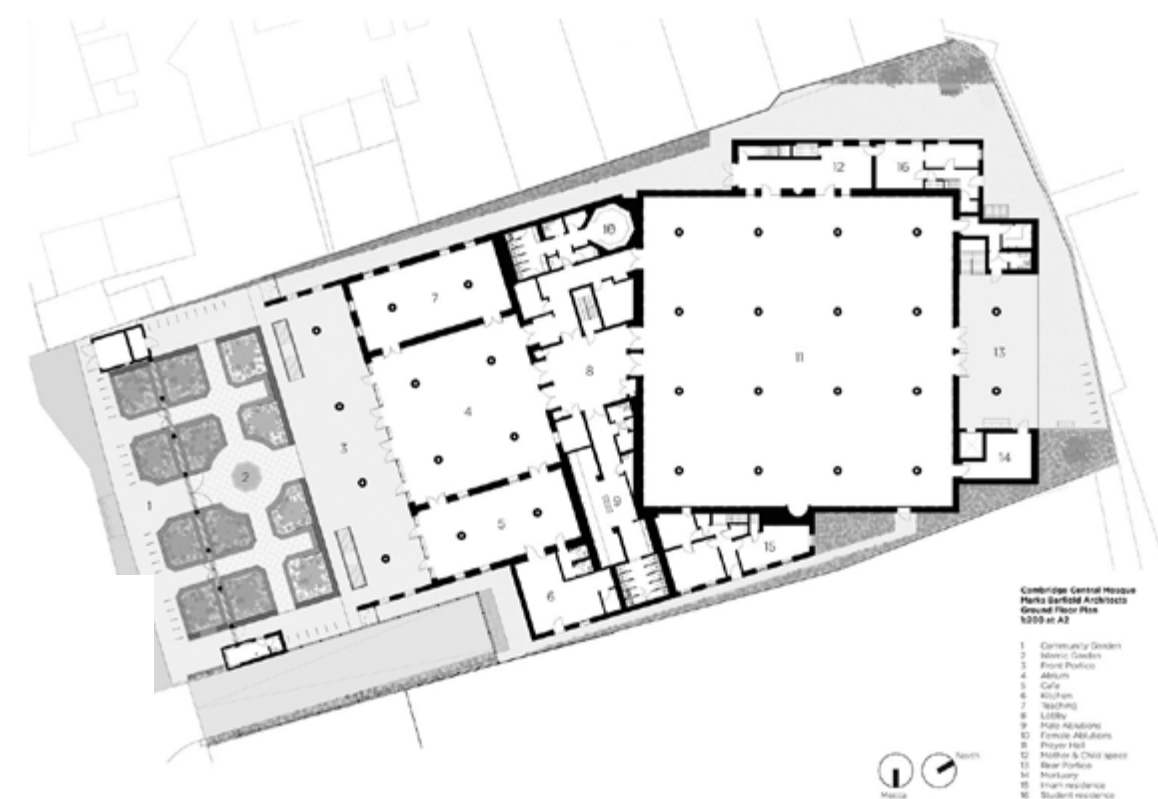


1-2 لقطة توضح مدخل مسجد كامبردج ورحابة الرواق الأمامي.
1-3 الموقع العام لمسجد كامبردج.

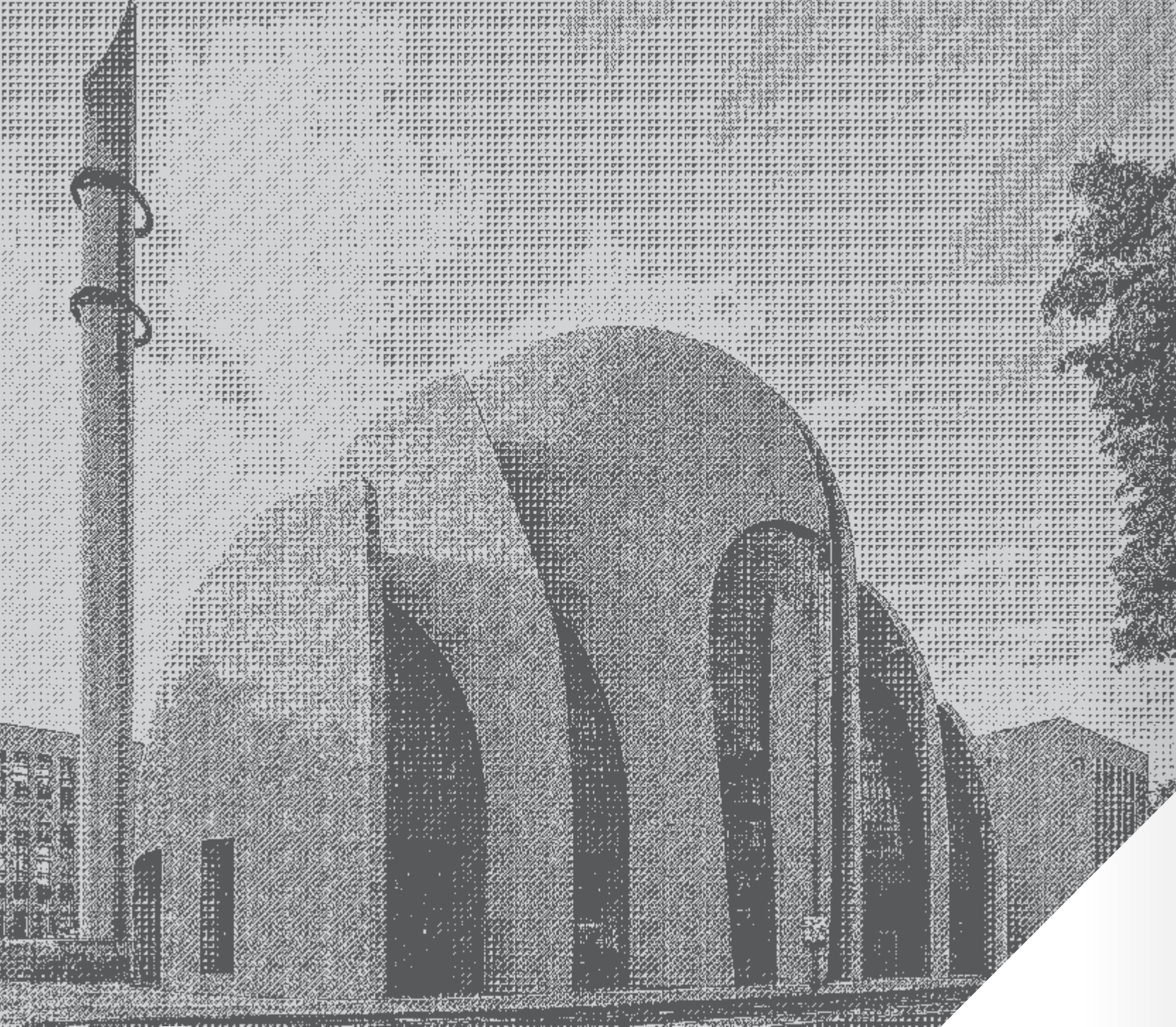
'the mind'.⁴ The more stable this relationship, the more identities that will develop positively, and whenever this stability is disturbed, a virtual state of dissonance and conflict between cultures will appear. Mosque architecture throughout a history, spanning fourteen centuries, worked deeply to bring about a stability to this relationship, which was one of the engines of the development of a special identity for architecture in Islamic civilization, it is supposed to continue to create new ideas and mechanisms, not repeat the experiences of the past.

It seems that we always collide with sentiments when talking about identity, the identity of the mosque in particular, one which contradicts the 'rational' aspect of identity, even if it is a spontaneous product. In fact, it is the rational aspect of identity, or what remains of it and continues, that arises from deep interactions between methods of thinking and that of production. Dysfunction in identity can be measured when these interactions are disrupted.

4 Al-Naim, Mashary Abdullah (Saturday, June 22, 2019 AD) "Is there an urban vision in the Qur'an?", Al-Riyadh Newspaper, Kingdom of Saudi Arabia.

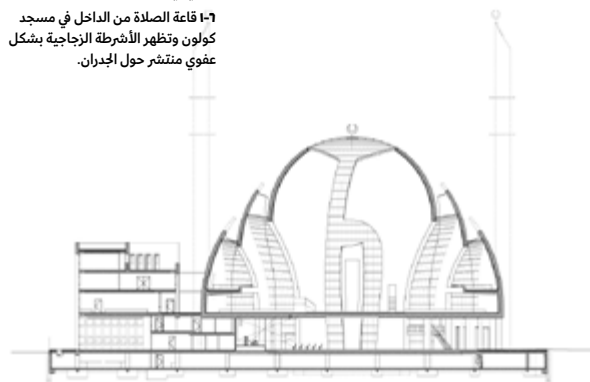


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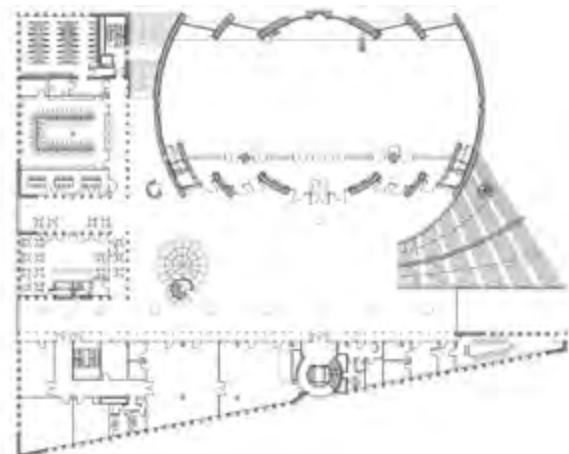


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1-4 كتلة المسجد تظهر على شكل أربعة أوعية تحتضن قبة مسجد كولون.
 1-5 قطاع طولي ومسقط أفقي للطابق الثاني في مسجد كولون.
 1-6 قاعة الصلاة من الداخل في مسجد كولون وتظهر الأشرطة الزجاجية بشكل عمودي منتشر حول الجدران.



5-1



6-1

If we look at the idea of 'Acquaintance' through the concept of 'urban theory' in the Qur'an, we encounter one of the questions that arise in the academic community, namely: does the Qur'an contain an explicit, clear urban theory?

As it is known, or said, the Qur'an often does not detail matters. Rather, it presents basic rulings: how can it be said then that there is a 'Qur'anic urban theory'?

The studies presented by Oleg Graber (died in 2010 AD) maintain that there is no clear urban theory in the Holy Qur'an, yet we cannot fully rely on the authority of Graber, as there are two words in the Qur'an that can give us insight into how to understand the significance of urbanization and the managing/ruling of the planet as a whole (i.e., the idea of Khilafah).

The first word is acquaintance, which appeared within the Qur'anic verse: **"O mankind! We have created you male and female, and made you into nations and tribes, that you may know one another. Verily, the most honorable of you with Allah is that (believer) who has At-Taqwa [i.e. one of the Muttaqun, pious] Verily, Allah is All-Knowing, All-Aware..."** (V. 2:2) which refers to 'concentric circles of fields of identity' and that God created us from the same source, but made us differ and disperse into peoples and tribes...

The second word is interaction ⁵التدافع.

5 Al-Naim, Mashary Abdullah (Saturday, November 24, 2012) **"To get acquainted** with the Qur'anic urban theory," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.

In recent years, these two words have raised many questions for us about the moving engines or mechanisms that represented the essence of Islam in achieving the message of acquaintance and interaction. We found that the 'mosque' was one of the main circles, so to speak, that contributed deeply to confirming the culture of acquaintance. Still, the architecture of the mosque varies and overlaps in different human cultures across ummah, but nevertheless, it remains constant in its functional essence: a means of fostering interdependence across groups of people as well as a place of worshipping God, a place for facilitating acquaintance and interaction of people with each other as well as and most importantly a place for facilitating acquaintance and interaction of people with God.

What's really amazing is when we try to recall history and delve into the memory of the mosque and how it was able to gather people across a very wide geographical area, which almost included the entire ancient world. In all cases, it was in harmony with the cultures of people, and was able to express their ideals.

The reason the mosque has always contributed to conveying and realizing the message of 'acquaintance' is because it is a message of peace, brotherhood and equality...a message deeply embodied in core Islamic teaching, and therefore deeply embedded in the mosque. This building type, which urges acquaintance and interdependence, is at the same time calling for austerity, asceticism, and simplicity. It stresses that deviating from this message is a stark departure from the philosophy of Islam, and the mosque in its essence.

We can explain this phenomenon through the desire generated by the local communities to express their identity through the mosque, especially since it is the most important means of acquaintance for them. However, we have the right to feel some concern about this interpretation, as it seems that the architecture of the mosque took a political stance that expressed power in many cases. This makes the previous interpretation not completely honest, although its effect is still clear. Also, this prompts us to add another dimension, which is that: the more a mosque and its architecture belongs to its local community and the more the members of the community contributed to building it, the more the interaction there is between the people's thinking and the production methods employed to build the mosque, and, as a result, the more compatible the mosque and the people will be over time and the more the mosque architecture will express the depth and essence of (the individual and collective) identity of the people.

Some may say that the previous interpretations are rather sentimental and devoid of proofs. Now if we exclude historical mosque architecture, we will actually face a systematic challenge that puts us in a direct intellectual dilemma with the idea of the identity of contemporary mosque architecture, an architecture that is still trying to recover (or, in the case of more recent history, recover from) the historical 'functional and moral' role of the mosque. In doing so, (prospective) contemporary mosque architecture is severely disturbed by the multitude of competing urban elements in the vicinity of the urban mosque which did not exist before in history. Thus, we are facing new urban conditions that necessarily require a new way of thinking. Still, the question remains: What is this method that could restore balance to mosque architecture in the future?

At first glance, it is difficult to deny that the mosque has succeeded in embodying the idea of acquaintance up to this day, this is one point of strength that it possesses. Now through the initial reading of the long list of 'short-listed' mosques for the Abdullatif Al-Fozan Award for Mosque Architecture in its fourth cycle, which covers 200 mosques distributed across 70 countries (selected from among thousands of mosques that have been reviewed and excluded from the list), we can certainly feel the principles of 'expansion' and 'continuity'. Expansion at the geographical level, and continuity at the local level of cities, allowing for the communication that the mosque creates between members of local groups and forms what we can call a 'universal identity' between Muslims worldwide ('intra') and between Muslims and other cultures ('inter'). Our conviction is constantly increasing that the mosque, despite the multiplicity of its sizes and shapes, is constantly moving to achieve the message of acquaintance between the members of the same group and between the group and the world at large.

On the other hand, contemporary mosque architecture is characterized by the phenomenon of a fragmented architectural identity. It is actually a 'crisis' in which we must face both professional and practical visions.

Although our idea focuses on investigating the common architectural language that contemporary mosques around the world currently share, still, signs of dispersion and lack of harmony appear clearly in this genre of architecture. This surely requires a complete rethinking of the concepts that we are expected to agree upon in our efforts to define the 'mosque of the future'. It seems that this strict, rather pessimistic view, did not appeal to some observers, as one of them mentioned that the adjective

"crisis" with which mosque architecture was described is a gross exaggeration, maintaining that the mosque still retains its basic message of acquaintance, bringing people of the world together, without prejudice. However, we must be aware that what applies to the stability of the function and mission of the mosque does not necessarily apply to its architecture!⁶

We will talk about two examples from the long list that were not shortlisted by the jury despite their seemingly, as some believe, impressive architecture, and despite their being widely published and discussed by architects: the Cambridge Mosque in England and the Cologne Mosque in Germany.

These two mosques share an intellectual and professional philosophy that aims to recall the historical image, but in a manner that tries to deviate from the power of direct copying through a formal abstraction of historical forms and development of their elements in a supposedly contemporary manner – via high technology.

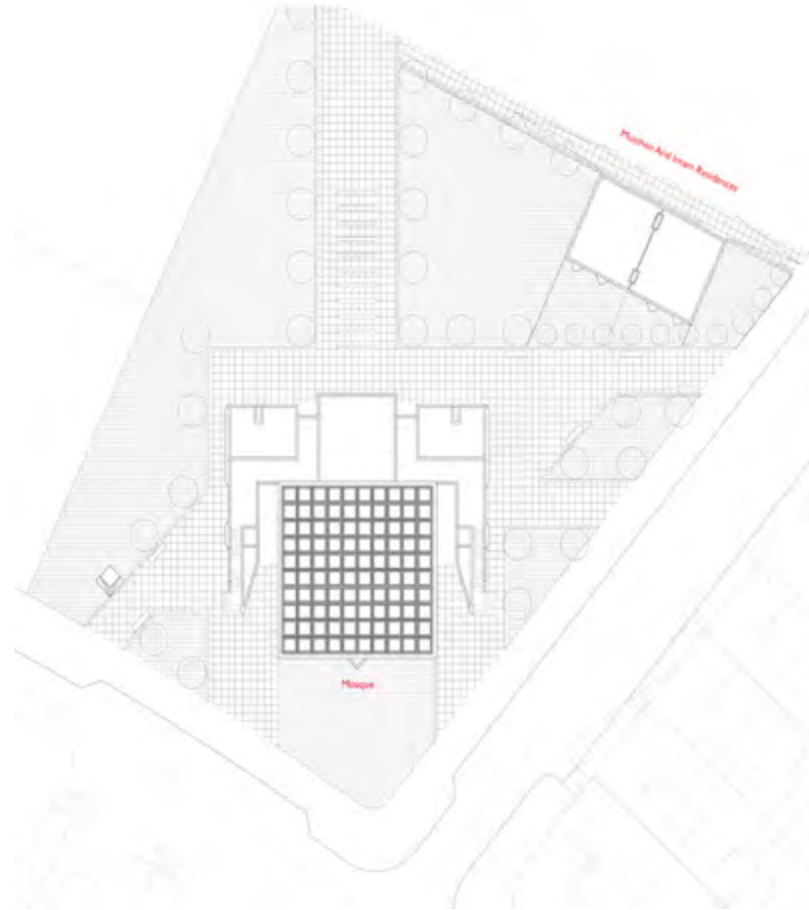
These serious attempts seems to us important because they present a comprehensive vision of what historical forms can represent in terms of opportunities to rethink the contemporary mosque shape. However, our philosophy here goes beyond this intellectual approach that relies on history as the sole source of ideas. To counter this approach, we adopt what we call the concept of 'parallel heritage', which takes a conservative stance on everything related to historical heritage, including mosque architecture and its extended legacy. We will discuss this theory in detail in the coming parts of this introduction.

6 Al-Naim, Mashary Abdullah (Saturday, April 9, 2022) "To get acquainted with a world of mosques," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.

١٠٧ رسومات أولية أثناء تطوير الفكرة المعمارية.
١٠٨ مقترح لأحد مشاريع القائمة القصيرة لمسابقة رتال لتصميم المساجد - مكتب (أو بي إم أي).

تصميم (أو بي إم أي)





It is worth noting that the term 'architectural crisis' is usually used to refer to cases that face a sudden upheaval in the contexts of architecture production that were shaping the visual/aesthetic, technical and operational mental perceptions, in addition to the general contexts that governs the mosque in its urban surroundings. The malady of the aforementioned contexts in mosque architecture assumes that there are solutions that have been developed to compensate for this imbalance, but this did not happen! Therefore, we posit that the use of the term 'crisis' on contemporary mosque architecture is justified. Therefore, one of the consequences of this crisis is the emergence of a crisis in mosque architectural identity, which is part of a wider architectural and urban crisis at the level of the contemporary Arab/Islamic nation (ummah).

In principle, we would come to the conviction that mosque architecture around the world has the ability to express the cultures of peoples, not only at the formal and visual level, but also at the level of lifestyles, through the multiplicity and diversity of functions that have become attached to mosques. It seems that understanding the history of peoples through the prism of the mosque seems possible. If we appreciate that the principle of 'acquaintance' is one of the foundations on which human racial and ethnic diversity is founded (and on which that diversity is reconciled/resolved/unified), we can then perceive that the mosque's ability to permeate races and ethnicities around the world constitutes a remarkable phenomenon that is rarely repeated in any other building type.

However, communicating a complex and deep idea, rooted in the essence of the mosque and the philosophy of its human and cultural role is not an easy matter, especially if the expression of this philosophy is through a critical architectural language that seems rather dry in the eyes of some. Still, the attempt to link the mosque's human message with architecture, according to our view, is an important and even urgent issue. Architecture remains one of the basic 'instruments' that can convey deep cultural messages without the need of uttering a single word. It seems that the development of a theory that deals with urban identity in light of the Qur'anic concept of 'acquaintance' which urges a rational equilibrium between different cultural identities, opens a wide horizon for rethinking the prevailing intellectual approach and subsequently developing a new theory that we've named 'parallel heritage'. We see it as a rather important endeavor because it tries to scrutinize the prevailing methods of thinking via systematically criticizing them. At the same time, it shows that the crux of the problem lies in the methods of production and how they can be overcome.

1-9 الموقع العام لمقترح «الشريف الكباشي».
 1-10 مقترح لأحد مشاريع القائمة القصيرة لمسابقة زئال لتصميم المساجد - المعمار «الشريف الكباشي».
 1-11 منظور داخلي يوضح قاعة الصلاة ويظهر تساقط الاضاءة الطبيعية التي تعطي الفضاء احساس من الهدوء.



In principle, this methodology can be adopted to understand the philosophy of 'acquaintance' as a basis for 'identity dynamics', meaning that identity, as such, is in a state of movement from its minor circles up to its major circles. The ascendancy is that the large circles of identity contain the smaller and imprint them with their character. Nevertheless, we must acknowledge that identity depends on the principle of diversity, as knowledge is mainly pushing for this; The Divine verse states: **"Mankind were but one community, then they differed (later), and had not it been for a Word that went forth before from your Lord, it would have been settled between them regarding what they differed."**(10/19) ; and also: **"To each of you We prescribed a law and a method. Had Allah willed, He would have made you one nation"** (5/48); and **"And among His Signs is the creation of the heavens and the earth, and the difference of your languages and colors. Verily, in that are indeed signs for men of sound knowledge."**(30/22); but most importantly: **"And had your Lord willed, He would have made the people one nation * and they would not cease to differ."**(11/118)

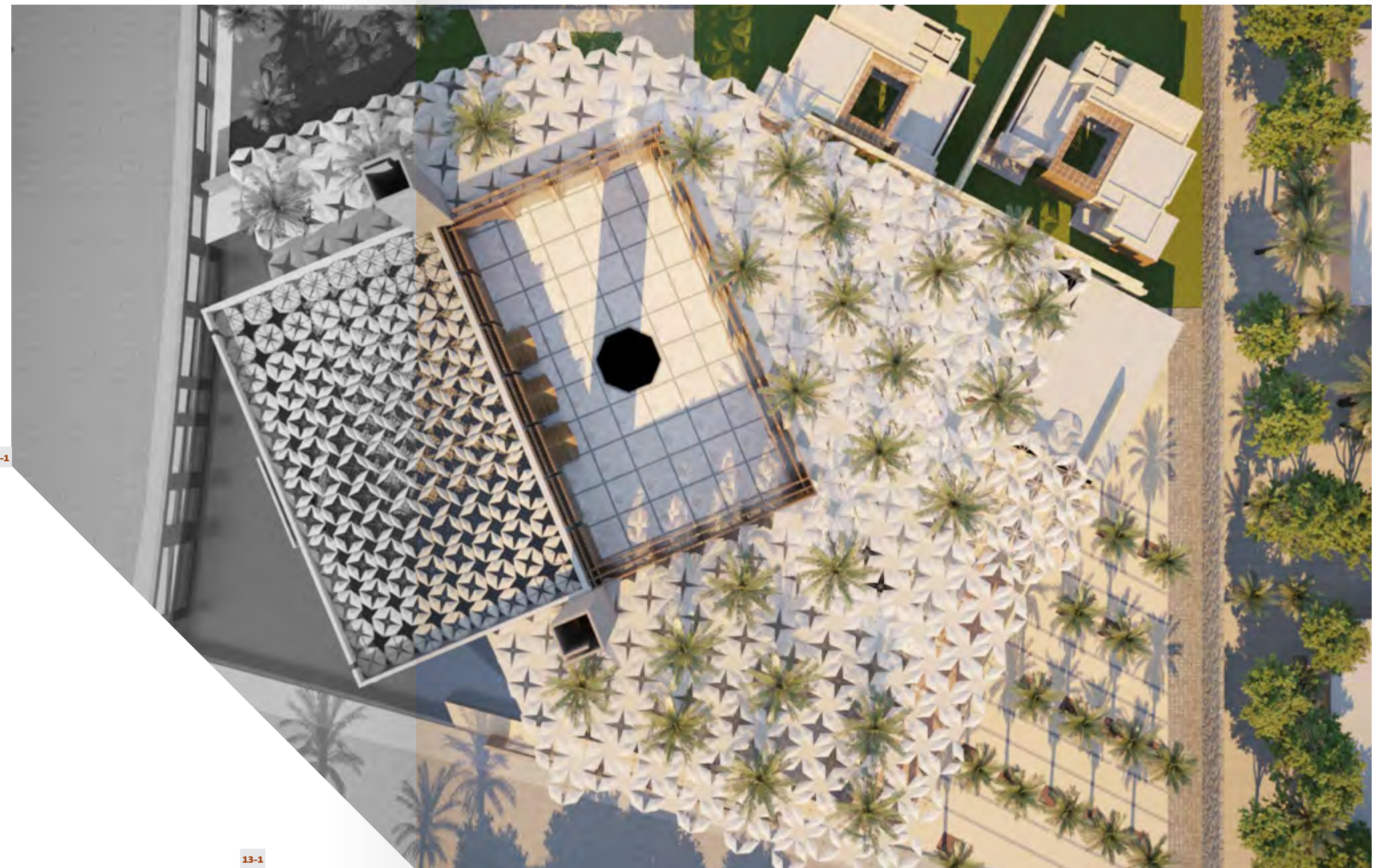
These verses confirm that being in a state of 'difference' is the (Divine) norm and will remain so forever. This is why God created the principle of 'acquaintance' as a counterbalancing mechanism. However, merely understanding the dynamics of identity without developing a relevant method that can turn it into an applied professional and intellectual practice forming a clear position on the contemporary architectural product, will not help us much in determining what the mosque of the future will be.

Universal Acquaintance: Towards a new intellectual approach in architecture

In spending quite some time pondering the word 'acquaintance', we have come to the conclusion that it constitutes a very important cultural state. Culture is transmitted horizontally, some consider it a "contagious state or condition," meaning that man by nature learns from others through 'acquaintance', and this is can be extended to embrace human civilizations as a whole.

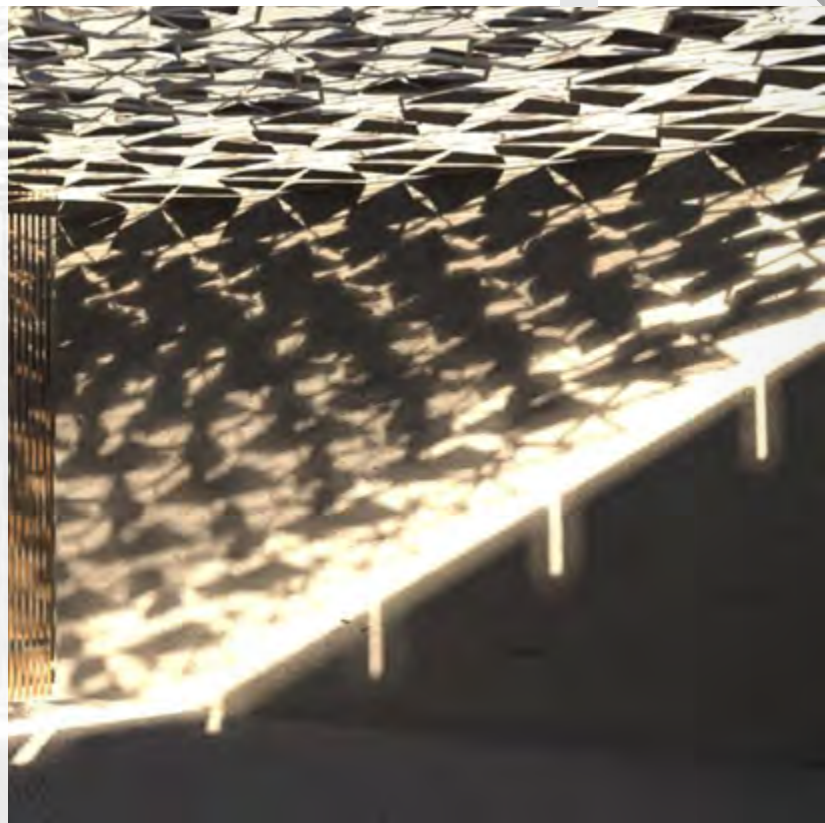
Now if this Qur'anic phrase confirms the idea of 'identity', through the formation of gender and peoples and tribes, it confirms at the same time human unity through acquaintance. From this very idea, we proceed to confirm that urbanization itself is a human product affected by the transfer of knowledge between peoples and what we call 'the culture of acquaintance'.

In this regard, at the local level one can observe many architectural elements that have been transferred or exchanged between villages and cities in the world. They have, over time, come to belong to everyone, and as soon as their use matures in one place, they subsequently move to other places. Later, they develop according to the specific needs of those areas via the technologies available, then they transfer to other areas, and so on. It may happen that an architectural element moves to several areas at the same time, and it is developed in several ways according to the conditions and knowledge prevalent in those areas. The end result is a variation on a theme, verity in unity, perhaps this explains the phenomenon of the evolution of mosque styles throughout history. 'Acquaintance', and the horizontal transmission of the culture of architecture represents the most important phenomenon in urban heritage and is the one that we can rely on in any synchronic study of the development of urban forms invented by man.



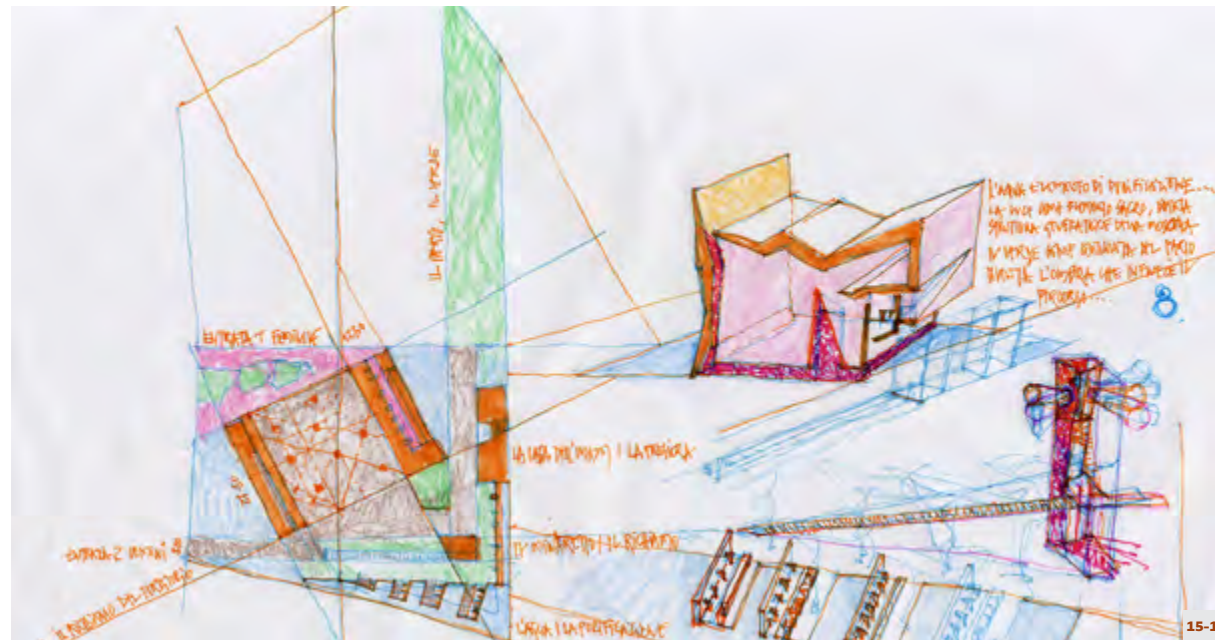
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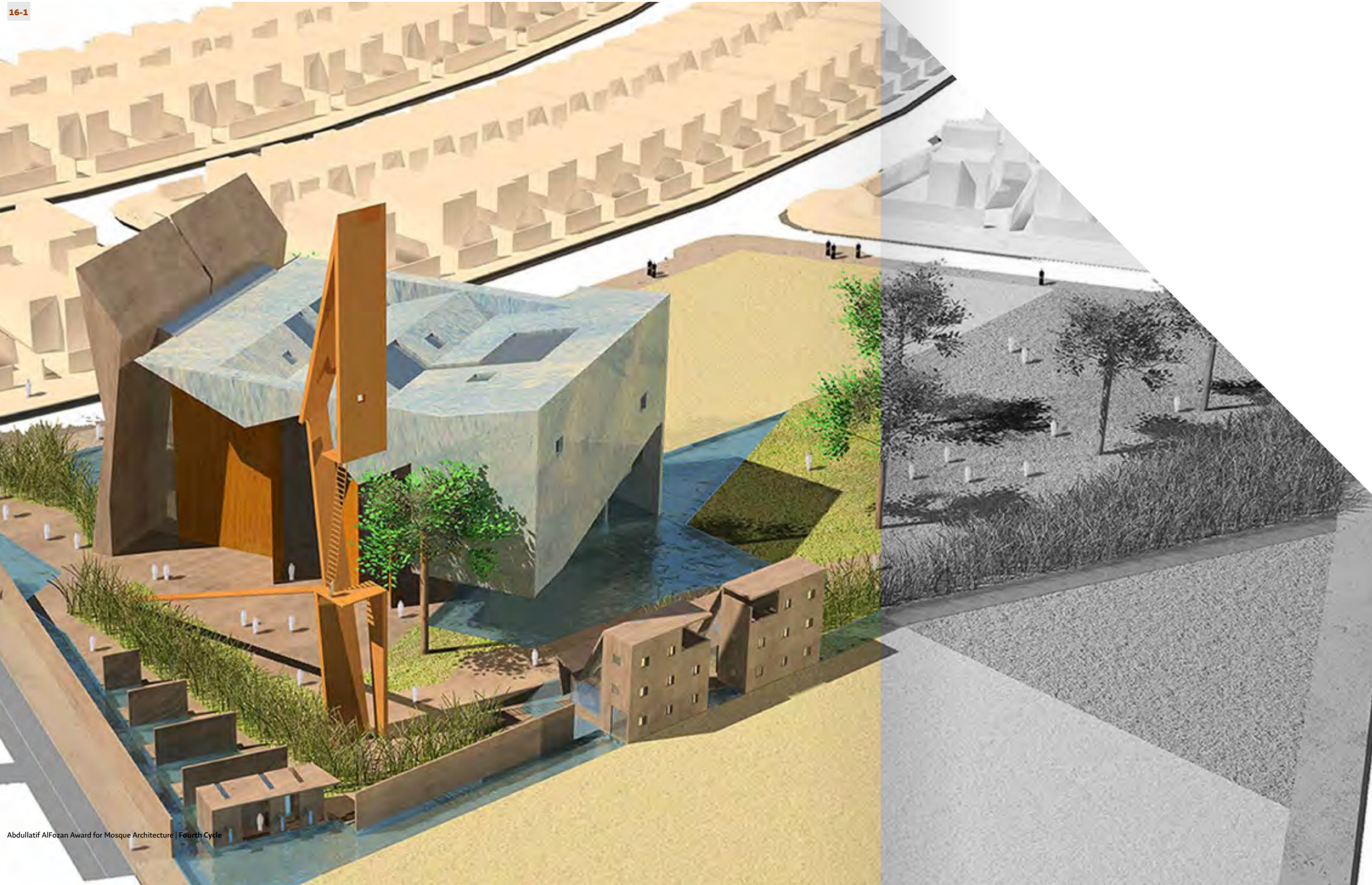


14-1

1-12 مقترح لأحد مشاريع القائمة القصيرة لمسابقة رتال لتصميم المساجد - المعماري (هاني مرتضى).
 1-13 منظور داخلي لقاعة الصلاة.
 1-14 المسقط الأفقي للطابق الأرضي.



1-10 رسومات أولية لتطوير كتلة المسجد.
 1-11 مقترح لأحد مشاريع القائمة القصيرة لمسابقة زغال لتصميم المساجد - مكتب (أو بي إم إي).



16-1

If we analyze the long-list of the Al-Fozan Award in light of this idea, we come to notice the clear differences between mosques according to the circumstances of place, although the enabling technologies have become, in almost all cases, 'universal'. This indicates that the cultural and social dimension has a special importance, which must be taken into account when searching for the mosque of the future. This is deeply related to the principle of acquaintance and communication as one of the most important generators of social values.

Indeed, the Qur'anic word 'acquaintance' calls for horizontal cultural expansion, it instructs Muslim Muslims to mix with other civilizations (both within and outside ummah) and learn from them. But at the same time, Allah (through the Qur'an) calls for election, choice and selection: meaning that, through acquaintance, we choose the best, take notice of and select the distinguished in other cultures and learn what really benefits us from them. This important mechanism that makes us develop our condition by getting acquainted with what others have, is part of a higher human culture, which is tafa'ul: 'interaction'.

The reality, though, is that it is not possible to understand the notion of identity in Islamic culture without addressing the issue of 'civilizational interaction' as a universal norm:

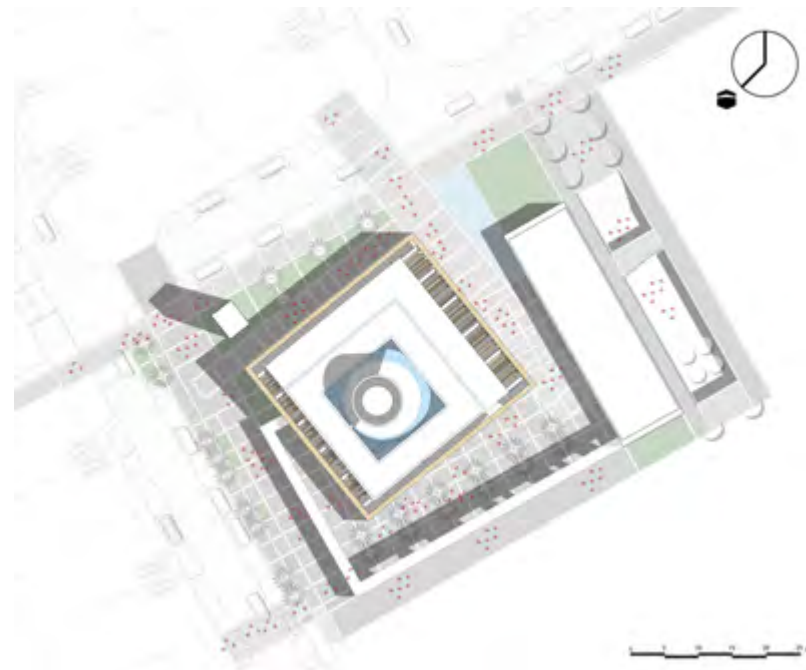
"Had Allah not pushed the people [to interact], some by the other, the earth would have been corrupted. But Allah is Bountiful to the worlds." (1/251) and also:

"And were it not that Allah checks [pushes to interact] the people, some by means of others, there would have been demolished monasteries, churches, synagogues, and mosques in which the name of Allah is much mentioned." (22/40)

The 'push - for interaction', according to sociologists, means natural selection, or the survival of the fittest. Interaction and struggle for survival are part of defending the right, which requires the survival of the fittest. This does not in any way mean the notion of conflict that Hegel (and later Marx) saw as a form of social determinism which denies the existence of constants in the universe. 'Interaction', according to Islamic doctrine, means pluralism and an affirmation of balance between disparate parties - without excluding or eradicating or even harming (recall the Islamic 'do not cause harm or return harm' doctrine⁷) the other.

We believe that the principle of 'interaction' also applies to architectural forms. There is always a sort of natural selection for the spatial, visual, and even technical urban experience. Often, by his assimilation of culture, a person chooses the best and appropriate ones, and then develops them according to his needs. This, in itself, is one of the reasons for urbanization (according to the Qur'an), with two important characteristics: learning and development. People learn from one another, but they are not satisfied with simply accepting what they learned as is, but rather they imprint it with their own character, thought, creativity and taste, and adapt it according to their conditions and needs. They constantly create new forms, even though the origins of those forms may be transferred from others. This is exactly what the Muslims did at the beginning of building their civilization; they learned a lot from the countries and civilizations they conquered, but in the end they made a unique civilization of their own.

7 al-Sunan al-Kubrá 11070: 'Abu Sa'id al-Khudri reported: The Messenger of Allah, peace and blessings be upon him, said, "Do not cause harm or return harm. Whoever harms others, Allah will harm him. Whoever is harsh with others, Allah will be harsh with him."



1-17 الموقع العام.
1-18 مقترح لأحد مشاريع القائمة
القصرية لمسابقة رتال لتصميم
المساجد - مكتب (ماس ستوديو).

17-1

I have a personal opinion in this respect as I see that Muslims, at the beginning of their civilizational formation, were fascinated by the knowledge that existed in other civilizations, despite the power and dominance of material forms, and they were not directly affected by it, but rather drew from its knowledge and mastered it, then, Muslims produced their architecture and other products through a 'hybrid' or 'assimilated' knowledge that they developed and followed in their production: the specificity of the 'self' compared to the 'other', without there being any rejection or marginalization of the latter.

The previous interpretation is deeply related to what we can refer to as 'architectural interaction'. It is a relevant universal norm that humanity has practiced since the beginning of time. The multitude of urban agglomerations created by societies around the world can be seen as a direct result of this important cross-cultural 'interaction'. Otherwise, how can we explain the development of certain forms in certain regions without other regions, even though the social values are almost identical? Why, in certain circumstances, are values similar and yet architectural forms are different (and vice versa)?

The answers to such questions are linked to the principle of architectural interaction, which makes one form closer to a specific local culture than another, and thus is adopted and developed. This originally results from the principle of 'competition' that the 'architectural interaction' encourages. Competition calls for research, learning, and acquaintance (we are different from each other, as mentioned in the Holy Qur'an, and we compete with each other, yet we are looking for acquaintance and learning from each other). Were it not for this competition, each people group would have been satisfied with what they already have, and human civilization would not have developed, or would have developed into a group of civilizations isolated from each other. If so, we would have found architectural forms separate and truncated in each region. Fortunately, this did not happen throughout history, as we find that successful forms and experiences are always transmitted through civilizations and generations and are formed in a different way. With each new transition, however, it remains indebted

to the origin of the human experience and to the principles of acquaintance and architectural interaction.

It seems that the horizontal extension of knowledge created by the principle of 'acquaintance' that urges interculturalism as one of the spontaneous historical human practices through which all civilizations have crossed paths throughout history, and the principle of 'interaction' that urges the selection of the best, determine the relative level of development and the extent to which ideas diffuse and the time period in which they are supposed to live.

As a concept, **'to get acquainted'** refers to looking forward to the future, as there is nothing static about acquaintance and interaction as long as differences between people exist. Therefore, this principle constitutes one of the foundations that contributed to the development of my 'parallel heritage' theory as a methodology that can contribute to the development of an active stance toward changing our position regarding the practice of contemporary architecture at the levels of both criticism and practice.



18-1

The Contemporary Mosque and the Development of the Concept of 'Ummah' Architecture

It may be stated that the mechanism of 'acquaintance and interaction' constitutes an integrated 'urban dynamism' that can be relied upon in understanding the Qur'anic urban theory. Many supports are found in the verses of the Qur'an but there is not enough space in this short account to mention them all. Nevertheless, it is worth noting that these two mechanisms worked throughout history to achieve the concept of the 'nation'. Although this concept is specific to Islam as a religion and as a way of life, the Qur'anic and, consequently, Islamic discourse is addressed to all humanity.

In general, the mechanisms of acquaintance and interaction guarantee permanent renewal, notwithstanding that it fosters the relative stability of ideas, products, and even relations between

civilizations. Therefore, these two mechanisms urge mindfulness and thinking and push for action and innovation to balance with the competitors – not to overcome or annihilate them!

This rather philosophical approach pushes us to understand the relationships between human beings and diagnose the perceptions that civilizations usually develop about themselves. Accordingly, they define their 'identity-within', an identity that, interestingly, does not necessarily represent how others view their civilization.

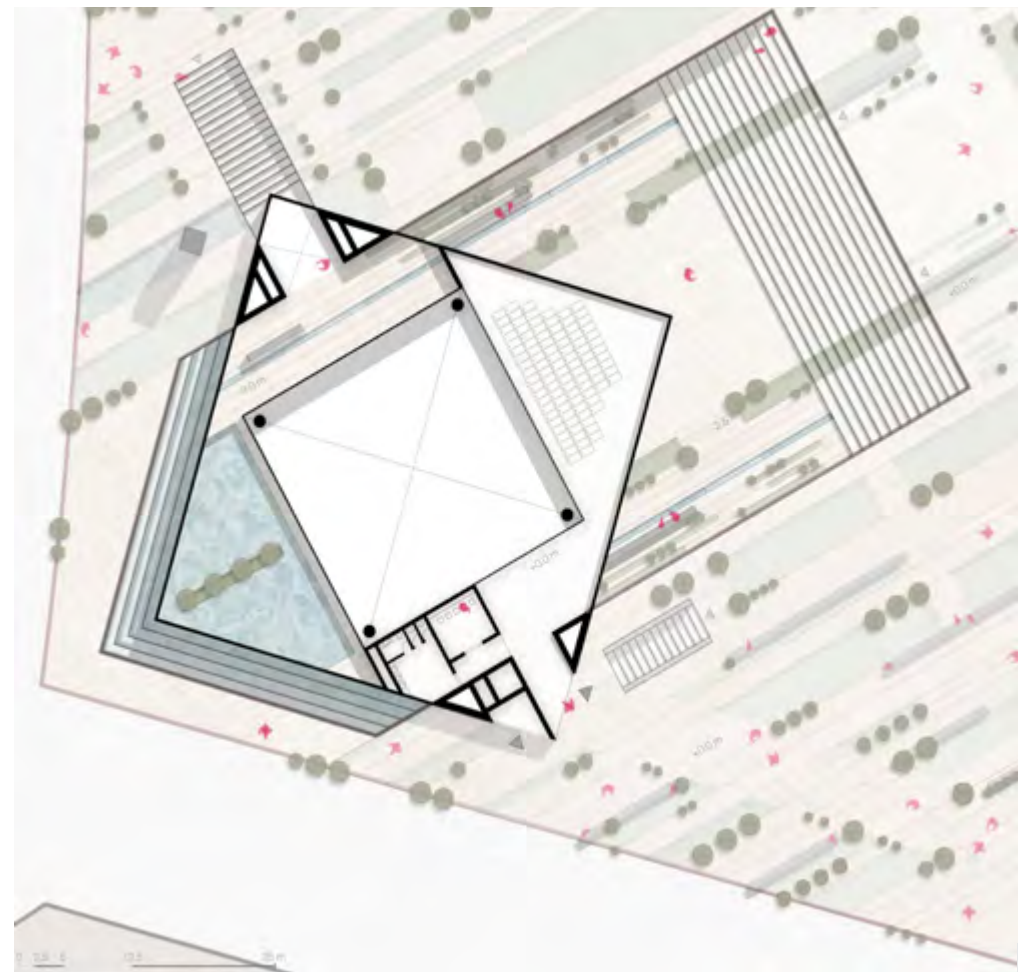
A 'nation's architecture', as a concept, arises from these two dimensions mentioned above. Therefore, how does a nation see its architecture and how do other nations see the nation's architecture? It seems that this systematic questioning is essential to determine the identity of the future mosque. If the mosque is conceived through the concept of the nation, it seems quite broad and needs to be carefully thought about: how would the mosque achieve this concept through communication and social cohesion.

Nevertheless, we must say that the idea of the 'mosque' existed before Islam as a place that had a highly symbolic and social value. God Almighty says about the Companions of the Cave: **"when they disputed among themselves about their affair and [then] said, 'Construct over them a structure [mosque].'"** (18/21) and **"Then when the final promise came, [We sent your enemies] to sadden your faces and to enter the temple [mosque] in Jerusalem, as they entered it the first time..."** (17/7).

It is indeed a point in need of investigation. Although the mosque and its architecture has its roots well before Islam as a religion, it has become, to others (outside ummah), the main entity that expresses the Islamic identity. Do Muslims among themselves consider the mosque to represent their identity? This question is the essence of the mosque's relationship with the development of the concept of a 'nation's architecture' in our contemporary time.

The Bahraini architect Ali Larry realized the ability of the mosque to express the concept of the 'nation' during the final jury session for the mosques of the fourth cycle in Kuwait (November 2022 AD). He said: "What the Abdullatif Al-Fozan Award for Mosque Architecture is doing is creating a new and contemporary concept of the term nation through architecture." It seems that Larry's observation stems from his experience during visiting the mosques designated for him to review on the short list. Visiting a mosque in its social and cultural environment gave him a different perspective of the role of the mosque: going beyond the rigid image imprinted in the mind. He began to feel the deep values, material and non-material: the mosque encourages acquaintance and interdependence on the level of all human beings. It was then, it appears, that the term 'nation', in its architectural usage,

1-19 المسقط الأفقي للطابق الأرضي.
1-20 المقترح الفائق بالمركز الأول
(الموقع الأول) لمسابقة رتال لتصميم
المساجد - مكتب «بيس معماريون».



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represented by the mosque, started to take shape in his mind: the mosque, as he felt it, "unites the world." Indeed this is the basis of the Qur'anic term 'universal acquaintance', just as God created us from a single source and made us different genders, peoples, cultures and tribes, the goal remains: communication and acquaintance. The concept of the 'one nation' is embodied in its architectural image through the mosque. God Almighty says: **"And indeed this, your [nation], is one [nation], and I am your Lord, so fear Me."**(23/52)

Here we collide with a confusing cultural situation that the Islamic nation faces in general: the difference between 'ability' and 'conviction'. We mean the difference between the ability of the mosque and its architecture to develop a contemporary concept for the nation, and the conviction and desire of Muslims to empower this ability and transform the mosque into an experimental urban space that embodies human values, overcoming the current view (held by many) that reduces the role of the mosque to being a place of worship only. We believe that the problem that faces the contemporary

mosque lies in the gap between the appreciation of the mosque's cultural potential and the conviction to harness that potential.

Perhaps a quick look at shortlisted mosques, published in this book (after this introduction), visited by ten technical reviewers from different countries, shows how mosque architecture linked a mix of geographies, cultures, and climates that extended over a wide swath of the world, from Australia in the east to the heart of Europe in the west. It is not surprising that the feeling of nationhood is amplified through contemporary mosque architecture, when one building represents all this extended and diverse bond. The list of twenty-two mosques represents various case-studies showing how the mosque, even when it is as small as the Musalla prayer room in Indonesia, or as vast as the mosques that formed multifunctional social centers such as those in Germany, represents an axis of acquaintance and a center of encounter: the most prominent element in defining the human community associated with it. However, this wide geographical spread does not mean that contemporary mosque architecture is in a satisfactory state

or that it is stable. If we go back to the mechanism of extending knowledge and mosque experiences horizontally across the geographies of the world and the mechanism of choosing the best experiences, we face the problem of the historical mental image that collides with these two mechanisms and limits their impact on contemporary mosque architectural practice on a large scale. It is agreed that the historical mental image limits daring, reduces the chances of experimentation, and directs architectural practice toward repetition and restoration of the well-established image in the mind. Admittedly, this may be satisfactory to a large segment of the general public. But still, this point prompts us, without equivocation, to search for a different direction and approach that goes beyond the historical mental image and encourages a spirit of more adventurous design in mosque architecture.

Let us return to the term 'nation' as a general inclusive idea that can possibly link all ideas and practices of future mosque architecture. Any level of social cohesion requires the existence of a motive for the meeting of people and their intersection at the urban level and the existence of common interests among them.

If we look at prayer as a ritual, we find that in part it represents the aspect of pure adoration, as it is the second pillar of Islam and the religion could not be sustained without it. However, it is not obligatory at the level of the congregation, except on Fridays: **"O you who believe! When you are called to the congregational prayer [on Friday], proceed to Allah's remembrance, and drop all business. That is better for you—if you only knew. Then, when the prayer is concluded, disperse throughout the land, and seek Allah's bounty, and remember Allah often, so that you may prosper."** (62/9 and 10)

And since the obligatory congregational prayer is on Friday, jumua'a (meaning congregation and gathering) refers to meeting, unity, and convergence, but the daily prayers in mosques are valued (twenty-seven times) better than the individual's praying alone. Here comes the significance of the presence of the mosque as a daily propeller for social cohesion. Although prayer is the bond between a person and God, in congregational prayer it is also bond between a person and his society, the mosque represents the urban space that embodies this bond.

We must note here that 'acquaintance' in the concept of the mosque is not obligatory but rather optional, although preference is given to praying in the mosque because this encourages the interdependence and unity of people. Therefore, the choice remains in the hands of each person, and they are the ones who shape their orientations in life. The two verses in Surat Al-Jumu'ah present the philosophy of balance between religious and secular activities and the importance of the presence of mosques for achieving this balance. The basis is the worship of God, after worship, people start to "spread across the land," according to the authority of the verses of Surat Al-Jumu'ah. Before that we read: "And give up selling." It is not the abandonment of selling in its entirety, but only at the time of the Friday prayer, subsequently spreading across the land while continuing to remember (invoke) God. Here, the relationship between religion and the world appears to be inseparable, as it is not possible to understand the mosque and the reasons for its existence without understanding this relationship between the place of worship and its urban / social environment. In this case, it is possible to understand the reasons for urging prayer five times a day: besides being a bond with God, which purifies man from sins, prayer is also a deep social bond and one of the engines that made the Islamic community at the level of private local groups (al-Harat) through daily prayers. At the level of the broader

١-٢١ منظور داخلي لقاعة الصلاة... هده وسكينة. المقترح الفائز بالمركز الأول (الموقع الأول) لمسابقة رتال لتصميم المساجد - مكتب «بيس معماريون».

community weekly prayers are flexible, they can be performed in the mosque if the social and urban conditions are appropriate and can be otherwise performed at home whenever circumstances permit. We believe that the ability to choose and be flexible has always represented fundamental trends that have contributed to determining the locations of daily mosques and the evolution of their forms, being an integral part of society and its circumstances.

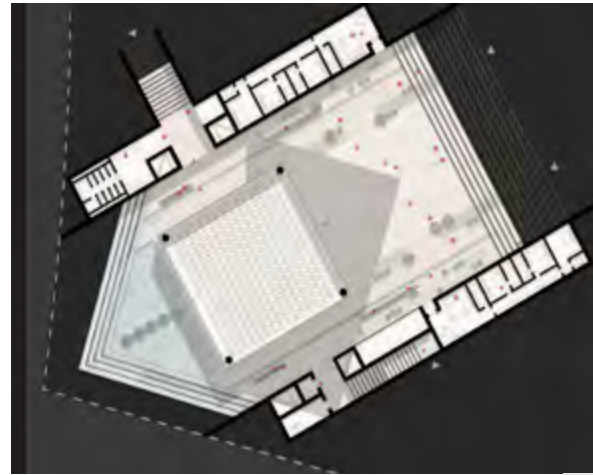
Muslims have realized the importance of this balance between the space of the mosque and the space surrounding it at an early age, so the mosque became the nucleus around which the city is built. A solid basic relationship emerged through the ages between the sacred space and the worldly. In the custom of many researchers, this balance represents the basic theory upon which all cities in the Islamic civilization are based. Thus the culture of 'acquaintance' is comprehensively formed in the heart of the city on a weekly basis and with a binding approach. Accordingly, the Friday prayer appears as a religious, cultural, and political educational occasion. However, before that, social cells were voluntarily formed in the daily five prayers mosques, which represent the essence of the 'acquaintance' philosophy and create what can be called a 'familial bond', which integrates a homogeneous human group at the spatial and cultural level, contributing to the creation of their values and customs, and defining their daily traditions.

The Crisis of the Contemporary Mosque and the Decline of the 'Ummah's Architecture'

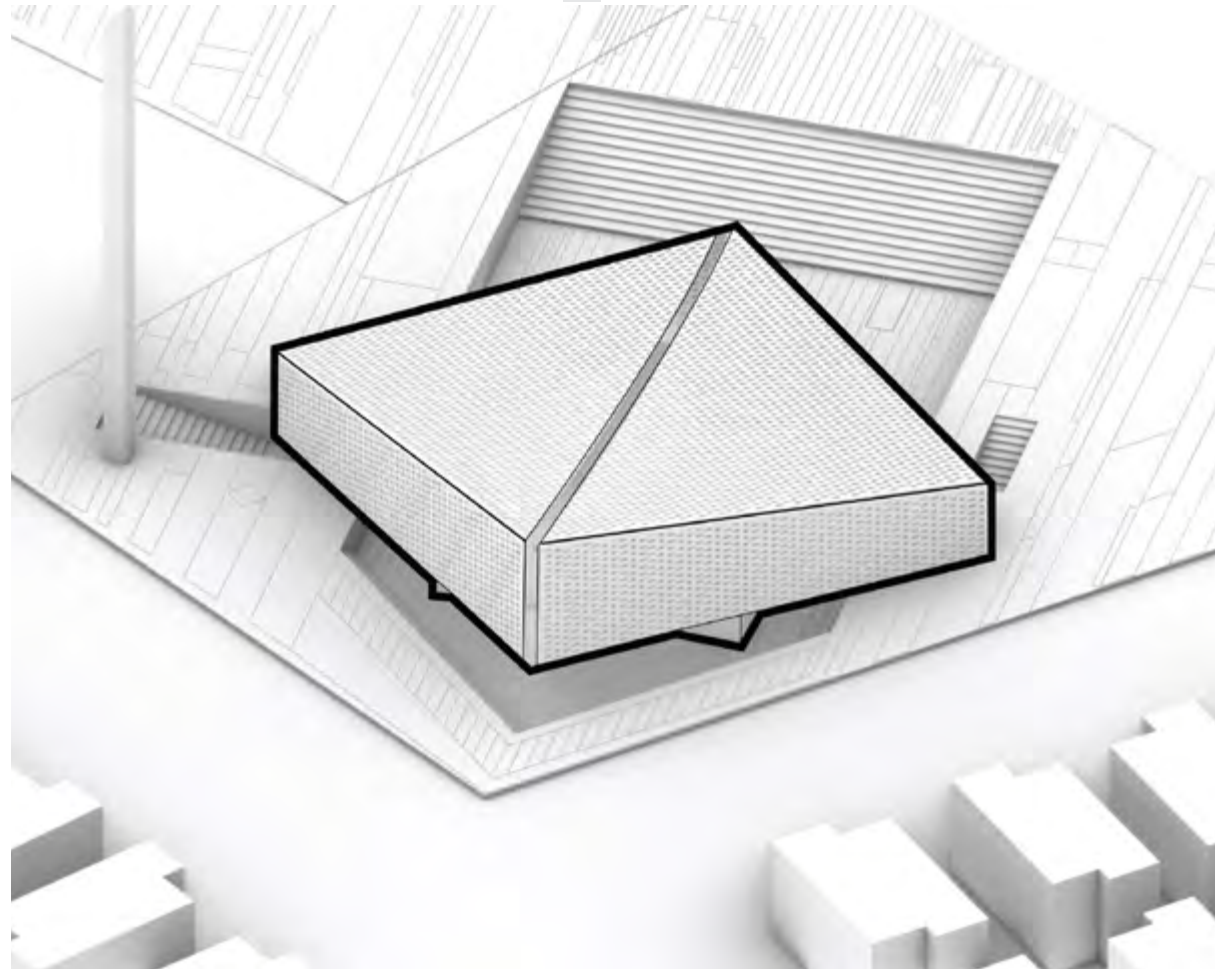
It is necessary to point out here that the strict ties imposed by the mosque on the system of social life of the groups associated with it have been greatly affected since the beginning of the twentieth century. However, the situation has progressively worsened since the second half of the last century until the present. Specifically, we would like to point out that the crisis of mosque architecture began to appear nearly seventy years ago. However, it did not move to societal awareness, especially professional and academic awareness, until recently. The hierarchical social relations (from the small communal group to the large community) became rather imbalanced as a result of the mosque's isolation from the users, at the level of operation, spatial connection, and sense of responsibility, so the concept of the 'mosque community' did not mean as much as it did in the past, and the concept of the large congregation was dispersed with the multiplicity of mosques, the increase in their number, and the disintegration of the surrounding urban fabric. Therefore, we can affirm that the crisis of contemporary mosque architecture arose as a result of a lack of understanding of the true significance of the mosque as a social and cultural facility that allowed, throughout the Islamic ages, the emergence and development of a 'culture of acquaintance' and contributed deeply to the creation of the idea of the 'nation', an idea adopted by the mosque from the level of the small social circle to the next, the widest possible circle that we can imagine, accommodating the concept of the 'nation'.



١-٢٢ المسقط الأفقي للطابق السفلي
 ورسم إيزومتري لكتلة المسجد.
 ١-٢٣ دراسات لتطوير كتلة المبنى وقطاع
 طولي يوضح دراسة أشعة الشمس
 للمسجد - مكتب «بيس معماريون».



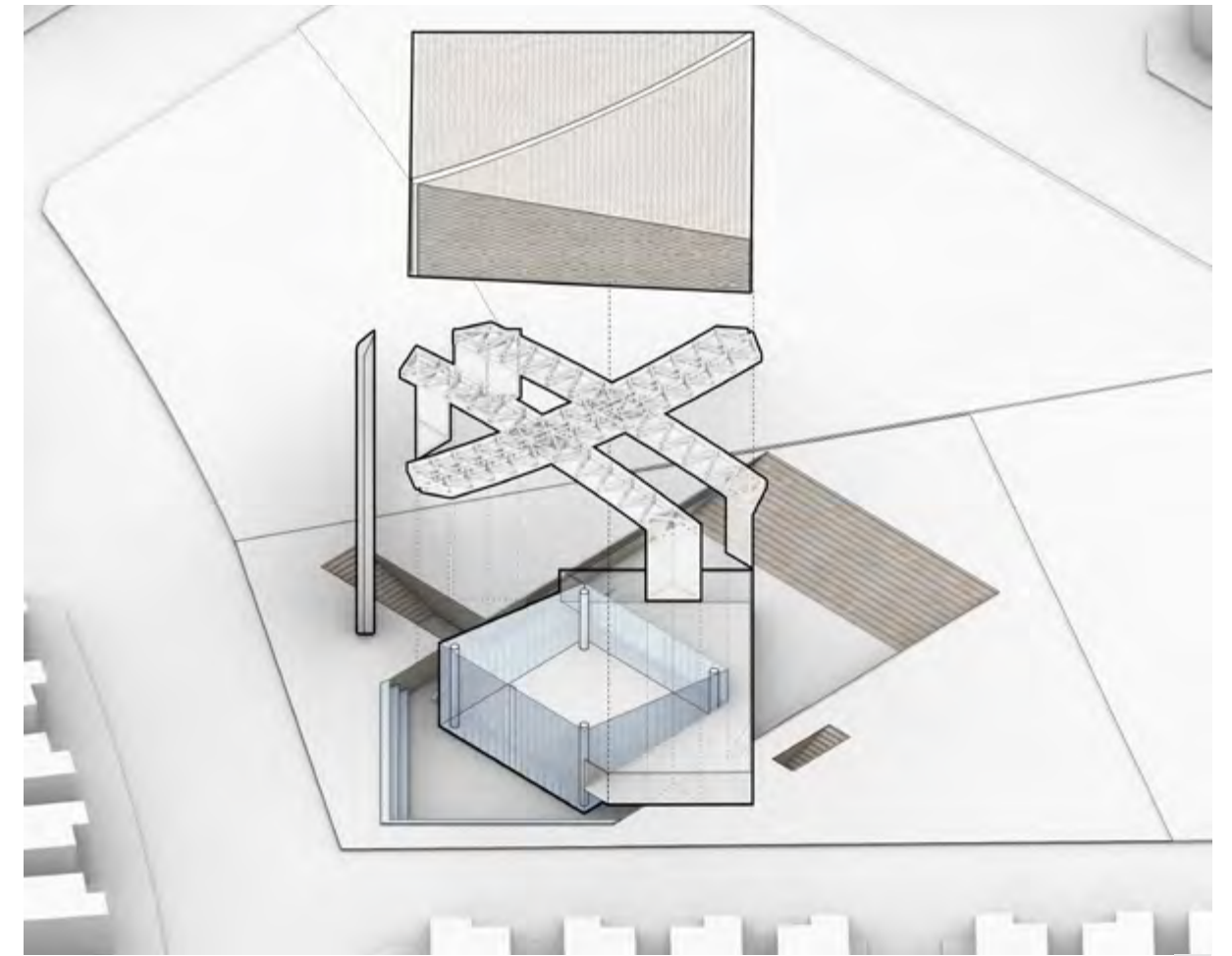
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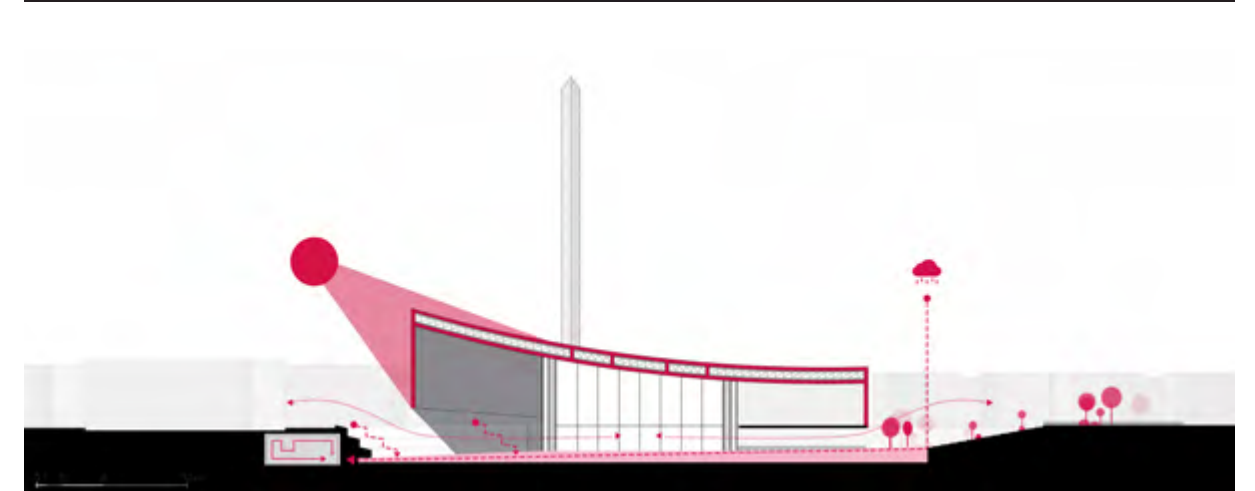
The main problem is embedded in the building of a relationship between contemporary mosque architecture and the sense of ummah, 'nationhood'. It seems that this relationship is dialectical, because the concept of the nation was previously spontaneously formed in the mind without the need to search for associations that enhance the feeling of it, even if there were problems here and there that disturbed this situation.

The nation's being, as an entity, as a concept, however, began to face real existential challenges since the third decade of the twentieth century. The disintegration that affected the Arab and Islamic world after the First World War represents one of the greatest historical challenges that we are still suffering from today. This existential challenge was accompanied by a disturbance in the material evidence that strengthened the sense of the existence of cohesion and unity, the most important of which is the mosque, with the urban connection it represents and the imposed systems of life that constituted the daily program of local communities in the Islamic world. From our point of view, it is difficult to separate mosque architecture from these major perceptions that Islamic societies take into consideration, even if they are just small communities in a social environment that differs from them in belief.

Perhaps we could link this controversy to the feeling that was born in the mind of the Bahraini architect Ali Larry, that the idea of the International Mosques Award could remind the world of the concept of the 'nation', which has been clearly declining in recent times. And there cannot be a 'nation' without the existence of interdependence, social acquaintance, and integration between the different cultures to which Islam extends, which at the present time includes all cultures.



23-1



Therefore, how could the concept of the nation be achieved architecturally? This is a deep question that was not thought about previously, for when we say that "the mosque brings the world together" or as in the slogan "The Mosque: A Transcultural Building" that was adopted by the Third International Conference on Mosque Architecture that was held in Kuwait between November 14 and 16, 2022. These show the universal dimension which the mosque can express as one of the fastest spreading building-types in the world, bearing in mind that this spreading alone cannot create the concept of the nation, although it creates many cultural and urban challenges in different geographies of the world.⁸

Let's start from the fact that architecture has a great ability to convey cultural messages in a sort of silent language, broadcasting them on a large scale with the ability to preserve the meanings inherent in a building, even with the changing forms that may be associated with the building, as is the case with the mosque. And if we go back to the essence of the function of the mosque and its being a space for balance between the religious and the worldly, a catalyst for societal cohesion, a maker of hierarchies of social relations that are constantly expanding, we will make sure that the latent meanings that the mosque possesses are much greater and more important than the apparent meanings expressed in its architectural form. Therefore, in a mosque, we are faced with a place full of meanings, symbols, a space that is able to communicate these meanings easily to the surrounding community, whatever its beliefs, collectively or individually.

⁸ Al-Naim, Mashary Abdullah (Saturday, December 3, 2022) "The Architecture of the Mosque and the Concept of the Nation," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.



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١-٢٤ منظور داخلي يوضح قاعة الصلاة.
١-٢٥ المقترح الفائز بالمركز الثاني (الموقع الأول) لمسابقة رتال لتصميم المساجد - المعمار (طالب الهاشم).
١-٢٦ منظور خارجي يوضح جزء من صحن المسجد.
١-٢٧ قطاع طولي.



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25-1

We can proceed from this concept to visualize the architectural concept of the nation. So what building is more capable than the mosque to embody this 'nation' concept and restore the fragments of the mental image of the concept in our present time? However, we must admit that the concept of the nation, from an architectural point of view, is engulfed with many challenges and with many valid questions that require objective answers.

Most certainly, the architecture of the Islamic nation, of ummah, which is supposed to be provided by the contemporary and future practice of mosque architecture, does not at all mean restoring the historic shape of the mosque, or even stylizing mosques visually; just as the mosque worked historically to create multiple styles, on the horizontal geographical level, so that formations belonging to Central Asian architecture, Malawian architecture, Chinese, Persian, Indian, and even Andalusian architecture appeared. These styles formed a vertical temporal development in which experiments, technologies, and accumulated experiences, produced multiple and disparate forms. However, they all refer to one identity, one nation, and one function that is essentially one of the most

important functions that have always constituted the essence of Islamic existence, in its latent, as well as apparent value. Therefore, the architecture of the nation means all this philosophical entanglement with the material, aesthetic, and technical formation, and it also means all the heritage and experiences that the local cultures that belong to Islam carry.

When we say that mosque architecture, with all its geographical and cultural extensions, can inspire the concept of the nation, we are here talking about a 'supra-national' architecture that expresses a group of common characteristics (material and non-material) which unite a large part of human races around one idea. In principle, this term can be accepted, especially since the mosque has historically, and even in contemporary times, achieved deep penetration at the level of local cultures. If we agree that we can call the architecture of the mosque "the architecture of the nation," then what characterizes this architecture and distinguishes it from secular architecture (Islamic or 'Western') or even architecture of other religions (Abrahamic for sure (Jewish synagogues/the 'tent of meeting in the Sinai'/the two 'Temples', Christian churches) even non-Abrahamic)?



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29-1

There is a need to create such terms, in our view, as what distinguishes us and makes us different from the world may be an entry point for developing an architectural school of thought different from what the West offers. The architectural (similarities and) distinctions are there, they just haven't been codified, they haven't been categorized. Certainly, the details provided to us by contemporary and future architectural practice remain, but it must be at the level of what mosque architecture has provided throughout history, and perhaps even better.

This notion leads us back to the concept of 'parallel heritage', which can represent the theoretical milieu of what we called 'the architecture of the nation'. Parallel heritage is an idea that addresses the future permanently; that is, its main motive is that "the present is a renewable moment that represents a transitional time zone between the recent past and the near future." Although 'parallel heritage' works to move and renew the present moment, it always looks at the near and distant future and does not pay much attention to the distant and near past!

Parallel Heritage: A Systematic View of Future Mosque Architecture

If we desire to understand how we can see the architecture of the future mosque in light of the parallel heritage methodology, we must state that it is a 'future' heritage with a 'modernist' orientation and not subject to the 'spatio-temporal'; that is, it is independent of time and space. This methodology is concerned with creating a new frame of mind, not linking itself to any temporal or spatial attachments, past or present, which may abort this new formation that we aspire to achieve. In fact, detachment from the temporal and spatial context has its own referential risks, so where do we start? Where are we going? What are the access and arrival stations?

This is what makes us look at the beginning, especially if we are talking about "the architecture of the nation" and the urban theory in the Holy Qur'an as a theory not subject to local specifics. It is also a 'non-spatio-temporal' theory, as it does not specify times or places, but rather presents general principles and directions directly related to human instinct, the nature of man, and the essence of his creation. The transition from the overall foundational ideas to the special partial ideas, such as the architecture of the mosque, requires a measure of experimentation and a rather calm analysis of the constants associated with this architecture.



28-1

١-٢٨ مقطع طولي.
 ١-٢٩ المقترح الفائق بالمركز الثالث
 (الموقع الأول) لمسابقة رتال لتصميم
 المساجد - مكتب (علاء شيانة).
 ١-٣٠ منظور داخلي يظهر بساطة قاعة
 الصلاة.

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١-٣١ المقترح الفائزة بالمركز الأول
(الموقع الثاني) لمسابقة رتال لتصميم
المساجد - المعمار (طارق علي، علي
فهيم، يحيى عبدالرحمن، حسين إمام).
١-٣٢ قطاع طولي يوضح دراسة الرياح
وأشعة الشمس.

This idea can be linked to the saying of the Messenger, may God's prayers and peace be upon him, "The [whole] earth has been made for me as a mosque and a purification place." This saying does not define what mosque architecture means, but rather defines the essence and function of the mosque. The controversy raised by mosque architecture through the parallel heritage methodology may open many questions that need practical answers, not just theoretical ones. Although the theory of parallel heritage is broad and includes many urban and non-urban issues, we find it appropriate to link the basic ideas that this introduction attempts to raise, such as the ideas of 'acquaintance' and 'the architecture of the nation' and liberates the mosque from the restrictions of form and refocuses it on the idea of the human bond that carries values of the mosque that advocate equality between human beings, simplicity, and asceticism.

Some may raise the issue that every idea has a beginning and a reference, and that it is difficult to separate it from its reference frame. But, it must also have causes, so what prompts us to adopt a new idea if there are no actual reasons for doing so? Through our reading of contemporary ideas and practices about architecture in general and mosque architecture in particular, we found that these attempts lack a link that represents a school of thought that has roots but is free from the constraints of the past. All that we found are scattered ideas, most of which are from the past and cannot be relied upon to bring about real change. Furthermore, these ideas lack what we call a 'creative nucleus' (and here we mean the sources and roots that generate any civilization. These sources can be linked to the urban theory in the Qur'an with its general human discourse), and it is the nucleus that we refer to as the 'parallel heritage', a starting reference for the future frame of mind.

Our reference to the "creative nucleus" brings us back to the problématique that produced the historical heritage. This gets us into an 'ideological' dilemma. We see that this nucleus is the latent reservoir that generates civilization. Each civilization can take different paths according to the different political, social, economic, and cognitive conditions that direct the interpretations of the formed mind that created it. How we see the architecture of the mosque, according to these perceptions, is what this critical introduction represents (as an initial attempt that needs a lot of theoretical development and practical experimentation). Here we do not claim that we will reach a final vision, but it is the beginning of asking fundamental questions about the architecture of the mosque of the future and the architecture of the nation in general.

One of the most important critical positions raised by parallel heritage is that the creative nucleus created by historical heritage can create the heritage of the future without the need to rely on what was actually produced in the past. This seeming paradox exists because the same sources and the same roots have been (and still are) interpreted throughout history and those sources and roots have produced what's reached us (or is in the process of reaching us through new design) in terms of present and near future architecture. This nucleus has contributed to creating areas

of inspiration that unleashed the imagination of architects and craftsmen throughout the history of Islamic civilization. We see that this nucleus is still capable of launching new ideas and is still capable of creating new creative spaces. However, the essence of the theory of 'parallel heritage' is related to: not returning to the historical interpretations of this nucleus, and therefore what parallel heritage expects is a professional practice that is different from what built environments formed historically. It seems that this perception represents a contemporary urban intellectual debate that may contribute to a reinterpretation of architecture in general and mosque architecture in particular.

It should be said that there are cognitive doubts surrounding the term 'heritage' in general. So why speak about 'parallel heritage' while the meaning of heritage is established through its association with the inherited past: as the result of a previous frame of mind formed in the past, so how do we link heritage to the future and say that it is the heritage of a frame of mind that has not yet been formed? Even if it is formed, it is a renewed mind in its essence, one that does not stop at the civilizational products it produces but rather constantly transcends them.

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34-1

36-1



35-1

١-٣٤ منظور خارجي لمدخل المسجد...
 احتواء وترحيب.
 ١-٣٥ قاعة الصلاة.
 ١-٣٦ صحن المسجد - المعمار (طارق
 علي، علي فهمي، يمني عبدالرحمن،
 حسين إمام).

For us, we see that heritage is a temporary product that accumulates with time, therefore we must differentiate here between the concept of the accumulation of heritage, which we call the historical heritage, and the present heritage that extends into the future, that which will be with the passage of time, an accumulated heritage that some may consider 'historical'.

The idea of a 'heritage of the future' is an opportunity to reform the mind that deals with the creative nucleus. It aims to give priority to rational thinking over everything else, liberating the mind from copying and imitating, and linking the creative nucleus that generates civilization to the spirit of the age in which we live, and subsequently to the transformations of the features of the age with the progress of time.⁹

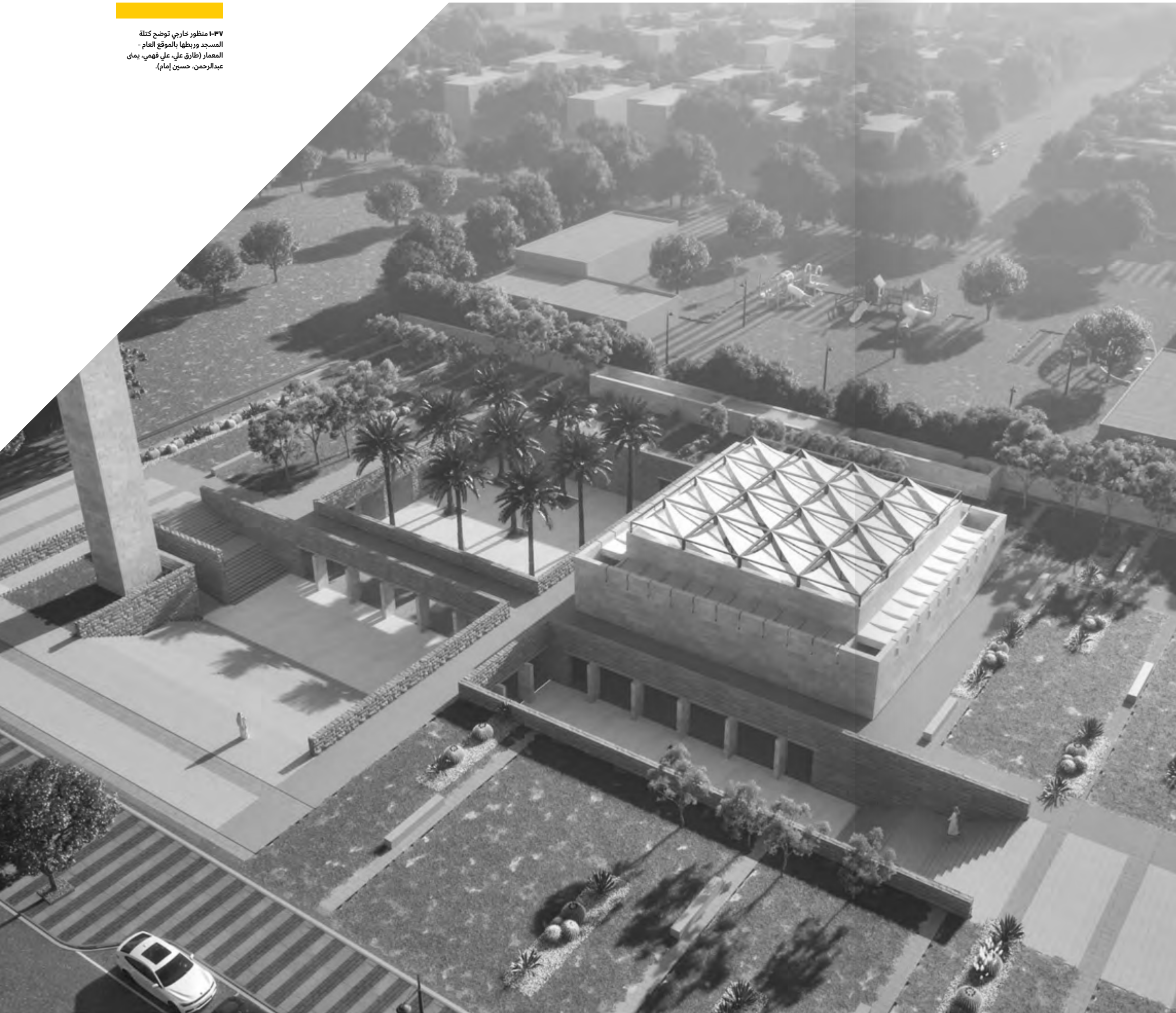
Still, the idea of parallel heritage can be vague. So, it is necessary to develop basic principles that frame this idea, define its directions, and contribute to the development of its use across various professional fields in the future.

These, however, are not final principles, they still need a lot of elaboration and research. Nevertheless, we address them here as principles that form a road-map for a new idea.

Five preliminary principles of parallel heritage have been developed to represent a coherent framework. They are characterized by the fact that they constitute general determinants of the theory. On this basis, it is not possible to deal with each principle alone except in the light of critical research that can help to understand the idea. Further, these principles are not sequential; that is, they do not assume the connection of one with the other, but rather are five principles that clarify the characteristics without which the parallel heritage would not be present!

⁹ Al-Naim, Mashary Abdullah (Saturday, June 26, 2021) "The Five Principles of Parallel Heritage," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.

١-٣٧ منظور خارجي توضح كتلة
المسجد وربطها بالموقع العام -
المعمار (طارق علي، علي فهمي، يحيى
عبدالرحمن، حسين إمام).



37-1

The first of these principles is that it is a heritage formed in the present in order to change the future. Meaning that the goal is to create an intellectual/mental space that reconfigures the cultural product according to the requirements of the constantly changing civilization to which we belong. This principle represents the beginning of the criticism of the historical heritage and establishes the idea of the future. For example, if we want to paint a mental picture of the future mosque, the starting point is supposed to be considering the historical heritage of mosque architecture as a legacy that was formed in the past. We are not supposed to return to it and submit to its characteristics, no matter how present they are in the mind, even with its emotional sway over the minds of many in the general public. This principle also focuses on starting from the contemporary practice of mosque architecture, researching its orientations, and identifying its positive and negative characteristics.

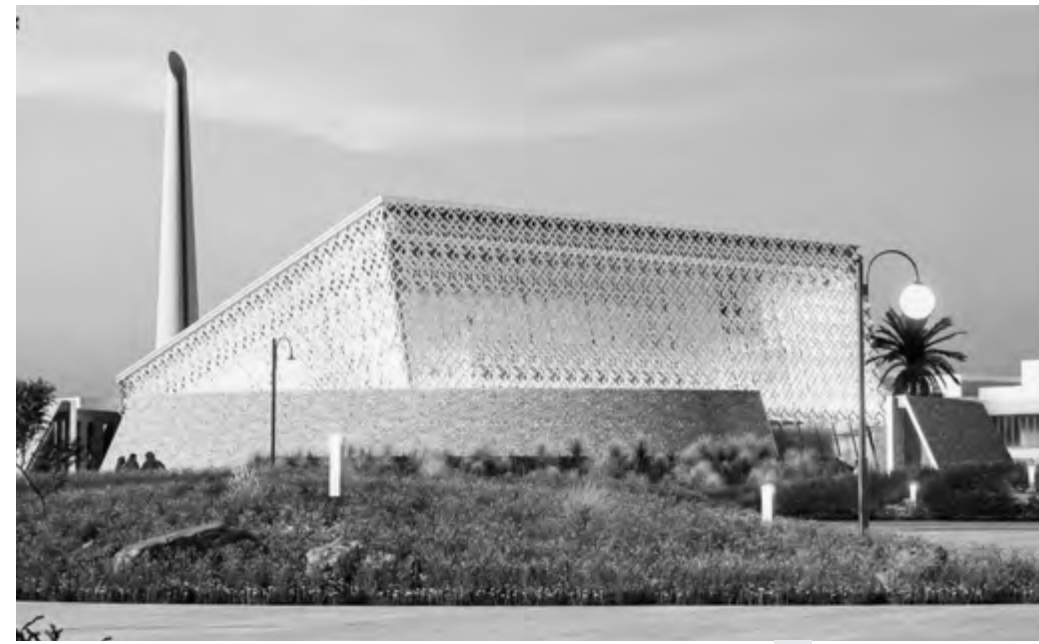
This being the case, we can say that the second principle is: the position on the historical heritage. The parallel heritage is separate from all previous interpretations of the creative nucleus, temporally and spatially, and does not refer to it except as previous experiences that represent cases related to its temporal, social, and technical context to understand the generating nucleus of civilization.

Of course this principle represents the main point of disagreement with the so called 'historical school of heritage', and constitutes the actual turning point: either we accept change or we continue to ruminate on the past. In examining many dissertations about what is described as 'Islamic architecture', historical mosque architecture is often strongly represented. We believe that the term 'Islamic architecture' represents the first and most complex of problems, for it is a term that leads to the historical heritage directly. Therefore, we can say that the parallel heritage notion rejects the term 'Islamic architecture' as a field of contemporary thinking but does not clash with it at the level of historical studies. Through this understanding, the parallel heritage represents "the architecture of the future" as an alternative that constitutes local interpretations and their creative, plastic, and technical spaces – even functional and urban solutions.

And if we are talking about the context in which architecture is practiced at the present time and what results from this practice, this context and these results represent the starting point of intellectual criticism: urging change and creating the mental/intellectual environment that stimulates innovation and opens up areas of inspiration.

The third principle of parallel heritage focuses on understanding the reality of the present situation and critically deconstructing it. Any transformation that does not take into account the present reality and the broader reality that connects our existence with the world is an isolated transformation, and therefore it is doomed to fail.

Perhaps this principle and the one preceding it, confirm that the 'parallel heritage' follows a critical mental school, one which does not specify the rejection or acceptance of any idea until it is examined by this mental approach. The study of the present reality mainly aims to define the intellectual and technical paradigm that governs it and determine its direction(s). It is assumed that parallel heritage works to create new ideas that constantly encourage and facilitate change in these intellectual and technical orbits – a sort of paradigm shift.



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In general, the first three principles determine the methodological orientation of the theory of parallel heritage; that is, if we treat the idea as a critical approach that determines our position on architecture in both its historical and contemporary parts. It should be clear from this framework that the theory always looks forward; some may raise questions about the level of rigor that can be achieved in any conception of or statement about the future, questions that, learning from experience, are fundamental to

development. Perhaps this, in particular, is what this methodology rejects, as it believes that learning is generated simultaneously and ideas develop through experimentation and perpetual modification. The near future is constantly taking shape in the now.

The fourth and fifth principles represent the 'applied steps' of the theory of parallel heritage. The fourth refers to 'impermanence' or (stated more optimistically) 'relative stability', meaning that it is a renewable and non-static heritage that does not stop at any

١-٣٨ المقترح الفائز بالمركز الثاني
(الموقع الثاني) لمسابقة رتال لتصميم
المساجد - مكتب (كلير).
١-٣٩ منظور خارجي يوضح جدار القبلة.

cultural product that contributed to its production, as long as the goal of the product is outdated. It is a heritage that constantly looks to the future and does not look back. The areas of learning within it are generated through this rather futuristic outlook. Therefore, every idea it produces carries the seeds of its own annihilation along with it, with the mindset of moving to a further new idea that is more suitable for the era and context in which it will be born. We must point out that this principle represents the critical engine that urges the challenge and debate (and, when appropriate, tearing down) of existing ideas. Parallel heritage theory is not complete without this principle that places ideas in a state of constant testing. From this point of view, we can say that all mosque architecture at the present time, and in the future, is subject to accountability. Its presence is linked to its immediate time and its (local and global) context and it is in a permanent state of flux. This proposition may require some critical, scientific, and professional dynamism that is absent from our region. Still, it represents an educational necessity that must be addressed.

Finally, it must be born in mind that the 'creative nucleus' represents the fifth principle and constitutes the reservoir of ideas for this heritage.¹⁰ As we mentioned earlier, the creative nucleus represents a holistic state and reference core. We have indicated that the urban theory in the Holy Qur'an could be one of its most important sources, but it is difficult to say that it exclusively represents all of these sources. Each civilization has its sources of inspiration that distinguish it from other civilizations, and therefore what parallel heritage is looking for is to distinguish the identities of these civilizations from each other by drawing inspiration from their own creativity-generating core. In the case of Islamic civilization, it is possible to rely on the urban theory in the Qur'an as a birth base of this civilization, and as a general human discourse, not because it belongs to Islam as a legislative system, but rather as a Divine revelation directed to 'the world'.¹¹

10 Al-Naim, Mashary Abdullah (September-October 2022) "Parallel Heritage and Future Prospects for Saudi Architecture," Al-Qafila, Aramco, Dhahran, pp. 66-73.

11 Al-Naim, Mashary Abdullah (Saturday, July 3, 2021 AD) "The Creative Core and the New Identity," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.



٤٠-١ منظور لقاعة الصلاة... شفافية وبساطة- مكتب (كلير).
٤١-١ الجدار الخارجي المكسو بالحجر الفاصل بين المسجد والساحات الخارجية.
٤٢-١ رسومات أولية لتطور فكرة القاعة.

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The questions posed now regard the relationship of parallel heritage to the message of 'acquaintance' that the mosque has been constantly sending throughout its history, regardless of the architecture that it represents. We can agree that contemporary mosque architecture needs to be tested by these principles in a practical way, this is exactly what the Abdullatif Al Fozaan Award for Mosque Architecture is working on. What we will raise in the remaining part of this introduction represents some experiments worthy of consideration, although it is difficult to say that they represent what parallel heritage aims for, since they were not experiments directed from the beginning to test the theory, but are experiments that can represent a space for a transitional dialogue that may lead us to a more mature vision of parallel heritage and its new conceptual thesis.

The 'Retal' competition: a distinct experiment for the neighborhood mosque

Lately, we have developed a classification system for mosques according to both their size and use: there is a category for central mosques, a second for Friday mosques, and a third for neighborhood mosques, or what could be called the mosques of the five daily prayers¹². This classification is justified in light of the urban expansion, inconsistent social diversity, and the transfer of control over mosques from the people to a government or private entity, semi-isolated from society. It seems that creating a different mosque experiment linked to this classification contributed to the development of some criteria and determinants that differentiate between one category and another according to the size and use of the targeted mosque. Theoretically speaking, this classification can be considered as part of the development of the concept of 'acquaintance'. Each category refers to a community circle with its own characteristics. Time and again, the central mosque represents the city's community as a whole, while the neighborhood Friday mosque, or part of it (as a result of the multiplicity of congregational mosques in the neighborhoods) and the five daily prayers mosque represent Al-Hara. The number of neighborhood mosques is often

¹² There is another category of Islamic place of worship not listed here, but for which there are examples in this book: 'musalla'. These are not mosques but very small prayer spaces/rooms, similar to Christian chapels or 'Poustinia' (remote prayer cabins), originating in Eastern Europe, but now found in various places.



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much greater than the first two types, so the Al-Hara Mosque represents the real challenge to develop an architecture that is linked to people and works to build a well-known and cohesive community.

In this context, The Abdullatif Al-Fozan Award for Mosque Architecture and the Retal Urban Development Company ('Retal': specializing in real estate development in the Kingdom of Saudi Arabia) organized an open global competition to build two mosques on two sites belonging to the company in Dammam.

It received entries from 154 contestants from 32 countries around the world. They presented striking architectural solutions, some of which were unprecedented. This activity explicated how architectural competitions can somehow positively contribute toward changing the intellectual discourse of design. The introduction of this competition was an opportunity to spark an intellectual debate about the nature of future mosque architecture, and more importantly, show how contemporary architects think

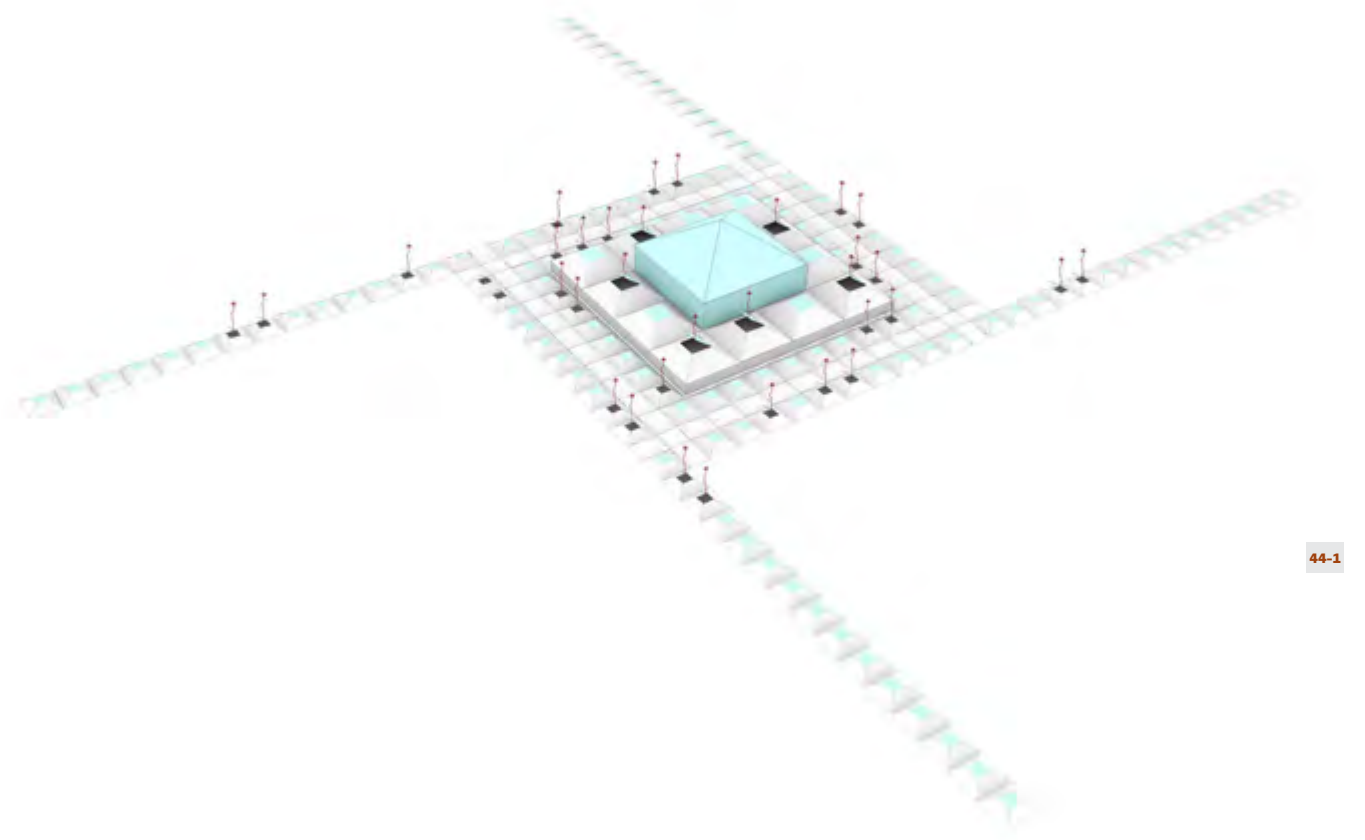
٤٣-١ المقترح الفائزة بالمركز الثالث
(الموقع الثاني) لمسابقة رتال لتصميم
المساجد - مكتب «بيت المغربي».

about mosque architecture. Each competition represents a wide space to overcome stagnant solutions and ideas, challenge them and change their paths. It also confirms that there are multiple solutions to every problem and that it is unwise to stop at the first solution that comes to mind.

The 'Retal experiment', however, remains limited to two matters: the first is that it only includes neighborhood mosques, and therefore the design experiment is supposed to focus on a building in a small, interconnected community. What are the elements that the designer is supposed to think about in order to be able to achieve such a goal? Is it possible in the first place to achieve the principle of acquaintance through architectural design, or does achieving acquaintance require direct life experience? Is it a long or short period of time until the group is formed? These questions represent direct challenges to the idea of 'acquaintance' on the one hand, and posed many challenges to the theory of parallel heritage on the other. What is the new idea that challenges the heritage of the historical mosque? It is important to note that the participants in the competition were not asked to think about this question. We raise it here, however, in order to consider the competition with a different critical perspective.

There is agreement that creative solutions do not necessarily result from innovators with extensive experience, but rather may be born from young minds that look in a different way, 'outside the (expected and repetitive) box'. This, in itself, represents a great challenge.¹³ In architecture, every problem has multiple solutions, and the architectural competition is a chance to review several solutions to one architectural problem. This in itself represents a fertile field for experimentation and testing of ideas. Although the Retal mosque architecture competition was not intended to test any of the ideas raised by this introduction, the attempt to discover these ideas through what the designers presented in the competition, spontaneously and unintentionally, gives us the possibility of revealing many unforeseen ideas contained in contemporary architectural experiences.

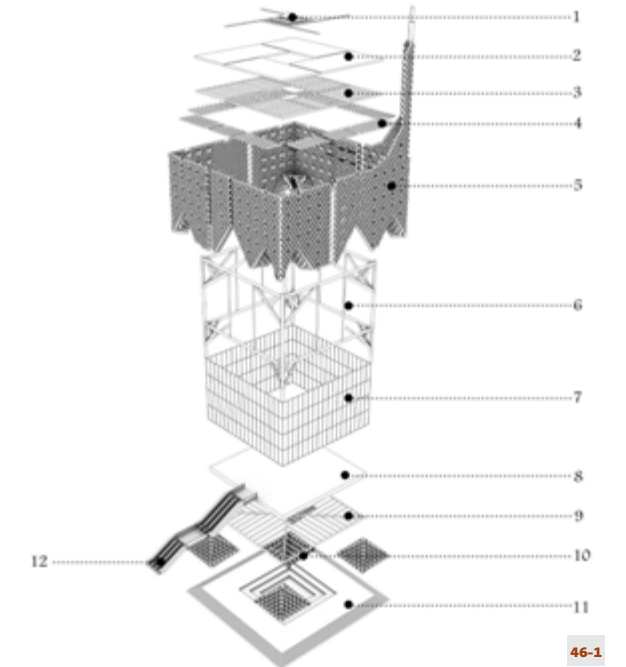
13 Al-Naim, Mashary Abdullah (Saturday, June 18, 2022) "One Job, Multiple Solutions," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.



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Going back to the mosque competition, we see it as a professional experiment that corresponds to the theoretical methodology that we would like to launch in this introduction. We expected fresh and interesting results from it, especially since there is a surprising stagnation with regard to creative design experiments in mosque architecture. Although the competition is for two sites in the city of Damman in the Kingdom of Saudi Arabia, we expect the impact of the competition, its results, and the proposals that were submitted, whether they won prizes or not, will change the way of thinking of the future in mosque architecture, not only in the Kingdom but in many regions of the world. Our belief stems from the essence of the idea of 'acculturation', which represents the concept of 'acquaintance', as it seems that this term is not satisfied with the issue of human acquaintance at the level of individuals, but rather conveys their cultures to each other and mixes them in an acculturation that raises the issues of bilateral 'influence'. This is what makes the competition a cultural case that brings together multiple backgrounds. How did each contestant view the mosque in the city of Damman, and how did each contestant incorporate part of their cultural background into the idea presented? If we consider 'the mosque as a cross-cultural building', we can confront the effectiveness of this idea through this competition as one example. In general, the competition can be considered an experiment in how ideas move between cultures. In the past, this used to take a long time, but now the transition is rapid and may constitute a temporary state that makes the ideas themselves in a state of permanent change.

٤٤-١ رسم أيزوميتري لكتلة المسجد
ودراسة ربطه بالموقع العام.
٤٥-١ كتلة المسجد و تفاعلها مع الساحة
الخارجية.
٤٦-١ دراسات لتطوير كتلة المبنى.
٤٧-١ منظور داخلي لقاعة الصلاة -
مكتب «بيت المقربي».



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This rapid transition of forms and ideas may raise the issue of 'form maturity and stability'. All historical architectural forms needed a period of time to reach maturity and stability. If this period is reduced to the point of not allowing new forms to mature and then stabilize, we will face a major architectural problem. This problem is related to the dispersion of architecture itself, and this is what parallel heritage actually faces. As the fourth principle is 'relative stability', it is not possible to accept instantaneous change that does not allow an idea to settle, nor settle for absolute stillness that leads to repetition.

Let us say that the Al-Fozan Award leads us down a different professional path in the field of contemporary mosque architecture. It was not satisfied with merely presenting rewarding prizes for the best practices in mosque architecture around the world – which is its main goal – but rather, the award has worked since its inception to organize several competitions, one of which focused on "mosque accessories." The winning project, which is a "holder for the Qur'an book," turned into a product that produced 250 pieces, distributed to 50 mosques in the capital Dammam as an experiment. One of the principles that these competitions focus on is: from idea to construction or manufacturing, it is not enough to organize a competition that does not result in work that people see and which benefits the community, but that the intellectual movement must be directly related to the practical experience in order to evaluate and develop it. This approach, although in its infancy, represents a laboratory for new ideas that the award wants to achieve at the level of the future mosque and through its global rather than local role. As we mentioned previously, it is not enough to propose theories without testing them, since each test is not considered a complete experiment, but rather a step in challenging the idea itself.

The mosque 'accessories' competition represented an answer to a fundamental question: Is it possible to develop a building linked to a place without being linked to a local manufacturing environment? This fundamental question, prompted by the parallel heritage, is one of the engines of renewal and search for new ideas, experimenting with them, and transcending them at the same time. The competition focused on several areas related to

the mosque, such as places of ablution, places to remove shoes, Qur'an holders, etc., and aimed to achieve two outcomes; the first: drawing attention, on the intellectual and professional level, to the technical and behavioral problems that these places associated with the mosque suffer from, and the second: the development of practical professional examples that show that focusing on problems, diagnosing them, and developing plans to solve them can contribute to overcoming the technical reality to realize a better result, and that this overrun is only a stage that can also be overcome in the future.

In the Retal competition, the jury short-listed 24 projects out of 154 projects submitted to the competition, so that the winners would later be selected from the short list (which was already done, as the jury chose 6 proposals, three for each site). What was achieved by organizing this competition, other than reaching designs that could create a mosque environment different from the one we know? This question brings us back to the basic concepts and principles that we are trying to establish around mosque architecture that is clearly neglected in the architectural profession in our contemporary time, even in Islamic countries. Interestingly, there was an agreement between the organizers of the competition that 'we are looking for what we have not thought of before'. It seems that this mysterious search, which we will not be able to reach through our individual attempts, needs to expand the scope of participation and open the door for everyone, professionals and students of professional offices and independent architects, male and female, to participate in making these ideas that we expect have not crossed our mind before. Did we achieve the goal we were striving for? We cannot agree on a complete answer to this question. It is assumed that the architectural competition encourages the exploration of ambiguous ideas, as it is based on daring and entering into unconventional ideas. When the architect lacks these qualities, he or she often falls into the trap of repetition and following the prevailing intellectual line – this is exactly what we wanted to overcome.

Some of the ideas that were submitted to the competition are unusual, whether shortlisted or not. Many of the entries show the enormous potential of the mosque design, which seems to be open



٤٨-١ و٤٩-١ المقترح الفائز بالمركز الأول لمسابقة اكسسوارات المساجد - حوامل القرآن - مكتب «بيطار».

تصميم: بيطار (٢٠١٠-٢٠١١)

تصميم: بيطار (٢٠١١-٢٠١٢)

تصميم: بيطار (٢٠١٢-٢٠١٣)

to unlimited depths and heights of imagination and is qualified to contribute to creating a different visual identity for our cities. In the future, it appears to us that breaking more restrictions surrounding mosque architecture, especially from the visual and plastic side, will provide great opportunities to redefine what mosque architecture is in the future.

In order to answer the two questions we raised about the competition, we will try to address the design orientations of the three winners in the first site, who represent three different countries respectively: Kuwait (Peace Architecture and Planning Office), the Kingdom of Saudi Arabia (Talib Al-Hashem) and the Arab Republic of Egypt (Alaa's Office Shabana Architects). Any attempt to link the theoretical concept of acquaintance will collide with the architectural design's dissociation from direct life experience, which makes the mosque's universal message a state above forms or design, and requires a reconnection with society, whether local or global. This initial challenge shows the method of thinking that we are supposed to follow to reflect on the professional status of mosque architecture.

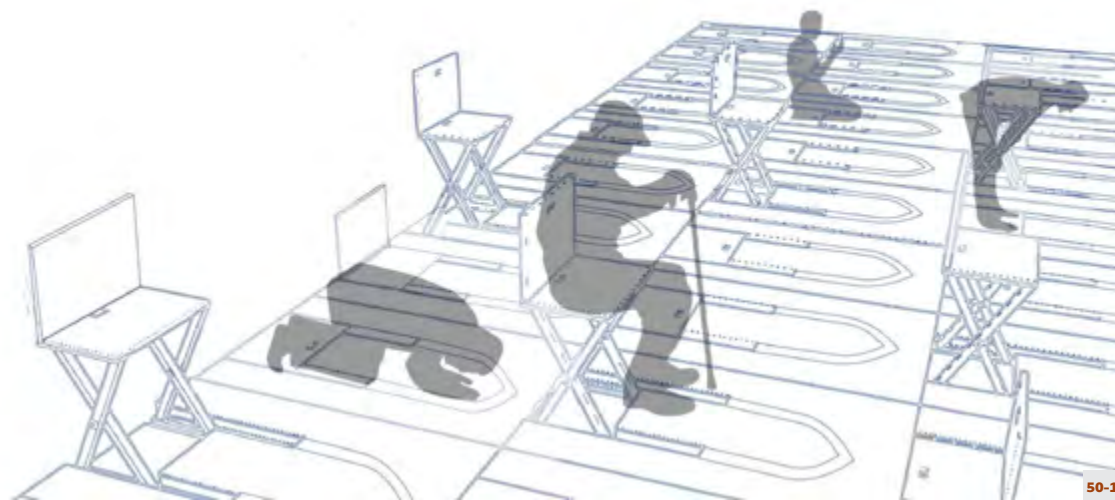
At first glance, we will stop at three trends represented by the winning projects, the first: visual / plastic with high technical specifications that challenge the historical heritage of the mosque, if we exclude the presence of the minaret. If we link this approach to the theory of parallel heritage, it will make us rethink this theory, as it does not call for a new and future theory without being linked to the sources, roots, and essence of the creative nucleus. So, can we say that the design idea presented by the "Pace" office bears any apparent or hidden connection to the nucleus that represents the essence of the mosque's architecture? Such a question cannot be answered without deconstructing the idea and its elements...this is

one of the professional challenges facing the application of parallel heritage theory. In addition, the issue of relative stability advocated by parallel heritage imposes on designers a blazing technical and critical presence, these features are lacking in our academic and professional community in the Arab and Islamic world.

The proposal presented by the architect, Talib Al-Hashem, represents the opposite of the first proposal from a plastic point of view, as the focus was on creating a social space at the expense of dissolving the visual form within a large group of elements that enhances communication between the users of the place more than watching the shape of the mosque. The idea depends entirely on connecting people to the vicinity of the mosque and encouraging them not to leave for their homes immediately after the end of the prayer. In order to achieve this goal, it was necessary to create social spaces that some may consider redundant to the mosque's need, and reduce the visual impact of the mosque in the urban environment. The idea pushes the philosophy of the mosque, which strongly urges acquaintance, and resists the plastic-formalist approach based on the use of materials, techniques, and monumentality, to reflect the values of modesty, simplicity, and harmony with the social and urban environment.

The third winner presents an idea of balance between the form and the social environment. All three proposals could not discard the historical legacy of the mosque, perhaps due to the presence of the essential function and the fact that the mosque constitutes a well-established, cumulative mental image that is difficult to move from to a new / different image. However, we must emphasize here that getting rid of any historical mental image cannot happen suddenly, but rather through experience and reinterpretation of the creative nucleus, which has not happened so far. It seems that architectural practice faces a state of urgency and immaturity, which makes serious architectural research face clear professional shortcomings that push many architects to imitation and repetition, and effectively curtails creativity and innovation. Without knowledge, there is no daring, and without daring, knowledge does not develop. Because parallel heritage requires professional daring, it therefore requires a deep knowledge of the wellsprings and sources of inspiration that can create a different mosque architectural space.

تصميم: بيطار (٢٠١٣-٢٠١٤)



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We must point out here that architectural competitions may help develop some ideas, but they will not solve the problem of the absence of the technical manufacturing environment, generally, in the Islamic world. It seems that the attempts of the Al-Fozan Award to organize competitions concerned with developing products for mosque accessories aimed in particular at drawing attention to the huge manufacturing gap that communities suffer from; therefore, the architecture of the future mosque will remain immature and will not reach the stage of an integrated experiment as long as this gap exists. In addition, what we mentioned earlier about the concept of identity is that it is not an abstract idea, but a spontaneous result of the environments that ideas, and production mechanisms in general, find themselves, their 'context'.

Professionally, thinking about 'parallel heritage' requires making sure of what we call 'the engines of renewal', as no renewal can take place without an environment that supports new ideas. Therefore, if we want to apply the theory of parallel heritage to professional practice, we must diagnose the state of production, both intellectual and industrial, as tributaries that push for new ideas, placing parallel heritage in the laboratory of the experiments, making sure of its feasibility and ability to interact with the requirements of life in a specific period of time. Indeed, Mosque architecture faces this dilemma that pulls it from two sides. The first is the dominance of the static historical image; and the second is the weakness of production mechanisms in general. This places us before a great challenge. Although the mosque carries deep messages that enhance human acquaintance and contributes to creating a contemporary concept of the nation, it faces major challenges at the level of architectural practice. We acknowledge their existence and work to address them.

The second site in the Retal competition offers solutions that are not far from the first. It reminds us of the duality of superior technology / handicraft. It is clear that the historical ideas that developed from the nucleus that represented the source of inspiration and innovation in mosque architecture were directly related to man, his skills and his direct relationship with nature. Thus, the crafts and factories that resulted from these crafts have evolved to meet the direct and simple needs of users. This spontaneous evolutionary climate, which lasted for more than thirteen centuries, faces many challenges today. Although the craft is still important and required in contemporary mosque

architecture, the power of superior technologies has made it inferior and perhaps, at times, invisible.

The first winner, of the second site (from Egypt), tried to restore the calmness of the historical mosque, with its deep connection to the place. He sunk the mosque's mass below ground level and made the prayer hall volume and the minaret visible above it. At the same time he created external spaces open to the sky around the facilities of the mosque which are also sunken underground. The solution is characterized by simplicity, innovation, and the use of historical experiments without using their forms. It clearly says that the 'modesty of the mosque' is what gives it prestige and impressive visual and urban presence.

The Claire office, from Saudi Arabia, which won the second place, offers an advanced technical solution, from our point of view, as it deals with spaces and formations that create an impressive technical synthesis. Although we do not object to such a dazzling outcome, we still say that any technology that does not have local roots and has not developed from the conditions of local production mechanisms represents a great burden and does not constitute a real local continuity; rather, it belongs to the thought and production mechanisms of the societies that produced it. This puts us at a crossroads: either we accept the technology or we reject it. Is this choice realistic, is it even desirable, or is there room for reconciliation between these two poles? One of the conditions of parallel heritage is the generation of new ideas and production mechanisms, and therefore this means that it must be one of the conditions for future mosque architecture to 'localize' production mechanisms appropriate to local environments and to create a manufacturing market with economic feasibility that guarantees permanence, continuity, accumulation, and the development of ideas.

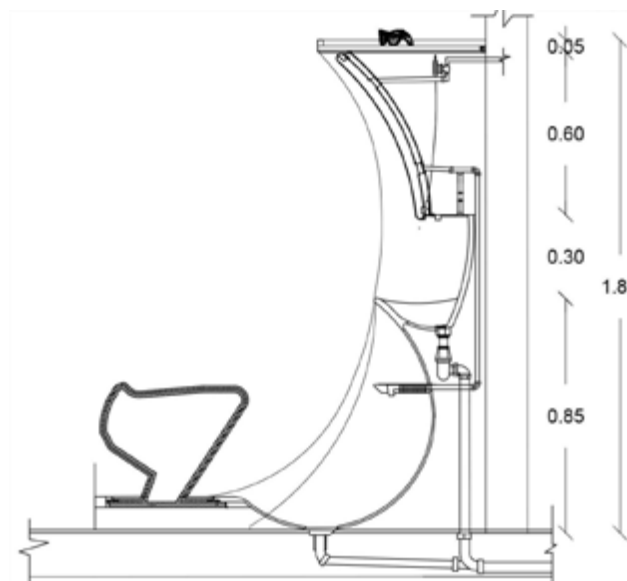
The third proposal, by the Maghribi House of Design from Egypt, tries to create a deep sense of connection with the historical mental image of the mosque, so that at first glance we feel that the mosque was built from natural materials, but the idea is mainly based on technical virtuosity: employing materials and techniques that give a sense of installation and assembly, creating a spacious and luminous prayer space.

The three winning experiments in the second site, all indicate a desire to bypass history and search for solutions that challenge stagnation and repetition. Despite the vast discrepancy between

1-50 مقترح لأحد تصاميم القائمة القصيرة لمسابقة أكسسوارات المساجد - كراسي المصلين.
1-51 و 1-52 مقترح لأحد تصاميم القائمة القصيرة لمسابقة أكسسوارات المساجد - المواضع.



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an idea that relies on simplicity, that which express humility, and an idea that relies on technical virtuosity, all ideas share one goal: to resist the historical mental image.

The remainder of this introduction concludes our perception of the intertwined ideas between parallel heritage as a critical/ analytical theory and the challenges posed by the practice of architecture on the ground. Although we mentioned at the beginning that the theory of parallel heritage is in its infancy and needs a lot of professional testing and theoretical analysis that will make it a viable theory and then refine and develop it over time. We believe that, through what has been presented here, we can sense a real beginning that allows for a rethinking of many 'constants' that some find difficult to challenge.

Why Parallel Heritage? A Final reading

It is important to state from the outset that mosque architecture is related to the imagined traditional culture, even after the disappearance of most of the traditional building methods. This was due to the confusion of what the mosque actually is and represents: as a symbol that has its own meanings and functions rooted in the collective mind of Islamic societies, and between the visual image of the mosque that does not necessarily embody a fixed and imagined image that cannot be changed.

In time, this rather ambiguous view led to a state of caution and fear of prejudice towards this image and even gained some sanctity – albeit without merit. Some have also tried to link the feelings of reverence and serenity with the historical forms that developed in the past. Its presence among those who frequent the mosques has become a sort of condition for reverence! Consequently, the mosque is not considered as such except when it is 'clothed' in the historical traditional image.

It seems here that the ability of the collective imagination to create sacred forms and relate to them is a cultural issue that constitutes, in itself, a challenge facing any acts of innovation. This imagination/illusion always leads to mental stagnation, surrounded and directed by subjective emotions. Therefore, any confrontation with this collective imagination is considered a confrontation with the established and the sacred. This phenomenon represents the bedrock of the crisis of contemporary mosque architecture, one that suffers from severe hesitation between stepping forward and creating an illusion, rather multiple illusions of forms, and the collective extremism inhabited by the historical illusion.

Hence, we had to present a different approach based on 'epistemological' inquiries, trying to return the mosque to its foundations and origins that began approximately 1440 years ago. These foundations are based on non-material/architectural conditions, but rather due to temporal and spatial determinants that prayer, as such, is not 'valid' unless it is present. As for the material component of the mosque, it was a product of the accumulated events and the technologies available in Medina at the time which witnessed the birth of the first mosque for Muslims.



53-1

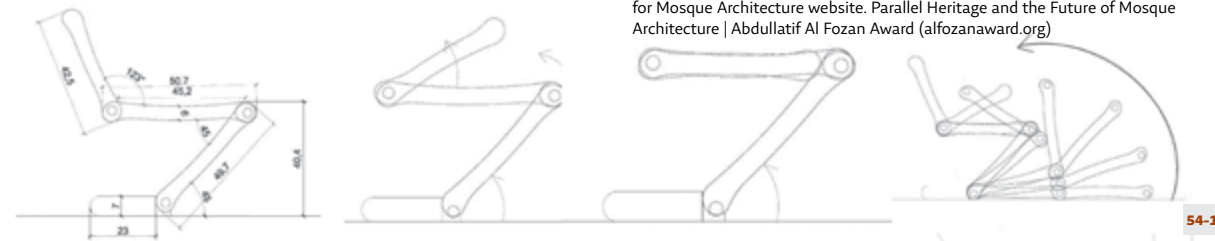
١-٥٣ و ١-٥٥ مقترح لأحد تصاميم القائمة القصيرة لمسابقة اكسسوارات المساجد - جوامع القرآن.
 ١-٥٤ رسومات أولية لتطوير فكرة كرسي الصلاة.
 ١-٥٦ رسومات أولية لتطوير فكرة مواضع الأذنية.
 ١-٥٧ مقترح لأحد تصاميم القائمة القصيرة لمسابقة اكسسوارات المساجد - مواضع الأذنية.

'Parallel heritage' is a theory that does not reject – in any way – the historical heritage, neither does it try to be an extension of it. It is a theory that aims to define what the 'heritage of the future' is, rather than trying to define the heritage of the past. Some conservatives may see in this term a problem related to the concept of 'heritage' itself, meaning the 'legacy' or 'inheritance' of historical events and past experiences. But in fact, 'parallel heritage' is nothing but a 'virtual heritage' that foresees a future vision of what heritage could be in the future. Here comes the question posed by the theory of parallel heritage in the field of future mosque architecture: What will mosque architecture be like in the future if we go back to the seminal roots of mosque architecture and harness it to create a hypothetical future historical line and abandon the past historical line?

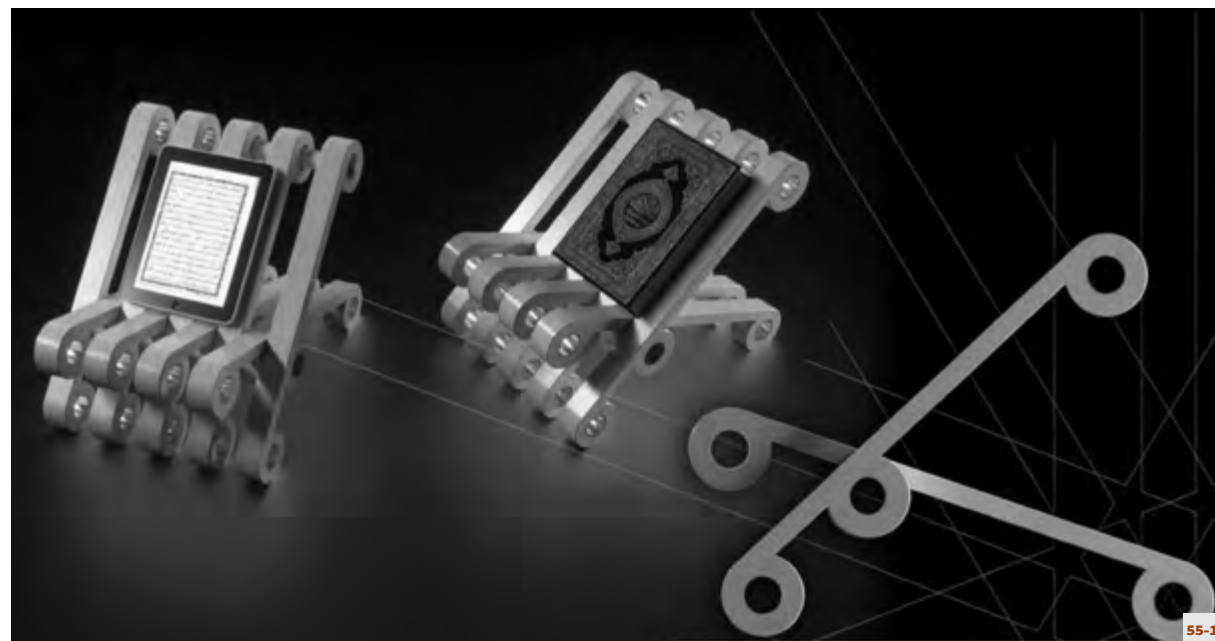
The idea of parallel architectural heritage is based on the theory of the emergence, development and extinction of architectural forms throughout history, the beginnings of the generation of modified forms from them, and the development of hybrid forms, understanding the behavior of architectural forms and the possibility of establishing an original architecture that does not copy history. That is, clinging to the foundations on which historical architecture was based, provided that it takes an evolutionary path other than the one taken by the historically recognized forms.

This theory aims to formulate a heritage for the future while preserving the origins and roots of concepts and legislation that resulted in historical and traditional forms and adapting them to build design scenarios according to the needs and capabilities of each designer. Hence it becomes a single source for a multi-format product. The theory is related to the study of the origins of shapes and the reasons for their existence and development.¹⁴

14 Al-Naim, Mashary Abdullah (September 27, 2018 AD) "Parallel Heritage and the Future of Mosque Architecture," Abdullatif Al-Fozan Award for Mosque Architecture website. Parallel Heritage and the Future of Mosque Architecture | Abdullatif Al Fozan Award (alfozanaward.org)



54-1



55-1

The problem of historical architectural heritage is the precedence of certainty over criticism and experimentation, while parallel heritage is based on experimentation, examination, and criticism until it concludes with conditional architectural certainty. The parallel architectural heritage is a true rebirth of future mosque architecture, and the development of a historical path for the future of this architecture. The concept of this theory is more comprehensive than limiting itself to criticizing the historical heritage of mosque architecture, as it is a critical approach that is not subject to the restrictions of the accumulation of texts that sanctified the historical forms, and draws from the basic sources that generated these forms.

Therefore, we are facing a hypothesis that tries to critique the paths of the historical heritage that mosque architecture went through, and tries to find a future path different from its predecessor. The reason for this is that the technical, knowledge, and craft environment that produced the historical form of the mosque no longer exists; a different professional system has appeared in its place, one that requires new concepts and relationships between all parties that produce architecture. Thus, the 'parallel heritage' theory relies on two main poles, one of which is fixed. It is the sum of the functional elements needed for the obligatory prayer in the mosque, and it has legal, spatial and temporal controls. As for the



56-1

other variable and innovative pole, it is the sum of the techniques, knowledge, and crafts that exist and develop in every era and interact with the constants, to produce a new architecture for the mosque that expresses the spirit of the era. It is the interaction of the constant with the variable that creates a constantly renewed architecture, while preserving originality and depth.

The intellectual, social, and even economic transformations that we are experiencing at the present time require a way of thinking and dealing with texts that generate culture in a different way, one that eschews many traditions that restricted creativity and pushes to think 'outside the box'. This metanoia ('change in mindset') is necessary for the mechanism of producing ideas to keep pace with the needs of society in our time and to deviate from the prevailing stereotypes.

It is expected that a mass of resistance will form against this new method. Therefore, the idea of 'parallel heritage' addresses the mind as a mechanism for generating ideas and not as a carrier and keeper of historical knowledge with its accompanying values. The convictions on which this parallel heritage is based are based on the fact that it is no longer possible to continue with the same previous stereotypical thinking. This kind of mind is no longer part of the accumulation of the legacy and the illogical assumptions it imposes, one that re-ruminates the same methods for making ideas. Otherwise we will remain in square one!

If we try to understand what 'parallel heritage' means, we will find that it represents a mechanism for understanding the texts and sources that represent the sources of culture and form its general identity. However, this mechanism deliberately neglects all previous interpretations of these texts and sources and presents a completely new interpretation that deals with the current situation and needs of contemporary society with all its technical data. In order for the idea to be clear, the 'parallel heritage' considers the texts and sources that generate ideas in our culture valid for all times and places. Therefore, it is working on adopting a new cultural/civilizational line parallel to the line that began 1,400 years ago with different data and circumstances, so it considers these sources born today and interprets them with the data of the present.¹⁵

15 Al-Naim, Mashary Abdullah (Saturday, January 25, 2020 AD) "Parallel Heritage as Reform of Thinking," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.



57-1

It may be that the term is in its infancy and still needs a lot of work and research, but we should start with the issue of 'idea generators' in our culture and consider them as the 'source' for the new, instead of relying on ideas that were conceived in the past and considering them as ready-to-use products.

One question that can be raised here is: Why do we need parallel heritage?

Another question is: Why should we go beyond the historical heritage with all its lessons and positive ideas that can be learned from?

With regard to the first question, we have stated our conviction that our contemporary culture has reached a sort of dead end, and that it needs 'revolutionary ideas' that recreate the mechanisms for producing creativity. Here comes the role of 'parallel heritage' as a direction and pattern in critical thinking, one which gets rid of judgments and preconceived interpretations of the sources of culture. Therefore, it represents an opportunity to create new 'generators' of ideas within culture.

As for the answer to the second question, it constitutes a great arena for disagreement and controversy: why should we overlook all the knowledge accumulation that resulted from working with the basic sources of culture?

From a scientific and methodological standpoint, previous works often represent a source and direction for any future systematic intellectual work. Our conviction was to create a rupture with the historical heritage, as Muhammad Abed Al-Jabri believed, and that the parallel heritage can create a new way of thinking capable of connecting it with the historical heritage in the future.

Mainly, our work on the idea was in the field of architectural criticism, and we considered that 'parallel heritage' is the theory, while we worked on what we called "the urban theory in the Holy Qur'an" as the source that generates ideas. As we mentioned earlier, the idea is in its infancy, but we found that there is a lot that can be done in this aspect and that it can build a new direction in architectural thought, not only in relation to our culture, but it may rather contribute to the development of general ideas as a whole. Although architectural thought relies mainly on three basic interests: 'history', 'theory', and 'criticism', we focused on theory and criticism and considered that history is what the 'parallel heritage' will generate in the future that can be linked to previous history if needed.

It must be stressed that the application of parallel heritage in various fields of knowledge – science, even education and economics – depends on research work. This last is a long-term undertaking. Reaching valuable results from which may require experimentation, but in general, we see that it is necessary to go through new experiments that liberate us from the state of stillness. We are living in the present time, and this undoubtedly requires a major educational shift – we hope to be ready for it.

The late Iraqi architect Zaha Hadid, RIP, in an interview several years ago, was asked about her lack of conviction in the possibility of Arabs combining the traditional mind with the modern at the same time. She was told that it is not possible to reconcile the two minds. Her answer was categorical, that it is impossible to achieve this reconciliation, not because theoretically this combination cannot be achieved, but because the mind occupied with heritage, in its essence, is capable of dominating the subconscious of a person and resisting any liberation of thought on an unconscious level. Thus, a person unconsciously becomes entangled within the heritage box while he believes that he has a free mind. A lot of thinkers and intellectuals in the 20th century tried to devise a process of reconciliation between heritage and modernity, or originality and modernity. This reconciliation consisted of wishes, which they knew with certainty were impossible to achieve, for the simple reason that the mind does not combine something with its opposite, and therefore every attempt to harmonize originality and modernity failed.



1-08 مقترح لأحد تصاميم القائمة القصيرة لمسابقة اكسسورات المساجد - كراسي المصلين.
1-09 مقترح لأحد تصاميم القائمة القصيرة لمسابقة اكسسورات المساجد - حوامل القرآن.

1-02

Why parallel heritage?

Because any attempt to overlook the virtual infiltration of the historical heritage into the mind will dominate it and turn it into a muted, repetitive mind. What the parallel heritage calls for is: a complete departure from living under the umbrella of history, liberation from the collective imagination that confers sanctity on the otherwise unholy, and the creation of a critical space characterized by audacity.

When we say audacity, we acknowledge the accumulated historical restrictions that shackle intellectual criticism and strip it of its tools. Indeed this may not be a satisfactory answer, but there is no doubt that parallel heritage has the ability to change the ways of education and thinking and propel us to new areas of material and intangible production, provided that it transcends the historical restrictions on the mind.

The challenge facing the Arab and Islamic world at the present time is to understand the idea of progress that Immanuel Kant expressed in terms of containment and transgression: containing the present time, the present era and transcending it to the next. We believe that 'parallel heritage' as an idea can achieve this, at least on the theoretical level.

At the level of the terminology, it is the heritage that we create in the future and contribute to shaping it in the present moment in which we live. It is a moment, without a doubt, moving within the course of time, but at the same time we link this heritage to the sources and origins of Arab / Islamic culture, which formed its 'creative nucleus', and here we mean, in particular, the Qur'an.

Here, however, three problems have faced us: the first of which is the extremism of the traditional mind, one that sees what we call a denial of the nation's heritage over fourteen centuries; the second is the extremism of the liberal mind, which is deeply sensitive to heritage and considers it the main obstacle to the creation of a contemporary Arab mind; and the third is the ambiguity of the term itself: the lack of understanding of why it is a parallel heritage and not progressive or evolutionary, for example?

With regards to the third problem, we explained that the idea of parallelism does not cancel the previous experience nor does it extend from it. Rather, it shares with it the sources that are supposed to represent the beginning of both.

If, for example, we say that it is an evolutionary heritage, this necessarily means that it develops from something that preceded it. This, then, would contradict the cognitive model that we think of, because it is a model that does not develop from something that preceded it. Rather, it returns only to the source, without negating other experiences that developed from that same source.

This was the first stage of transgression of the historical heritage. The objection posed by the supporters of the traditional mind was of our attempt to rid the parallel heritage of ideology, as there is not an unbiased knowledge. While, I claimed, that bias meant 'ideologicalization'. The evolutionary path of ideas is not compatible with being biased, nor any cognitive criticism that is tainted with it, as it is difficult to achieve a creative epistemological model of universal ideas. In his thesis "The Jurisprudence of Bias," Abd al-Wahhab al-Masiri denies the possibility of getting rid of

being biased, however, we used to see that what al-Masiri proposed was indeed more biased than anything else! While the biased team against the historical heritage believes that we started with a thesis against 'ideologization', we ended with the ideologization of the parallel heritage when we linked it to the main source of Islamic culture – the Qur'an.¹⁶

Therefore, we ask: is the 'parallel heritage' just another attempt at a reconciliation similar to previous attempts, or is it a working on a new, unprecedented epistemological paradigm? Can this model really encompass the historical heritage, dismantle it, and transcend it at the conscious and subconscious level, or will the lingering 'taboos' of the historical heritage remain an obstacle to any attempt to emancipate the traditional mind and its exit from the dark box? Do we really need a new cognitive paradigm? And when we say that the source of this model is the Qur'an, isn't this a kind of 'ideologization'?

These were some of the questions that the intellectual elites raised about this theory over the past few years. Surely, their interventions were important, profound and critical, requiring a rethinking of the idea of parallel heritage as an epistemological model that addresses the future.

In order to clear the parallel heritage of bias and 'ideologicalization', we must show that the Qur'anic discourse is indeed human and universal. It does not go into details (as we mentioned in separate places in this introduction). It must be associated with a reference that formed the Arab and Islamic creative nucleus. The Qur'an, undoubtedly, represents this reference. However, we have clearly emphasized that the parallel heritage differs from one culture to another, according to its creative nucleus and the references that formed that nucleus.

Although it is difficult to answer all the questions, the 'parallel heritage', from our point of view, is capable of containing the historical heritage, transcending it, and presenting a future epistemological model that liberates the Arab and Islamic mind from many hinderances.

16 Al-Naim, Mashary Abdullah (Saturday, May 8, 2021 AD) "Parallel Heritage: Containment and Transcendence," Al-Riyadh Newspaper, Kingdom of Saudi Arabia.



1-02

GUIDING PRINCIPLES FOR ADJUDICATING MOSQUES

Guiding Principles for Adjudicating Mosques

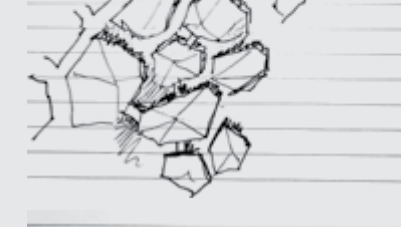
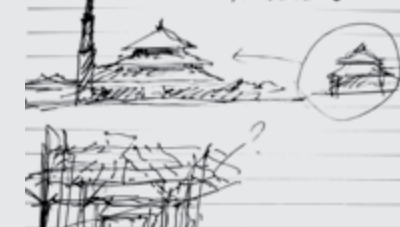
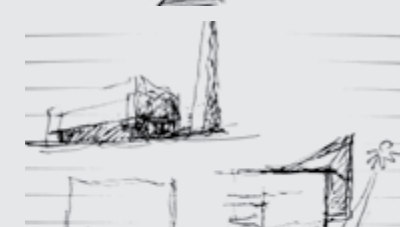
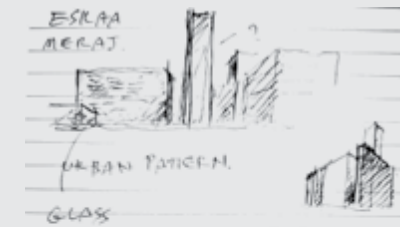
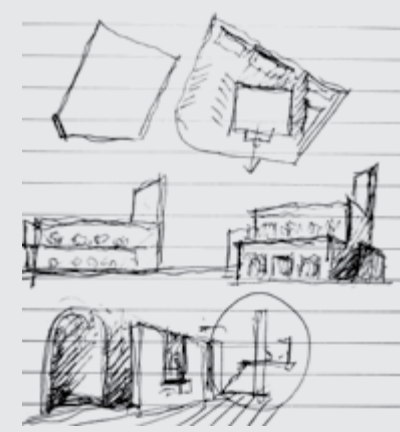
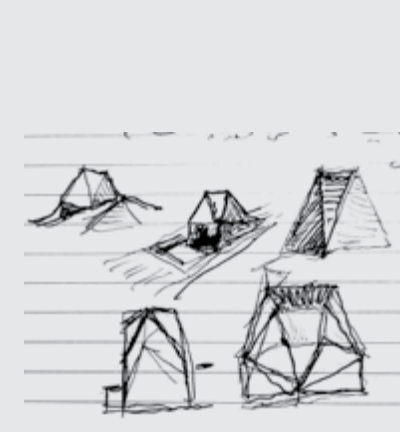
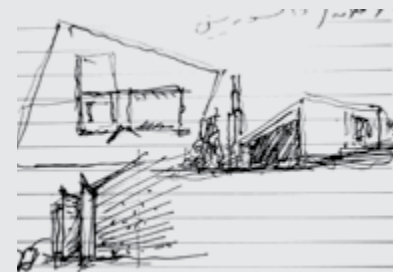
Evaluating architectural aesthetics is a highly subjective matter. While there are epistemological foundations such as balance, harmony, and functionality that serve as guidelines, there are no hard-and-fast rules for deciding which architectural works are worthy of esteem.

Judges can draw upon their preexisting knowledge and experience in this field to select potential new alternatives. They must break free of the constraints of accepted guidelines and parameters in order to exercise their independent judgment in determining the aesthetic value of the work.

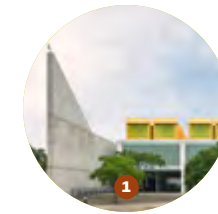
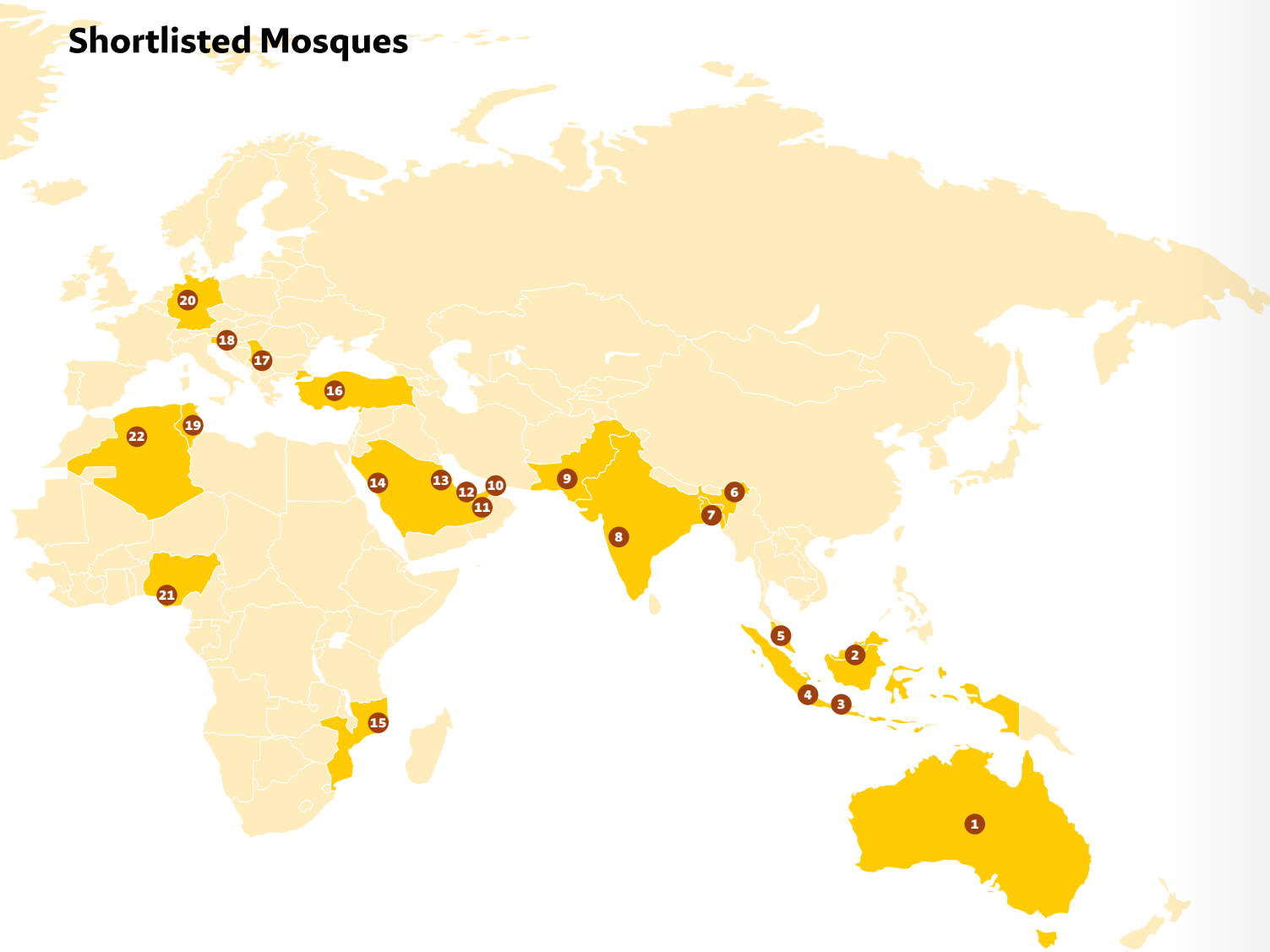
In order to take a balanced approach in assessing the work, judges often draw upon practical experience so that they can leave the door open to new and innovative approaches that offer fresh perspectives.

Regardless of the parameters used to determine aesthetic value, such decisions cannot be made solely on the basis of rational certainties. There are endless possibilities depending on the subjectivity of the judge and the nature of the project in question, and the extent to which the specific form of the work achieves its desired aims.

When it is necessary over the course of adjudication to select a finite number of winning projects from a larger set of submissions, as is the case with regional or international awards, it is unlikely that the perfect project exists. However, judges can develop criteria for selecting a winning project based on unique elements that make a work stand out, even when the project as a whole might not satisfy all given architectural criteria. The winning projects can therefore be selected to highlight particular innovations within certain works. In other words, the judges' goal should be to present a diverse set of solutions that can guide other practitioners and provide useful points of reference for design, research, and further architectural inquiry.



Shortlisted Mosques



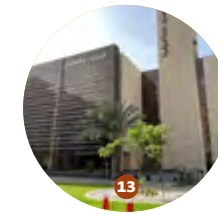
Australian Islamic Center
AUSTRALIA



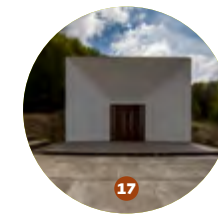
Masjid Cyberjaya 10
MALYSIA



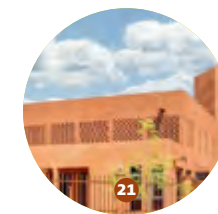
Pakistan Navy Mosque
PAKISTAN



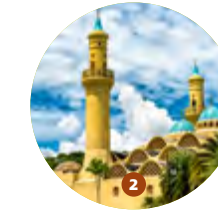
Al-Esraa and Al-Me'raj Mosque
SAUDI ARABIA



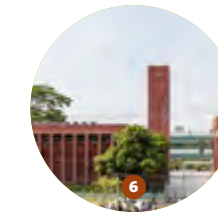
Tupalla mosque
SERBIA



Abijo Mosque
NIGERIA



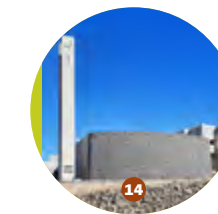
The Ash-Shaliheen Mosque
BRUNAI



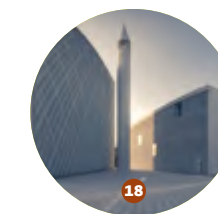
مسجد العمدة محمد حنيف
BANGLADESH



The Musalla of Qasr Al Hosn
UAE



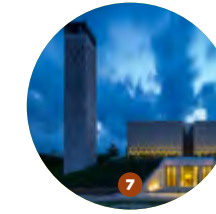
Al-Garra Mosque
SAUDI ARABIA



Ljubljana Islamic Cultural Center
SLOVENIA



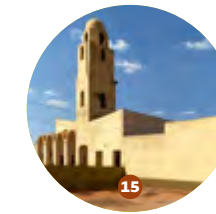
Masjid Darul Ulum
INDONESIA



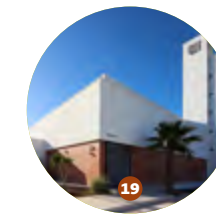
Aman Mosque
BANGLADESH



Gargash Mosque
UAE



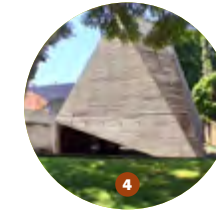
The Lichinga Mosque (Abu Bakr)
MUZAMBIQUE



Al-Tasamoh Mosque
TUNIS



The Great Mosque of Algiers
ALGERIA



Banyuwangi Prayer Room
INDONESIA



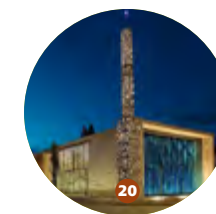
مسجد الحاج عبدالرؤوف
INDIA



DIFC Grand Mosque
UAE



Doğramacizade Mosque
TURKEY



Penzberg Mosque
GERMANY

A photograph of the Tupalla Mosque, featuring a large, dark, rectangular structure with a central entrance, set against a backdrop of trees and a cloudy sky.

Tupalla Mosque 74

A photograph of the Banyuwangi Prayer Room, showing a large, triangular structure with a steep, wooden roof, situated outdoors with trees in the background.

Banyuwangi Prayer Room 88

LOCAL

MOSQUES

An architectural rendering of the Musalla of Qasr Al Hosn, depicting a complex, multi-faceted structure with various geometric forms and a central courtyard, set in a desert environment.

The Musalla of Qasr Al Hosn 102

A photograph of the Al-Garaa Mosque, showing a large, rectangular structure with a textured, stone-like facade, situated outdoors with a clear sky.

Al-Garaa Mosque 116

TUPALLA MOSQUE

**Less Is More, in a
Mountainous Region!**

Tupalla mosque

Location: Tupalla village | Serbia

Owner:

Architect: Arber Sadiki G+A Architects

Area: 84m²

Completion date: 2019

Capacity: 64 worshippers

Type: Local Mosque



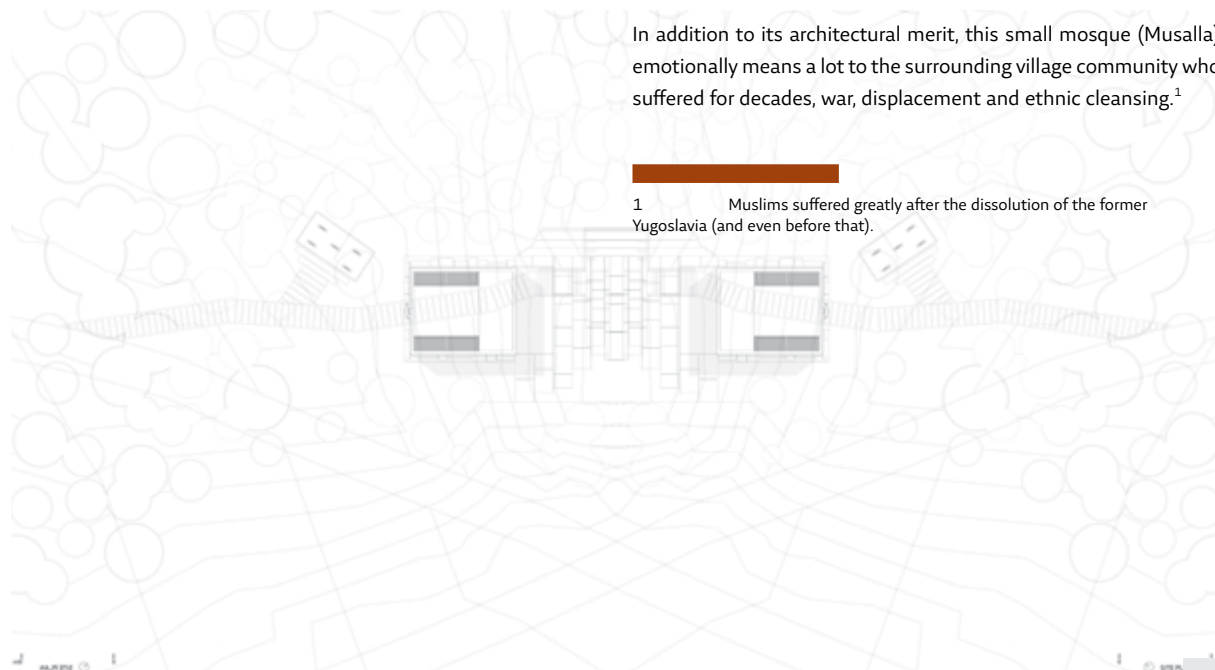
٢-١

٢-١ مسجد صغير وسط محيط طبيعي
متناغم.
٢-٢ الموقع العام.

With its architectural language, this small mosque represents a daring experiment, almost completely breaking with heritage, but without compromising the spiritual sense of being a space for worship. Instead of luxury and splendor, the architect tried to capitalize on the inherent aesthetics of the eternal Islamic, indeed universal, values of austerity, humility and minimalist simplicity.

In addition to its architectural merit, this small mosque (Musalla) emotionally means a lot to the surrounding village community who suffered for decades, war, displacement and ethnic cleansing.¹

1 Muslims suffered greatly after the dissolution of the former Yugoslavia (and even before that).



٢-٢

The creative simplicity that we find in this Musalla with its thoughtful details remind us of local Musallas of small neighborhoods that used to represent the social bond of a group of people who are well acquainted. Over the centuries, these kind of mosques have constituted a safe social refuge for members, what could be called: the "third place"- after housing and the market. It is a place with the spiritual characteristics of tranquility, such as in this Musalla. Now although it is remote in the middle of an open space, away from any visible urban fabric, still, it is an inseparable part of an invisible social fabric.

The relationship of the mosque to the urban environment

The story of the establishing of the Topala Mosque in Serbia is one of perseverance and resilience of a small village community on the border with Kosovo. Although it was designed entirely by an architect, it also possesses many of the characteristics of the building heritage handed down to the local community who actually, mind and soul, participated in the construction.

The village for which the mosque is built is a remote village located on a hillside that can be reached by a narrow winding road. Walking this road, through the woods, really feels like a spiritual purification journey ending in the front yard of the mosque. This last is preceded by a small cemetery through which the community wanted, symbolically, to engage their ancestors to be part of the memory of the place. At the far end of the front yard plaza (in place of the Sahen in traditional typologies) is the mass of the mosque which can be seen from almost everywhere without overshadowing the beauty of the surrounding forest or the far buildings of the village. This village is inhabited by a small population with strong familial and cultural ties to Kosovo. Despite the obstacles placed in front of them by the state authorities, these inhabitants financed the construction of the mosque themselves.

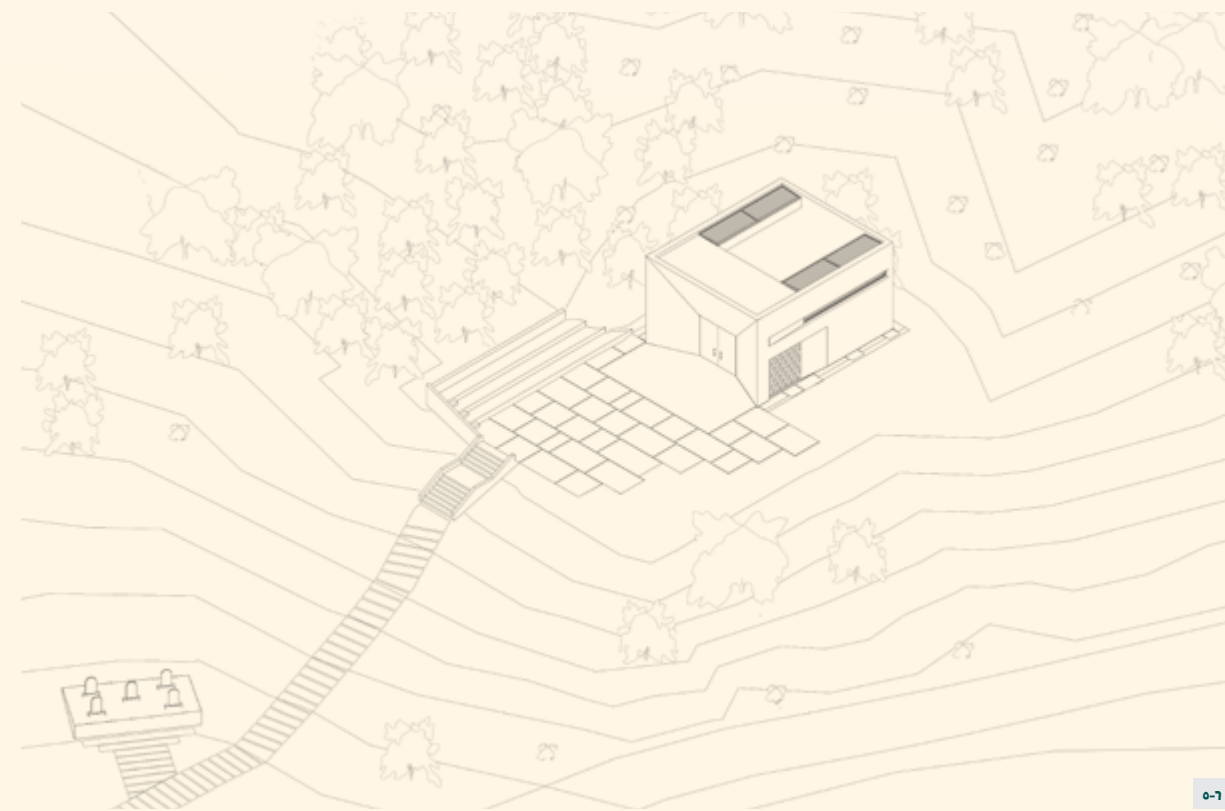
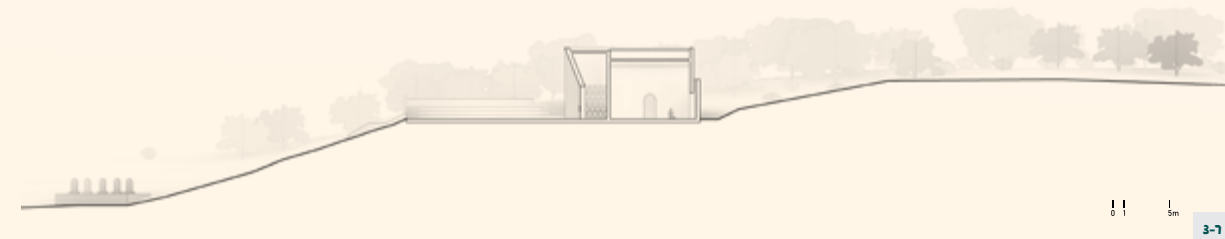
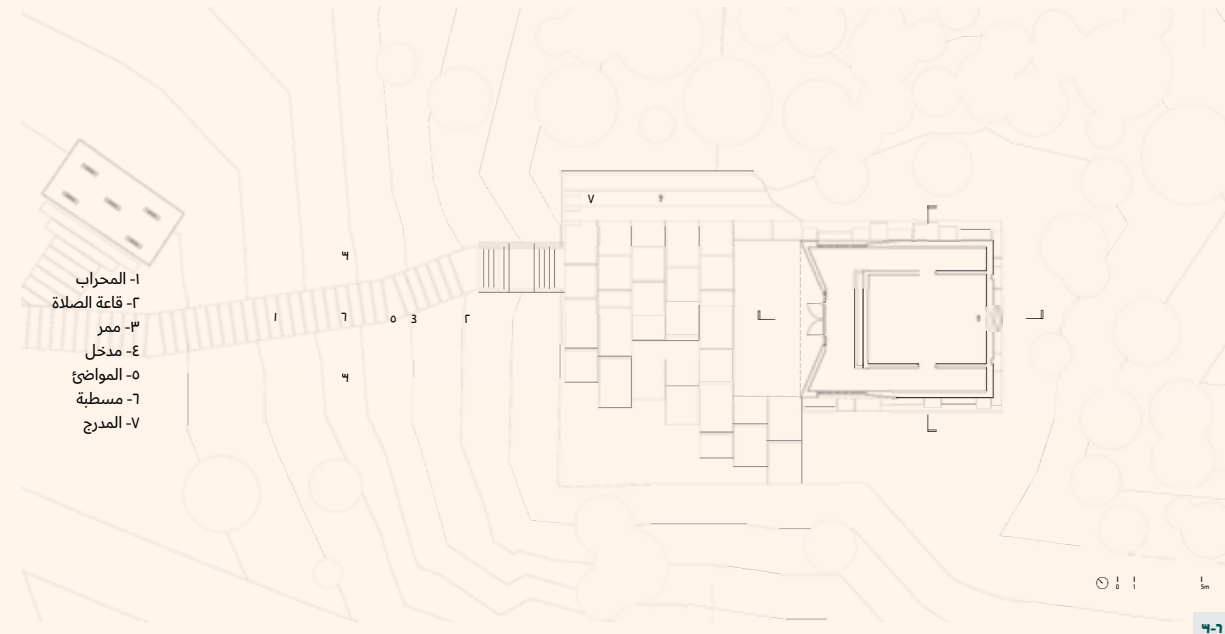
This simple building reflects a sense of visual modesty similar to traditional neighborhood mosques. Although it is of a single mass in the middle of an open forest, the designer and the villagers preferred that the building appear as if it complements the open space. The laws imposed by the authorities might have had a role in their choice, but the result reminds us of the places that have always accommodated forming a special relationship between a group of people and their Creator. This eternal relationship seems to be renewed in the village and its "Tubala" Musalla.

The village can be reached by car or van, but the road is not well maintained, and there are no specific road signs that could lead the interested visitor to the site of the mosque. Given that the building is located in a mountainous area that serves a small Albanian community without any cultural facilities around it, the mosque's front yard and amphitheater provide, in addition to religious services, opportunities for non-religious cultural activities, where boys gather to play, as well as offering an extended space in all directions of the enclosed prayer space. We can feel what this unrestricted relationship between the inside and the outside provides, in terms of "acquaintance".

For the Albanian community, the inhabitants of this village, known for their work ethics and self-esteem, this small mosque represents a sign of continuity of their existence, culture and religion. Their mere participation in the construction, in cooperation with the architect, is an added "soft" value to the mosque...

The Musalla itself did not escape acts of prejudices and injustices, as the original design (which can be seen in the drawing) included a small minaret next to it. However, "officials" never allowed its construction, in line with the prevalent banning of building minarets that prevailed in Europe at the time (especially in Switzerland). Per contract, in the absence of the minaret now, the mosque, with its modern minimalist architectural language seems to no longer constitute any "threat" for them!

Here, however, is not the place for discussing challenges facing the building mosques in Europe; it is just a chance to printout that these challenges sometimes lead the designer to think differently and come up with judicious solutions, as we see in this Musalla. One of the important points that this mosque did shows us is that unique mosque architecture can be achieved in a very simple way and without exaggerations.



- ٢-٣ مسقط الطابق الأرضي.
- ٢-٤ قطاع طولي.
- ٢-٥ رسم إيزومتري لكتلة المسجد والمنطقة المحيطة.
- ٢-٦ مدخل المسجد يذكرنا بالتراجع عن سطح الواجهة الأمامية والعمق الذي كان يميز المساجد التاريخية.

We must say that the clear design language of the "Tubala" mosque poses some questions regarding the traditional custom of building neighborhood mosques that always dissolved in the urban fabric of the neighborhood and the village, intersecting centrally with the movement patterns of the population. It seems that this custom, spread over large areas in Islamic cities, began to take a slightly different direction in the Ottoman culture in particular, as village mosques became open and prominent sites that could be seen from a distance.

Analytical description of the chapel from the outside

The mass of the mosque surprise us by its small white cuboid shape that sits on a spacious front platform/plaza. It can be said that this platform acts as space similar to the courtyard of the mosque in traditional architecture: gathering, preparation and extension. However, in the current design, it is an unenclosed spacious yard in the middle of the picturesque mountainous area, at the end of which the mosque appears as a free standing object. We can classify this design as one belonging to the era of early modernity with its clear values based on pure (white) forms and honesty of exposing material and structural systems.

What is distinctive about the white mass of the mosque, which is almost completely solid, is its entry façade. The architect introduced a dramatic "gesture" for the entrance by offsetting its front wall backwards into the body of the mosque for it to appear running towards a central vanishing point.² In addition to the visual

effect of this design feature that highlighted the entrance, its slight recess into the interior of the building mass results in creating an entry canopy that protects the visitor from the elements and also protects the mosque's valuable wooden door. As for the other façades, they are almost completely solid, except for the mihrab that emerges from it. The façades of the Musalla from all sides reinforce the idea of abstraction and creative simplicity that the designer sought to express from the beginning.

Analytical description of the Musalla from the inside

What is remarkable about this small mosque is that it accommodates its entire functional program in less than 100 square meters. This encourages us to typologically classify it as a Musalla rather than a Mosque. Its success story should help shed light on this type of mosques and promote it. As a matter of fact, this classification does not negate the assigned character of a mosque, according to tradition, every place in which prayer is held is ritually consecrated as a mosque.³

The most important thing offered by the interior design of this Musalla, in addition to the ingenuity of resolving its small program needs, is the idea of arranging, sequencing, and entering the spaces. Most strikingly (and this is quite unique) the architect did not hide the ablution area within a secondary space, as is customary, but rather placed it directly in the front façade of the entry foyer. This is in a poignant gesture that can only be interpreted as an exceptional celebration of the often neglected ablution ritual itself. The space for ablutions, and the foyer of the Musalla that contains it, from the right and the left, are distinguished by two walls built of hollow triangular blocks covered with colored glass that gives it vitality and warmth on the one hand, and compensates for the absence of decoration on the other. Along these two walls, the strangest thing about the building appears to the visitor: two corridors lead to entering the prayer space form the side not the front axial wall opposite the Qiblah wall, as is usual. This bright design "maneuver plays on the spatial perception of worshipers to increase their

3 Historically speaking, many neighborhood mosques do not exceed this mosques floor area.

2 As in a perspective construction drawing.





٢-٧



٢-٩



٢-٨

sense of detachment from the outside world. The floor plan reveals that the prayer space seem more like a space-within-a space.

The space inside the Musalla, and the space surrounding it on three sides, is more like closed (or muffled) corridors that help in sound insulation and visual preparation for entering the space of the sanctuary. What increases the effectiveness of this architectural idea is the subtle indirect light openings, all of which were made overhead along the side walls.

We are not exaggerating when we say that this small space provides us with a direct example of what we call spatial rhetoric - indeed "Less is More."⁴

The extreme minimalism of the space of the space is contrasted by a striking richness in the details, simplicity in the visual language, and the ability to communicate with nature. Spatial rhetoric here represents a direct critical study of everything outside this creative simplicity that many contemporary mosques seek!

4 Similar to "balagha" in Arabic rhetoric, which actually conveys a high degree of abstraction and condensation on the use of language.

Technical Analysis (Technology and Sustainability)

In his design approach, the architect relied on what he described as an investment in keeping with the "genius loci," which is in itself, a sustainable stance. The sheer simplicity of design and construction, with local materials, naturally results in a minimal carbon footprint. Add to the above, social sustainability, manifested in the engagement of the local labor force.

More specifically, it can be said that the design allowance of indirect flow of light requires little need for electric lighting, and that the double walls used for the building, fortifies it with good thermal insulation.

The road to the mosque is of slight slope and generally does not pose much of an obstacle to anyone. However, there are always some people ready to help the handicapped with wheelchairs dedicated to them as part of the mosque's charity services.

٢-٧ كتلة صغيرة وهادئة لا تفكر صفو المحيط الطبيعي.

٢-٨ تكوين زجاجي هادئ يشكل الفضاء الجمالي لقاعة الصلاة.

٢-٩ انعكاس الألوان الخاصة بالتكوين الزجاجي الزخرفي.

What is remarkable about this small mosque is that it accommodates its entire functional program in less than 100 square meters. This encourages us to typologically classify it as a Musalla rather than a Mosque. Its success story should help shed light on this type of mosques and promote it. As a matter of fact, this classification does not negate the assigned character of a mosque, according to tradition, every place in which prayer is held is ritually consecrated as a mosque.



Conclusion

The Small Topala Mosque reflects an exceptional architectural experiment, emphasizing that notion that outstanding design does not necessarily require large budgets or complex construction techniques. With his close cooperation with the local population, morally and practically, the architect Arbar Sadeghi reminds us of the virtues of humility and austerity and their aesthetic value. But most of all, he gets credit for engaging the local community with the building process in all its phases.

We can invoke here the principle of "architectural asceticism," one that highlights and enriches necessities and fundamental aspects of architecture as opposed extraneous superficial matters. This principle could represent an intellectual rigorous methodology for an architecture of future mosques that we are in dire need of.

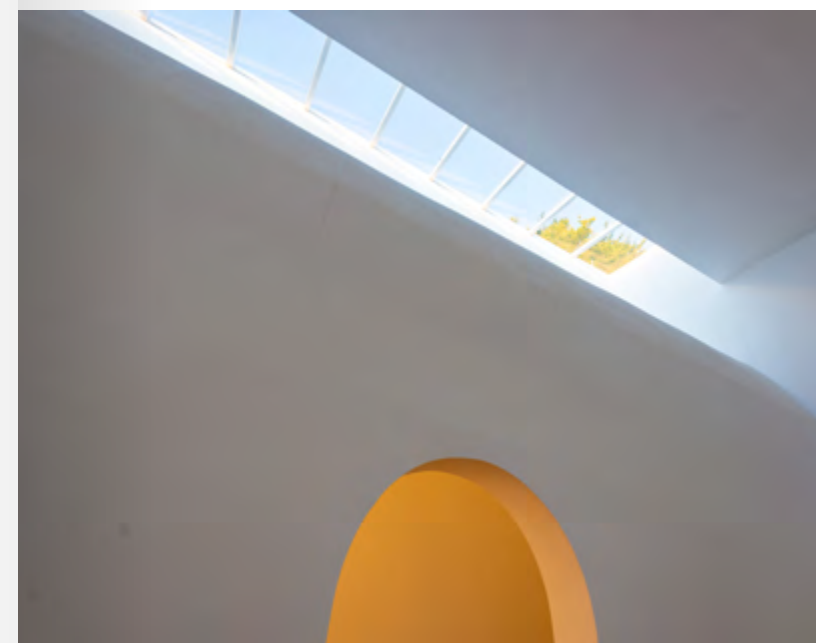


٢-١٠

٢-١٠ قاعة الصلاة تمثل فضاء بسيط وهادي.

٢-١١ الإضاءة الطبيعية على جانبي قاعة الصلاة.

٢-١٢ أكثر ما يميز هذا التكوين البسيط هو هذا الالتحام مع الطبيعة المحيطة وكأنه مولود منها.



٢-١١

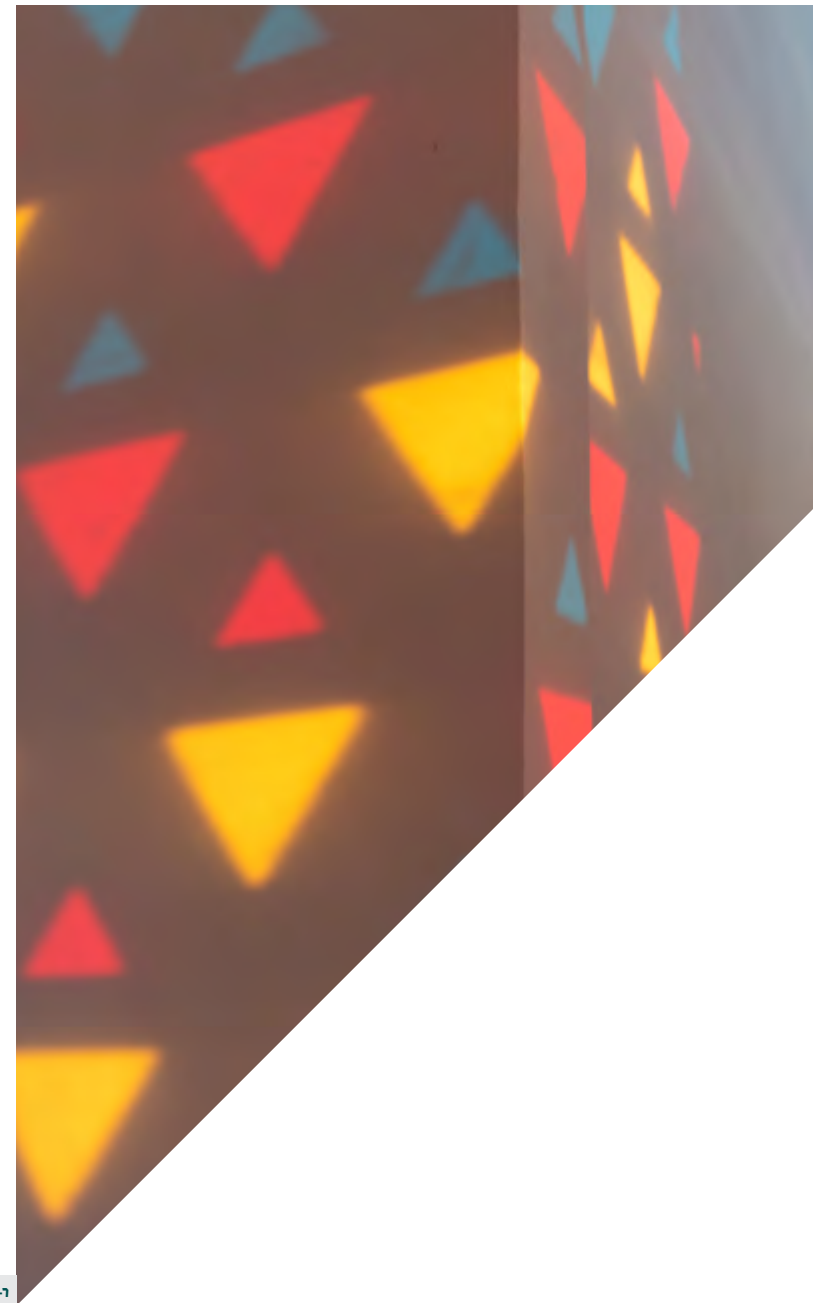
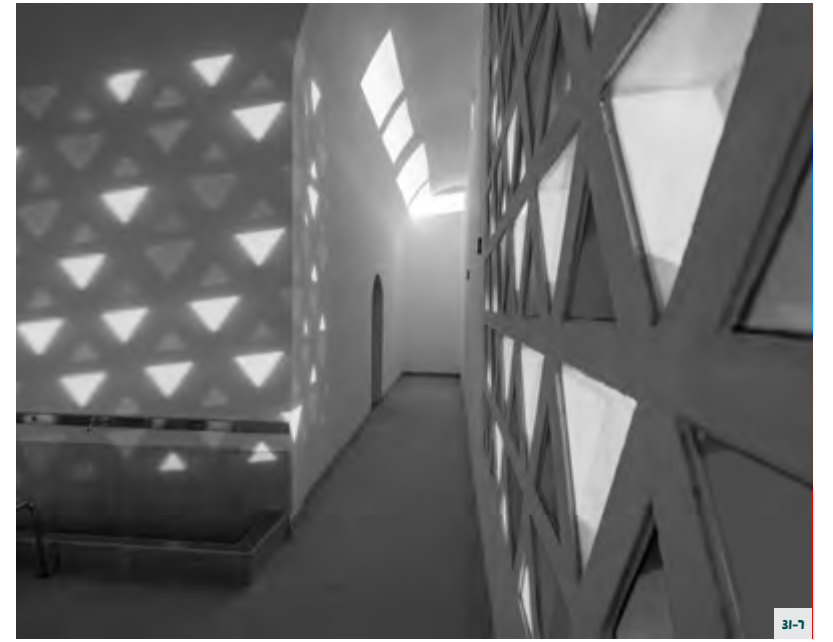


٢-١٢

In general, the mosques built in Europe in the past few decades, especially in the Balkan countries, are full of bright modern architectural ideas that can constitute lessons for the rest of the world (Muslim and non-Muslim). It can be said that these mosque experiments are a creative reaction to painful historical circumstances and exceptional political fluctuations. Although the critical analysis of these experiments and their causes requires more space than what this book allows, the following two points could be mentioned:

First, the people of the Balkans were cut off from Islamic history (Ottoman in particular) and its architecture heritage due to the independence of the Balkan countries from the Ottoman Sultanate and the subsequent secular socialist political regimes that no longer cared for mosques. On the contrary, they were hostile to them, which forced architects to follow what could be called a cautious methodology of compromises (for example, the Topala Mosque dispensed with its minaret).

Secondly, the close connection of the Balkan architects to the European culture paradigms, especially modernity, their apprenticeship in its schools, their mastery of its language, and their adoption of its aesthetic values, made them sort of immune to the pressures of the "traditionalists" who are hostile to the notion of innovation in mosque architecture – those whom, alas, we find - in abundance - in the "old" Arab and Islamic world.



٢-١٣ التفاصيل تم اختيارها بعناية فائقة كي تتلاءم مع المساحة الصغيرة الهادئة.

٢-١٤ و ٢-١٥ خلق المساحات الجمالية ليس بالضرورة أن يكون مباشراً عن طريق إضافة مكمّلات تشكّيلية، فهي تظهر هنا على شكل انعكاسات تتغير من حيث المكان والوضوح طوال النهار، مما يضفي حيوية مستمرة على المكان.

BANYUWANGI PRAYER ROOM

**A Small Mosque with
Big Ideas!**

Banyuwangi Prayer Room

Location: Banyuwangi, East Java | Indonesia

Owner: Regent Banyuwangi Regency

Architect: Andra Matin

Area: 65m²

Completion date: 2013

Capacity: 120 worshippers

Type: Local Mosque



16-2

This building belongs to a rare typology in modern mosque architecture: the 'musalla'. It is an Islamic building type that has not yet been given due attention, for reasons that are not entirely clear. Perhaps this is due to the scarcity of demand for them by worshipers or perhaps it is the lack of a clear provision for them in modern masterplans of Islamic cities.

But from a purely experimental point of view, it could be speculated that, as a type, being an 'ancillary' building and not a formal full-fledged mosque, it carries great promise for testing new ideas; this is due to its small size, limited functional requirements and, consequently, its manageable cost. Therefore, it should not be viewed here – or judged – by the strict criteria for performing the usual role of a mosque, but rather as a special, rather complimentary space, for a short spiritual retreat or a place for meditation, away from the hustle and bustle of modern daily life and its worries¹. This musalla, or prayer 'room', as it is called because of its small scale, is a remarkable example of this rare type of mosque. It is a poetic qualitative addition to the wide spectrum of mosques selected for discussion in this book.

If we go back searching for previous (modern) examples by way of a frame of reference for our critical account here, we may not find more eloquent examples for comparison than the Al-Jazirah Small Mosque (designed by Abd Al-Wahed El-Wakil) in the Jeddah Corniche (in the 1980s), and the Namaz Khana Park Laleh in the garden of the Carpet Museum in Tehran (designed by Kamran Diba in the 1970s). The latter example, however, is perhaps closer to the Banyuwangi Musalla in terms of its openness, austerity, and the fact that it is also exposed to weather factors and – intentionally – interacts with them. But the main interaction, and this is one of the main merits offered by musallas, is their supposed ability to build deeper intimate social bonds between worshipers. Although this hypothesis needs more research from us, initial observations seem to confirm it.

1 While the 'musalla' can be compared to a Christian 'chapel', it may also be compared to the even smaller Christian form of the 'poustinia', a simple prayer cabin in a remote area that originated in Eastern Europe, but may be seen elsewhere. See, for example, this prayer cabin in Colorado, USA: <https://www.aaelse.com/prayer-cabin/>

16-2 External view of the mosque with its surrounding area.

17-2 The mosque's shape varies when seen from different angles.



17-2

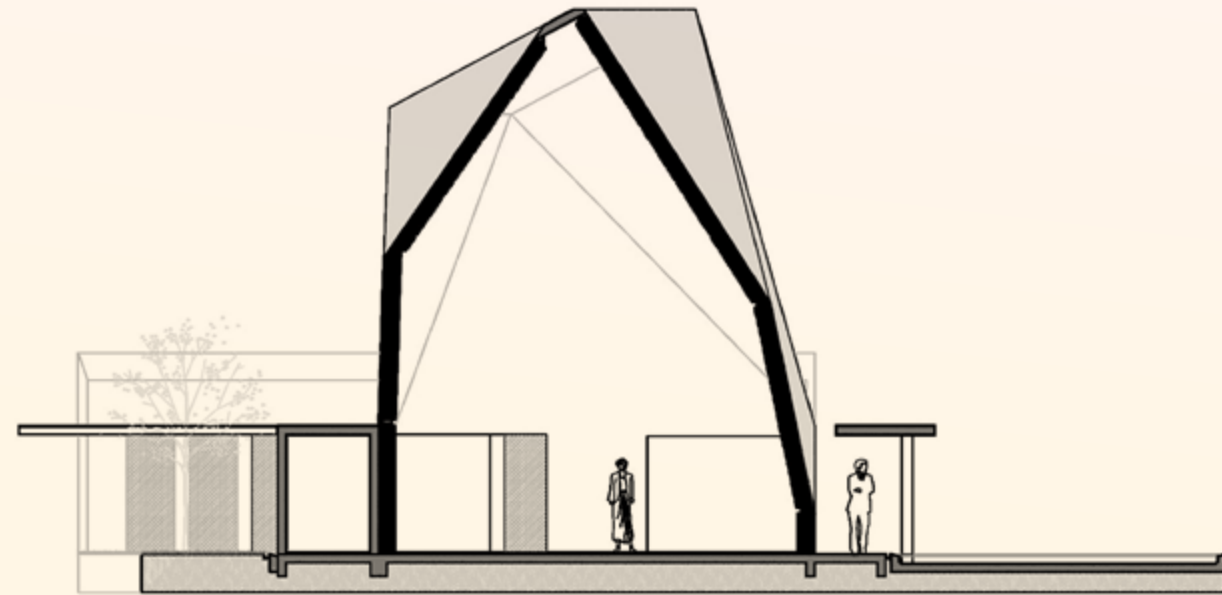
The relationship of the mosque to the urban environment

The Banyuwangi Prayer Room, completed in 2013, is a small, rather mini mosque, so much so that it is called a prayer 'room', one that accommodates a small number of worshipers within the precincts of a government compound. A separate annexed block, ten feet from it, contains its ablution and services area. The prayer room is known locally as Musholla Pendopo, which encourages us to call it a 'musalla' rather than a 'room'. The name Mushola, given to it in the Indonesian language, must be a local adaptation of the Arabic origin: musalla. At any rate, it is a small mosque in one corner of the mayor's office complex, in Banyuwangi, a small city at the eastern edge of Java Island, Indonesia. This government complex includes a large official assembly hall and various offices as well as guest rooms for government officials. Interestingly, this hall is a replica of a traditional house, with an old mosque still in use on the site. The entire site is beautifully landscaped, facing a main road, behind which lies a spacious public garden that complements the beauty of the area as a whole. It is noteworthy that in the vicinity of the complex, the largest mosque in the city of Betour is located: the Great Mosque of Rahman.

Until recently, Banyuwangi, which has a Muslim majority, was a quiet slowly developing city. But in recent years it has been gradually transformed into a tourist destination due to the pioneering projects of a succession of ambitious mayors and the support of the thriving active tourism department in the area. This is in addition to its strategic location as the last city on the island of Java prior to crossing over to the most famous tourist destination on the island of Bali.

The Musalla was designed to stand out and distinguish itself from the rest of the buildings on the site by the novelty of its architectural language in terms of a design typology based on the traditional 'gazebo style': a symmetrical architectural style with sloping, overlapping roofs found in Indonesia. However, the Musalla is not easily visible from the main road due to its small size on the one hand, and because of the dense trees inside the complex on the other. In addition, the majority of the public are not even aware of its existence, as it is more like a private prayer room serving the government complex.

Since the site for the Musalla is very small, there was not much room to design a garden around it. However, the architect Andre Mattin skillfully marked the boundaries of its site by erecting an elegant stone wall like a hedge on one side, and a slope of grass in the form of a small artificial mound at the steep outer side. Access paths to the Musalla are located behind that wall, which enhances the building's concealment from the main complex, thus providing the required privacy for those who go there on foot for the purpose of spiritual solitude and prayer. These paths have a gentle slope that makes access to the prayer room very easy, similar to the 'ritual' of fulfilling the special tradition (sunnah) of walking to mosques and its delegated virtues for forgiveness and purification. There are no steps or obstacles, only the reflective water pool that surrounds the Musalla. Worshipers cross over it, via a bridge, which further confirms the symbolism of separation from the world of daily work to enter – 'another' world. We must note here that the element of water is a symbolic religious (eschatological) element that refers to the Qur'anic verse "and rivers flow beneath them" in a depiction of paradise... the mosque being a gateway to heaven. It is a sort of precursory preparation for the worshipers to go through the spiritual experience, as if water is a transitional zone between this world and the hereafter.



18-2

Analytical description of the building from the outside

The main striking feature of the Banyuwangi Musalla is its extreme simplicity and stark austerity. Its compositional language is geometric and abstract without carrying any of the traditional mosques' connotations. It is, according to the designer's statement, like deconstructing the cube shape (similar to the Holy Kaaba) and reconstructing it again in a new way. Although a far-fetched, rather audacious, design statement, its mass actually appears as a spatial geometric body belonging to the family of irregular polyhedra. Although it starts a quadrilateral shape from ground level, it emerges upward with inclined triangular shapes. The final shape at the roof is a sort of formal resolution, a culmination, echoing the shape of the base: a smaller square that looks like an oculus. Further, the small mihrab, with its prismatic body emanating from the mother-block, confirms the 'maqam'² mode, of the entire composition.

² Maqam, as in music. It's a key or tonality that prevails throughout a piece.

18-2 Section.
19-2 Triangular entrance and irregular external form.

While the main building dominating the compound is symmetrical, balanced, and built in traditional Indonesian style with a red pitched, two-pitched roof, the Musalla, in contrast, is a volume with asymmetrical roofs/faces, is monochromatic, and is made of simple wooden planks – in stark contrast to the rest of the stately, formal buildings in the complex. In addition, all the walls, as well as the floor and ceiling, are made of dark panels, a wood called Ulin in the local parlance, brought from the neighboring Indonesian island of Borneo.

The mass of the chapel is a solid volume with no windows or doors – only triangular openings in line with its general geometry and structural system. The latter consists of steel beams, which, in turn, are clad with wooden panels inside and out (two layers of cladding). The steel structure has been left exposed from the inside, but the exterior finish that covers it shows only the covering wood.

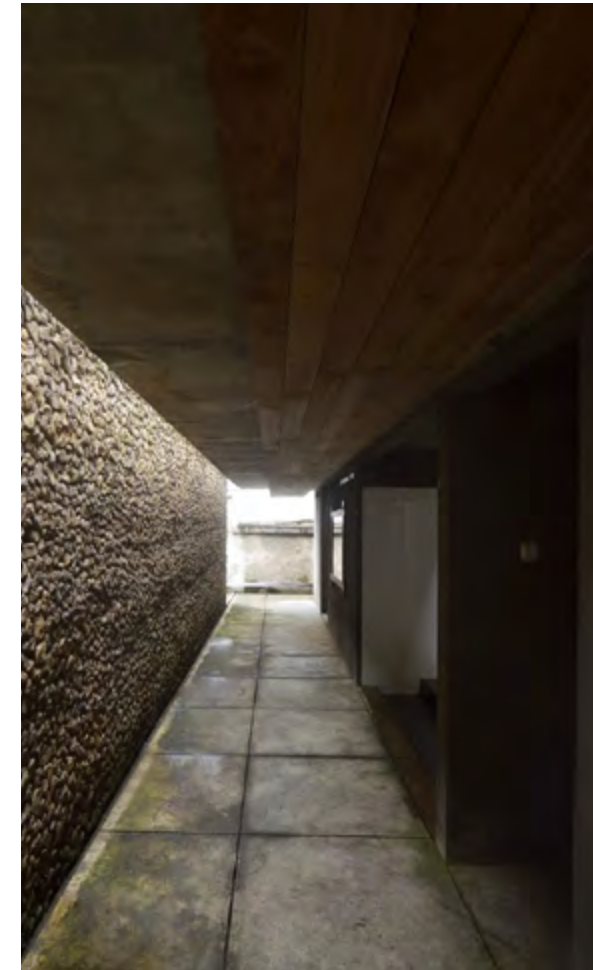
The composition of the building raises many questions about the shape of contemporary and future mosques, as it blatantly departs from the traditional monotony that pushes the visitor, whether he wants to pray or not, to take his first steps towards the building. Although some see this type of formation as unstable and exaggerated in its abstraction, it imposes a new reality for mosque architecture that is beginning to be clearly revealed.



19-2



20-2



21-2



22-2



23-2

Analytical description of the building from the inside

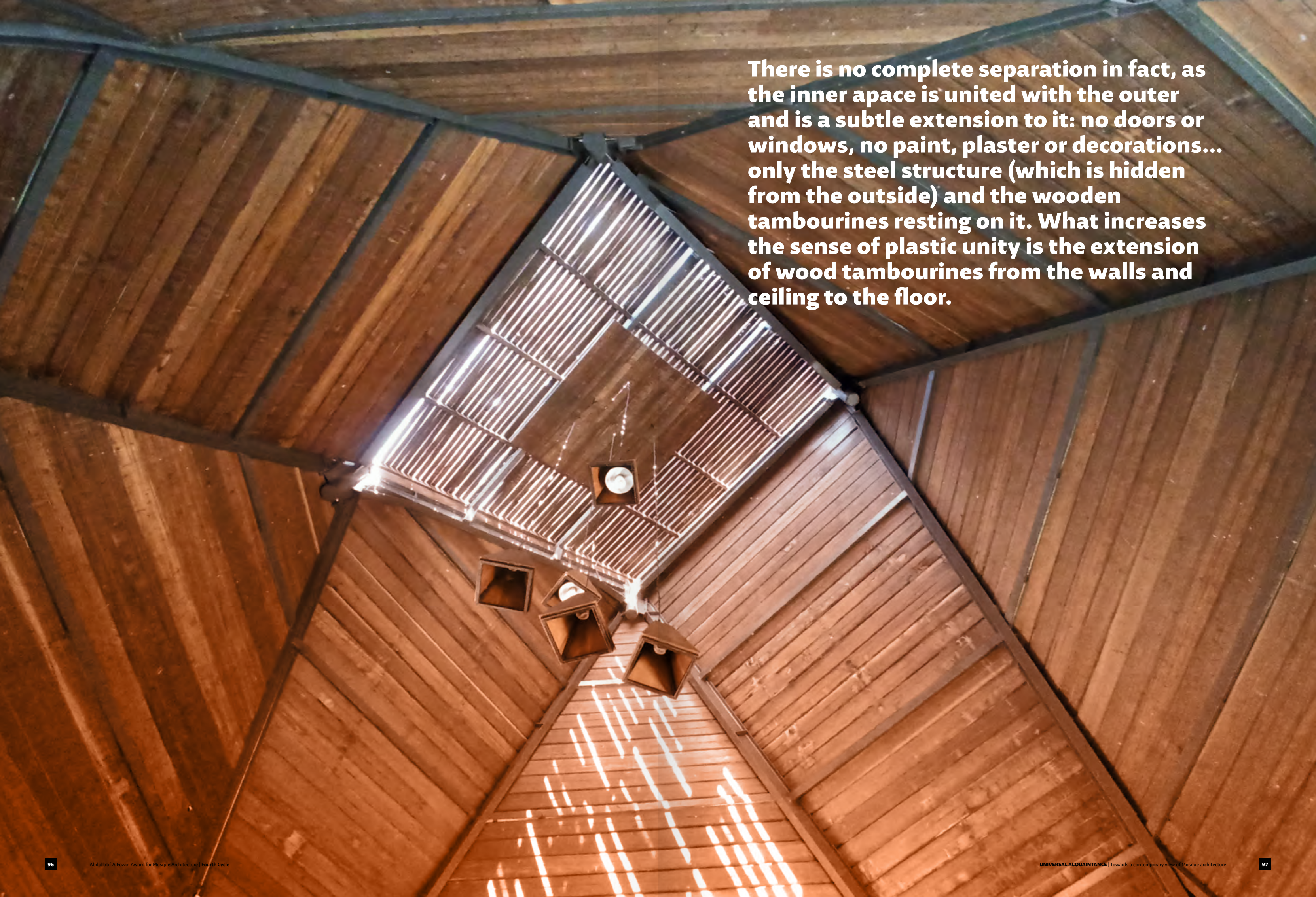
The values of simplicity, as well as the aesthetics of abstraction and austerity, which the architect Andre Mattin invested in his design ideas for this Musalla mass from the outside, bear even more fruit in its internal space, in terms of creating an atmosphere of isolation and tranquility that encourages a special kind of prayer and worship. There is no complete separation in fact, as the inner space is united with the outer and is a subtle extension to it: no doors or windows, no paint, plaster or decorations...only the steel structure (which is hidden from the outside) and the wooden tambourines resting on it. What increases the sense of plastic unity is the extension of wood tambourines from the walls and ceiling to the floor. The award's technical reviewer, Dr. Hammad Husain, stated that the floor was covered with carpeting when the chapel was inaugurated, but it was removed for reasons of moisture and to maintain cleanliness. This luckily came in favor of the special architectural expression of the interior atmosphere. Despite the small area of the 'room', the height, which is approximately three times the dimension of the floor, gives a sense of spaciousness, of sublimation.

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20-1 External view from a different angle.
21-2 Walkway.
22-2, 23-2 The entrance as seen from outside.



There is no complete separation in fact, as the inner space is united with the outer and is a subtle extension to it: no doors or windows, no paint, plaster or decorations... only the steel structure (which is hidden from the outside) and the wooden tambourines resting on it. What increases the sense of plastic unity is the extension of wood tambourines from the walls and ceiling to the floor.



24-2



25-2



27-2

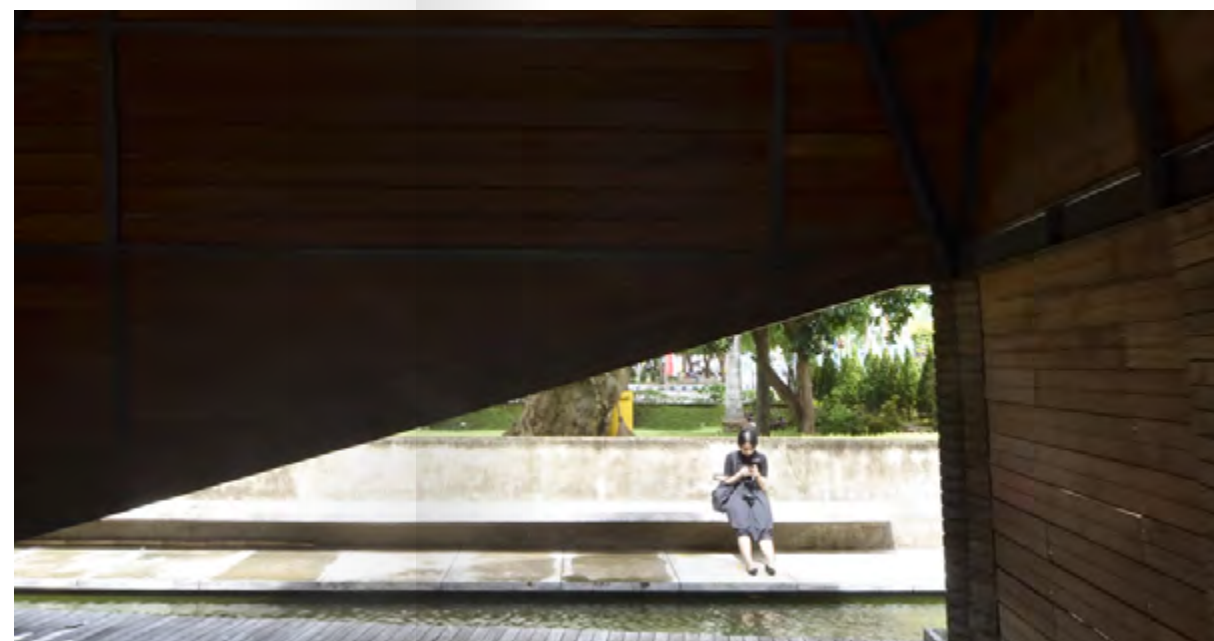
24-2, 25-2 Stone wall beside the mosque.

26-2 The entrance from the inside.

27-2 Simple water surfaces around the prayer room.

Conclusion

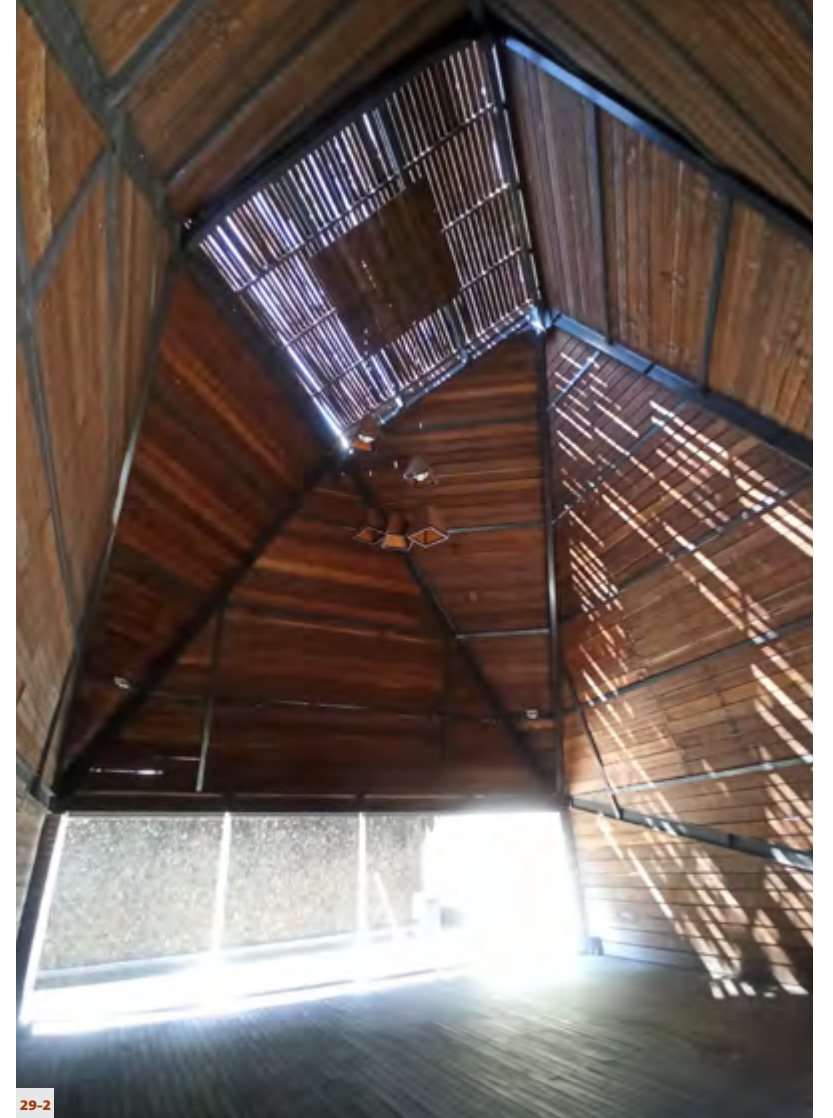
The Banyuwangi Musalla represents a particularly rejuvenating experiment for modern mosque architecture, a fact that necessitated critically reviewing it in a way that differed from that of the large, formal, and full-program mosques. The Musalla is, or rather should be, viewed as an independent mosque type in its own right. It must be given a large margin of tolerance for innovative architectural experiments because of its special virtues that serve the broad spectrum of the changing spiritual needs of Islamic societies around the world.



26-2



28-2



29-2



30-2

It can be said, very briefly, that the main features of the 'Musalla' style are the liberation from the burden of: the heavy program of the 'full service' mosque; limited site requirements, requiring only a small piece of land, and, economically, the small margin of risk. Most importantly, the Musalla allows for the creation of a special atmosphere for worship, a spiritual experience qualitatively different from that of a mosque.

The inclusion of the Banyuwangi Musalla in this book, and in the short list of projects nominated for the Al-Fozan Award, apart from its design excellence, is not only by way of acknowledgment but also a message of encouragement to both architects and clients to take notice of the musallas as a type of mosque that provides a special kind space for prayer, meditation, and seclusion in a way that is not available in large 'formal' mosques. This musalla's inclusion also emphasizes that mosque architecture is comprehensive and is not confined by arbitrary limits of size and scale, but rather extends to embrace the concept that the whole planet earth is a sanctified place for worship, in accordance with the oral tradition of the Prophet Muhammad (PBUH): "Earth has been designated for me [us] as mosque and purification."³

³ The nuances of meaning in this tradition are rather lost in translation.

28-2 The wooden skin and the steel structure.

29-2, 30-2 The openings in the ceiling allow air and light to enter the prayer hall.

THE MUSALLA OF QASR AL HOSN

Experimental Formations in
The Desert!

The Musalla of Qasr Al Hosn

Location: Abu Dhabi | U.A.E

Owner:

Architect: CEBRA Architects

Area: 1100m²

Completion date: 2020

Capacity: 350 worshippers

Type: Local Mosque

The main merit of this exceptional musalla is not only its innovative form that blends with the site, but that it also attempts to offer a profound spiritual experience for the visitor/worshiper rather than indulging in a superficial stylistic exercise.

Its architects do not draw inspiration from the problematic heritage of mosque architecture (the contemporary dilemma) but bypass it completely to extract their references from virgin nature and a spirit of place, thus presenting a poetic, cave-like formation via the use of contemporary digital techniques.

Employing the cave metaphor here is not for its rudimentary state, but more importantly for its sentimental spiritual reference to the Cave of Hira' located on the 'Mountain of Light', Jabal Al-Nour near Makka, the place where Prophet Muhammad (PBUH), contemplated, meditated, and later received his first revelation, and each of the revelations he received that make up the Holy Qur'an. In a certain sense, the Hira' cave could be considered a proto-mosque, if not the first mosque; the latter is the only reference which the architects subscribe to, as a 'link' to the mosque's 'heritage'.

Organic formations of irregular geometric shapes, resulting from the distinctive mud crack patterns of the coastal desert landscape surrounding Abu Dhabi were the basis of the volumetric/spatial structure architects adopted for designing the Musalla (and its surrounding landscape) to eventually create an extraordinarily sophisticated composition that raises questions about the future of mosque architecture as such!

(ع-ها) / 7000

The relationship of the mosque to the urban environment

The Qasr Al Hosn Musalla is located within the historical heritage site of Qasr Al Hosn.20 In accordance with the master plan of Abu Dhabi, the entire site was transformed by the architects, including the Musalla, into a public space in the form of a vibrant cultural park. This site, with its two historic buildings, occupies an area of 140,000 square meters in the heart of the modern dense urban area of the city. The masterplan, developed by CEBRA Architects and Abu Dhabi's Department of Culture & Tourism (DCT), stipulated the establishment of this cultural park to surround both the ancient Fort and a nearby cultural complex built during the 1980s.

The foremost guiding principle of the design was to ensure that the musalla would not overshadow the two aforementioned historical monuments. Taking this into account, we find that, with its low-profile design scheme, it proved to be a judicious counterbalance for both.

Its architecture of irregular geometric forms, a series of interconnected discrete blocks resembling a cluster of artificial rocks, tend to utterly dissolve and blend with the surrounding landscape. These 'rocks' break off from the paved surface of the park's plaza to gradually, piece by piece, advance towards the water body. Subsequently, they are submerged under it.

The peculiar shapes of the architectural/landscape formations are constructed according to a computer generated pattern called Voronoi. This pattern mimics the geometry of the hardened sandy mud after the water recedes and the desert dries up.

The use of the Voronoi pattern served the architects effectively in their pursuit of their idea of integrating the Musalla building into the context (the public space of the garden) in order to maintain the dominance of the two masses of the fortress and the cultural institution, thus deliberately making the building lower in height and smaller in scale. It also created a justification for the designers to fragment the mass and break it so that it does not appear as an overpowering formation that could compete with the two historic buildings. It is pertinent to note that in order to ensure the priority of pedestrians, within the vehicular-dominated traffic urban periphery, the entire Al Hosn site is closed to traffic, thus facilitating access to the musalla primarily by foot.

(ع-ها) / 7000

(ع-ها) / 7000

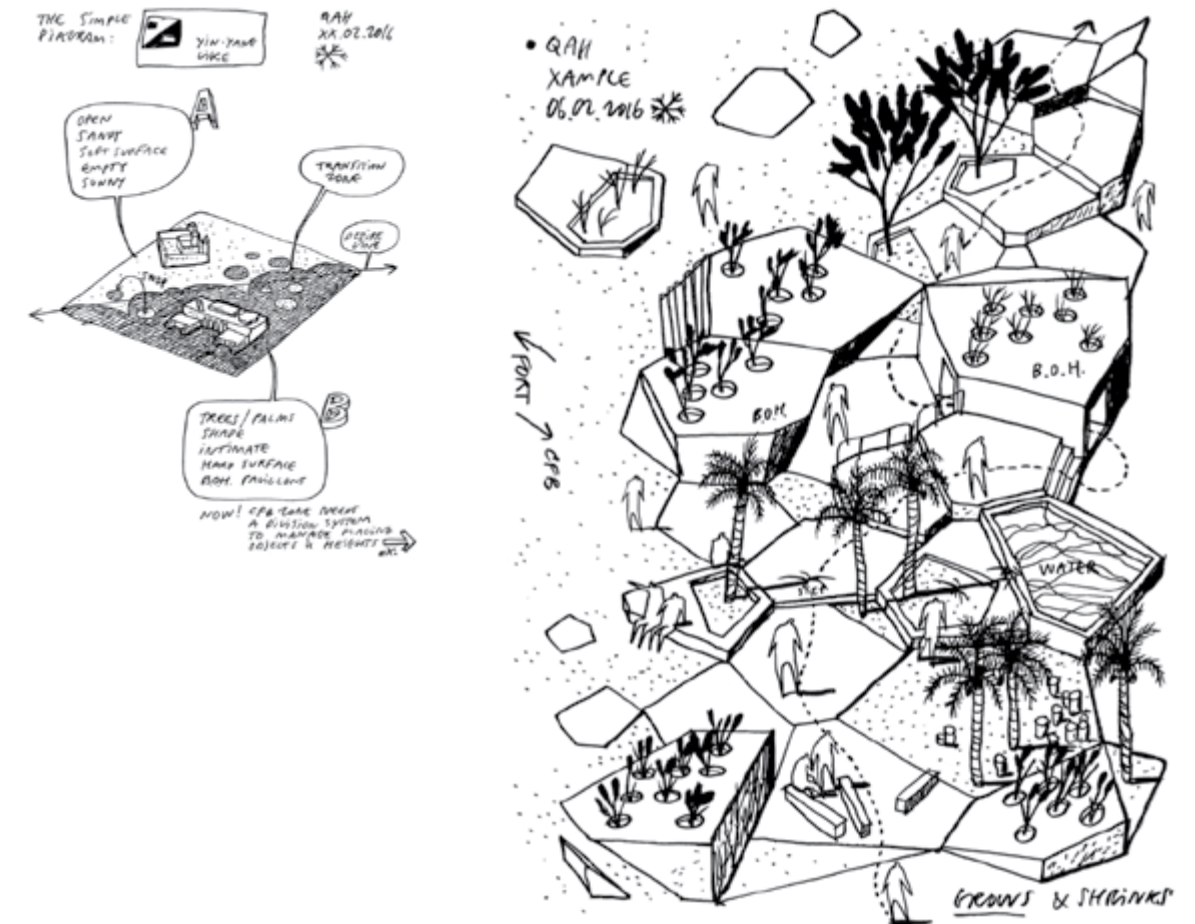
31-2 Site plan.

32-2 Study sketches for the concept.



31-2

32-2

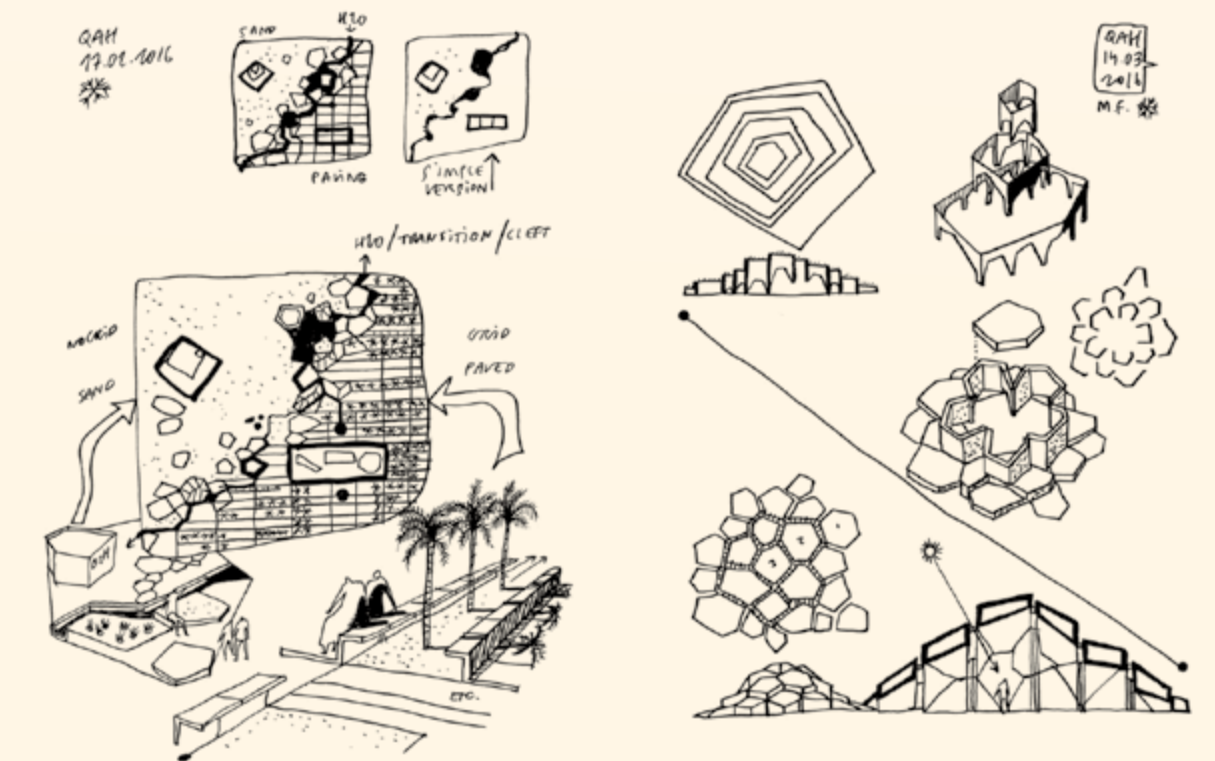




33-2



34-2



35-2

37-2

Accordingly, the main entrance to the Musalla was positioned toward the main street, where there is a bus stop, while the dexterous design of the surrounding public space allows for a smooth pedestrian flow from the city. Visitors hence enter the constituent blocks of the Qasr Al Hosn Musalla through narrow passages between the artificial boulders whose shape is formed according to the Voronoi pattern noted above.

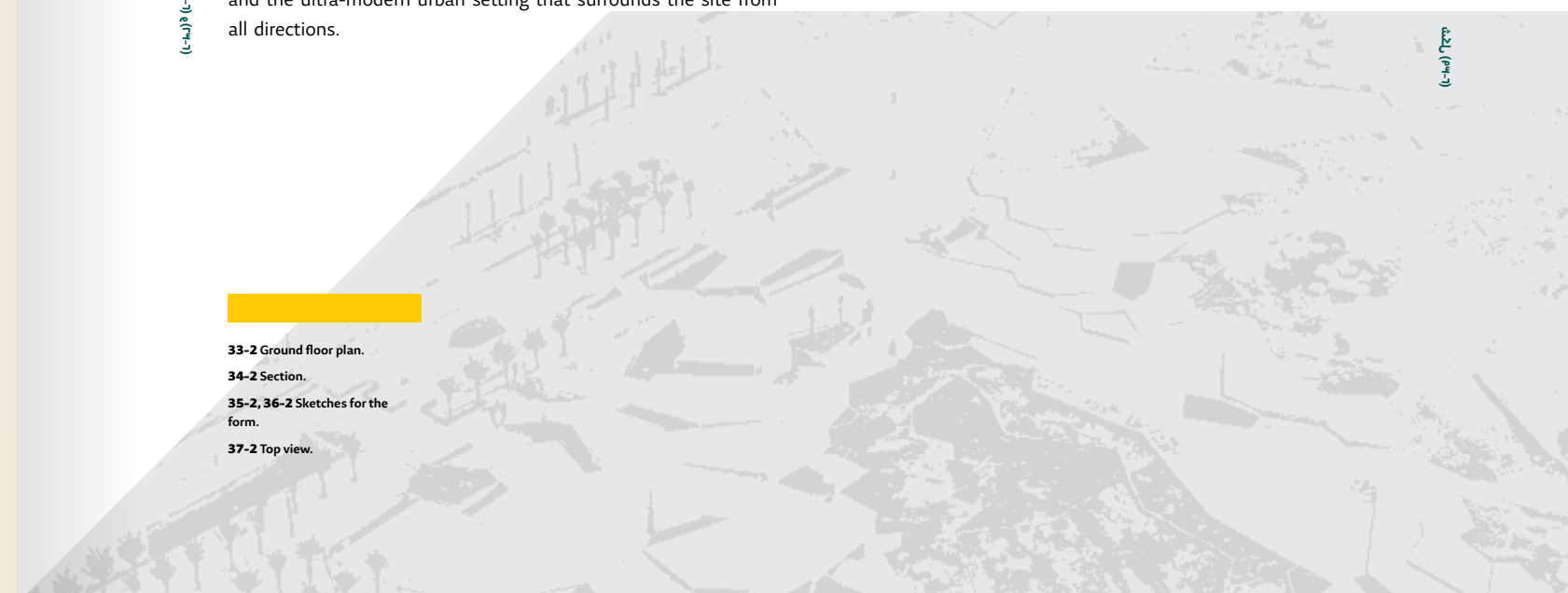
By and large, it is noted that the architects' elaborate landscaping scheme bestowed, on the park as a whole, a pedestrian-friendly informal atmosphere and a human scale that facilitated smooth access to the musalla from all directions.

Analytical description of the building's exterior and interior

According to the architects, their inspiration for the design of the building goes back to the Hira' Cave, as cited above. In such a cave-like space, with its discreet metaphor, it is natural for the exterior to amalgamate with the interior. Therefore, seemingly precarious rock formations dominate both the interior and exterior design of the musalla, a conspicuous contrast between the cave-like interiors and the ultra-modern urban setting that surrounds the site from all directions.

Upon approaching the musalla, the visitor encounters a variety of sensory stimuli employed by the designers to create a distinctive atmosphere. This was achieved initially via the careful selection of building materials for the exterior cladding, which also envelops the interior. Subsequently, the techniques of soundproofing, the fragrance of incense, and the subtle control of both temperature and light, further increase the psycho-spiritual impact of the interior space. The visitor (worshiper) thus is set to forget being in the middle of a modern city and allowing the worshiper to surrender to the solemn ritual space of prayer. This space's deliquesce with nature allows for a short period of quality-time, a period of detachment from the world and connection with God – isn't this what prayer is all about, in its simplest, universal sense?

33-2 Ground floor plan.
34-2 Section.
35-2, 36-2 Sketches for the form.
37-2 Top view.



37-2



Moreover, this 'special atmosphere' is achieved through the use of additional (non-functional) blocks/rocks located around the prayer halls on the outside. The reason for these additional blocks is to make visual (and acoustic) obstructions in order to give a sense of containment, to embrace visitors and forcibly reorient their gaze to the sky above as the surrounding city slowly disappears. Echoes of these (non-functional) blocks may also be found on the edge of the adjacent street, confirming the morphological sense of unity throughout the cultural park and its surroundings.

Each of the musalla's blocks has its own function, and every one of them is connected to the adjacent block via transparent glass bridges. These bridges are divided into two opposite arteries, where male and female worshippers follow separate paths by proceeding along a sequence of spaces as they arrive from the park/plaza.

With this configuration, visitors find the city's noise slowly fading away as they enter a foyer that has an image of a cave with jagged rock formations, a canny place for gathering in preparation for prayer. It is an image that evokes the great historical 'event' of the first revelation descending on the Prophet (PBUH).




38-2



39-2

38-2 Night image for the mosque.

39-2 Broken mass reflect the desert form.



With regard to sustainable technical solutions inside the musalla building, it must be noted that circular holes piercing both ceilings and walls were introduced, allowing for sufficient ambient lighting of the interior during the day, without the need for artificial lighting.



40-2



41-2



42-2



- 40-2 Mass of the mosque looks sculptural from the outside.
- 41-2 A walkway.
- 42-2 The mosque within its urban surrounding
- 43-2 The mosque within its urban surrounding.
- 44-2 A view of the interior space.

Project's sustainability and technical dimensions

In order to emphasize the relationships between traditional Emirati visual culture, especially the nature of Abu Dhabi Island with its newly founded modern urban identity, the architects decided to link the heart of Abu Dhabi city, in a most subtle and abstract manner, to the desert landscape beyond. A decision which proved to be formally judicious and environmentally sustainable.

Within this landscape-dominated scheme, it is clearly evident that the architects capitalized on making the body of water (an artificial lake) the focal point of the public space that encompasses the musalla and the two historical monuments.

The lake provides ample provision for reducing water consumption within the public park as a whole while also embodying a sustainable feature that uses the water to provide natural cooling for the site as a whole (a sort of pleasant micro-climate.)

Instead of designing a traditional urban park of lush greenery in a desert climate that would have otherwise required extensive watering and maintenance, the architects opted for introducing a beautiful native garden using local materials and suitable vegetation from carefully selected native plants that are both sun-tolerant and require minimal irrigation.

The judicious arrangement of vegetation further supports the architecture of the park, providing shade along the paths and spaces branching out from them. What further aids in achieving this shading scheme are the large protrusions resulting from the inclined surfaces embodied in the landscape scheme. These sloping surfaces, with their subtle differences in elevations and levels, give way to the creation of discrete spaces (with seemingly natural formations) to accommodate the integration of the musalla and the food and beverage pavilions situated along the lake. This supports a climatically comfortable outdoor activity, devoid of costly artificial air-conditioning.

(٤٠-٢) / ٢٤٥

(٤١-٢) / ٢٤٥

(٤٢-٢) / ٢٤٥

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43-2



44-2



45-2

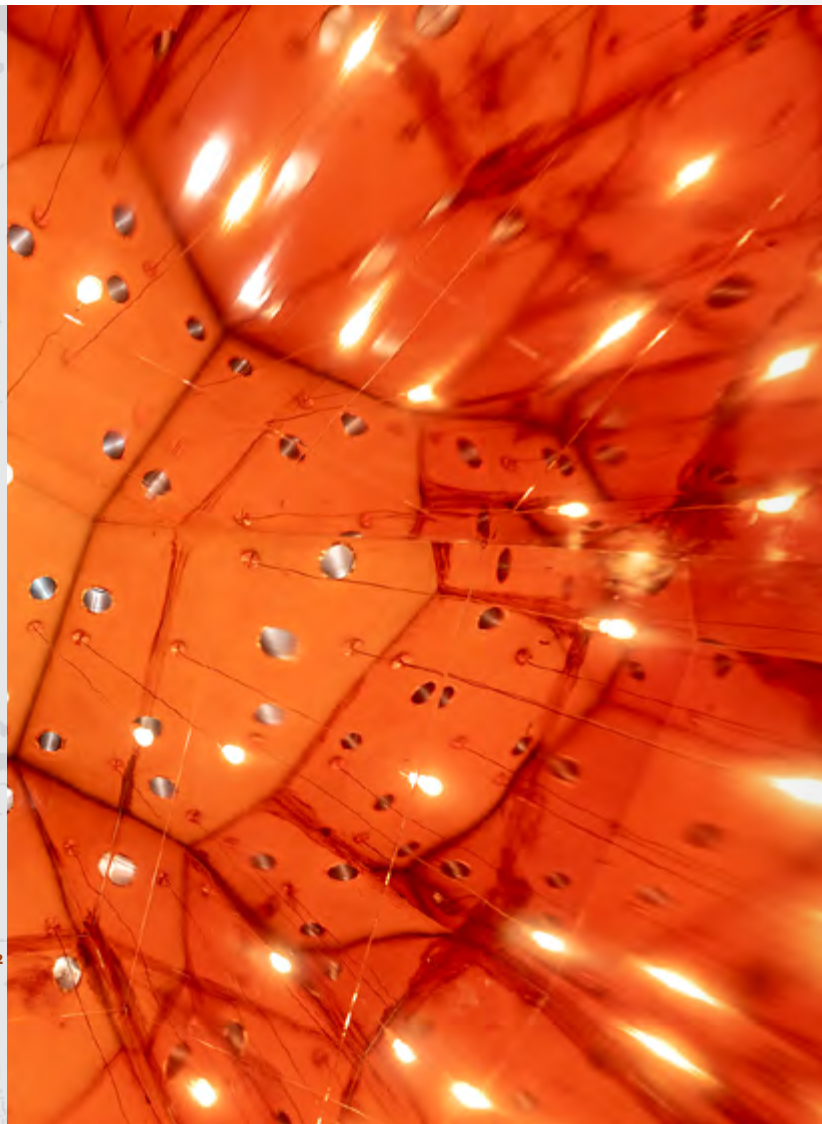


47-2

شكل (45-2)
شكل (47-2)

With regard to sustainable technical solutions inside the musalla building, it must be noted that circular holes piercing both ceilings and walls were introduced, allowing for sufficient ambient lighting of the interior during the day, without the need for artificial lighting. Suffice it to say that these holes appear like abstract star-formations, emulating the sight of the dome of the night-sky, an image embedded in the collective subconsciousness of both Bedouins and sailors as they navigated both land and sea.

In contradistinction to the ambient lighting of the prayer halls, we find that the entrances and ablution areas are lit by what is known as light cannons in modern architecture.



46-2

Conclusion

In this design, the architects confront us with the use of organic formations stemming from a spirit of place that never ceases to visually express its natural vestiges. They did not stop at direct, superficial borrowings; rather, they interrogate nature in search of design ideas that might represent a gateway to new solutions that could potentially generate new meaningful forms, what might be called 'morphogenesis'.

شكل (46-2)

From a purely interpretive point of view, we can see in the rock formations of the Qasr Al Hosn Musalla, metaphors of symbiosis and social solidarity that the mosque is intended to generate. Here the book's litaarafou motto 'universal acquaintance', appears embodied in a visual symbolic image: blocks supporting each other in an abstract scene that sparks our imagination.

We can perhaps agree that this musalla embodies, in an unprecedented way, ideas that carry in their tangible forms, deep, intangible meanings that stimulate for worshipers sustained pondering, meditation, and prayer, and for the architectural community, encourage further re-interpretation of mosque architecture.

45-2, 47-2 Geometry of the ceiling.

46-2 Irregular internal spaces.

AL-GARRA MOSQUE

Local Formula for Modernism

Al-Garra Mosque

Location: Al-Madinah Al-Munawarah | Kingdom of Saudi Arabia

Owner:

Architect: Mohammed Ibrahim Shafee

Area: 2100m²

Completion date: 2020

Capacity: 600 worshippers

Type: Local Mosque

Basic empirical data based on a report by Dr. Galal Abada

The Al-Garra Mosque represents a unique design by a young architect from the sacred city of Al-Medinah, the city of the very first mosque in all of Islam; one can sense from it a deep, intuitive knowledge and awareness inherited from the properties of time and place – their genius loci.

The place, geographically and geologically, is Yathrib, an ancient city standing on the dormant volcanoes Harrat at the heart of the desert of the Arabian Peninsula; later, time-wise, becoming Al-Medinah Al-Munawwarah, a city enlightened by the life of its resident par excellence, peace be upon him (PBUH), his mosque, and his final resting grave.

Both knowledge and will enabled this architect to relinquish sanctimonious styles dependent on added decorations and false cosmetic exaggeration, currently present in built mosques, and opt for experimenting with a design that would offer a true spiritual experience rarely found in contemporary mosques. Because of the degree of innovation evident in the Al-Garra Mosque, we may not find a frame of reference for this mosque, by way of comparison

and critical classification, except, perhaps, the Sancaklar Mosque in Büyükkçekmece, Istanbul, Turkey, and the Prince Shakib Arslan Mosque in Lebanon (both of which won the Al-Fouzan Award last cycle).

This mosque is an example, even a lesson, on how an architect's immersion and absorption of the truths of history and place can lead to producing a design that not only reflects both (history and place), but is even their natural projection into a new era, albeit in new materials and, perhaps, novel forms!

Despite his deep historical awareness, it is possible to say that the architectural language that the architect deftly used is originally a language that belongs to the core of modern architecture: in terms of volumetric/spatial arrangement, the legibility of its functions, and structural honesty. The mosque's design is reminiscent of brutalist architecture in general, especially the circular columns that Le Corbusier had always used in 'Chandigarh' and other places. In this design, one can also find traces of the architecture of Frank Lloyd Wright, Alvar Aalto, and Bruce Gough, especially in their organic treatment of the sharp, space defining surfaces.

On the other hand – and here lies the success story of this project – this seemingly 'modern' language did not make the local community feel alienated (the shock of modernity as critics describe it); but rather, they seem to have identified with it in an instinctive way. They were actually touched by its ambient atmospheres (as confirmed by the technical reporter, Dr. Jalal Obada, who visited the building, confirmed by the resident imam of the mosque, and more importantly by the worshipers – despite their cultural diversity and ethnic backgrounds). This corroborates that there is a great potential for new enlightened grassroots experimentations in mosque architecture, both in form and in material.

48-2 External view.

49-2 Top view.

50-2 Site plan.



48-2

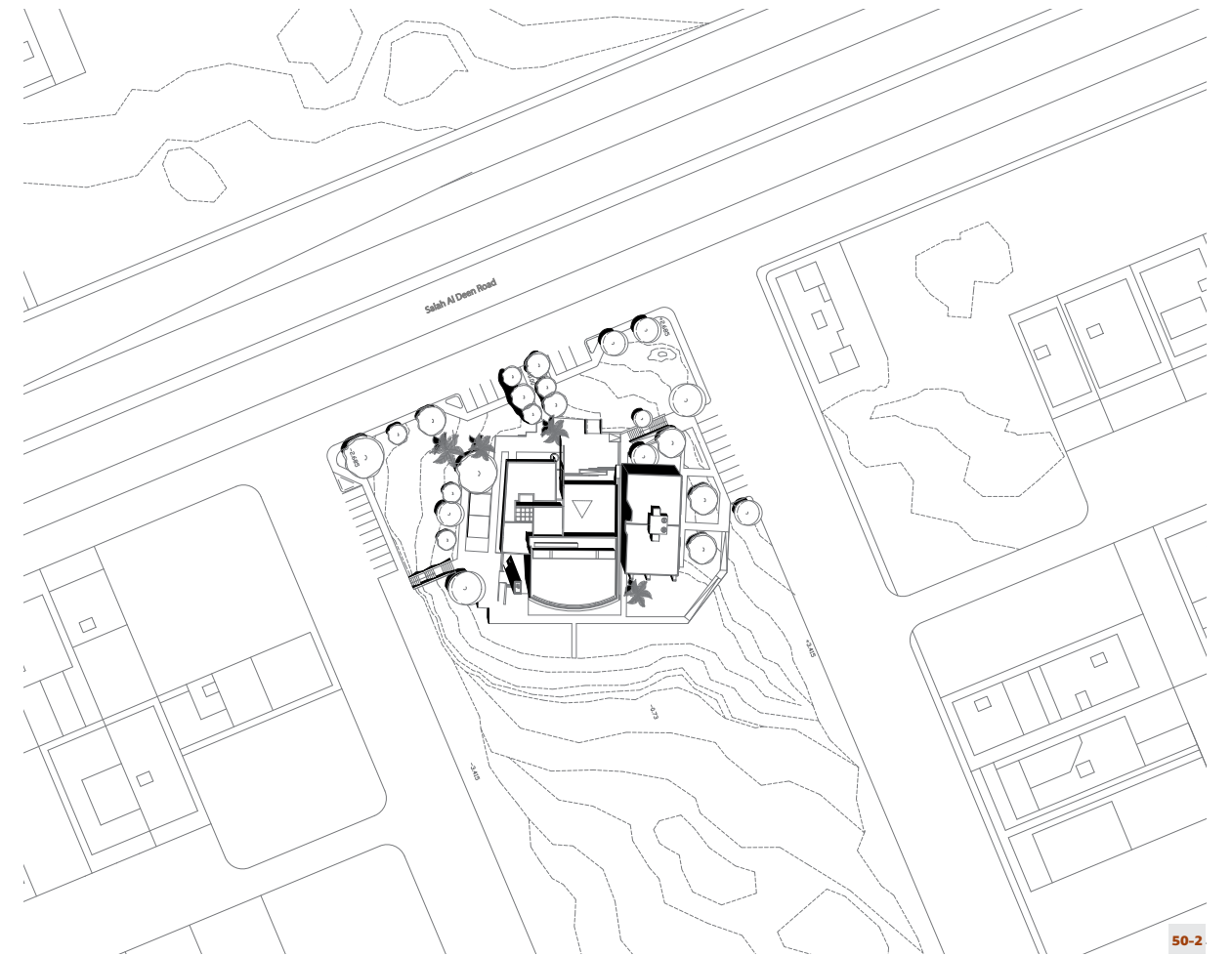
The relationship of the Al-Garra Mosque to the urban environment

Al-Garra Mosque, which interestingly means: the heart and the most honorable thing, is located in heart of the Al-Garra area in Al-Medina, along the Hussain As-Sudusi road which is a main road in the Shoran neighborhood near the historic Quba' Mosque area. The site on which the mosque was built is surrounded by a main road and two parallel secondary streets, but they are on two different levels (by about 7 meters) leading to surrounding residential complexes consisting of two to three floors.

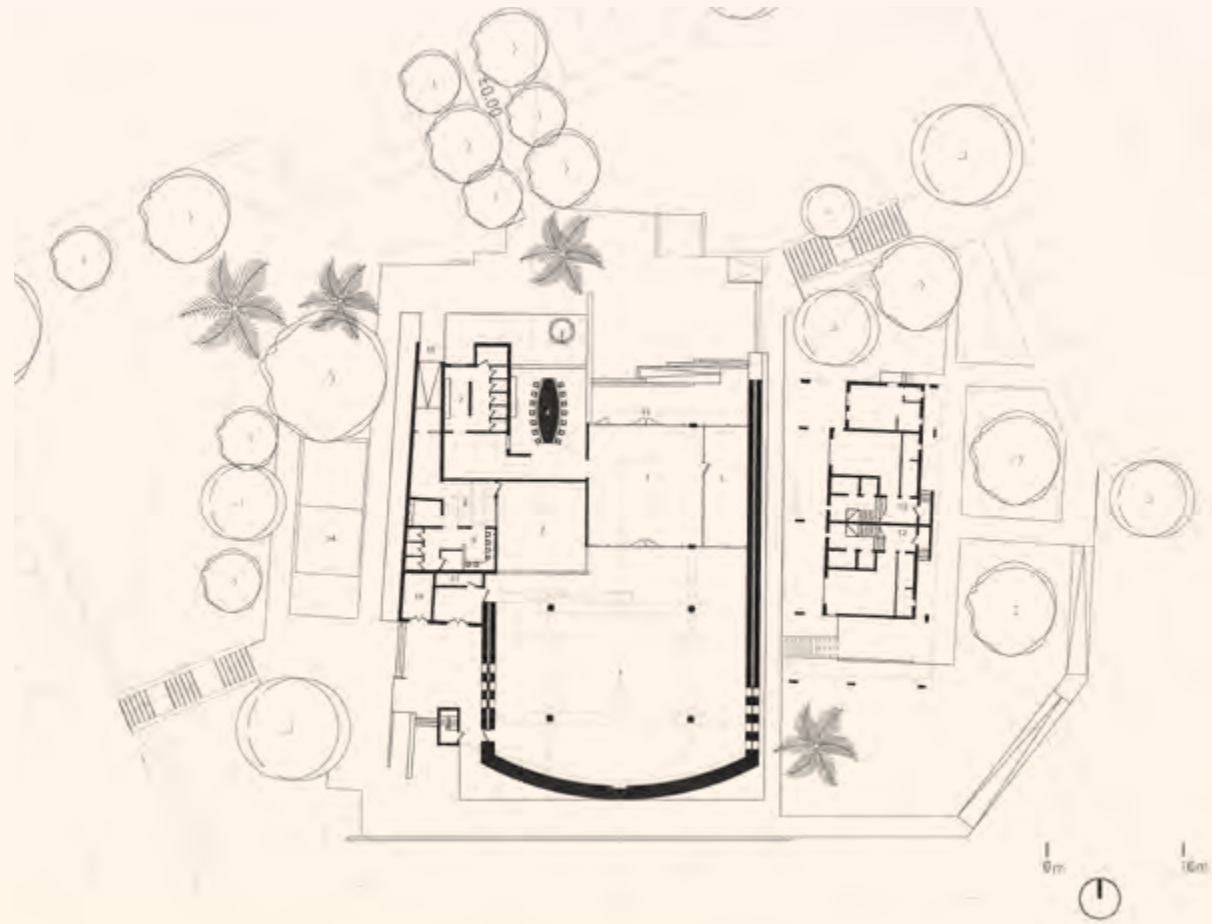
The site of the mosque is a regular patch of land, originally allocated in the master plan for a mosque complex located at the beginning of a long urban strip containing a garden and public services for the neighborhood. This plot of land provided an opportunity for the construction of a mosque, which could represent an important visual landmark for a neighborhood comprised of homogeneous rectangular housing blocks, some built and others still under construction. Note that the residential architecture of the surrounding neighborhood is characterized by its low density modern-style buildings with variations that suit the differing needs and tastes of the community.



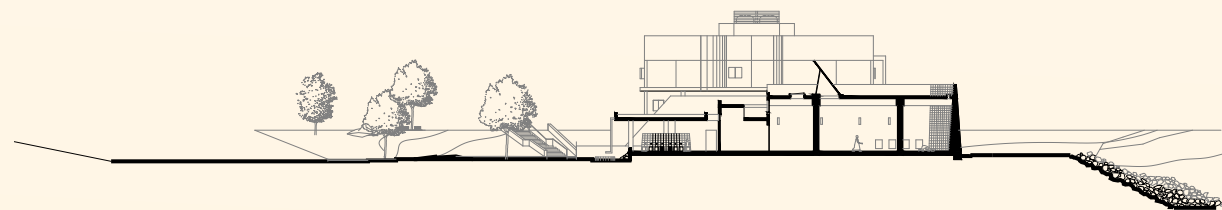
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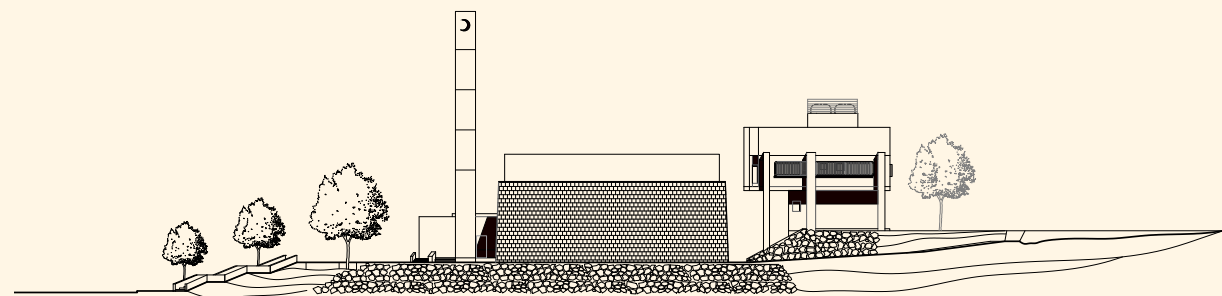
50-2



51-2



52-2



53-2

Originally, the site of the Al-Garra Mosque and its surroundings were part of what is known as Harrat Rahat, one of the most diverse inactive volcanic remnants of Medinah, characterized by small volcanic terrain and lava field soil. This latter type of soil is quite challenging for building construction, as the entire site must be excavated, the soil removed, and then the site must be re-filled with a new soil suitable for building foundations. However, this soil removal process usually provides important sources of lava stone, a local building material, favored in Medinah, for its excellent thermal insulation properties.

The topography of the site slopes slightly towards the central services part of the neighborhood. Photographs show that the Al-Garra Mosque is raised on what looks like a plateau. It seems clear that the master planner judiciously allocated it as a place for a prominent community mosque. In general, we can say that the mass of the mosque complements the terrain and appears as an unmistakable component of its nearby urban surroundings.

The architecture of the mosque also interacts well with the site's natural climatic conditions. As it is known, the climate of Medina is extremely hot and dry, for it is surrounded by desert and mountains on all sides. The prevailing winds blow from the north and northwest in summer and from the opposite direction in winter. The coldest month, however, is January, when the average temperature is 17.2°C. These harsh climatic conditions require careful handling during the design process.

The construction of the Al-Garra Mosque falls within the context of the urban transformation and architectural experimentation which Medinah, like many other Saudi cities, is currently undergoing. While there is a growing appreciation and awareness for preserving the extant urban heritage, encouragement of innovative and creative architectural developments is increasing rapidly with the availability of new building materials such as stone and brick along with concrete, glass, and aluminum. The current architectural 'modern boom' has stimulated the use of mixed modern architectural forms and designs; this has led to the emergence of new forms for several building types – with the exception of mosque architecture. Hence the importance of the Al-Garra Mosque as one of the experiments that represents an attempt to deviate from the stagnated status quo in mosque architecture.

- 51-2 Ground floor plan.
- 52-2 Section.
- 53-2 Section.
- 54-2 Minaret and the main door.



54-2



(ع-00) ١٢٢٢

Analytical description of the building's exterior

The Al-Garra Mosque complex consists of two main disparate blocks: the mosque proper, with its sanctuary haram (praying hall) and sahen (courtyard) on the one hand, and another adjacent block, slightly higher, allocated for the accommodation of both the imam (prayer leader) and the muezzin (the one who sings the call to prayer). The mass of the mosque is generally characterized by what may be called 'noble' simplicity. Built in an adopted style of modern architecture, it does not contain the traditional elements of the mosque except for the minaret, while the courtyard is concealed. Both courtyard and sanctuary are integrated into the main mass of the mosque, distinguished only by a slight difference in height between their respective roofs. Furthermore, services and facilities cannot be distinguished from the exterior as they are amalgamated under the prevailing roof of the mosque as a whole.

The two constituent blocks of the mosque are located on a hill/plateau that rises about seven meters from the side of the black stone Qibla wall, facing Mecca. This actually increases its prestige and visual impact. On the opposite side, the body of the mosque is preceded by a spacious entry yard surrounded by trees and plants with simple desert gardening treatments.

In general, the positioning of the mosque on this strategic hill amongst its surroundings, foreyard, and garden renders its external mass visible and distinct from the neighboring area that benefits from it. It is noted that the garden of the mosque constitutes an example of desert landscape architecture in terms of the characteristics of the planting, softscape, and hardscape. This further strengthened the project's affiliation with the special environment of Medinah, and deepened its sense of sustainability. The design of the site surrounding the mosque includes a series of small spaces in the form of front and side gardens, where many local Medinah trees (especially palm trees) have been planted around the main mosque building, and along the imam's residence parallel to the Al-Garra Mosque. Although small in size, these gardens constitute public civic spaces for the residents of the neighborhood to gather before and after prayer times.

The minaret is one of the important elements that further accentuates the modern image of the formation of this mosque. Despite its 'minimal' simplicity, it reflects a bold and defying design statement. It is a simple concrete prism extruded vertically from the floor of a square horizontal plan containing the minaret's staircase. The concrete of the minaret has been left plain unclad, except for pleasant traces of the concrete molds. On its upper most part, only two opposite sides of the square are elongated towards the top, with a crescent sign hollowed-out in their midst.



55-2 External stone wall.
56-2 Prayer hall.

56-2



55-2



What increases the psychological-visual effect of the Quibla wall is that it is solid, completely free of windows and openings. The architect compensated for the lack of openings with a continuous strip slit in the ceiling along the wall.



57-2

Analytical description of the interior of the building

The internal character of the Al-Garra Mosque is in consonance with the external design treatment, in terms of an architectural language characterized by a spirit of austerity and abstraction, free from applied decoration or any vestiges of extravagance. Materials such as stone, concrete, and brick, extend from the outside to embrace the inside and vice versa. A conscious investment by the architect was placed in the idea of keeping materials in their natural raw state in all the spaces that make up the project program.

The program of this project consists mainly of a main prayer hall (haram) preceded by a wide roofed foyer that takes the place of the courtyard (sahn) in traditional mosques. This roofed foyer/courtyard is illuminated by a triangular upper window opening, slightly tilted towards the north, to catch its continuous light free from direct rays. A multi-purpose hall opens up towards the courtyard from its left side. This hall is organically integrated with the courtyard to allow both to be used for prayer in the event of the sanctuary overflowing with worshippers. The courtyard, and the entrance before it, lead to the generous service areas of the mosque, providing services such as ablutions, toilets for men, and other amenities. As for women's services and their prayer quarter, they are allocated space, for their convenience, on the right side of the mosque's outer yard. It is worth noting that the women's prayer hall is on the same level as the men's hall and not on the upper floor (the mezzanine) as is customary in newly built mosques in the KSA and other Islamic countries. The 850 square meter Al-Garra Mosque can accommodate more than 400 worshippers and around 200 more in the entrance space and multi-purpose hall, if required.



58-2

Now it goes without saying that the most striking feature of the whole design is the Qibla wall, or what might be called the niche 'mihrab' wall facing Mecca. That element, the niche, which the architect transformed into a complete border wall, is what gives the mosque its visual dominance internally and externally. It is slightly convex towards the outside, and at its middle point, where the imam stands, a very subtle setback (about 10 cm) towards the outside can be noticed. This retraction may be read as a niche within a NICHE, topped by a simple focal circular clock that sets prayer times. What most influences the design of this wall/niche is its monumental scale and its unique building material. It was built from the city's gray volcanic stone (Al-Harat), left in its natural state, without cutting or trimming. What increases the psychological-visual effect of the Qibla wall is that it is solid, completely free of windows and openings. The architect compensated for the lack of openings with a continuous strip slit in the ceiling along the wall. This opening was formed as a result of a very slight recession of setback in the ceiling slab of the prayer hall, which allowed natural light to penetrate from above in a kind of 'cascade' of light spilling over the rugged black stones of the wall.

The other two walls, to the right and left of the Qibla wall, are double walls of reinforced concrete, between which there is a small insulating void. This void was used to contain (and hide) all the technical extensions necessary for the operation of the mosque, and thus the architect dispensed with false ceilings/walls, so that no non-architectural element would disturb the inner space, except for the spherical lanterns that, with their platonic simplicity, significantly contributed to confirming a sense of minimalism. These lamps look like planets and stars against the background of the night sky (the background here constituted by the black Qibla wall!).

- 57-2 Lower windows of the prayer hall.
- 58-2 Ablution area.
- 59-2 Roof light on the Qibla wall.



59-2



60-2

Although the prayer hall is rather introverted, without views of the external environment, with light coming from slender openings at the top of the haram hall, the architect has incorporated small side windows compatible with the scale of the worshiper in a sitting position. These openings give the prayer hall a special ambiance of tranquility and elegance, in addition to their adding a sort of pleasing treatment to the solid side walls.

As for the ceiling surface of the prayer hall, it was intentionally left in its 'raw' state, so to speak, just showing traces of the concrete's mold lines, without any artificial ornamental treatment. This accentuated further the intended atmosphere of noble austerity that simulates what we have received from the historical accounts describing the Prophet's Mosque (PBUH). In general, the considerate treatment of lighting in the Al-Garra Mosque (in terms of both openings and lanterns) is one of the most important reasons for the success of the mosque's spiritual atmosphere, an atmosphere that changes and varies between night and day, between filtered natural lighting and dim artificial lighting.

It is worth noting that in his design, the architect did not overlook the atmosphere of the ablution halls, which are usually looked upon as an internal utilitarian service space to be hidden. Rather, he replicated the shape of the major black Quibla wall with a variant minor lower wall (with a height of approximately 120 cm) and implanted the water taps into it so that they appear like water springs emerging naturally from a volcanic rock. The minor wall was built at the center of a semi-open space overlooking the city in the background and the outer palm trees in the foreground (in contrast to the semi-dark space of the prayer hall).

Technical Analysis (Technology and Sustainability)

After consulting with the architect, the technical reporter for the award stated that some of the basic exemplary concepts of passive climate control strategies have been applied to the Al-Garra Mosque: thick hollowed walls, limited and deeply-recessed window openings, sustainable (local) building materials, and an energy-efficient artificial lighting system.

In general, some of the sustainable design solutions were originally observed to reduce financial costs, minimize waste, and rationalize energy, on top of which is the use of a most effective proven local material; that is, the volcanic basalt stone, abundant in Madinah (and the building site itself).

The use of walls of hollow volcanic stone, which can withstand the high external temperature, contributed considerably to increasing the thermal insulation for the mosque's interior spaces. This insulation is essential during the very hot summer, when the temperature exceeds 45 degrees Centigrade. During the winter, on the other hand, these cavities do the opposite, they maintain a warm atmosphere inside the haram hall, reducing the effect of cold air outside and accordingly the need for heating with its costs and resulting emissions.

With regard to sustainability, a necessary point should be highlighted: that is, the existence of an embedded system for recycling the gray water, emanating from the ablution area, through a purification process. The purified water then is either efficiently reused or channeled into the irrigation system of the surrounding garden.



61-2

60-2 Outdoor spaces.

61-2 General view for the central space.

62-2 Side image of the mosque.

As for social sustainability, it is noted that the lack of property border walls allowed for the outer spaces surrounding the mosque to be used for public gatherings and activities, especially for young people. This enhanced the social sense of place, and ensured the mosque's broader role in support of society in terms of providing extra services that can implant a sense of belonging to the mosque as a center for social sustainability.

Conclusion

It can be suggested that the architecture of this mosque belongs to what can truly be called an 'architecture of experimentation and testing'. Such experimentations provide an opportunity for the architectural (and non-architectural) community to learn lessons, not only to activate and develop its local capabilities and skills, but also to contribute toward educating the society as a whole regarding the virtues of experimentation. What increases the importance and credibility of this experiment is that it is being carried out by a young 'local' architect from Madinah itself; not by a 'foreign' architect imposing a solution from 'the outside'.

However, it is important to stress that the success of such experiments are not dependent, or they do not solely emanate from an architectural studio or office; but rather the active cooperation between all parties involved in the building process: architects, contractors, builders. In particular, there has to be an enlightened 'client' who truly subscribes to the virtues of an experimental architectural product and the real benefit it could carry for society – not to mention the wider contribution to the development of local and non-local discourse of mosque architecture.



62-2

Abijo Mosque 132

Lichinga

Mosque 146

Al Tasamoh Mosq 160

JUMA'A

MOSQUES

Esra & Me'raj Mosque 174

Bioclimatic Community Mosque 188

Gargash Mosque 202

DIFC Mosque 216

Mayor Hanif Mosque 230

Pakistan Navy Mosque 244

Haji Abdur-Rauf Mosque 258

Aman Mosque 272

ABIJO MOSQUE

Quiet Local Visual Features

Abijo Mosque

Location: Lagos | Nigeria

Owner: Benefactor

Architect: Patrickwaheed

Area: 700m²

Completion date: 2020

Capacity: 408 worshippers

Type: Juma'a Mosque

Basic empirical data based on a report by Jerry Magutu

Builders and architects of mosques in Africa face a multiplicity of professional and technical challenges which directly impact the quality of their architecture. Nevertheless, there are a few examples of recent mosque design that reveal promising design experimentation that may potentially advance the cause of future mosque architecture on the continent.

The Abijo Mosque falls into this category of experimentation. Its designer took the 'risk' of designing a mosque that did not reflect any of the populist traditional features of its function. Thankfully, his risk paid off, as the mosque was not only well received by the community, but became a relished part of its surroundings.

As one takes a closer look into the style of this building, one can't escape tying it to that of early modern architecture in Europe. One has only to imagine changing its color into white to discover the similarity between it and Le Corbusier's villa Savoy in terms of scale, horizontal elongation, proportions, even some glimpses of raising the building, or at least part of it, on pilotis (Le Corbusier's five points). Moreover, our architect here, has presented what might be called a 'functional mosque', in as much as the word 'functional' or functionalism can be understood as a distinctive style. From this viewpoint, he has done a pretty good job.

On the other hand, and in order to give the building a local 'flavor', the architect covered the external surfaces with what looks like a Tyrolian finish, mixing it with a locally known 'Laterite' material that has a reddish earthy color. This made the building somewhat merge with its surroundings, despite its seemingly 'foreign' shape. Using this material was inspired by the traditional Yoruba mud buildings with their unique architecture that responds to the local climate and reflects the building culture in the vicinity in general.

The relationship of the mosque to the urban environment

As a project, the mosque was sponsored and funded by a donor organization named Crescent Bearers¹, to be built on a plot of land located within the rapidly developing Abijo GRA² and donated by the Lagos State Government. The mosque's site is right off the Lekki/Epe expressway, about 28 km from the gate V/I-Lekki Toll, and about 1 km from the intersection of Abijo GRA Road.

Notable urban development projects in the vicinity of the mosque include the Caleb International School to the south, a shopping and office complex, currently under construction, 200 meters to the west, in addition to the Chois residential estate to the east, and other gated residential projects in the vicinity.

Patrick Waheed Design Consultancy, a design-build firm, was commissioned by the donor, in conjunction with the Community Development Commission, to design and build what they described as a 'community mosque' (the principal architect was Ade Shokunbi). Classifying the mosque as a community mosque, reflects its acquaintanceship dimension, elevating its function from solely a place of worship to a broader role, a place of worship and a place for social interaction.

Figure (2-3)



Figure (1-3)

1-3 Front elevation.
2-3 Night view of the mosque.
3-3 Site plan of the mosque.

1 The Crescent Bearers are a charitable organization based in Lagos, founded "to keep Faith in Islam through charitable activities which uplift the morale, spiritual and material development of the Ummah in Lagos." Source: <https://guardian.ng/features/friday-worship/crescent-bearers-commissions-ultra-modern-mosque-to-commemorate-83rd-anniversary/>

2 GRA: Government Residential Area.

2-3



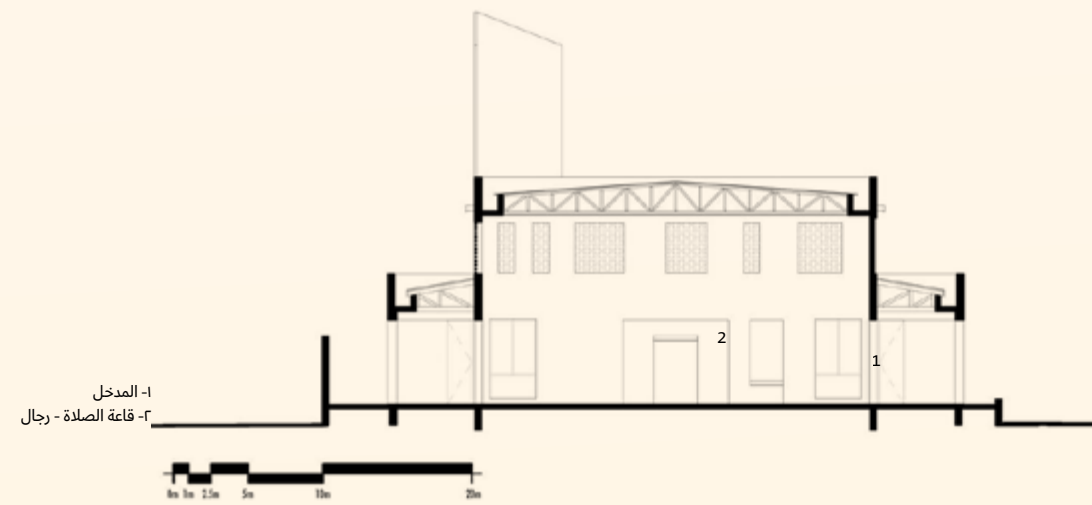
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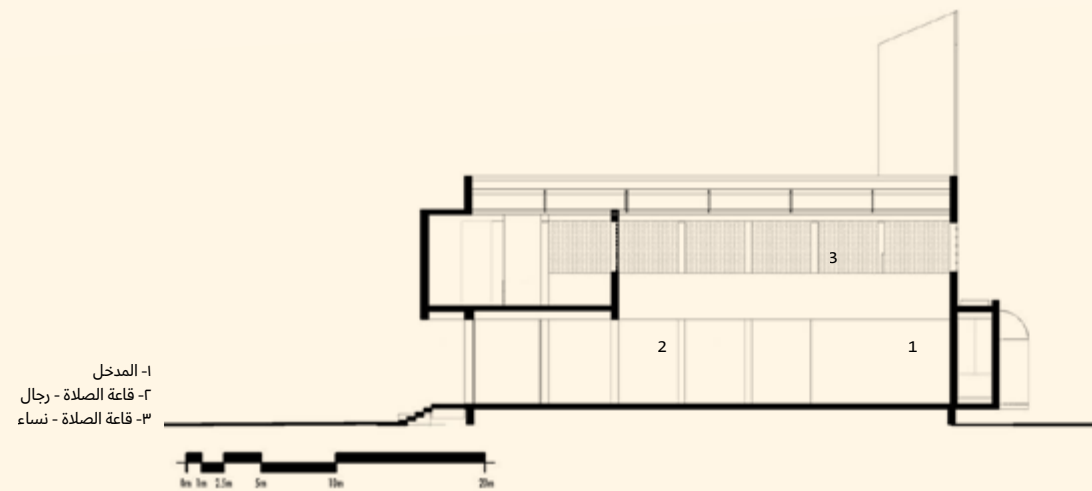
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4-3



5-3



6-3

The building permit initially obtained from the CDP permitted the construction of a mosque that could accommodate up to 408 worshipers (323 males and 85 females). Accordingly, upon receipt of the duly certified building permit and drawings, the donor presented a check for US\$40,000 based on the initial cost estimate. Later, the chief architect (Adeyemo Shokunbi) funded the endowment of the mosque facilities throughout his life.

Analytical description of the building from the outside

One of the function-based compositional principles on which mosque architecture is generally based upon is the creation of boundaries (actual or virtual) between the prayer hall and the services belonging to the mosque. Accordingly, this mosque was designed to consist of two parts: the volume housing the prayer hall (the sanctuary or haram), and the second part was dedicated to the services of the mosque.

The sanctuary is a cuboid block crowned by a prism-shaped tower that functions as a minaret. For this block, from three of its sides, there are spacious entrances that render the process of evacuating the sanctuary very efficient, especially after Fridays and other congregational prayers.

These entrances are shaded by volumes raised on slender columns (pilotis), under which one gets an impression similar to that of traditional colonnaded porticos on the one hand, and on the other hand gives them the character of the early modernist architecture of the International Style. The architect did not keep the windows and wide rectangular openings open, characteristic of the aforementioned style, but rather covered them with what is similar to the mashrabiya: alternating gaps in the concrete surfaces that allow filtered light to enter into the space.

While the three extensions emanating from the main volume of the building were employed to act as porticoes for the colonnaded foyers, we find that their fourth counterpart was left solid with a special extension containing a space for the niche (mihrab) and the pulpit (minbar). To the left of this 'extension', the mosque's minaret rises announcing to the farther neighborhoods the presence of the mosque. It is an unusual minaret, with a sloping roof, according to which the shape of the minaret changes from a parallelogram to what looks like a prism. This last is pierced with small triangular holes, echoing to triangles of the false-ceiling we shall see inside. The minaret rises above the sanctuary by about one floor height (approximately 4 meters,) enough to make it fully visible from the surrounding low-rise buildings. This height also allows the sound of the azan (call to prayer) to reach the neighboring area right-up to the borders of the adjacent highway.

4-3 Ground floor plan.

5-3 Section.

6-3 Section.

7-3 External surrounding detail.

7-3

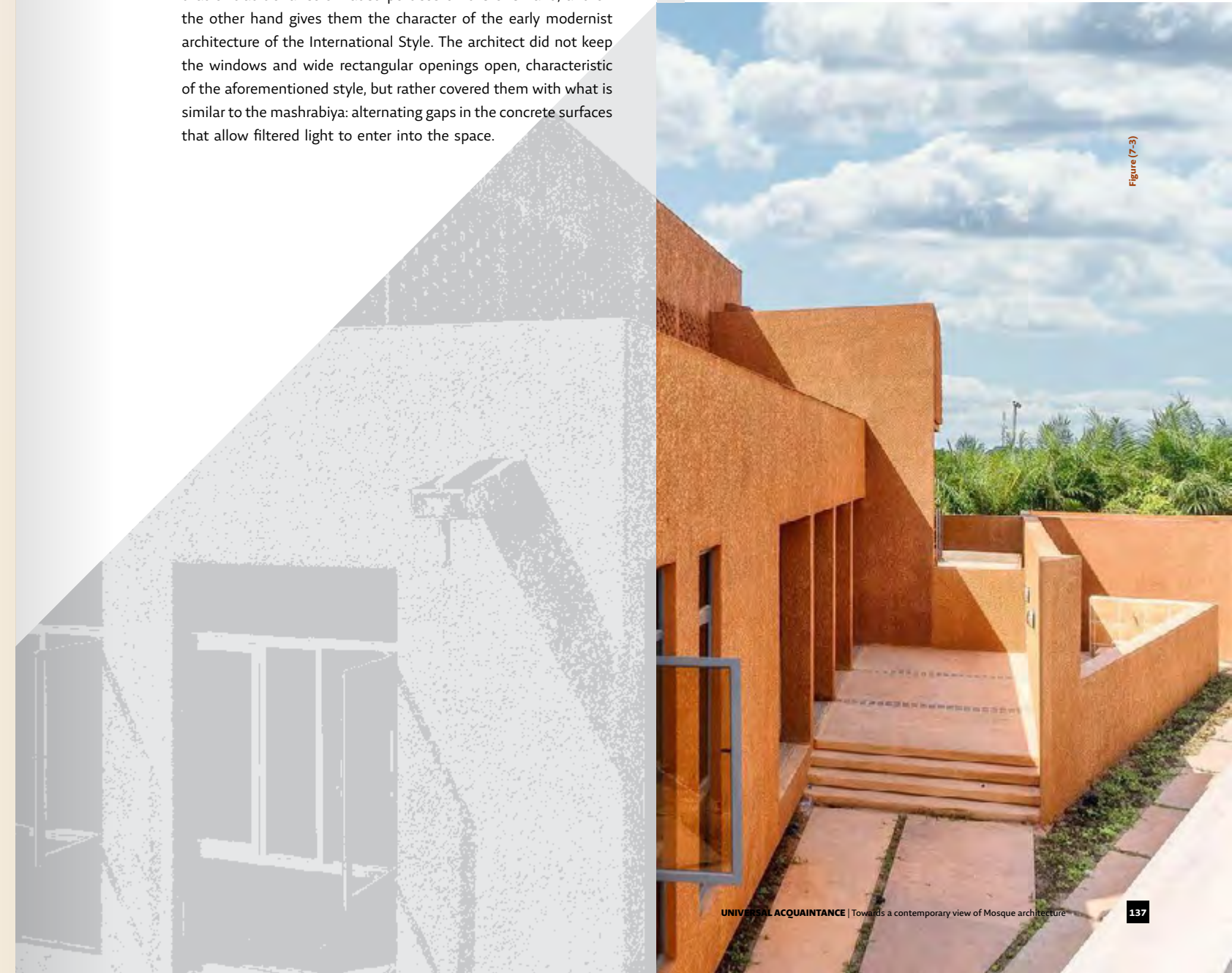


Figure (3-3)

Figure (4-3), (5-3)

Figure (6-3)

Figure (7-3)



8-3



9-3

Figure (8-3)

Figure (9-3)

Figure (10-3)

As for the service part of the mosque (ablutions, toilets, technical services, guarding, etc.) they are grouped in small blocks and arranged orthogonally outside the main block on the north and west sides. The aforementioned blocks are surrounded by open spaces covered with treated clay tiles, in addition to concrete paving for both the driveways and parking lot. These last, are interspersed by potted plants, shrubs, and grass. All these components are bordered by a semi-transparent wall/fence of concrete pillars and iron balustrades.

In general, this mosque represents, from the outside, a simple architectural formation that basically stems from the formal values of modernity. These values can be linked to the concept of the 'simple mosque', whose architecture should not be conspicuous but rather should blend seamlessly with its surrounding urban fabric. Regardless of the technical or material constraints that contributed to adopting this simplicity, the final outcome that we see here provides an important example that can boost the cause for an African mosque architecture, a cause that needs a lot of effort and attention on our part.

Analytical description of the building from the inside

The internal space of the mosque stems from a rectangle plan, out of which several smaller rectangles emerge. These rectangles are set with careful attention to their geometry and proportion (the golden ratio³ in particular, as indicated by the technical reviewer of the award). According to this proportional system, the elements of the minaret, the mihrab, and the minbar are integrated in a coherent manner on the eastern side (the Qibla wall). Based on this aforementioned system, a 'modular' structural system for the columns was also adopted. The modular system, starts from the portico(s), that measure 3.60 x 3.60 m, and make their way into the space of the prayer hall. As for the flat roof of the mosque (apparently without the dome) it was constructed using a steel truss resting on the concrete frame via the same mentioned module. Due to the nature of the soil of the site, a raft foundation and a reinforced concrete frame were adopted, with cement block filling for the walls.

³ The 'golden ratio', also known as the 'Divine proportion' (i.e., Allah's proportion) is typically represented by the Greek letter Φ (phi) and having the exact value of $(1 + \text{the square root of } 5) \text{ divided by } 2$, or approximately 1.618.

8-3 Qibla wall from outside.. The picture shows the minaret and the upper openings.

9-3 Qibla wall from inside.



The main prayer hall is a generous double height space, while the women's space is located at the back side, on a mezzanine floor accessed via a separate staircase. This last, is partially veiled by a mashrabiya lattice-screen that bears the same character as the geometric motifs used in the false ceiling.



10-3

The main prayer hall (for men) is a generous double height space, while the women's space is located at the back side, on a mezzanine floor accessed via a separate staircase. This last, is partially veiled by a mashrabiya lattice-screen that bears the same character as the geometric motifs used in the false ceiling. (These are the only decorative elements in the building.)

On the opposite, eastern side, both the mihrab and the minbar were integrated by adjoining them into a space of their own: an 'offset' that shoots out from the main space of the sanctuary. This design decision provides privacy while also breaking the large scale of the sanctuary's space to conform to the scale of the mihrab (a human scale). It is worth noting that this design-idea further allows for side lighting to both the mihrab and the minbar; it also gives way for the concealment of the stairs leading to the latter, so that it does not interrupt the continuity of the front lines of worshippers, as is the case of traditional added pulpits (minbars). The hidden staircase leads to a mini rectangular platform, which shoots slightly into the space of the sanctuary in the form of a 'balcony' of low height upon which the preacher can stand. It is not a grand design gesture, but rather just sufficient for the preacher to be seen by the congregation, and for his voice to be heard in all directions.

On the other hand, to increase the capacity of the Abijo Mosque, its northern, southern, and western walls were provided with vaults with sliding panels, which open completely to expand the prayer hall during Friday prayers. The large openings of the external walls are framed by indigenous Iroko wood, and the doors are sliding door-types that have windows with built-in glass louvers to aid ventilation when the doors are closed (this rather elaborate design was to avoid the use of air conditioning).

The architect was keen to add a tint of earthy colors throughout the mosque, even to the doors. Being steel doors, they've been treated with acid to give them a rusty finish, bringing them closer to the color of the surrounding earth. The same technique was applied to all steel elements used in the pulpit, sliding door frames and fence railings. In fact, the colors of the entire mosque complex come from a monochromatic palette that has further enhanced the intended sense of austerity embracing the whole project.

10-3 Ablution area.

11-3 Mosque entrances as it appears from the inner space.

12-3 Relationship between the outdoor spaces and the prayer hall.

Figures (11-3), (12-3)



11-3



12-3

13-3 View from outside of the mosque.

14-3 Walkways around the mosque.

15-3 Side view the minaret and part of the elevation.

16-3 Construction details.

Technical Analysis (Technology and Sustainability)

The overall design strategy of the Abijo Mosque reflects a keen environmental awareness of the local conditions in Lagos. The report submitted by the award's technical reviewer, who visited the mosque, states that the materials used in its construction have 'passive' environmental characteristics; they are locally available, and had generally low energy usage and emissions for both the construction and finishing processes.

The provision of large windows, sliding doors, and high-level ventilation openings in all directions floods the interior of the mosque with natural light, and allows also for cross-ventilation. Because the mosque is devoid of any unnecessary technologies, this approach, which depends on the ability of the architectural elements themselves to create a balanced climatic environment, represents one of the important experimental solutions that may contribute to the development of mosque architecture in the neighboring less developed regions. Although a variety of materials were used in the mosque, the overarching goal was to achieve a sense of belonging, sustainability, and a reduction of maintenance costs.



13-3

(16-3) Figure

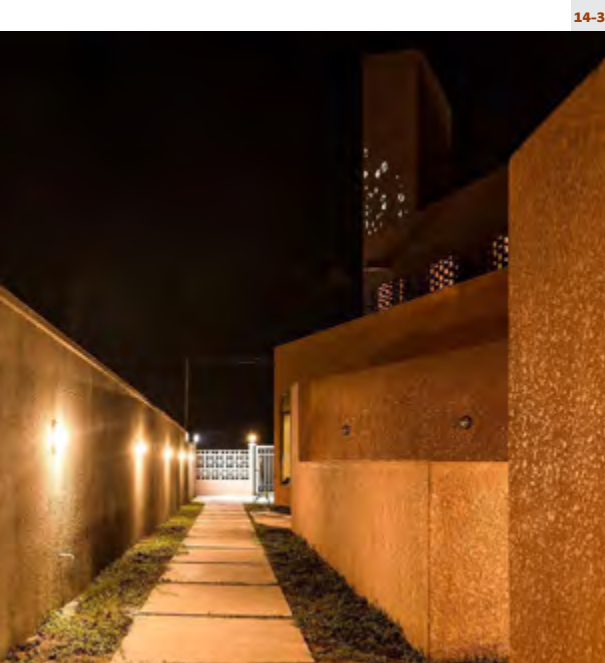
Figures (2-14), (2-15)

Conclusion

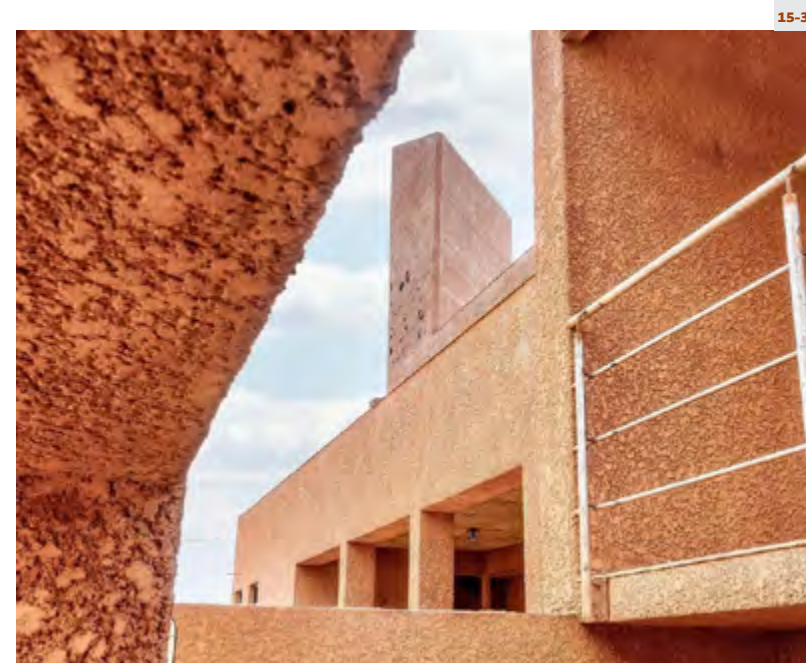
We need to support such ideas that provide empirical examples in areas facing real professional and economic challenges, particularly because they restore the spirit of simplicity in mosque architecture. Although this mosque did not try to incorporate or utilize lessons from the African architectural heritage (except in terms of superficial formality) still, the design in general may contribute indirectly to the development of mosque architecture in many regions of the world facing similar challenges.

In general, the Abijo Mosque does not subscribe to an architecture style with mummified and kitsch shapes in order to satisfy the prevailing populist 'taste' for mosque design, but rather the Abijo Mosque provides an example of a courageous experimental architecture in search of a language consistent with the spirit of time and place.

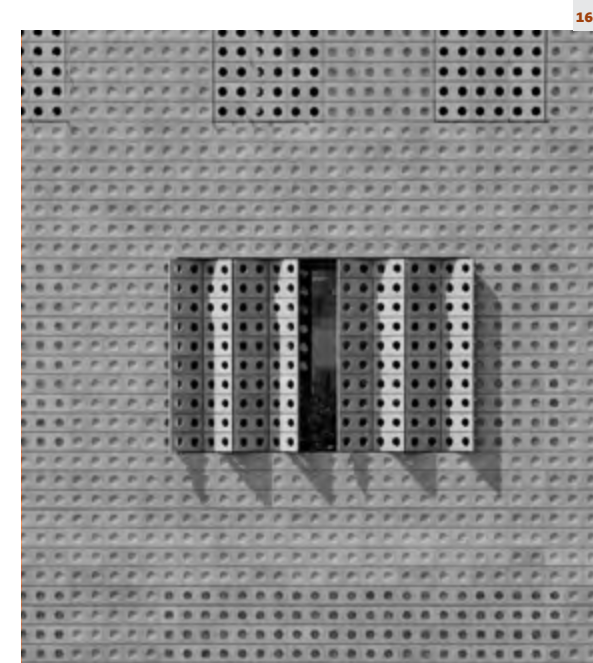
If we put aside the formal architectural language and its implications, we must point out and, indeed, praise the elaborate functional solution that competently takes the functional aspects of the mosque into account, and weaves from them rigorous logical forms that solve the problématique of the mosque program. We can cite here, for example, the proposed solution to the problem of emptying (evacuating) worshippers after the end of prayer, a serious problem from which many mosques in the world suffer. In addition, we must note the societal role that this mosque plays, as it was built to gather the crowds of worshippers who used to otherwise pray separately on the side of the road, into a decent space. The idea of gathering, and 'assembly' itself, in support of communal conversation with and worship of Allah is one of the lofty messages the mosque has sent across geographies, societies, and cultures since the foundation of the first mosque.



14-3



15-3



16-3

Figure (16-3)

LICHINGA MOSQUE

THE ABU BAKR

Unfolding Austerity in an African Mosque

The Abu Bakr Mosque and School

Location: Lichinga | Mozambique

Owner:

Architect: Muhammad Mayet Architects + Urban Designers

Area: 1360m²

Completion date: 2020-2021

Capacity: 900 worshippers

Type: Juma'a Mosque



17-3

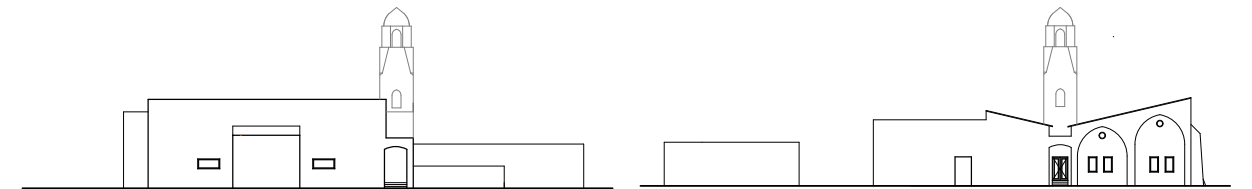
Mosques built in Africa never cease to amaze us by their local take on Islamic architecture. The truly emotive thing, however, is the similarity between the difficult conditions, under which they were built, and those surrounding the very first mosque in Islam, the Prophet's Mosque (PBUH), in the sacred city of Al-Medina. There are few contemporary examples that evoke such a sense of austerity found in early mosques. The Abu Bakr Masjid and Madressa (mosque and school) in Lichinga is one such rare example.

Indeed, as a community of practice, we need to return to a sense of creative simplicity that mosque architecture embodied, before it was lost with the accumulation of codes that endorse formal exaggeration and elaborate decoration, thus turning mosques into places for the exposition of material wealth and status rather than being spaces that enhance spiritual values.

Paradoxes and questions posed by the examples of the shortlisted projects in this book are intended to bring forward intriguing examples of mosque architecture to the specialists, with the aim of stirring discussion about the architecture of the future mosque: can we define a philosophical framework by which this architecture can develop?

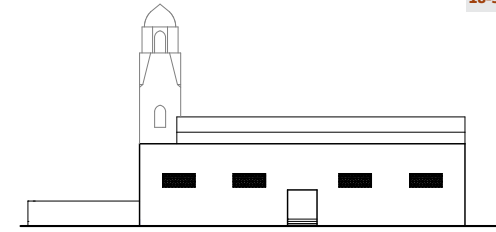
It may be very difficult to answer such a question through the example studied here, but without doubt we need to create a meaningful dialogue about the current philosophical framework of this architecture which seems to have lost its direction during the last hundred years or so...

- ٣-١٧ الموقع العام.
- ٣-١٨ الواجهة الشمالية.
- ٣-١٩ الواجهة الجنوبية.
- ٣-٢٠ الواجهة الشرقية.
- ٣-٢١ الواجهة الغربية.
- ٣-٢٢ المسجد كما يبدو من الخارج.

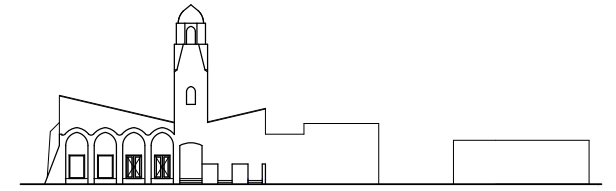


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20-3



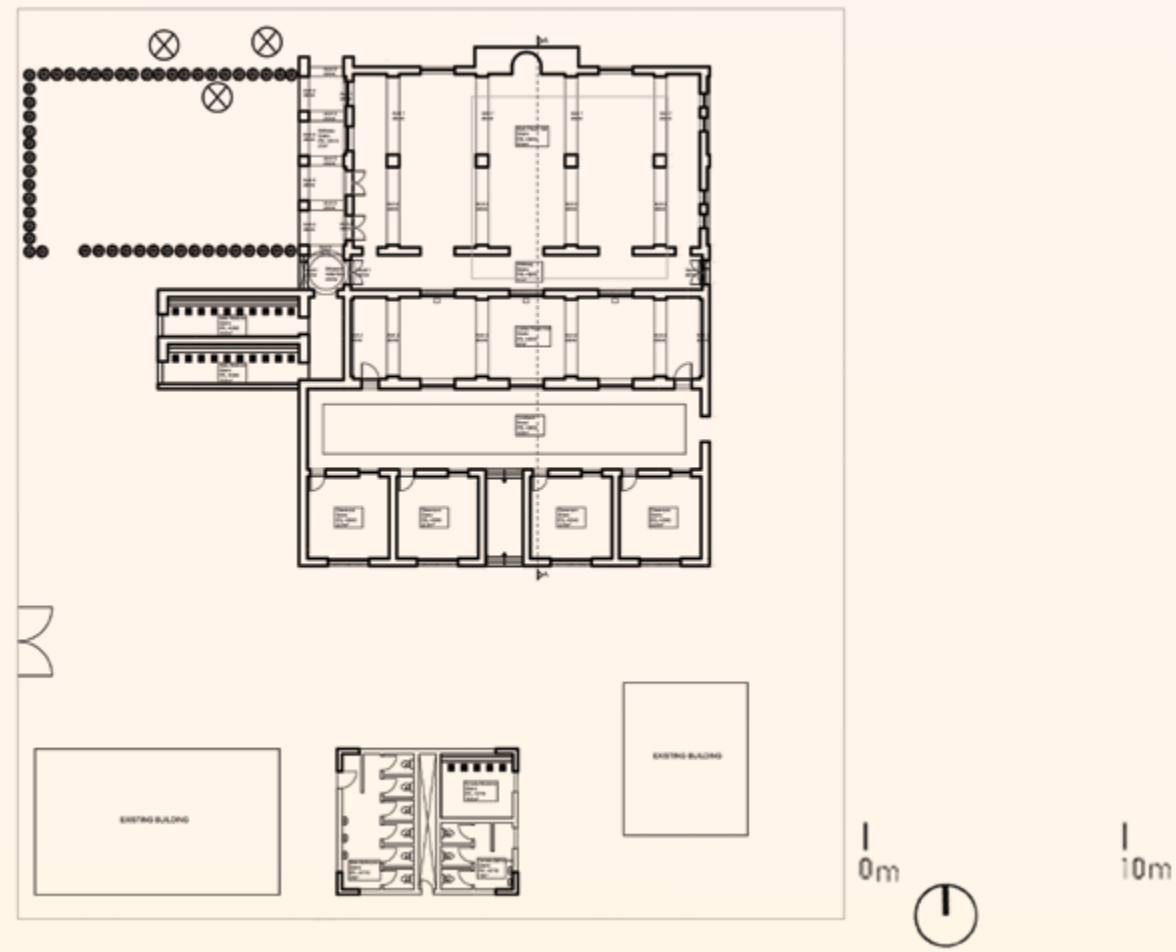
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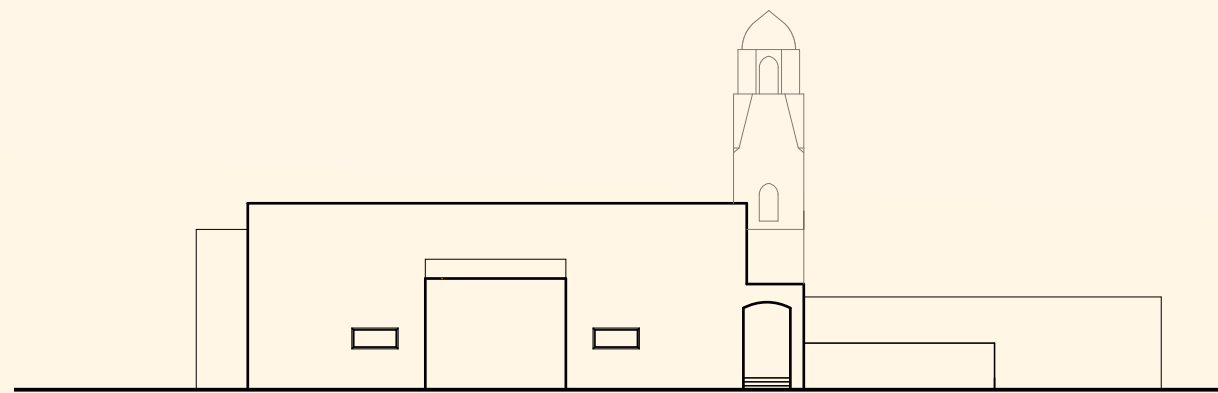
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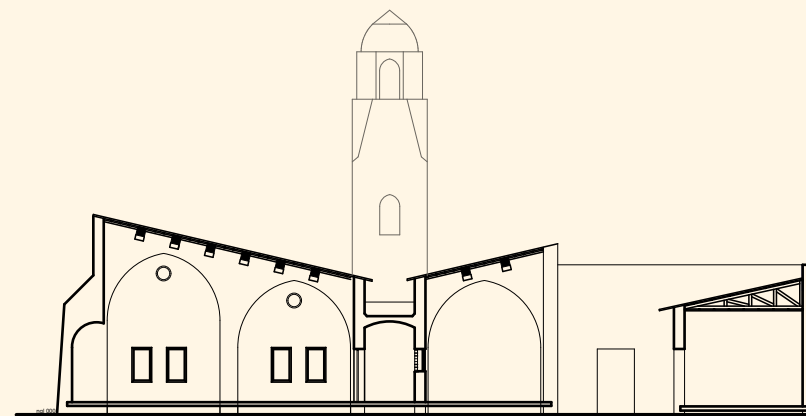
22-3



23-3



24-3



25-3

The relationship of the mosque to its surroundings

The Abu Bakr Mosque and Madressa is located on the Lichinga Plateau in Mozambique, at an altitude of 1,360 meters above sea level to the east of Lake Nyasa. Due to its high elevation, this plateau has a sub-tropical climate: milder summers and markedly colder winters than the surrounding valleys. From a visual point of view, many religious buildings, including mosques, tend to occupy elevated sites in order to dominate the urban surroundings around them. Although this tendency does not fully apply to the Abu Bakr Mosque and Madressa, this building and its design approach generally emphasizes, practically and morally, the tradition of the mosque as a building that calls for humility of worshipers and the integration (of the built forms and the people) with their surrounding urban and social environments to enhance acquaintance and the true sense of Islamic values.

The Waterval Islamic Institute sponsored and funded the building of the Abu Bakr Mosque. This institute has a family charity fund which mainly runs Islamic schools at the primary and secondary levels in the countries of Madagascar, Mozambique, Malawi, Zanzibar, Uganda, and South Africa.

This project was first conceived as an extension of an existing mosque which was successfully serving the surrounding residential neighborhoods but not fully sufficient for accommodating the increasingly growing number of worshipers. Accordingly, the body sponsoring the project sought to build a larger mosque on the same area of the existing building, provided that the construction/expansion operations did not affect or interrupt the daily congregational prayers because the area is remote and there are no nearby mosques to compensate.

Thus, the construction process took place in parallel with the gradual demolition of the existing building.¹ However, the initial condition of the client for building the mosque in the same place as the existing mosque was later amended to establish a new, separate place for daily prayers first, pending the demolition of the current building, and the rebuilding of the new mosque. Accordingly, the building took nine months of construction and the consultants chosen for the design and supervision were Muhammad Mayet Architects + Urban Designers from South Africa.²

1 The irony is that due to the remote location of the land, the project-engineer adopted unconventional supervision processes to manage the site, as he relied heavily on virtual communication (social media messages via WhatsApp and virtual meetings through the Zoom platform).

2 The total cost of the project was US\$40,000.



26-3

It is well known that the mosque represents the architectural hub most connected to the daily urban life of the community, and solutions must always be devised in order to replace the mosque in the event of demolition, construction, or renovation, as is the case in this mosque. We believe that this problem represents one of the main practical challenges in building mosques. Naturally, it is expected that many mosques will undergo improvements, renovations and reconstruction. However, the solutions available to mitigate the impacts on the existing community of worshipers are limited. Building temporary mosques of course means more spending. One of the solutions we call for is more effort to develop a local database to understand future needs and take those needs into account from the beginning, thereby ensuring a high quality design, high quality implementation, and finally promoting scientific research in the various fields of mosque architecture.

٢٣-٢٢ المسقط الأفقي للطابق الأرضي.
٢٤-٢٥ مقاطع طولية.
٢٦-٢٧ المئذنة والتشكيل الخارجي.



Analytical description of the building from the outside

This community-oriented mosque is centrally located within a suburban neighborhood, linked to both immediate and distant neighborhoods by the existing road network. The importance and value of the mosque, with its position among the neighborhoods, has increased after the recent expansion. Thus the mosque is no longer just a place of worship, but has become a center of social interaction (and acquaintance). However, the non-transparent wall surrounding the building and the complex, established later for security reasons, now cuts off visual contact at eye level between what is happening inside the mosque's perimeter and the outside. Still, the mosque's shape and size, crowned by a soaring minaret, renders it fairly recognizable from a distance.

In terms of massing, the mosque consists of continuous volumes on the ground level. As we go up, however, its spaces are later articulated, by the shape of their roofs, according to the function beneath.

As usual, the main mass is, of course, that of the sanctuary; it is divided into two parts: the men's section, with a high sloping roof and behind it the women's section, with its low sloping roof as well, albeit sloping in the opposite direction. Both roofs lean toward the covered central corridor separating them. It is a sort of hallway that extends on the same axis as the minaret over the entire width of the mosque, ending with an additional exit in case of the need for evacuation, especially when the mosque is overcrowded.

The walls of the women's and men's prayer halls, with the porch between them, on the left of the mosque, borders a special porticoed entry. The portico consists of four units (modules); these four units are roofed with mud brick vaults whilst the fifth is a similar unit from which the minaret is extruded. Although simpler, this is a direct allusion to previous schemes used elsewhere.

As mentioned earlier, being trapped in the vicious cycle of reproducing historic replicas of mosques of the past doesn't provide effective solutions for mosque architecture now, and it won't provide effective solutions in the future. While the Abu Bakr Mosque mosque does reference the past, it references the very early stages of Islamic history, a past so distant it's almost forgotten by the architectural community. However, if we look at the spatio-temporal, social, and economic situation of the Abu Bakr Mosque, we can find many compelling motivations for such a sustainable, simple, and proven approach.




٣٠-٢٧ رواق المسجد.
٣٠-٢٨ و٣٠-٢٩ قاعة الصلاة من الداخل.

28-3



29-3



A photograph showing the interior of a mosque prayer hall. The walls are made of light-colored mud brick with white limestone stucco. The lower half of the walls is painted in a bright, warm color. The ceiling is a simple wooden grid. The floor is covered with patterned prayer mats. A large group of women, wearing colorful headscarves and long dresses, are sitting on the mats, facing towards the front of the hall. The architecture features large, simple arches. The lighting is warm and even.

The interior walls of the two prayer halls are simple, made of local mud brick, completely devoid of decoration. Then the bricks that form the wall are covered with white limestone stucco, the bottom of which is covered with a brightly-colored oil paint so that it may be easily cleaned.



30-3

To go back to the description of the complex from the outside, it is noted that the ablution areas for both sexes are located to the right of the entrance porch, albeit without provision of a roof. They are separated from the outer courtyard only by partitioning walls about 140 cm high. Further, sanitary services were built independently, in the back of the plot, to serve the site with all its activities.

In addition to the aforementioned components of the mosque, there are four school classrooms with an area of 23 m² each in the rear part of the complex, in a single linear arrangement, separated from the main mass of the mosque (the women's area) by an elongated courtyard used for gathering and for outdoor teaching when weather permits.

Analytical description of the building from the inside

The overriding characteristic of the interior space of this mosque, emanates from its hypostyle type, which reminds us of the architecture of the first mosques in Islam, especially the very first mosque in Medina. Although this type is primarily structural, it imprints the internal spaces with a sense of extension and spaciousness, an ordered extension that rhythmically punctuates the internal space.

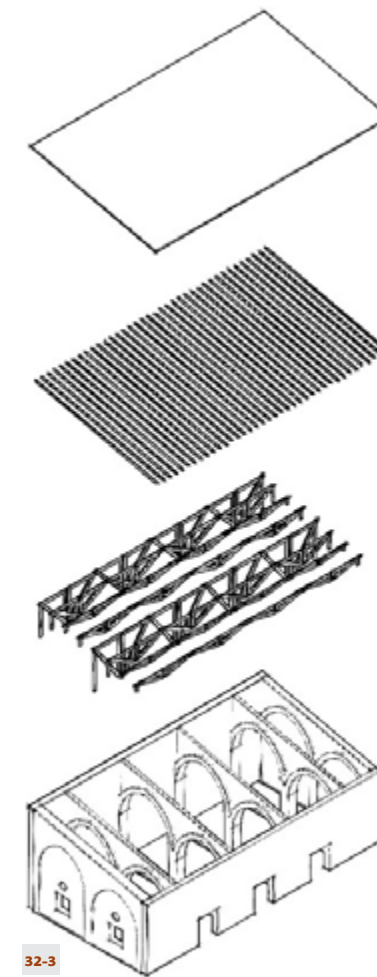
The interior walls of the two prayer halls are simple, made of local mud brick, completely devoid of decoration. Then the bricks that form the wall are covered with white limestone stucco, the bottom of which is covered with a brightly-colored oil paint so that it may be easily cleaned. As for the floors, they are covered with straw mats and simple rugs with lines regulating the prayer rows. All the above make the overall character of the interior spaces comfortable, austere yet elegant, and very typical of East African architecture: spaces that are light, airy, and well serviced, despite the limited economic conditions.

This mosque, in addition to the Ibigu Mosque in Nigeria, presents an important example that sheds light on contemporary African mosque architecture. The Abdallatif Al-Fouzan Award has always argued for 'the cross-cultural mosque' as a profound universal motto that echoes the title of this book: "Universal Acquaintance," which enhances human unity. How can the two mottos coincide, the material and the philosophical/social? And how can mosque architecture be shaped in the future to express this congruence and overlap? These challenging questions force us to place greater emphasis on difficult examples in less developed regions where cultural influences are clear and direct.

٣٠-٣ المئذنة تستعيد تكوين المآذن التاريخية وتقترب إلى حد كبير من مئذنة عقبة بن نافع في القيروان.
٣١-٣ مدرسة المسجد والباحة التابعة لها.
٣٢-٣ دراسة معمارية وإنشائية.



31-3



32-3



33-3



34-3

Technical Analysis (Technology and Sustainability)

Among the most successful characteristics of this mosque are the selection of local materials from which it was built, alongside the inexpensive construction techniques carried out by qualified local workers. All materials were available locally and at reasonable costs.

It is worth noting that the mosque does not need any mechanical heating and air conditioning systems. The same applies to artificial lighting systems during the day. We can say that the architecture of this mosque restores the local use of natural systems of ventilation and natural lighting. The Abu Bakr Mosque's architectural design, spatial organization, and visual formation embrace and embody the idea of sustainability, without any 'modern' mechanical mediation.

Conclusion

The story of the Abu-Bakr Mosque is that of a building of noble austerity and honest social service without extravagance or pomp. Although it does not present any significant breakthroughs to further the formal discourse of contemporary mosque architecture, it provides a significant example of an architecture that has its ubiquity in an important region of the world, a region that has its own challenges and harsh conditions that may preclude sophisticated innovations. Still, without a doubt, this mosque conveys Africa's aspirations for the future and provides a statement to be added regarding the universality of the mosque and its architecture. This example is noteworthy for its sincerity in dealing with difficult economic conditions and for its success in providing an architectural environment that serves the surrounding community with a limited budget, confirming that the sources of inspiration in mosque architecture never spring forth from extraneous spending, but rather arise from the ability of the architect to understand and serve the local community, developing designs that honor Allah, support the community, and lift the soul.

The Abu Bakr Mosque represents a step forward on the road to repositioning Africa's experiments within the body of world of mosque architecture in general; it is a step we see as important, and it could have a significant impact in the future.

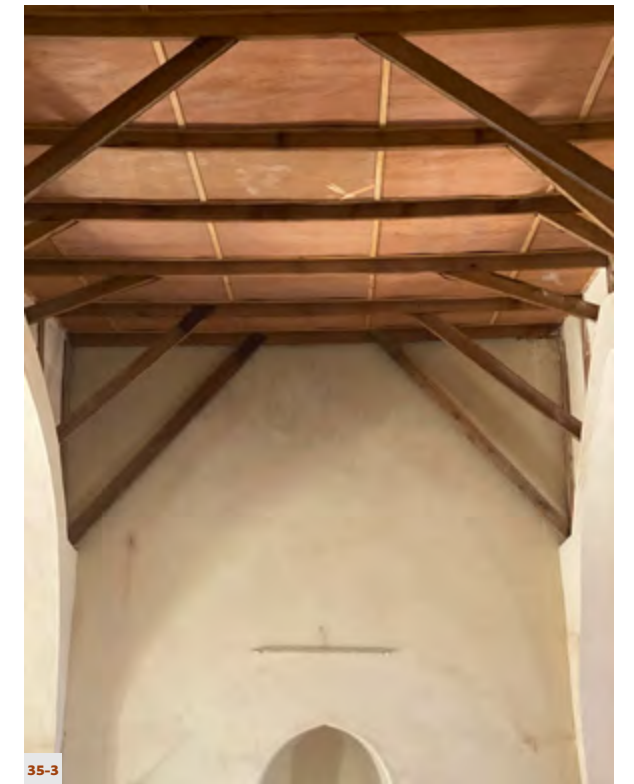
We pose here a question to reflect upon regarding the criteria for success in architecture, especially mosque architecture: aren't the criteria for success dependent on the quality of responses to the particular conditions of society?

Addressing this question is among the fundamental tasks of the Al-Fozan Award and its global mission, especially in this cycle. Perhaps focusing on such rare examples and including them in the short list in each of the award's cycles is an initiative to shed light on major mosque issues that have not received attention during the past decades.

٣٤-٣٤ تفاصيل العقود في قاعة الصلاة.

٣٥-٣٥ تفاصيل السقف.

٣٦-٣٦ و ٣٧-٣٧ الأروقة التي تتقدم قاعة الصلاة.



35-3



36-3



37-3

AL TASAMOH MOSQUE

**Forgiveness and
Acquaintance**

جامع التسامح

Al-Tasamoh Mosque

Location: Sanhaja | Tunisia

Owner: Benefactor

Architect: Akram Bsila | Tsageda

Area: 1000m²

Completion date: 2020

Capacity: 500 worshippers

Type: Juma'a Mosque



38-3

It is such a heartwarming coincidence to find among the shortlisted mosques in the current cycle of the Al Fozan Award for Mosques, a mosque bearing the name Al-Tasamoh (āl-tsāmh): which may be translated into English as 'tolerance', 'forgiveness' or even 'inter-forgiveness'. For inter-forgiveness, in a sense, is close to 'acquaintance', the title of our current book, or indeed 'inter-acquaintance' (if such a word could be crafted in English), even if forgiveness, as a moral value, constitutes a new mode of acquaintance – taking place after a dispute! Or, in a broader sense, it means accepting the 'other', rendering the mosque a meeting place for disparate parties, not just for homogeneous groups.

From a moral point of view, the mosque could perhaps be seen as a catalyst, facilitating people accepting each other, no matter how different 'others' are from 'us,' or 'self'... within the boundaries of a mosque, the house of the Lord, all people are equal.

The moral value of forgiveness, which envelops this mosque, is an important Islamic belief, as the Prophet Muhammed (peace be upon him) said, "Allah will not be merciful to those who are not merciful to mankind" (Bukhari 7376). The Qur'an teaches, "Let them pardon and forgive. Do you not love that Allah should forgive you? And Allah is Oft-Forgiving, Most Merciful" (24:22)¹.

¹ This link between forgiving other people and receiving Allah's forgiveness is also found in the Injil of Isa ibn Maryam (the Good News of Jesus, son of Mary): "For if you forgive other people when they sin against you, your heavenly Father [Allah] will also forgive you. But if you do not forgive others their sins, your Father [Allah] will not forgive your sins" (Matthew 6:14-15).

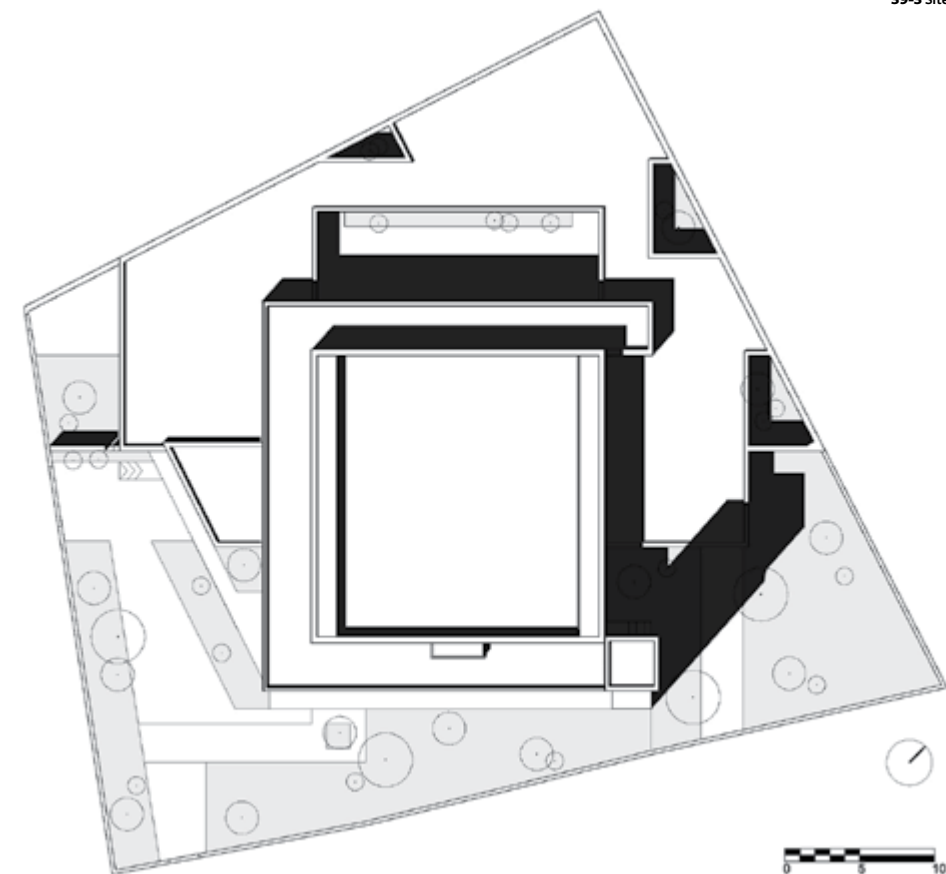
The core value of forgiveness is further accentuated by the values of solidarity and piety (ālaqwa), since the land for the Al-Tasamoh Mosque was donated by a benevolent lady just before her death, its building expenses were generously provided by benefactors, and even the architect presented the design as a donation too... Later, the circle of virtues was completed, so to speak, by the participation of an honorable contractor who undertook the task of execution with compassion. All this encourages us to say that, as stated in the Noble Qur'an, this is a "mosque founded on piety - from the very first day!" (9:108)

Furthermore, what increases the value of this mosque, is that it offers an experiment which joins the list of modern mosque experimentations looking for new horizons to design places of worship that respond to the requirements and challenges of the new millennia with all its complexities.

What's really interesting is that the architect who designed this mosque, as we have seen in more than one mosque listed in this book, is a young man, thus becoming part of a 'phenomenon' of hope: a new generation of architects who chose to follow the challenging path of innovation (igtihād) rather than the easy way of imitation!

It is also gratifying to learn, by way of the mosque's Post-Occupancy Evaluation (POE), that architect Akram Basileh's diligence quickly paid off: the community surrounding the mosque not only accepted the new building but also seem to have identified with it. The evidence of this is that they started restoring their own houses to look like and imitate the mosque's main features. Furthermore, it is important to point out that, although the mosque is built on the very edge of the village, the community has come to consider it as sort of an off-set center of the community, congregating around the

Figure (38-3)



39-3

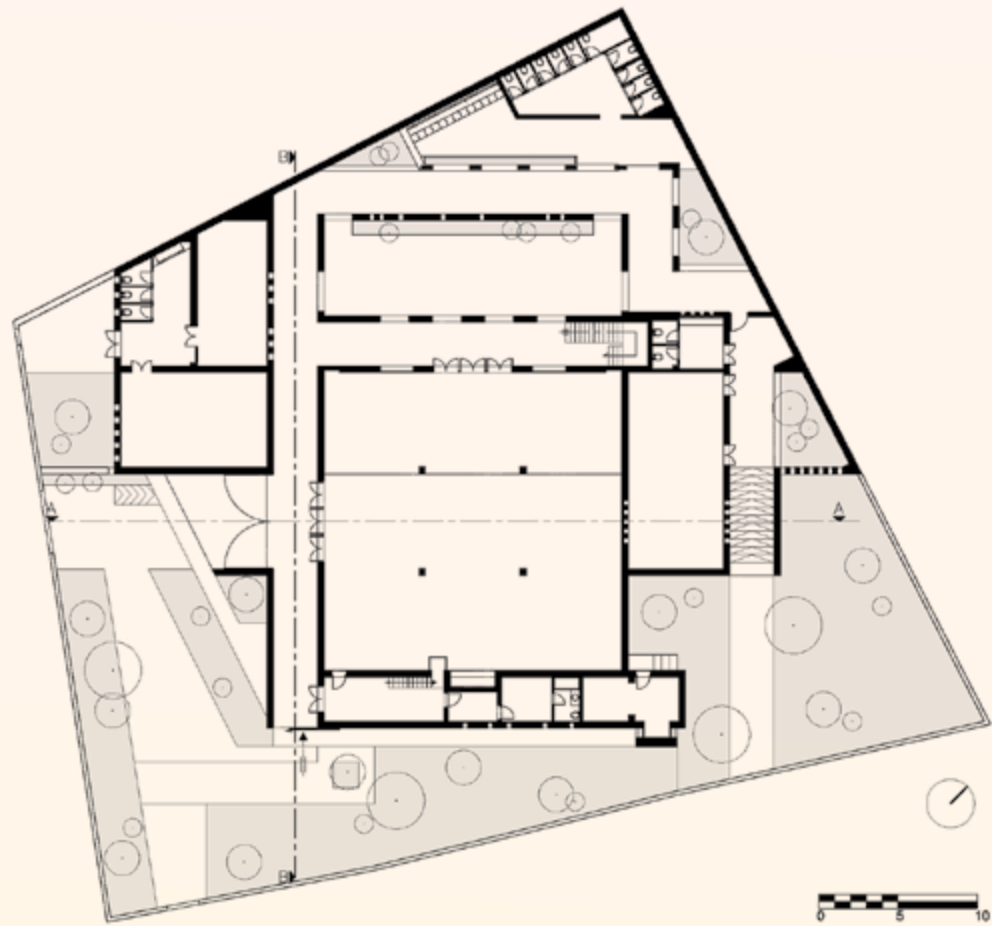
38-3 Surrounding outdoor space.
39-3 Site plan.

mosque in adjacent cafés with their eyes set on the mosque as a pleasant building set against the green orchids in the background – what better could an architect hope for?

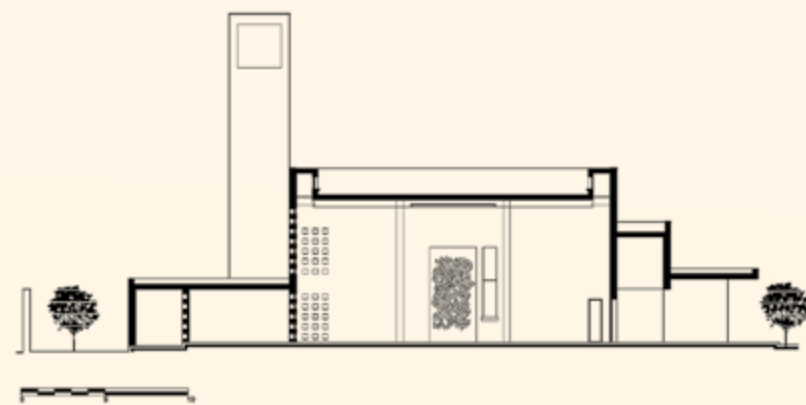
This issue, in particular, is quite relevant to our discussion in this volume: the impact that the mosque's architecture can have on the architectural and aesthetic imagination of the community. Despite the difficulty of measuring such an impact, this mosque's narrative gives us some insights into what a successful experiment can do.

The Relationship of the Mosque to its Surroundings

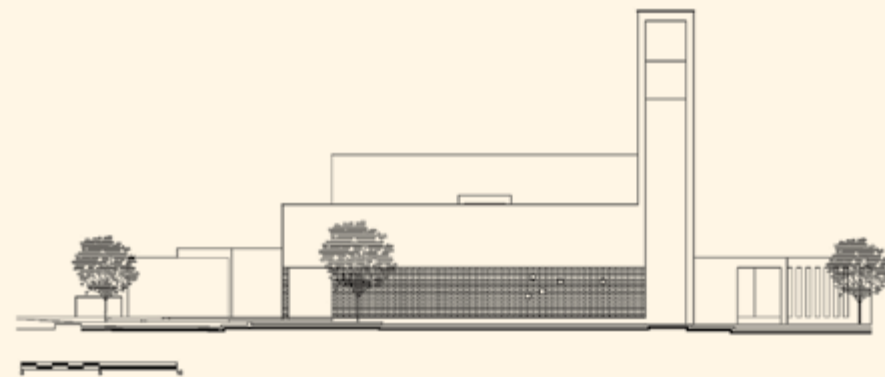
The mosque is located on a relatively small plot of land in rural Sanhaja, one of the villages in the Manouba Governorate of the Republic of Tunisia, the northernmost country on the African continent. Interestingly, the mosque is not located in the heart of the village, as is customary, rather, it is placed in an agricultural area bordering the village. This was the choice of the benevolent lady who donated the land. Subsequently, the mosque's committee entrusted the office of Tasigda (Akram Basileh, architect) to carry out the designs. Luckily, the strong rapport that developed between the committee and the architect, extended to include the contractor, as hinted above.



40-3



41-3



42-3

The mosque is built on a flat tract of land at the corner of an intersection of two important country roads connecting the village with the surrounding agricultural area and other neighboring rural communities as the aerial photograph shows. Building the mosque on the periphery of the village, bordering its agricultural areas, led to the emergence of a new urban, or rather rural, visual perception between the built-up area and the surrounding agricultural area, rendering the streets bordering the mosque as public spaces for congregation (compensating for the lack of a proper courtyard).

Excluding these external areas, the mosque can accommodate up to 500 worshipers. Al-Tasamoh serves all five daily prayers, Friday prayers, Ramadan al-trāwīh prayers, and 'eid feasts. The courtyard and outdoor spaces, can accommodate about 80 additional worshipers.

Analytical description of the building from the outside

From a distance, the Al-Tasamoh Mosque, with its white mass and towering minaret, does not seem foreign to the scene of a Tunisian village. But, as soon as one comes closer, it becomes clear that one is in the presence of a different architectural 'dialect', if not a foreign language: the dome is absent, arches are missing, and the minaret is ambiguous as a sign! Still, the modern composition represents, not a drastic rupture with Tunisian architectural traditions but a subtle point of departure towards something freshly new...

Externally, at the ground floor, the mosque can be seen as a single monolithic mass of orthogonal lines fused with the boundary wall from the rear, and freed from it from the front, (the direction of the Makkah - the Qiblah.)

As for the other two sides, a retraction from the boundary wall was realized to make room for the three entrances to the mosque. The continuous mass on the ground floor soon gives way to a distinct volume above: a higher square-based mass emerges from the lower one to form the roof of the prayer hall. At the left side of the Qiblah wall, the minaret is attached, at the top of which an inscription of the word ALLAH is hollowed out using Kufi Arabic calligraphy. The sight of the word lit against the night sky and rural landscape is really impressive.

In terms of the treatment of its external surfaces, the mosque's mass, with its white stucco gives a dual impression, as far as its architectural character is concerned. One can clearly recognize, on the one hand, that it belongs to the traditional style of Tunisian villages, but at the same time conveys a close kinship to the heritage of early modernist architecture (especially the white purism period of Le Corbusier, 'Adolf Loos,' and others).

This hybridity could perhaps be seen as an attempt to create a trend that aims to break free from the grip of blindly repeating historical architectural traditions, yet we do not believe that it is an attempt that fully achieved what it seeks.

Figures (43-3), (44-3) Figures (41-3), (42-3) Figure (40-3) Figure (39-3)

40-3 Ground floor plan.

41-3 Section.

42-3 Elevation.

43-3 Adjacent outdoor space.

44-3 Brick work in the lower part of the external wall.



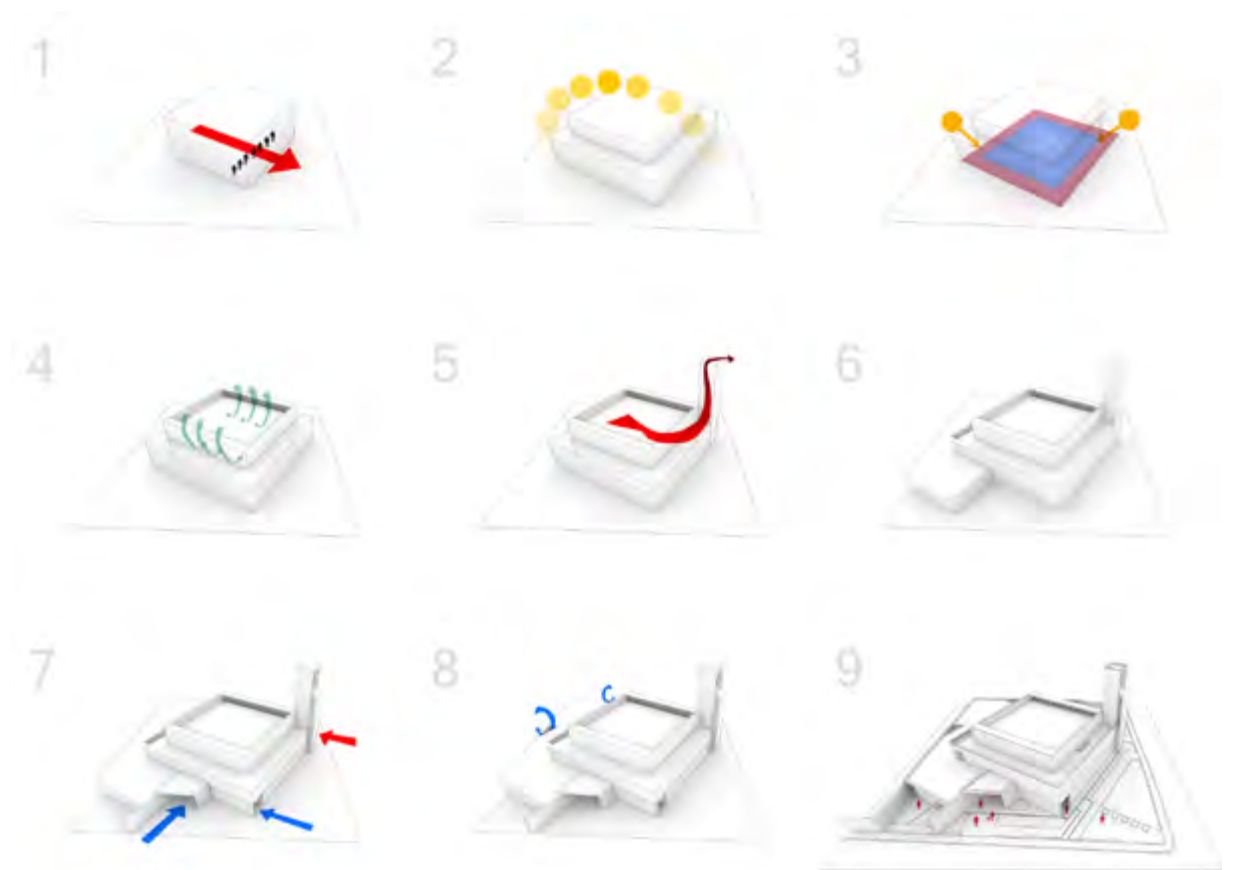
43-3



44-3



45-3 The minarete and part of the external mass.
 46-3 Climatic studies.
 47-3 One of the external courtyards.



47-3

46-3

Figures (46-3), (47-3) Figure (45-3)



While the upper part of the building is built with brick covered with white lime stucco, the architect has wisely decided to keep the lower part in its natural state: exposed bricks, without cladding. This design maneuver serves to counterbalance the perceived coldness of the white lime's overtones on the one hand, and on the other hand provides a rough texture to contrast the smoothness of the white lime above. This judicious maneuver also contributes to 'breaking' the scale of the relatively high building mass, bringing it closer to the human scale by dividing the building into two parts, higher and lower.

Offset from the lower part of the building, toward the property line, is the a gentle masonry fence; it is built of the same material as the mosque's mass with its white color, in addition to some metal elements (balustrades) as accessories.

Analytical description of the building from the inside

In contrast to the 'forged' traditional design strategies of flooding mosques with cheap ornamentation and/or false decorations (strategies adopted by what we might call the current 'conformist' architects), the architect of this mosque relies on simply bringing in the white aesthetic palette used on the exterior into the interior space, where the elaborate manipulation of light constitutes the essence of the desired ambiance.

Program-wise, we find that the mosque's traditional activities are fully met, in addition to a Qur'an school, all within an area not exceeding 1,000 square meters!



The most important interior space is, surely, the haram, or main prayer hall, which extends to a height of two floors. The rear part of the haram includes an additional prayer space in the form of a mezzanine accessed via a staircase behind a small courtyard.

The most important interior space is, surely, the haram, or main prayer hall, which extends to a height of two floors. The rear part of the haram includes an additional prayer space in the form of a mezzanine accessed via a staircase behind a small courtyard.

The continuity of the space in the prayer room is only interrupted by four square-sectioned columns, with a protective moquette²-like carpet wrapped around their base.

The natural day lighting does its qualitative job because of the clever way in which the light openings are concealed at the top, so that the light flows from them, spilling from the openings onto the white walls and causing them to glow as if they were halos.

As one enters the prayer room, one's eye is instantly captured by a light crack emanating from above to symmetrically create two skylights that delineate the room on both sides, like a vent open to the sky.

There are no 'windows' on the white walls in the conventional sense, but rather a grid of square openings or holes, but subdued in a way that maintains the dominance of the upper light sources.

The lower surface of the ceiling is also kept white, its serenity disturbed only by a square frame chandelier which hangs from a central point in the ceiling to form a delicate, barely noticeable, quadrangular pyramid, an example of the care for simple details that do not interfere with the basic architectural parti.³

Interior walls are all fully white stucco, devoid of decoration. Before the walls meet the floor, a black protective moquette like carpet has been added, forming a sort of "belt" at a height of about 80 cm. A little above this black belt, one notices a generous amount of Qur'anic shelves punched into the walls at an appropriate height. The floor of the mosque was furnished with mats (rugs) of an earthy color, surrounded by weaves of black 'rugs', which in turn define and control the prayer rows. Sadly, these mats were later replaced with green carpets donated by one of the benefactors without consulting with the architect. This, dejectedly, changed the austere character and elegance of the original design.

The cavity of the niche or mihrab offset from the frontal wall (facing Makka) crowns the space of the main prayer hall with an expressive Qur'anic focal verse, "And the mosques belong to God, so do not invoke anyone with Him" (Al-Jinn: 18) written in black steel (against the mosque's white background) in the manner of 'letters art', a trend in plastic art, differing from classical calligraphy. It is based on the use of letters as a plastic medium to realize a visual effect. Hidden lighting flows from the top of the back wall of the mihrab as if it were a 'halo' to illuminate the above mentioned Arabic calligraphy and give it depth (through shadows).

As for the pulpit, or minbar, it was interpreted by the architect as a novel balcony extending out of the quiblah wall. With its transparent glass edges that increase its lightness, it looks very modern without losing its dignity. Access to the pulpit is via a back staircase concealed within a spacious spaces dedicated to the Imam (prayer leader) behind the Quiblah wall. This space houses all the accommodations and services needed to support the mosque: housing for the Imam, health services, and appropriate storage facilities. Along this frontal space, we also find an entrance to the base of the minaret and its services: stairs, control panels for lighting and sound (to broadcast 'the call to prayer' from the top of the minaret).

2 a thick, velvety material used to make carpet.

3 overall concepts, thoughts, decisions that inform the architectural design.



48-3

In addition to the space of the main prayer hall, usually reserved for men, women have their own counterpart prayer hall. It is located at the left side of the main hall (southeast) with a separate entrance and separate ablution facilities. The internal character of the women's quarter could be seen as a miniature version of the main prayer hall.

Located on the opposite side of the women's quarter is both the library hall and the educational part of the complex. It is accessed from the same porch and corridor hall of the main entrance of the mosque.

Although an integral part of any mosque program, Al-Tasamoh Mosque has only a small atrium that supposedly attempts to compensate for the lack of a formal courtyard or sahen. It is located at the back side separating the space of the main prayer hall from the space for ablution services and the toilets; its floor is mostly tiled, but on its margins there are simple planters at the back side, and an arcade that connects to the various activities of the mosque (including the school) in the front.

Figure (52-3)



49-3

48-3 Al-mihrab and part of the Quibla wall.

49-3 The prayer hall which includes the skylight strips on its sides.



50-3

Technology and Sustainability

The field visit's technical report stated that in this mosque sustainability is archived in several ways. Most noticeable of which is the subtle integration of the local population into both the building and management of the mosque. Employing local builders ensured competence of building with local materials, a conscious choice to reduce both the carbon footprint of the projects well as reduce costs to the lowest possible level.

As for the materials used, the technical report indicates that they were chosen to keep the need for maintenance to a minimum. In this design, the architect relied on employing the easiest construction methods available, and specified particularly the use of local materials proven to be most responsive to local climatic conditions. He also placed great emphasis on working personally with the builders skilled in building with local materials. Thus, at the level of the implementation processes and the synthesis of architectural forms, the architect tried to restore the semi-symbiotic Tunisian building traditions that depend on community participation. These traditions often convey the experience of manufacturing forms in a spontaneous manner. However, we cannot say that this attempt was completely planned in advance, as it was not part of the philosophy of design and architectural composition. Still, we must point out here to the valuable transfer of traditional sustainable formations which deal with the climate unprompted, without the need for mechanical support.

Conclusion

The virtues of returning to the simplicity of the early archetypal mosques of Islam as a reference point, is an approach that we have seen in more than one of the mosques of contemporary Africa – in this book in particular.

Now although the economic conditions of North Africa differ generally from their sub-Saharan counterparts, the Al-Tasamoh Mosque can be classified among the African experiments that places trust in the ability of modern mosque architecture to address the challenges of scarcity of economic resources, climate change, and social hardship.

From a formal point of view, the mosque presents a remarkable experiment that tries to redefine and interpret the traditional constituents of the mosque: the mihrab, the minbar, the minaret, and even the dome (or what compensates for it).

The choice for cladding the mosque with white stucco constituted not only a point of visual confluence between local Tunisian rural heritage and early modern architecture's Purism style, but also, and more importantly, the true spirit of Islam. Words are both generative and symbolic: the mosque of forgiveness... A heart that forgives, and, just as importantly, a heart that has been forgiven (by others, and most importantly, by Allah) is a heart that is clean, it is pure, it is white – hence our white mosque of inter-forgiveness!

50-3 Mass of the mosque.

51-3 A study model shows the relationship between the mosque components.

52-3 Ablution area.

53-3 Outdoor view showing the main entrance.



51-3



52-3



53-3

المؤمنين كتاباً موقوتاً

الإسراء والمعراج

AL-ESRAA AND AL-MERAJ MOSQUE

Multi-stories Worship Space

Al-Esraa and Al-Me'raj Mosque

- Location: Al-Khobar | Kingdom of Saudi Arabia
- Owner: Al-Hussain Group
- Architect: Saleh M. Al-Luhaidan
- Area: 2772m²
- Completion date: 2018
- Capacity: 750 worshippers
- Type: Juma'a Mosque



54-3



55-3

After recognizing its exceptional name, Isra' and Mi'raj¹, calligraphed atop the main façade, this mosque façade strikes us as being a 'screen' displaying the hadith of Isra' and Mi'raj in its entirety, as if it were displayed on a giant computer screen!

Furthermore, this 'screen' is no ordinary screen. It not only displays the words of the hadith, but has, moreover, a transparency built into it which allows the spectator to see through it into the background: silhouettes of worshippers standing, kneeling, and prostrating themselves in a most touching spectacle!

1 As described in the Qur'an and various hadith, the Prophet Muhammed (pbuh) made a miraculous journey in two parts on a single night: the first part (Isra') from Mecca to the Al-Aqsa Mosque in Jerusalem and the second part (Mir'aj) from Jerusalem to various levels of heaven.

Following the 'screen', in terms of visual and symbolic importance, comes the minaret, upon which is inscribed (90 degrees counterclockwise) a relevant Qur'anic verse: "prayer has been decreed upon the believers a decree of specified times,"² linking it to the element of time as such. This subtle metaphor, presumably, constitutes an original new 'reading' into the function of the minaret.

Thus it can be said that this mosque contains strong and original architectural idea/ideas, creating entirely new precedents that constitute an added value to our discourse of contemporary mosque architecture.

The Al-Esraa and Al-Mi'raj Mosque's architecture is linked, stylistically, to an artistic movement within the wider style of modernist architecture that highlights the value of the form (formalism) over all other considerations. This is what drew the attention of some users who believe that there is an exaggeration in the formulation of the prayer hall(s) with its(their) glass façades that reflect a style of an office building rather than the style of a house of worship – had it not been for the hadith displayed on it. It is perhaps understandable that the visibility to the outside of three praying floors on the façade (one on top of the other) contributed to this feeling, in contrast to the interior, which engenders a sense of being simple, compact, and satisfactory.

One of the issues that must be underscored, in our search (and re-search) for the identity of the mosque of the future, is the multiple, sometimes exaggerated, formalistic indulgence, as it represents a clear trend that tempts many designers around the world.

2 Qur'an 4:103.

54-3 The screen glass wall with Arabic calligraphy enscript the prophet tradition of Al-Esra' and El-Meraj'.

55-3 Site plan.

56-3 Geometrical mass configuration.

Figure (55-3) Figure (55-3)



56-3



The relationship of the mosque to the urban environment

As a project, the Al-Esraa and Al-Mi'raj Mosque started with a desire by the Al-Hussein Group in Riyadh to build a mosque that would meet the needs of the surrounding residential community. The architect, Saleh Al-Luhaidan, took advantage of this opportunity to design a contemporary mosque in line with the contemporary urban communities in the Eastern Province of the Kingdom of Saudi Arabia (KSA). Thus, he presented his design and judiciously suggested the name for the mosque.

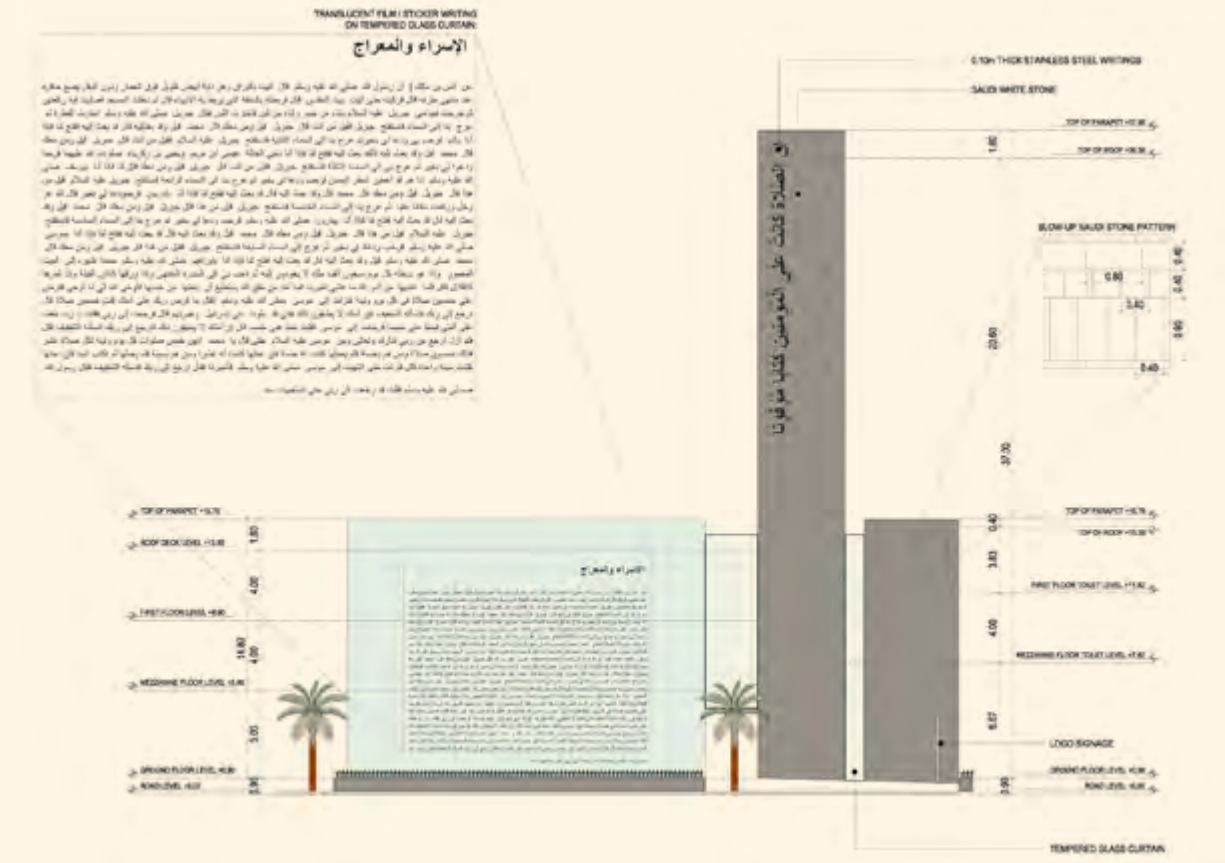
The mosque accommodates up to 500 male worshippers, divided into two floors, and about 250 women worshippers on the upper floor (the third level). Al-Esraa and Al-Mi'raj, and its ancillary facilities, cover a total area of 2,772 square meters, including a frontal space in the form of a public garden, which is a space that allows the mosque to adequately stand out before the surrounding neighborhood.

Figure (58-3)

The mosque is situated in a neighborhood inhabited by middle-class (to upper-middle class) families in the city of Al-Khobar, living in groups of multi-story residential blocks with a modern and simple design. Three of the mosque's side façades are located along the surrounding streets, while its main façade faces a public garden. The city of Al-Khobar is mostly flat and the site of the mosque is no exception. The city is laid out in an orthogonal grid pattern and the land on which the mosque is situated is subject to modern local urban planning systems in terms of shape, height limits, and setbacks, which requires a space of no less than two meters between the boundaries of the site and the mosque compound.

In general, the local character of the surrounding neighborhood of Al-Esraa and Al-Mi'raj expresses the prevailing architecture in the eastern region of the Kingdom, where the dominant residential buildings form a continuous, regular tapestry of blocks: a ground floor and a height of 5 floors coming together to form 'urban walls' that strongly define the streetscape. In terms of mass and height, this mosque is in harmony with the surrounding urban environment and merges with it, as is the custom of neighborhood mosques, especially since the Al-Esraa and Al-Mi'raj mosque does not contain a dome, appearing as if it were one of the surrounding buildings – had it not been for the existence of a minaret.

- 57-3 Ground floor plan.
- 58-3 Elevation.
- 59-3 The screen glass wall.



59-3



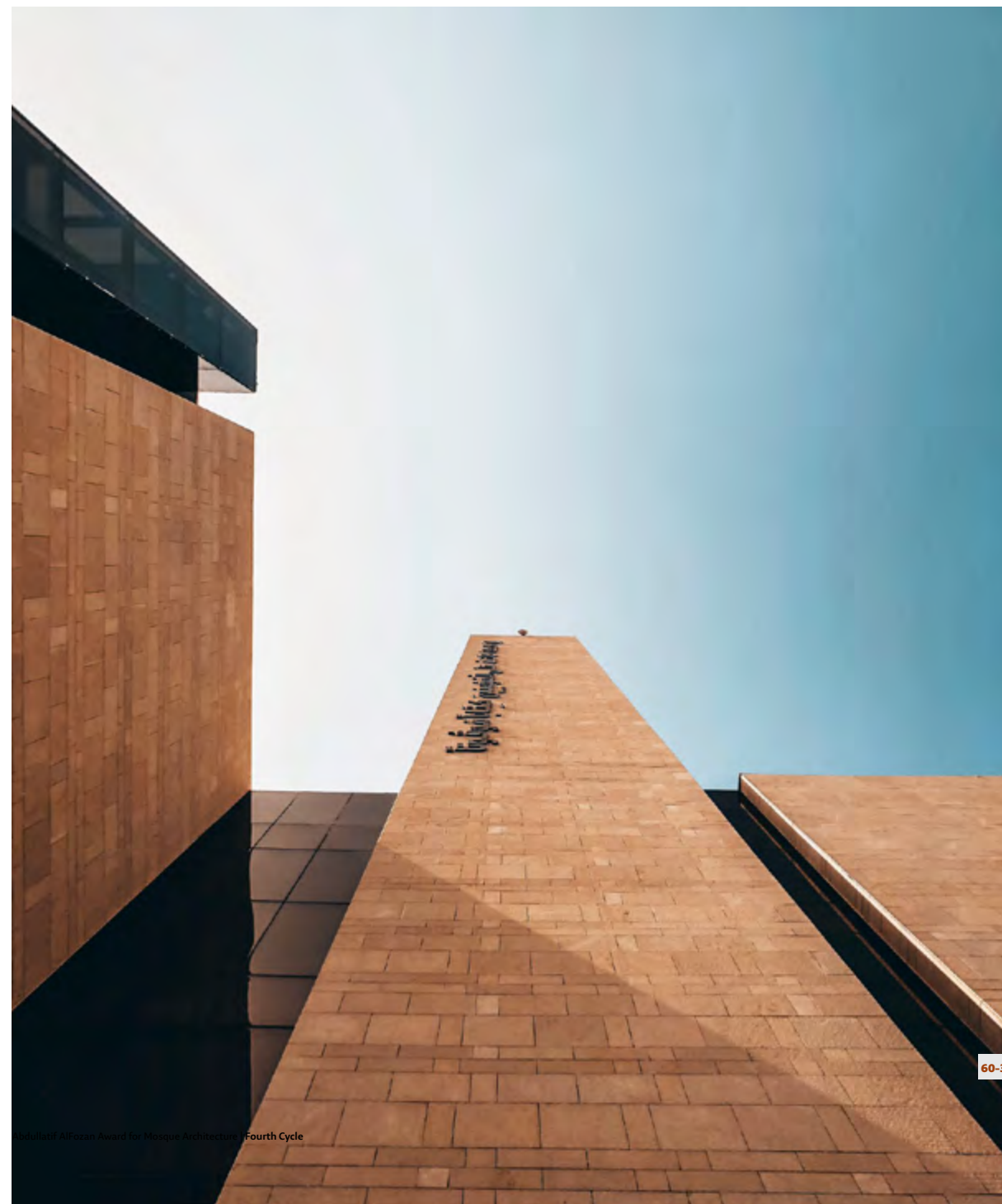
58-3

Analytical description of the building from the outside

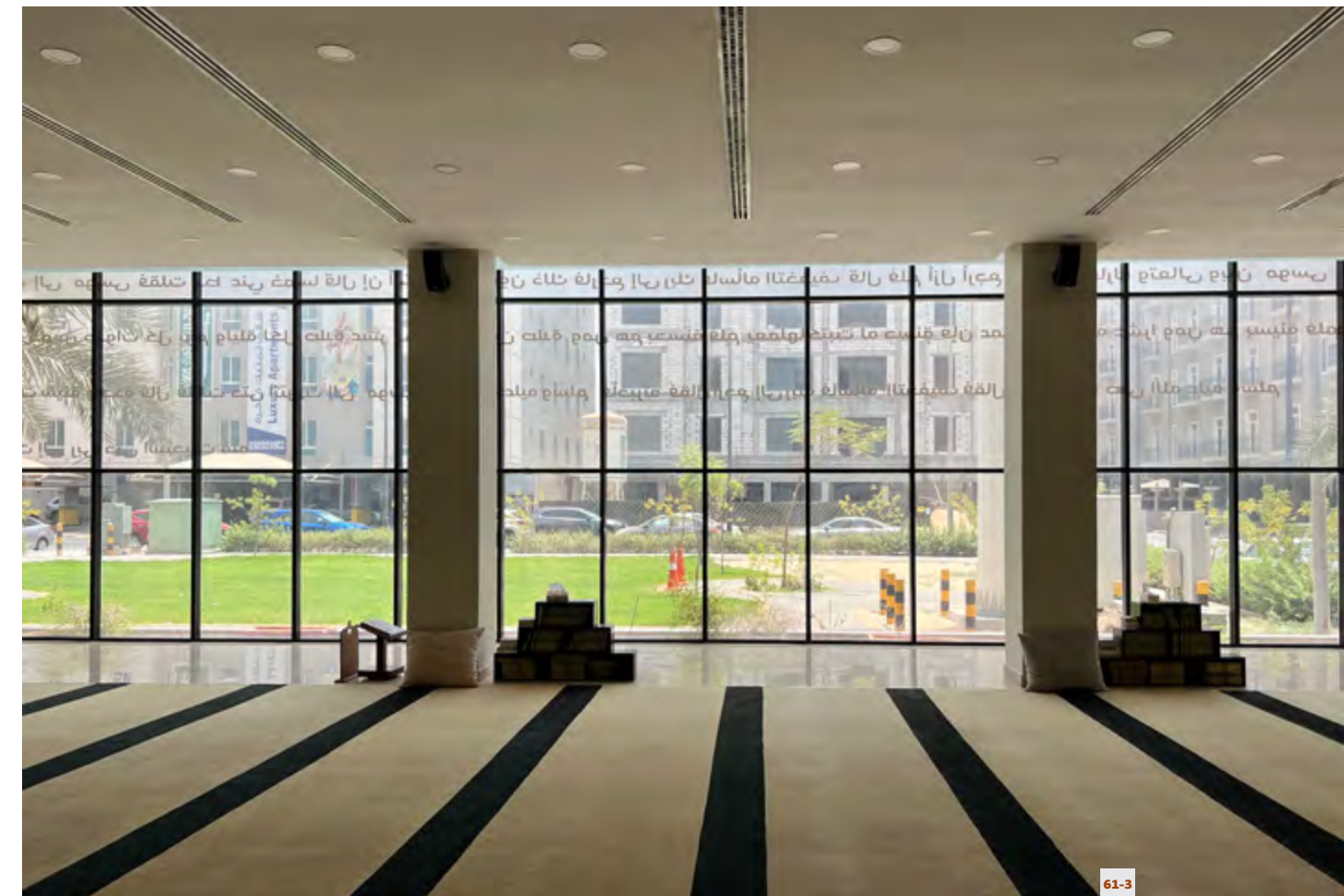
Within the aforementioned urban context, Al-Esraa and Al-Mi'raj was built in compliance with local municipal building guidelines. Nevertheless, it still captures the viewer's attention with its vibrant 'screen' façade and its high minaret (twice the height of the typical envelope). In addition to the minaret mass, the mosque is mainly comprised of two other disparate parts expressed by two separate volumes. Both the mosque volume and its service block are three spacious floors in height. As mentioned above, an expressive Qur'anic verse has been inscribed on it in a vertical way (uncommon to Arabic texts): "prayer has been decreed upon the believers, a decree of specified times," in clear indication that, although linked to the moment and its specific temporal dimension, a place of prayer is boundless and does not necessarily have to be framed by the built borders of a mosque. The philosophy of 'the moment and the place' which the mosque consecrates and embodies, is part of a universality that makes it a cross-cultural building type, fit for all places.

There is no doubt that the element that dominates the character of the Al-Esraa and Al-Mi'raj Mosque from the outside is its main façade (façade/screen) which displays the hadith of the Isra and Mi'raj. In contrast to its transparency, we find that the remaining façades of the mosque surfaces are solid, except for limited openings. These surfaces have been tastefully clad with alternating courses of local sandstone giving the façade a dynamic appearance akin to a cut into stone, revealing geological layers. This façade surface treatment mitigated the fact that they are solid, with a rather heavy impact. Contrastingly, the linking bridges, connecting parts of the mosque with each other, including the minaret, were built completely of reflective glass, which helped preserve the definition of the basic masses and articulate their independence.

The main entrance to the prayer space was placed to the northeastern side for several reasons and constraints, especially so as not to disturb the formal integrity of the façade/screen by any penetrations that could have otherwise robbed it of fully expressing its intended design idea. Also taken into account was the architect's provision of a special entrance for women from the northern façade. Furthermore, all public entrances were isolated



60-3



61-3

from the entrances to the residence of the imam and muezzin in the northern façade of the mosque in order to provide them with the greatest degree of privacy and keep their circulation separate from that of worshippers in general.

The constituent building blocks of the mosque are separated from the neighboring property lines by the small community garden, which contributes to the provision of sufficient distance in front of the viewer to fully perceive the screen that displays the noble hadith. For this reason, the main entrance was made from the back opposite side of the building. Now although the entrance is somewhat hidden from the surrounding streets, it gives a sense of privacy and intimacy that we find in the alleys of old towns, with their calmness, serenity (and 'filtration') before entering the worshiping atmosphere inside.

Analytical description of the Al-Esraa and Al-Mi'raj Mosque's interior

The plans of the mosque (and the visitor's personal practical experience) show that its built environment is very compact in terms of functional distribution within its allocated land parcel. The standard requirements for each of the mosque's functions have been secured in an effective and comfortable manner, both horizontally and vertically. The mosque's block contains three floors, a floor and a mezzanine for men with a height of 5 meters and 4 meters, respectively, and an upper floor for women with a height of 4 meters. The service block is placed on the other end of the minaret so that its circulation facilities (staircase and elevator) are more usable for worshippers (mainly elderly and handicapped worshippers)

As for the rear residential block, it was allocated spacious spaces on three floors for the guard, the muezzin³, and the preacher (imam). Their living quarters were designed on the lower floors and sleeping on the upper floors, in a way that provides privacy for the two families in question. At first glance, it seems that the ratio of the masses of the services of the mosque and its curators occupies a large area in relation to the size of the mosques as a whole. This is one of the features of mosques in the KSA and the Gulf countries in general, who allocate areas for the residence of the curators of the mosque and in many cases attached to it. This policy is to ensure the proper functioning of the mosque as a social institution on the one hand, and on the other hand, in pursuit of a decent life for both the muezzin and the preacher, so that each of them performs their duty in the best way possible.

³ The muezzin performs the 'call to prayer', typically from the top of a minaret.

60-3 One of the prayer halls.
61-3 External view of the mosque.



The interior spaces of the Al-Esraa and Al-Mi'raj Mosque are generally characterized by a minimalistic style, especially apparent in the walls/surfaces of the main prayer hall. The actual prayer floor surface, which is carpeted, is offset from the bordering walls by a two meter marble gangway for circulation (this is a new design concept), then comes the four columns that perceptually define the praying surface proper.



62-3



63-3

The interior spaces of the Al-Esraa and Al-Mi'raj Mosque are generally characterized by a minimalistic style, especially apparent in the walls/surfaces of the main prayer hall. The actual prayer floor surface, which is carpeted, is offset from the bordering walls by a two meter marble gangway for circulation (this is a new design concept), then comes the four columns that perceptually define the praying surface proper (see photos and section). This design approach holds for all three floors.

The walls/surfaces of the prayer hall(s) are pure white paint on three sides: eastern, western and northern. The fourth wall/surface, however, is the transparent façade screen on the southern side. The screen interface with the interior provides filtered lighting for all mosque spaces (all three floors).

The niche mihrab is located on the western side of the praying hall, facing Makkah, of course. It is part of an integrated rectangular cuboid that contains the space of the imam (prayer leader). To its right and left are two small service rooms, one for sound control equipment and the other a small office space. Behind the mihrab directly (only on the ground floor) there is an elegant sub-space, called 'maqsura', reserved for the elderly and handicapped; the maqsura consists of comfortable (folding) white seats specially designed by the architect and custom made.

There are some neat built-in 'pockets' along the entrance hall reserved for various uses, such as shoe racks, drinking water fountains, stack shelves of the Holy Qur'an, etc. This 'integrated' method of designing the serving spaces supports the mosque's minimalistic style so that no visual clutter obstructs the prevailing atmosphere of purity.

Technology and Sustainability

Except for the sophisticated 'screen' element, the mosque was built according to the simple construction techniques prevalent in the eastern region of the Kingdom: in-situ reinforced concrete for the overall structure and slabs, with concrete blocks for the partition walls.

The technical report, especially prepared for the award, stated that the technical building systems: electricity, water, sewage, and telephone lines are all conventional. The electrical wiring is simple. As usual, lighting fixtures are used, and floodlights placed in protected white concrete boxes to light the exterior front facades at night.

The climate in the city of Al-Khobar is hot and humid (35-45 degrees Celsius) during seven months of the year; humidity can reach a staggering 90% during the hot season, forcing the architect and the rest of the technical disciplines to deal with these harsh conditions by appropriate orientation and isolation strategies in a way that reduces dependence, as much as possible, on mechanical and electrical means of climate control, thereby minimizing energy waste.

62-3 Chairs for old people.

63-3 One of the internal walkways.

64-3 The prayer hall and the screen glass wall as they appear in one of the sides.



64-3



65-3



66-3



67-3

The technical report also stated that the presence of neighborhood gardens and the surrounding inner streets, wind scoops, and continuous urban street-walls helps to significantly reduce the effect of humidity and heat inside the mosque during approximately two-thirds of the year. The environmentally conscious design of the building envelope resulted in creating a special microclimate, allowing for a sound level of environmental performance that reduces energy costs for the building.

Conclusion

A careful examination of the Al-Esraa and Al-Mi'raj Mosque helps us to better understand the dilemma of contemporary mosque architecture; not because this mosque expresses it, but rather because it highlights the absence of standards governing mosque architecture in our present time. With the exception of the always present fixed function of prayer, mosque architecture is currently freed from all compositional and technical restrictions, especially after the present 'disengagement of form'; i.e., mosque architecture's liberation from the traditional elements of the mosque: the dome and, at times, the minaret. This so called 'liberation' is resulting in the current period of 'instability' that mosque architectural design is going through, a transitional stage that requires a lot of pondering from all concerned with the conceptualization, design, and development of new mosques in order to direct and mature it.

Although this mosque occupies a simple and modest spatial volume in its surrounding environment, and despite its commitment to local urban planning standards, in terms of the shape of its final massing, it contains a unique element, manifested in the 'screen', an element that constitutes a direct leap towards a twenty-first

century mosque architecture. Surely, this screen architectural element represents the state of what we might call 'experimental innovation' that characterizes current mosque architecture, in the absence of what can be agreed upon as criteria defining the mosque's identity. Of course every experimental endeavor has its pros and cons, accordingly, and in this light, the Al-Esraa and Al-Mi'raj Mosque could be considered an experiment worthy of particular attention.

A bold experiment like this could perhaps only come from a young architect who is proficient in state-of-the-art (digital) design tools enabling him to venture into introducing new aesthetics emanating from those tools. Aesthetic appreciation of a mosque like this may be difficult for the general public (especially senior citizens) who grew accustomed to the stereotyped image of a conventional mosque. But, on the other hand, it is arguably quite appealing for the aesthetic taste of the new generation, born with electronic 'screens' surrounding them from an early age, using it for play, study, and work... Nevertheless, it is remarkable that our young architect here uses the screen, with heightened religious

65-3 Ablution area.

66-3 Part of the external mass.

67-3 The minaret and part of the screen glass wall.

Figure (67-3)

sensitivities, to display a fundamental sacred text in the Islamic tradition, in a contemporary, innovative, and striking way: scale wise and material wise! The text of the hadith, according to the religious scholars, occupies a central religious position, which makes it worthy of not only being presented in its entirety, but celebrated with great reverence, as it constitutes the very basis of prayer and its point of departure: Muslims did not know prayer before it was 'revealed' through this Hadith. Therefore, it could be comfortably stated that it is, canonically, the authoritative text for all mosques and, by extension, the basis of all mosque architecture!

All things considered, by way of constructive criticism, a simple reservation, or let's say fear, is in order here. The fact that the speed of technological change may put us in front of a situation in which we look at 'screens' as a thing of the past – an outdated idea.

Thus it can be said that although, through his design, the architect introduced a pioneering idea regarding the pressing question of contemporary mosque architecture and its future, still, and at the same time he provokes other questions that generate

new problems about the sustainability of the aesthetic taste of human products that rely and bet on fast-moving technologies, that architecture, as such, may not be able to cope and keep up with! Accordingly, the fear here, is of a potential backlash resulting from the public's feeling of alienation that could lead them to a return to the past, with the illusion that it is a safe 'identity zone' so to speak, a 'familiar' style, even if the past style is artificial, false – even vulgar!

THE BIOCLIMATIC COMMUNITY MOSQUE

Community and Climate

Masjid Darul Ulum | Universitas Pamulang

Location: Pamulang, South Tangerang City, Banten Province | Indonesia

Owner: Universitas Pamulang

Architect: RAD+ar, Jakarta, Indonesia

Area: 1200m²

Completion date: 2020

Capacity: 1000 worshippers

Type: Juma'a Mosque



68-3

Figure (68-3)

Right from the outset, its unusual title, *The Bioclimatic Community Mosque*, reveals the intentions governing its design idea(s).

Considerations of climate change and environmental degradation now float on the surface of a profession that has been, until recently, hostage to formalistic currents and endless futile debates about tradition and modernity, especially in the contemporaneous discourse on mosque architecture. As a vital professional field, architecture is required to take a position commensurate with the challenges of upcoming environmental dangers. Accordingly, the *Bioclimatic Community Mosque* represents an unequivocal pioneering experiment in line with the discourse of sustainability in architecture.

In this regard, the architects (the RAD+ar (Research Artistic Design + architecture) studio in Jakarta, lead architects Antonius Richard and Partogi Pandiangan) revealed their intentions thus: "the *Bioclimatic Community Mosque* aims to address the fundamental issues of mosque design by distancing itself from current architectural discussions based on form and focusing solely on the core of the religious space." (our italics)

68-3 Main mass of the mosque showing different skin colors.

69-3 Night view of the external elevation.



69-3

Figure (69-3)

In order to distance themselves from these discussions, the architects resorted to embracing the environmental discourse and adopting it as a justification (or even an alibi) to evade incorporating 'traditional' elements of the mosque that they consider "populist, unauthentic and unnecessary." They elaborate on this concept: "The design replaces the iconic Islamic dome (often a key feature of mosques) with an active green roof, to cool the upper part of the building and reduce the significant overheating generated by the adjacent urban environment..."

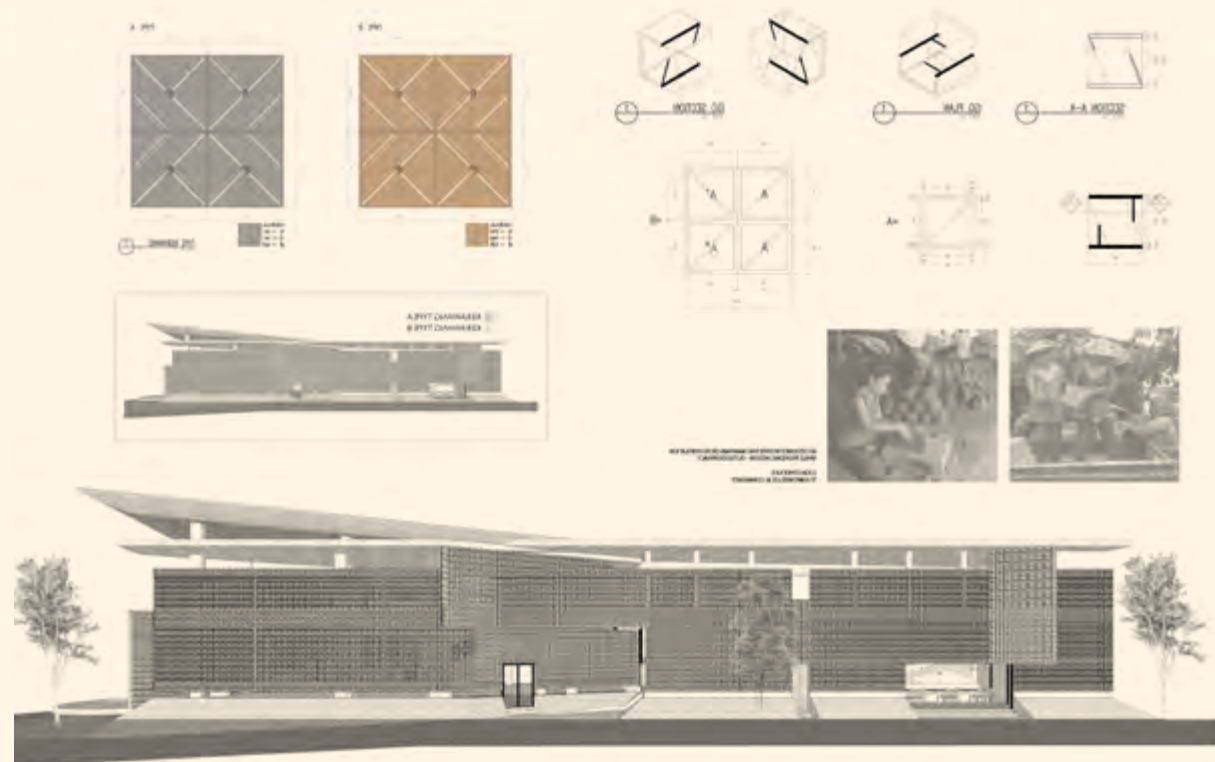
Here, the architects explain (or justify) their position regarding historical mosque architecture and its heritage, by saying that it is not a coup or revolution against this heritage, but rather "an act to redefine mosques' spaces in the context of postmodernism and on the basis of urgent necessity." "Necessity" here represents what these (clearly visionary) architects perceive as the occurrence of a "force majeure" ('greater impact', a term typically written into formal contracts to handle major unforeseen events) within a very real, although unwritten, contract between architecture, as such, and society; a necessity dictated by the eminent dangers that may occur as a result of neglecting environmental considerations in architecture and urbanism for decades. 'Neglect' being a key word, as architects, all architects not just those on the 'fringe', should have known better, and known much sooner, but this admonition is especially relevant for Muslim architects of mosques, for Abu Sa'ïd al-Khudri reported: The Messenger (peace be upon him) said: "Life in this world is sweet and green, and indeed, Allah has made you viceregents [stewards] there to see how you will behave."

On the other hand, we can say that a critical examination of the forms produced by the architects may confirm their modernist backgrounds and visual references, albeit indirectly, or perhaps unconsciously. Their plastic compositional treatment of volumes and surfaces of the mosque is reminiscent of the De Stijl school (Gerrit Rietveld, in particular). But they climatically adapted them with perforated surfaces that allow cross ventilation (as well as benefiting from the thermal properties of clay) instead of solid surfaces, and gave them less sharp industrial colors than the colors of the Bauhaus and the De Stijl schools. In short, its design can be seen as a subtle adaptive-reuse of this modernist style to suit today's pressing environmental challenges.

In such context, we are supposed to look at this 'trend' as a message to the contemporary practice of architecture in general, and mosque architecture in particular. It seems that attention to technology without environmental sensitivity is prevalent in current mosque architecture, and it appears that current architectural practice is drifting behind easy solutions. Creating forms that primarily respond to the climate may be a praiseworthy trend, similar to traditional architecture which was based on this important, rather structural correlation. But this does not at all mean that we should duplicate those experiments that occurred in the past, with their different conditions; rather, we, as a profession, are charged with the sacred duty of presenting fresh, new ideas that incorporate the spirit of the times, provide functional (and spiritual) value to inhabitants, and inspire and enliven all who encounter our carefully, intentionally, lovingly architected built environments. Perhaps this is what this mosque seeks to put forth.



70-3



71-3

The relationship of the mosque to the urban environment

The Bioclimatic Community Mosque, known locally as the Darul Uloom¹ Mosque, was completed for the University of Pamulang in 2020. It was built within the campus of this private university, which is located outside the borders of the capital, Jakarta, to accommodate approximately 1,000 people. The mosque is mainly used by students and staff of the university, but it is also provisionally open to the public.

It is clear that one of the goals of this mosque is to emphasize the Islamic identity of the university. Pamulang is a district in the south of the city of Tangerang, which in turn is located in the province of Banten. The southern city of Tangerang enjoys a unique geographical location as it is adjacent to the capital, Jakarta, and part of its metropolitan area. Pamulang is the most populous area in the south of the city of Tangerang and has an estimated population of about 310,000, the majority of whom are Muslims, but the local culture is based on Islam, Hinduism, and Buddhism, which makes the mosque in the heart of the university campus a message of confirmation of identity, read by every member of the community.

The mosque is located on the corner of two prominent roads within the campus: one leading to the campus gate, and the other to/from the multi-story parking building. A high school students' canteen is located on this road, and as a result, almost every student or employee passes in front of the mosque every day. In fact, this mosque is open to all, making it closer to a comprehensive community mosque, rather than just a musalla (similar in function to a Christian 'chapel', a relatively small space for worshipping Allah) for the university. Students, and pedestrians in general, can easily reach it through the campus gate whose buildings are characterized by contemporary design with wide glass façades. While the mosque does not contrast starkly with these buildings, it still has a warmer character due to its use of mud brick materials, with its warm colors that distinguish it from the rest of the university buildings.

Analytical description of the building from the outside

Formally, the Bioclimatic Community Mosque is characterized by its simplicity, a simplicity embodied by its main grey cuboid mass, a mass firmly embedded in the ground (by sloped lawns). From this cuboid, several planes of different colors shoot-off to create further minor sub-volumes. Most of these volumes appear fairly light because their surfaces are perforated and semi-transparent. It is interesting to know that the architect had originally meant for these walls to be solid, but after the outbreak of the COVID-19 pandemic, he modified the design and replaced them with perforated mud brick courses that allow for healthy cross ventilation.

The volumes of the mosque thus do not display any of the distinctive characteristics of traditional mosques. There's no minaret, no courtyard, and no dome. The dome was replaced by a thick slab in the shape of an inverted green roof with softly curved corners (in the manner of roofs designed by Le Corbusier)², in order to absorb the harsh rays of the tropical sun. It is noticeable that architects in this part of the world (East and Central Asia) have attempted to create a sort of 'parallel heritage' to prevailing mosque architecture, one that engages in a meaningful discourse/dialogue with history without surrendering to it or falling into its 'trap'. Although in its infancy, it seems that this attempt may lead to major changes in the perception of future mosque architecture.

1 Darul Uloom in Arabic means House of Knowledge or Science.
2 Especially in Chandigarh.



72-3



73-3

70-3 Ground floor plan.
71-3 Section and skin studies.
72-3 Details of the local brick that allow air and light to enter the inner spaces.
73-3 Night view of the external mass.



74-3 Part of the external mass shows the main entrance.
75-3 Part of the external space.
76-3 Woman prayer space.

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Figure (75-3), (76-3)

One of the points worth mentioning is that the services of the mosque were not integrated under the roof of the main haram (sanctuary/prayer hall) block, but were rather horizontally attached to it, extending in the form of two low 'wings' to the left and right of the haram. These two wings further accommodate a wide range of services: in addition to restrooms and ablution rooms, there are offices and shops, as well as a spacious cafeteria for students and visitors.

Analytical description of the interior of the building

The interior spaces of this mosque are characterized by the purity and simplicity of surfaces left untouched and devoid of color or decoration. Even the floor surfaces were not covered with any carpets or other floor covering. This may be difficult to understand for most mosque-goers in the rest of the world, but this design seems to be quite acceptable locally. Indeed, it has been noticed that a fair number of worshipers bring their own small praying carpets with them spreading them on the grounds of the mosque to form a remarkable mosaic-like informal tessellation. From our point of view, this practice may be very appropriate from a health point of view, as it is known that mosque carpets quickly become a source of annoying odors as a result of the moisture reaching them from worshipers after ablution.

The simplicity and neutrality in the colors of the defining surfaces of the haram is only violate, intentionally of course, by the surface of the Qibla wall; built of translucent yellow marble, it is lit from behind to create a dramatic contrasting effect, especially at night. On the other hand, it is noted that there are internally placed plants and trees to compensate, with their vitality, for the absence of decorations on one side of the sanctuary, as if the external garden had crept into its inner space. Tree branches and line-formations of the natural marble 'veins', work together to give a natural biomorphic 'decoration' commensurate with the general idea of the Bioclimatic theme of the project.

The mihrab was 'carved', so to speak, into the aforementioned marble Qibla wall, albeit with straight lines, corresponding to the character of the building as a whole. Over the mihrab's inner wall, the two major Islamic testaments of faith (the Shahabas)³ are

3 Bearing witness or testifying that "There is no deity but Allah" & «Muhammad is the messenger of Allah"

carved on wood in beautiful calligraphy; on its right and left the words (Allah' and 'Muhammad') are also symmetrically affixed (according to tradition). These are the only 'decorative' inscriptions to be found in the entire mosque that may be related to traditional mosques and their conventional signs or semantics.⁴ Furthermore, on each of its sides, the mihrab is bordered by two small rooms: one for the imam and the other for storing copies of the Holy Qur'an. Interestingly, both are accessed from inside the wide space of the mihrab on its right and left.

An essential part of the overall image of the inner space of the sanctuary is its exposed structural system, namely, the rows of cylindrical columns covered in stainless steel. The visual impact of these columns is accentuated by elliptical recesses that pierce the suspended false-ceiling to reach, directly, the structural slab. The former ceiling is pure white and has hidden lights within its oval cut-outs, similar to their counterparts on the edges of the prayer hall.

There are two large openings in the ceiling located directly below the skylights; their function is to allow natural light to flood into the prayer hall. A further secondary set of skylights span the south side of the hall above the interior dry garden, where the architect conceived planting trees and shrubs with the intent of blurring the boundary between exterior and interior. In addition, soft diffused light comes from the perforated walls surrounding the space, making natural lighting sufficient throughout the day without the need for any artificial lighting.

4 However it is noted in the different photos that they have changed several times.

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The simplicity and neutrality in the colors of the defining surfaces of the haram is only violate, intentionally of course, by the surface of the Qibla wall; built of translucent yellow marble, it is lit from behind to create a dramatic contrasting effect, especially at night.



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Conclusion

This design of the Bioclimatic Community Mosque is based in its entirety on an important Bioclimatic premise. Thus, before us is a building that represents an exceptional experiment in keeping with the spirit of the times – by responding to the main challenge facing not only its location but the globe as a whole: the climate crises.

One look at its anatomical section shows that we are here in the presence of a mosque building that belongs indeed to an architecture of the twenty-first century, a building liberated from the superficial stylistic 'burdens' of the past and looking towards the future.

The subtitle of this mosque (Darul Uloom Mosque) is further indicative and completes the message of its main title (The Bioclimatic Community Mosque), as the architects, in designing the mosque, rely on a scientific background and an ecological vision that reflects an environmental awareness on the one hand, and a moral bet that mosque buildings must be at the forefront of buildings that preserve the environment, not just as worldly duty but as sacred

religious obligation! In this sense, it can be said that the architects of this mosque were not satisfied with raising questions about the future of mosque architecture, but rather took a brave step to present an experiment – and some answers – that, in turn, raise further questions about contemporary practice in general...

Giving environmental matters the forefront of design considerations does not in any way negate the success of the basic function and raison d'être of the building – worship. A look at the last photo (underneath), an image of the bright mihrab façade, shows that the worshiper will leave the mosque with a truly exceptional spiritual experience!

Figure (82-3), (83-3)

81-3 Al-mihrab and the prayer hall.

82-3 Internal details.

83-3 Visual domination of the skin block.

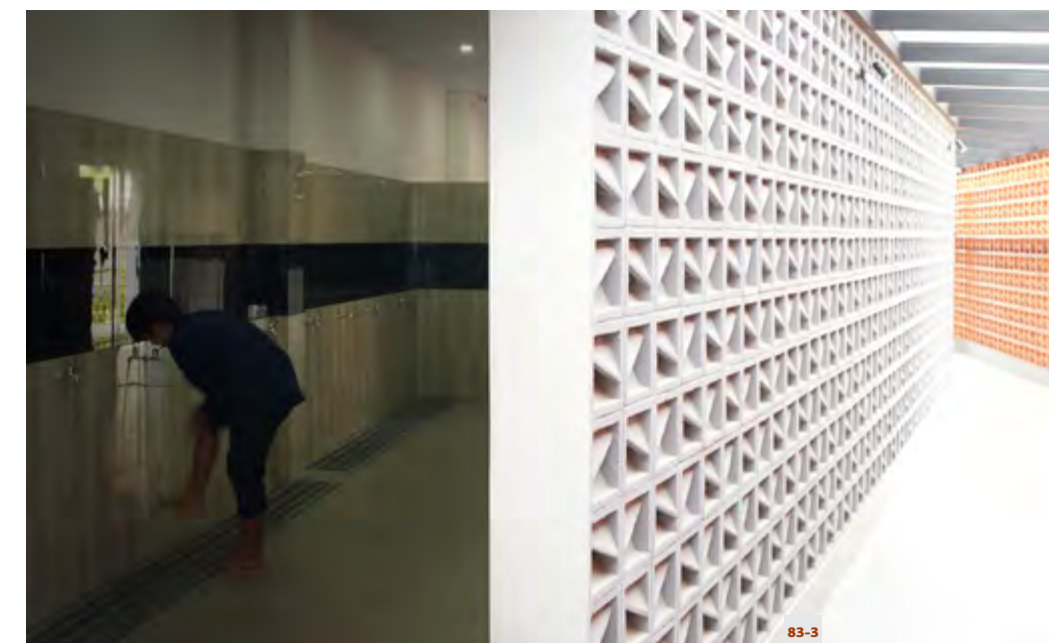
81-3



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GARGASH MOSQUE

Past and Present

Mohamed Abdulkhaliq Gargash Mosque

Location: Dubai | UAE

Owner: Mohamed Abdulkhaliq Gargash

Architect: Dabbagh Architects

Area: 1680m²

Completion date: 2020

Capacity: 650 worshippers

Type: Juma'a Mosque

Preserving the traditional elements of the dome, minaret and mihrab, it is remarkable how this mosque adopts a refashioning strategy of a familiar architectural language in an abstract, elegant way to suit the spirit of our age, without alienating the common perceptions or expectations of the public.

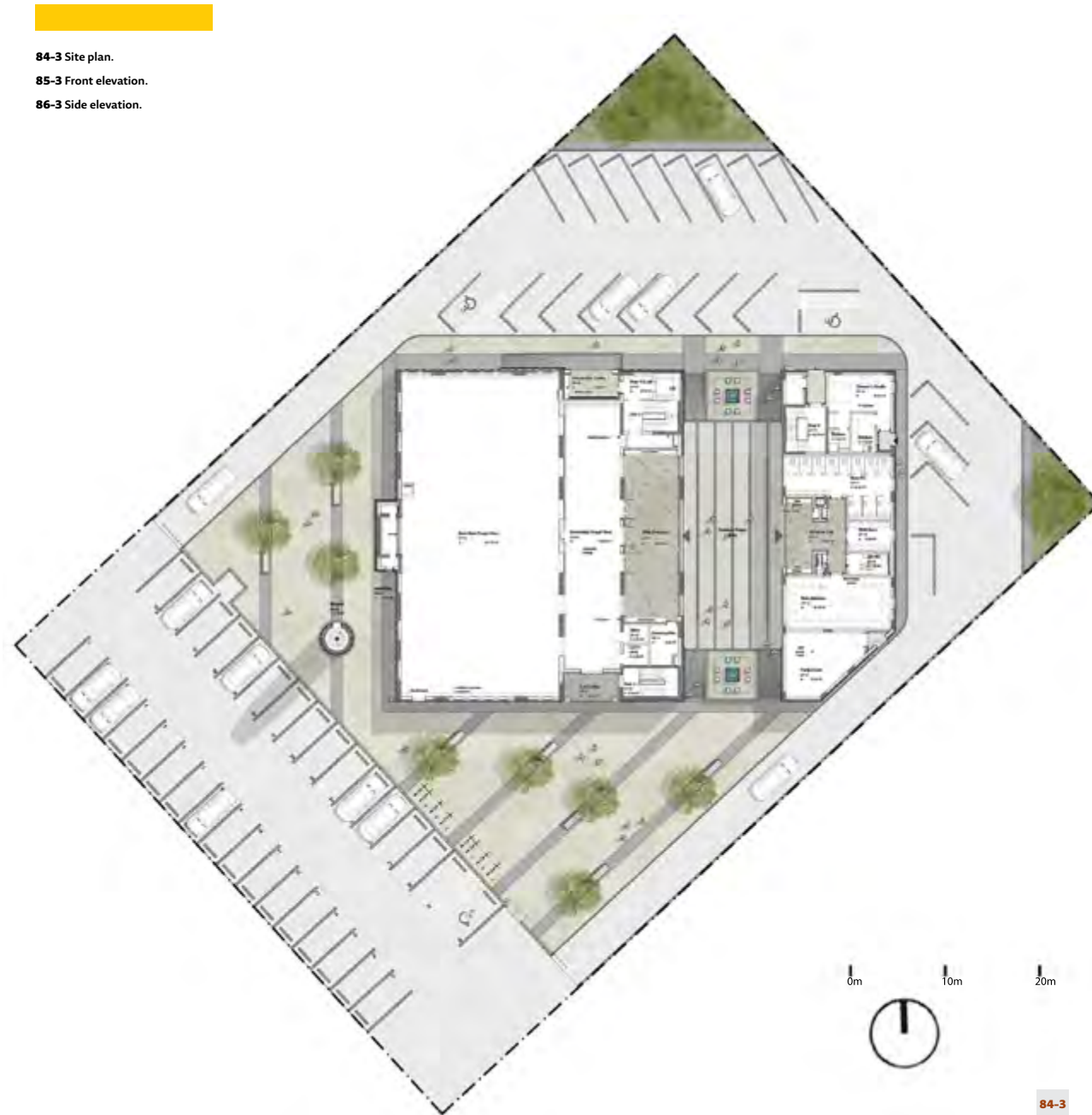
However, the main traditional element that the architect is credited with modernizing is her new vision for the traditional courtyard of the mosque, which she reimagined by providing a novel, foyer-like covered space. It is worth noting that the Gargash Mosque is the first mosque in the United Arab Emirates and the Gulf to be designed by a female architect: Ms. Sumaya Dabbagh.

The relationship of the mosque to the urban environment

The Gargash Mosque provides a serene, spiritual space for prayer in the Al Quoz district, in the heart of Dubai's busy industrial district. It extends over an area of 1,680 square meters, and can accommodate up to 500 men and 150 women. The family of the late philanthropist Mohamed Abdulkhaliq Gargash made a donation to build the mosque as an ongoing sustained charity. The choice of the site was intentional as they wanted to dedicate a special place for worship to support the vibrant industrial community in Al-Quoz:

"Creating a space for worship was a very particular design challenge. Prayer is a devotional act. It requires the worshipper to be totally present. With all the distractions in our modern busy lives it can be challenging to quieten the mind and find an inner calm to allow for full immersion into prayer," says the architect, "Through the design, a series of spaces are created that allow the worshipper to transition from the busy outer world and prepare for an inner experience."

Figure (84-3)



84-3 Site plan.
85-3 Front elevation.
86-3 Side elevation.

This was the statement of the architect given to the technical reviewer of the award, Mrs. Gemma Chidiac, when they talked about the intellectual backgrounds of the mosque's design. Accordingly, the mosque was designed to be a contemporary place of worship that is characterized by calmness in its general form, in its use of building materials, and in its treatment of natural light.

It should be noted here that Ms. Somaya Al-Dabbagh is a UK-educated Saudi architect with more than 25 years of experience. She is the founder of Al-Dabbagh Architects Company in 2008. The Gargash Mosque is the first religious project designed by the office and is among the first mosques designed by an Arab female architect in the UAE. The design process began in 2017 AD and took two years to be approved. The contract was signed in 2019 AD for the construction of what the architect describes as "the jewel of the industrial area," to be completed by June / July 2021.

The mosque is located in the heart of an industrial area and has been allocated a rectangular 'block' that has been defined by a fence of low height. It is worth noting that the mosque is not placed, with its masses on the ground, parallel to its defining lines, but rather in a clear deflection, as is observed in Islamic cities, in order to face the Makkah- Qibla direction. Within these determinants, the main design strategy used was contrasting the industrial context of the project, with its movement, activity, and crowding with an otherwise calm and reassuring place during times of prayer and throughout the day. This was achieved by the concept of sequential filtrations: a series of spaces embodying gradual transitions between the external, everyday world to the realm of the internal spiritual experience.

The overall configuration of the mosque consists of three elements, two adjacent blocks separated (and connected at the same time) by a large shaded space. The first block contains the prayer space (haram) or main sanctuary, on two floors; the ground floor for men is surmounted by a mezzanine 'suddah' for women. The second block on the other hand is the mosque services block. It is comprised of two levels also: the ground floor is for ablution and sanitary services, while the upper is dedicated to the residence of both the imam and the mosque's custodian.



85-3



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Figures (85-3), (86-3)



87-3



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89-3

Figure (88-3)

Figure (89-3)

Figure (90-3)

Separating the two blocks is an innovative space that the visitor may find the most comfortable and eye-catching element of this project, what can be called the mosque's court (sahn). However, because of its relatively small width, it was appropriate to cover it lightly with two perforated canopies, each of which rests on one of the two blocks of the mosque; these two canopies do not meet, but rather, in a clever design way, almost touch each other at the top.

This middle, foyer-like courtyard space, performs several important functions at the same time. It is an integrated reception space, which redirects the visitor towards the sanctuary space on the one hand, and on the other hand directs him to the public services of the mosque (the ablution area). However, the space contains at its farthest ends two outdoor ablution areas that allow the visitor to perform ablution without entering the service block opposite the sanctuary.

This space is a foyer for a sort of psychological 'preparation' for prayer...it is a place for taking off shoes, performing ablution (wudu) in preparation for salah (prayer), and subsequently entering the sanctuary. In addition, the configuration of the paving tiles of this courtyard are parallel to the lines of the prayer room carpet; this suggests that it is equipped to be a place for outdoor prayer in the event of appropriate weather or in cases of overcrowding. Suffice it to say that the court has two ramps at both ends for people with special needs ('people of determination' (أصحاب الهمم) 'ashab alhimam) is the newly suggested term in Arabic).

Analytical description of the mosque from the outside

The two cubic blocks of the mosque are separated/connected by a courtyard, constituting quite a simple, straightforward formation. In general, the purity of these two blocks, is only disturbed by the prominence of the dome at the top of the sanctuary, in addition to a less prominent mihrab at the Qibla wall. A few meters away from the block of the sanctuary, a slender, white (very) cylindrical minaret is located separately to complement to two other blocks.

To treat the surfaces of the two blocks of the mosque and its minaret and to adapt their abstract volumetric language to the requirements of the well-known semantics of Islamic architecture, a complex strategy was adapted to subject these surfaces to a special kind of ornamentation. An attempt was made to interpret traditional Islamic patterns in addition to the Arabic calligraphy represented by selected Qur'anic verses, in a modern way.

87-3 Ground floor plan.

88-3 Section.

89-3 Main elevation showing the minaret, wall of the prayer hall and the transitional sheltered space.

Figure (90-3)



90-3

Figure (91-3)

As for the ornamentation, a triangular shape motif was selected, and 'contemporary' variations were contrived on it. The method of deriving the adopted ornamental pattern comes from a computer generated matrix that has become widely used in treating the surfaces (skin) of buildings in what is known as 'parametric' architecture.

Regarding the Arabic calligraphy, we find that the Qur'anic verses are presented in the form of a continuous strip, slightly recessed into the surface (debossed) surrounding the building (serving as a protective incantation that preserves it, as indicated by the architect).

The boundaries of the plot of land on which the mosque is built have also been considered in the overall design scheme by means of soft and hard landscaping. The hardscape treatment generally began with appropriating the fence surrounding the plot. Its surfaces were treated using the triangular ornamental unit that dominates the entire building, in the form of holes in the wall, thus consolidating its relative lightness and transparency. The hardscape treatment also included the edges of the sidewalks and paving that are designed to designate their function.

90-3 Engraving details of the prayer hall wall.

91-3 Light and shadow on the covered transitional space.

To the external treatment described as hardscape, external ablution elements can be added in the space of the middle in-between foyer, which appear as if they were abstract, cubic sculptures. In addition, urban furniture and fixtures (seats, drinking fountains, shading and lighting elements) are also added. In terms of the soft-scape garden treatment, plants are strategically placed to emphasize a smoother filtered transition between the crowded outside world and the quiet interior space of the mosque.

Analytical description of the mosque from the inside

The design and treatment of the interior spaces of the mosque do not differ much from those of the outside, except in degree, but not in type. We find it an extension of the ornamental treatment based on the triangular unit, but with greater detail and intensity. This treatment extends from the walls to the dome (the 'false' ornamental dome located below the structural dome), where its ornamental form was used to filter natural light. Furthermore, the same design strategy was applied to the mihrab, which, in itself, became more like an interior lantern during the day and an external lighting element at night, to the extent that some called this mosque the "Mosque of Light." The architect explained this by saying:

"The use of natural light enhances the feeling of spirituality and the sacred, the connection between the earthly and the divine. The openings are deliberately placed to amplify the skin action."


Figure (92-3), (93-3)

Figure (94-3)

Figure (95-3)

91-3





“The use of natural light enhances the feeling of spirituality and the sacred, the connection between the earthly and the divine. The openings are deliberately placed to amplify the skin action.”



92-3

Despite the aforementioned ornamental treatment, the general character of the building remains abstract and simple “to reduce distraction and straying mind during prayer,” as the designer put it. In addition, the ornamentation extends to form a perforated screen (mashrabiya) to allow privacy in the women’s prayer area above the main hall. However, the feeling of connection to the main hall below languished.

Technical Analysis and Sustainability

From a structural point of view, the building was built mainly using a simple reinforced concrete system. The biggest challenge in the construction was the implementation of the precast GRC perforated panels (for ornamentation) and anchoring them to the walls in an integrated manner with the structure. Therefore, the project relied on two types of structures: an orthodox conventional structure found in the minaret, and a cave-like structure found in the prayer hall, while the ablution area and the Imam’s residence remain orthodox in their structure.

92-3 The covered transitional courtyard which connects the prayer hall with the other services.

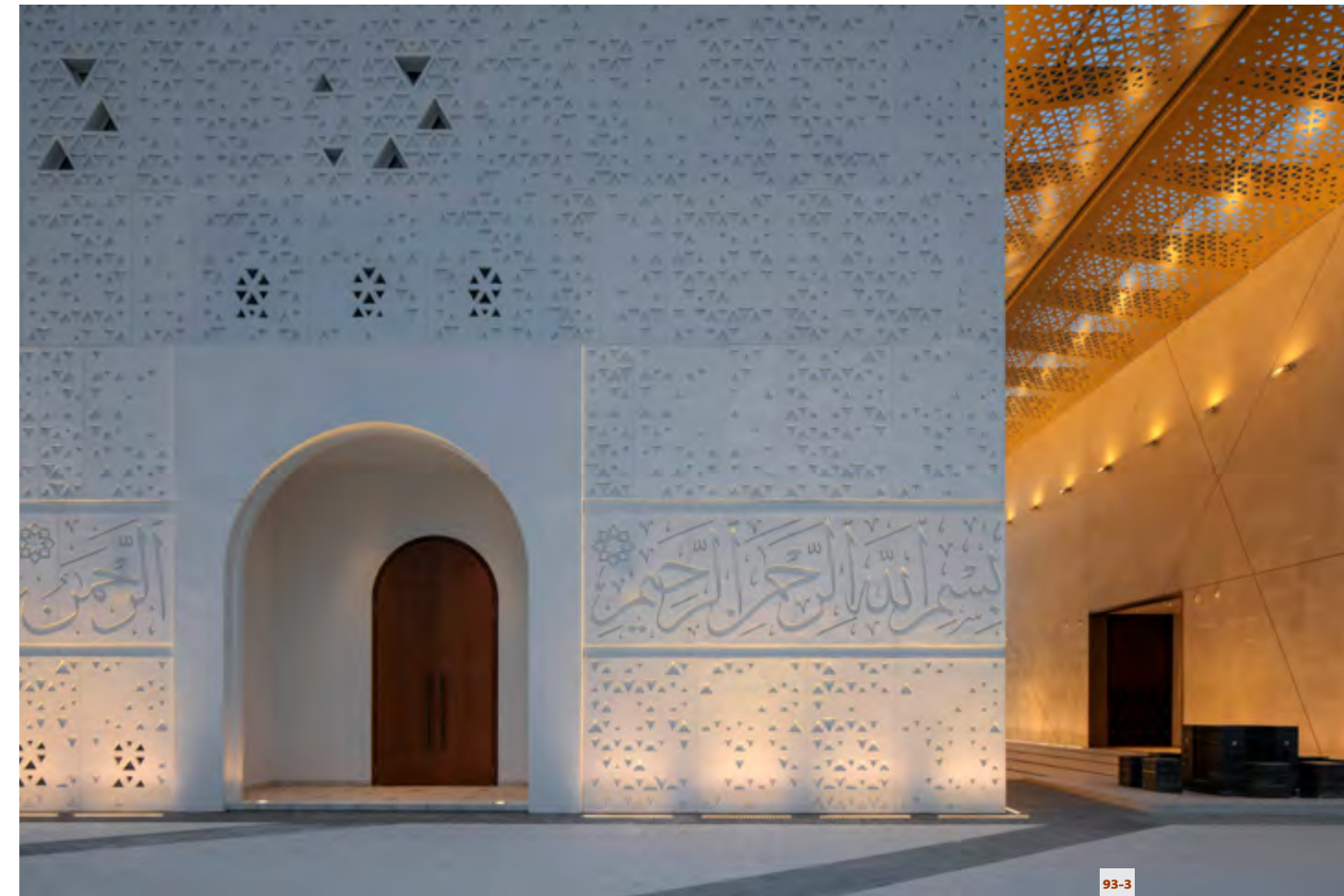
93-3 The main entrance and part of the prayer hall external hall.

94-3 Al-mihrab and part of the internal Quibla wall.

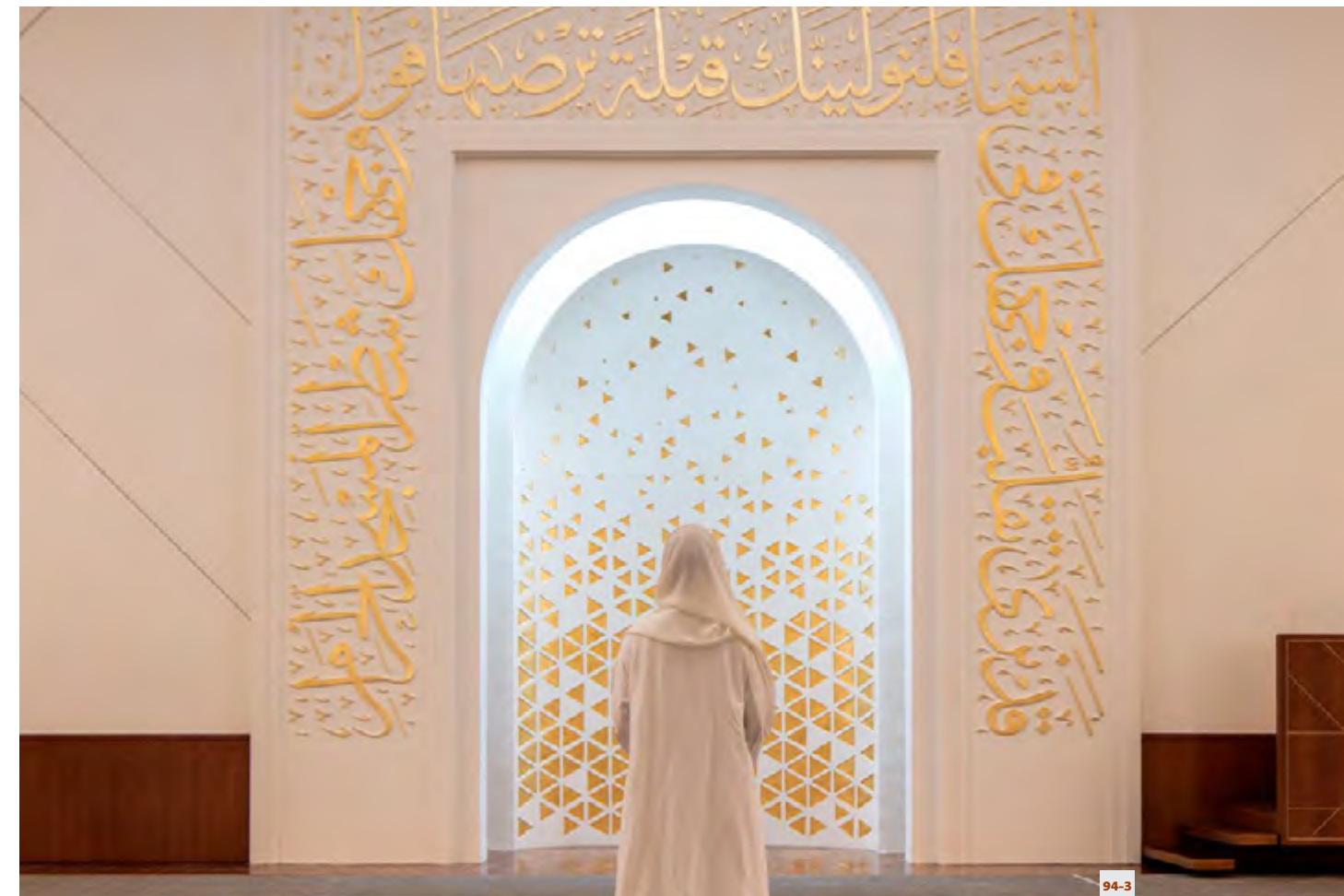
The dome’s structure is comprised of prefabricated steel connected with beams that allow for a hollow area in between in which the technical equipment could pass. Furthermore, it becomes a structural support for the interior skin using tension cables.

It is noteworthy that the use of the suspended ‘false’ dome contributed to improving the level of natural acoustic performance in the prayer hall. However, several speakers were added to better transmit sound at certain points in the sanctuary’s space. Furthermore, the canopy in the outdoor ablution area acts as a ‘filter’ for noise coming from the busy outside world and contributes to a fairly smooth, more gradual transition into the prayer hall.

The architect set out to adhere to the sustainability standards dictated by local (and international) regulations. With this in mind, care was taken to employ well-known and tested architectural treatments such as avoiding large glass openings, as the minimum number of openings was intentionally designed to treat light so that it is more effective, and at the same time contributes to reducing heat gain, thus reducing the energy load on the building. Any large openings that the building needed (such as those in the residences) were taken care of through setbacks, or Mashrabiya barriers.



93-3



94-3

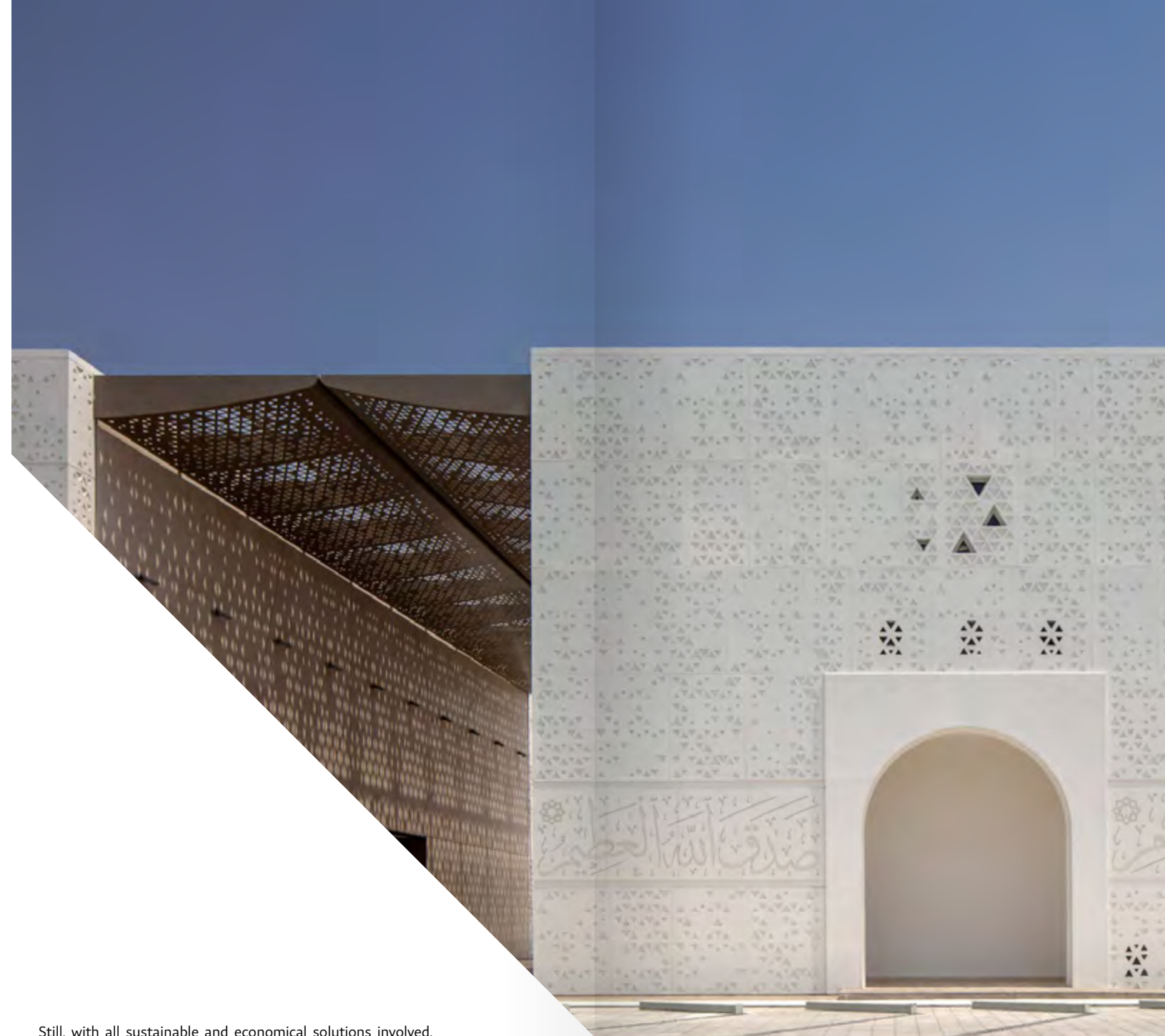


95-3

Several strategies were also included in keeping with sustainability standards to reduce energy and water consumption such as temperature control by the BMS to avoid over-cooling the building. Moreover, the use of locally handcrafted materials, such as GRC, hard surfaces and locally manufactured tiles/paving, is supposed to have helped in reducing the carbon footprint of the building that would otherwise result from importing materials from far away. The architect's office specified the materials from the local/regional market: stone from Oman, concrete, aluminum, cladding, carpentry and ceramics from the United Arab Emirates. This was a boon for the project when construction was disrupted on other nearby projects due to Covid-19 movement restrictions as well as the Suez Canal blockage disaster. This allowed construction to proceed, albeit with a slight delay.

On the other hand, the conscious orientation of the canopy allowed the prevailing winds to increase the cooling efficiency in this area through natural ventilation. The panels of natural ventilation devices for the prayer hall are placed at a lower level to facilitate natural fresh air (these are concealed by internal cupboards and perforated panels in the façade). Furthermore, the following environmental control elements have been implemented:

- Energy saving systems such as solar water heaters have been installed on the roof to supply hot water to sanitary areas and reduce energy consumption.
- Water saving devices for ablution and toilets have been implemented to reduce water consumption.
- Artificial lighting was provided through energy-saving LED lamps.



96-3

Still, with all sustainable and economical solutions involved, the budget was always in check through every stage of the design.

The materials used require minimal maintenance apart from cleaning in high traffic areas (i.e., the ablution areas and prayer hall) as would be expected in a building of this type. All exterior materials were selected from local sources or specially manufactured for the purpose of implementing the mosque and were tried and tested on multiple projects in the hot UAE climate.

The building is in its first year of operation and is still under a one-year defect liability period. However, the overuse of chemical cleaners on the reconstituted stone tiles did cause some material damage that could be corrected, but the cause of the damage has now been eliminated.

Matters of mechanical, electrical, and structural techniques have been resolved in a way that remains true to the building's design language, indicating that, for example, the appearance of the roof of the upper building from the level of the vehicular bridge passing along it necessitated making the mechanical services submerged under the roof masonry, as they were hidden in a delicate way in the early MEP service design strategy.



In terms of social sustainability, taking into account the transitional nature of the local community in Dubai meant that direct participation with an existing community was not possible. However, the choice of site by the client was intentional as he wanted to provide a spiritual and serene space for prayer for the industrial community of Al Quoz - although it was a community constantly in flux, so the mosque felt like an oasis resting place for the caravan passing by.

Conclusion

Although the Mohamed Abdulkhaliq Gargash Mosque does not make a substantial contribution outside the mainstream or present an interpretive experimentation in terms of providing a pioneering vision for contemporary mosque architecture, it is still highly effective and very successful on the social level, containing simple functional solutions that serve its community very well. Here, the simplicity offered by this mosque can be thought of as an attractive option for many mosques being built around the world.

We must give credit to the elegant technical solutions that matched the general formation, especially the external context, as they did not conflict with it, but rather enhanced its likable presence.

In general, this example can be considered as a kind of compromise between the blatant geometric formations that contemporary mosque designers are forging and the traditional straightforward replicas. In addition, this mosque represents the main link of communication in a transitional society, as it reflects the effective role of the concept of acquaintance, even if it is a transitional ephemeral acquaintance: in its daily function, it smoothly gathers the otherwise fragmented industrial society around it.

95-3 Night view of the mosque.

96-3 The harmony in the main elevation.

DIFC GRAND MOSQUE

Between the Sustainability and Visual Appearance

DIFC Grand Mosque

Location: Dubai | UAE

Owner: DIFC

Architect: RMJM Dubai

Area: 1347m²

Completion date: 2020

Capacity: 500 worshippers

Type: Juma'a Mosque

Contemporary mosque architecture reflects a clear shift from the visual elements and aesthetic values on which mosque architecture arose and took on its strict identity throughout history. Despite current debate and disputes regarding “what shape the mosque is or should be” there are still those who believe that its historical stereotype remains, or should remain, the bases for any innovation.

The design of the Dubai International Financial Center’s DIFC Grand Mosque presents us with a noteworthy example of a contemporary mosque whose design language attempts to be compatible with that of a modern commercial center. As the mosque is considered one of the icons of the globalization scene in the 21st century, it allows for a revitalization of the debate about the boundaries that could perhaps be crossed by the form of a contemporary mosque.

Amidst the skyscrapers of the Dubai International Financial Center’s Gate Avenue area, a viewer from afar is attracted by the sophisticatedly shaped low volume, in front of which is a slender vertical mass. In moving a little closer to the structure, one slowly realizes that it is an unusual mosque building. Visual identification is further enhanced by the presence of a minaret surmounted by a crescent and wrapped by a screen of Islamic pattern. However, as soon as one reaches the immediate vicinity, one is positively assured of the identity of the building because of the sight of worshipers praying behind wide glass façades on both sides of the building.

The unfamiliar idea of transparency between the interior and exterior of a mosque presents us with quite a shock. It is conceivably a shock similar to that conferred on buildings by the pioneering architects of the Modern Movement in the West, with regard to the style of transparent office buildings – and even residences (the glass houses of Mies van der Rohe and Philip Johnson).¹

With this similar introduced transparency, and in keeping with the commercial spirit of the surroundings, worshipers here are virtually ‘showcased’, becoming, in a sense, the exhibited ‘commodity’! Saying this however, does not necessarily entail negative criticism or censure. Rather, it is an indication of the extent to which an architect may stretch in search of ideas in order face the challenge of designing a mosque that belongs to such a place and time.

Regretfully though, the positive audacity of the architect’s utilization of the idea of transparency soon fades away by his treatment of the upper part of the building. There, he invokes ordinary, familiar, added decoration (the Mashrabiya) with little innovation, contrary to what the lower transparent base had promised us...

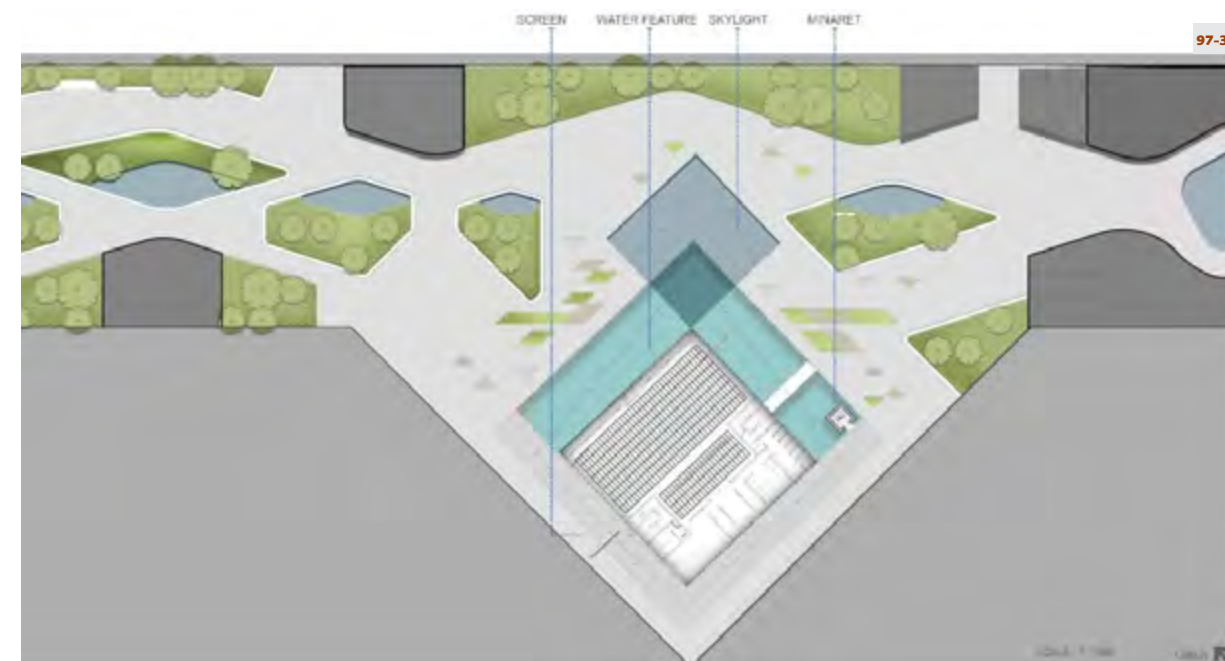
It seems that the designer succumbed to the challenge of presenting what he, or his audience/client, would consider to be an explicit indication of an ‘Islamic identity’ of a mosque, the traditional stereotypical manifestation of which still seems to mean a lot to the public and could not be easily evaded or shuffled off!

1 See, The Shock of the New, Art and the Century of Change, by Robert Hughes. Thames and Hudson, 1991.

Figures (97-3), (98-3)

Figures (99-3), (100-3)

97-3 Site plan.
98-3 The mosque within the urban tissue of the financial district.
99-3 Studies for the development of the building mass.



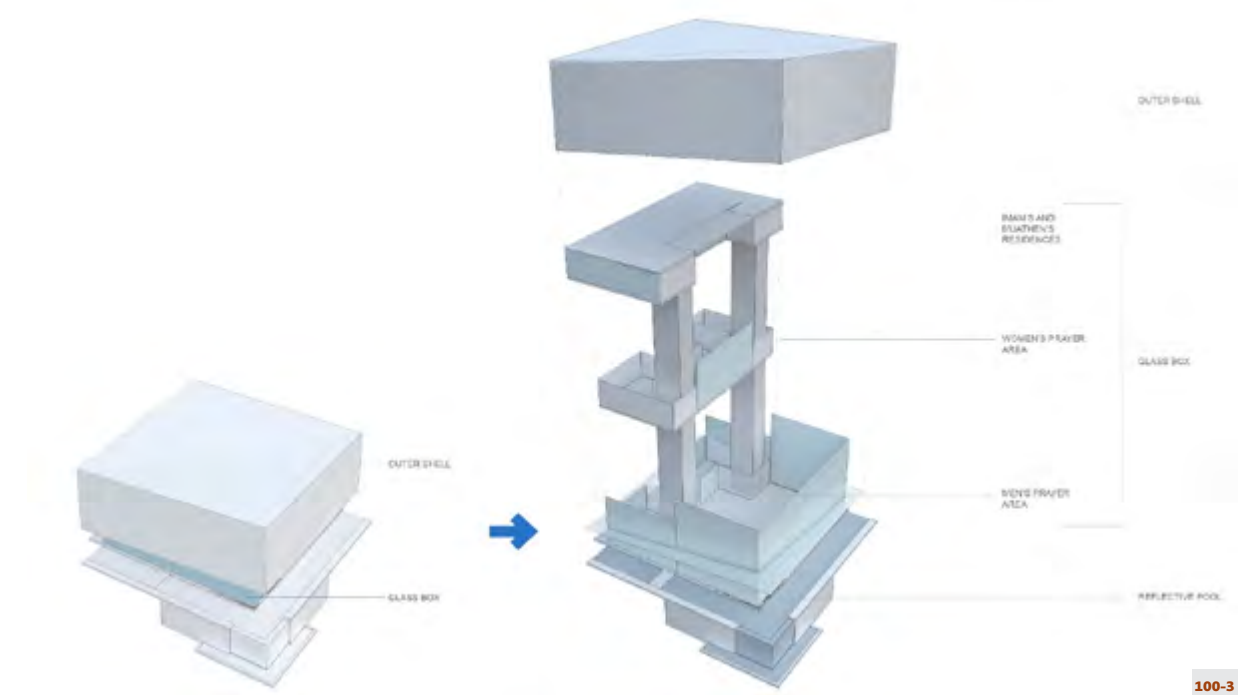
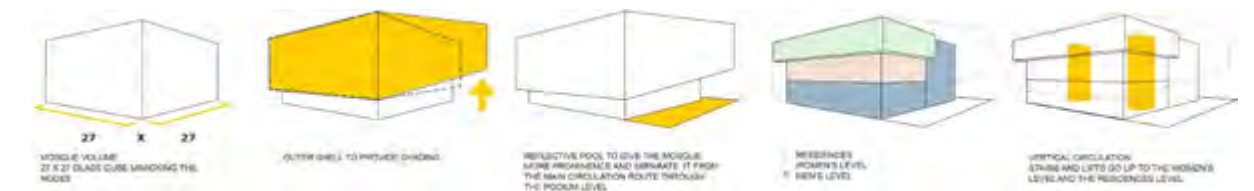
The relationship of the mosque to the urban environment

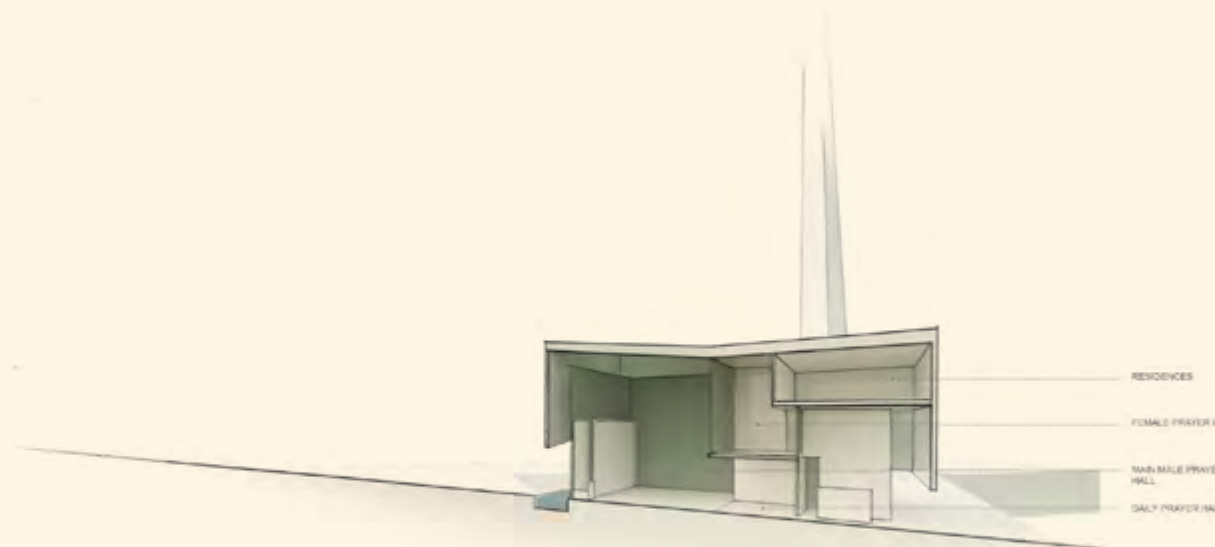
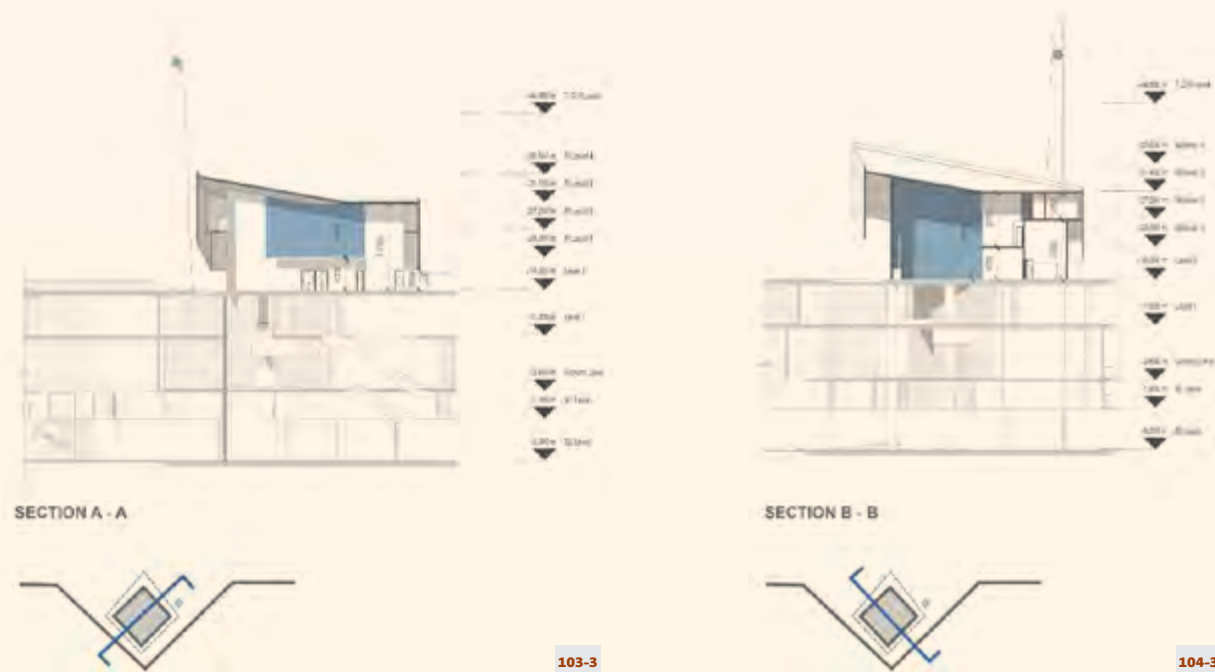
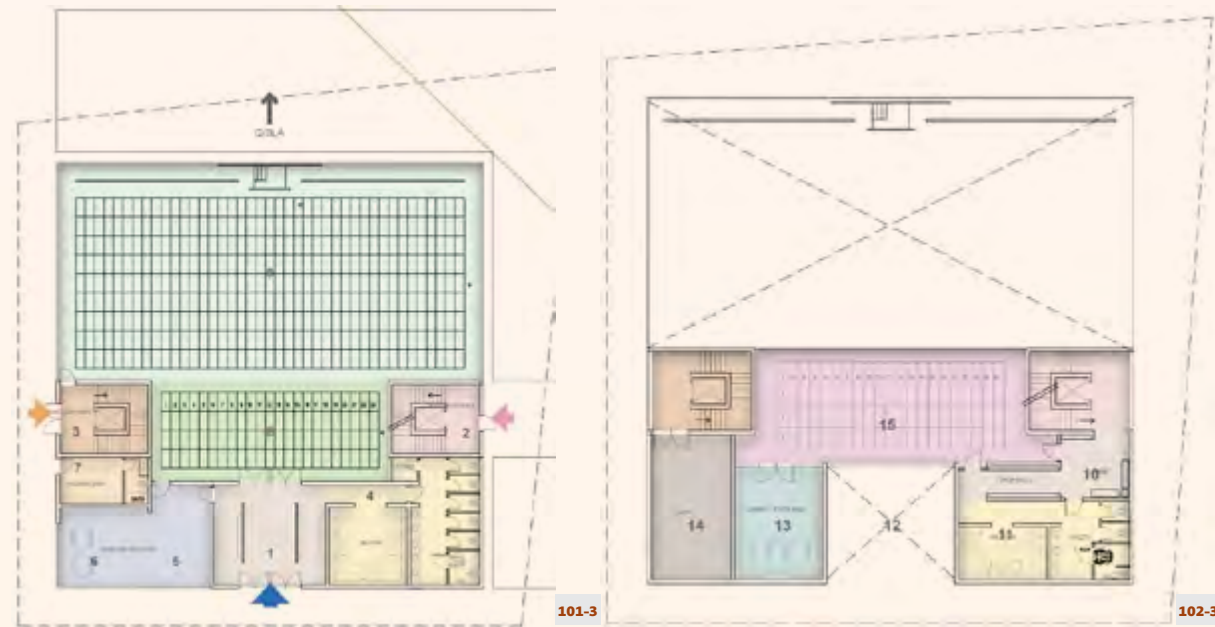
The DIFC Grand Mosque is located within the Gate Avenue project in the heart of the Dubai’s International Financial Center (DIFC). It is noteworthy to mention from the outset that it is the first commercial/entertainment project in the Middle East to be awarded the LEED Gold Certification for Sustainability. It was also shortlisted for the D3 RIBA Gulf Festival of Architecture 2020. The project was further shortlisted for the Great Campaign, UK.

The general strategy of the RMJM project plan was to utilize what it called a ‘spine’ that contains continuous, convergent services, to meet the direct demands of its business community. The demand for the presence of active retail in general, provided a window of opportunity to design an interesting network of various streets, each in turn encouraging walking rather than driving. They wanted the general public, who are accustomed to traveling by car, to discover what walking through these streets can offer in terms of a unique shopping experience.

With their diverse atmospheres, the design of these lanes aims to enhance the position of the Dubai International Financial Center as a world leader both in the world of finance and in shopping. With this in mind, facilitating pedestrian access to the mosque was one of the main objectives of designing the streetscapes leading to it.

Since RMJM designed the entire retail spine, with all its services and facilities, it was important for them to identify a most convenient location to build a mosque that would blend well with the particularity of this place and suit it. A decision thus was made to establish a large congregational mosque (jāmi’) that would accommodate about 500 worshipers. It was to be built on the platform above the commercial spine below.





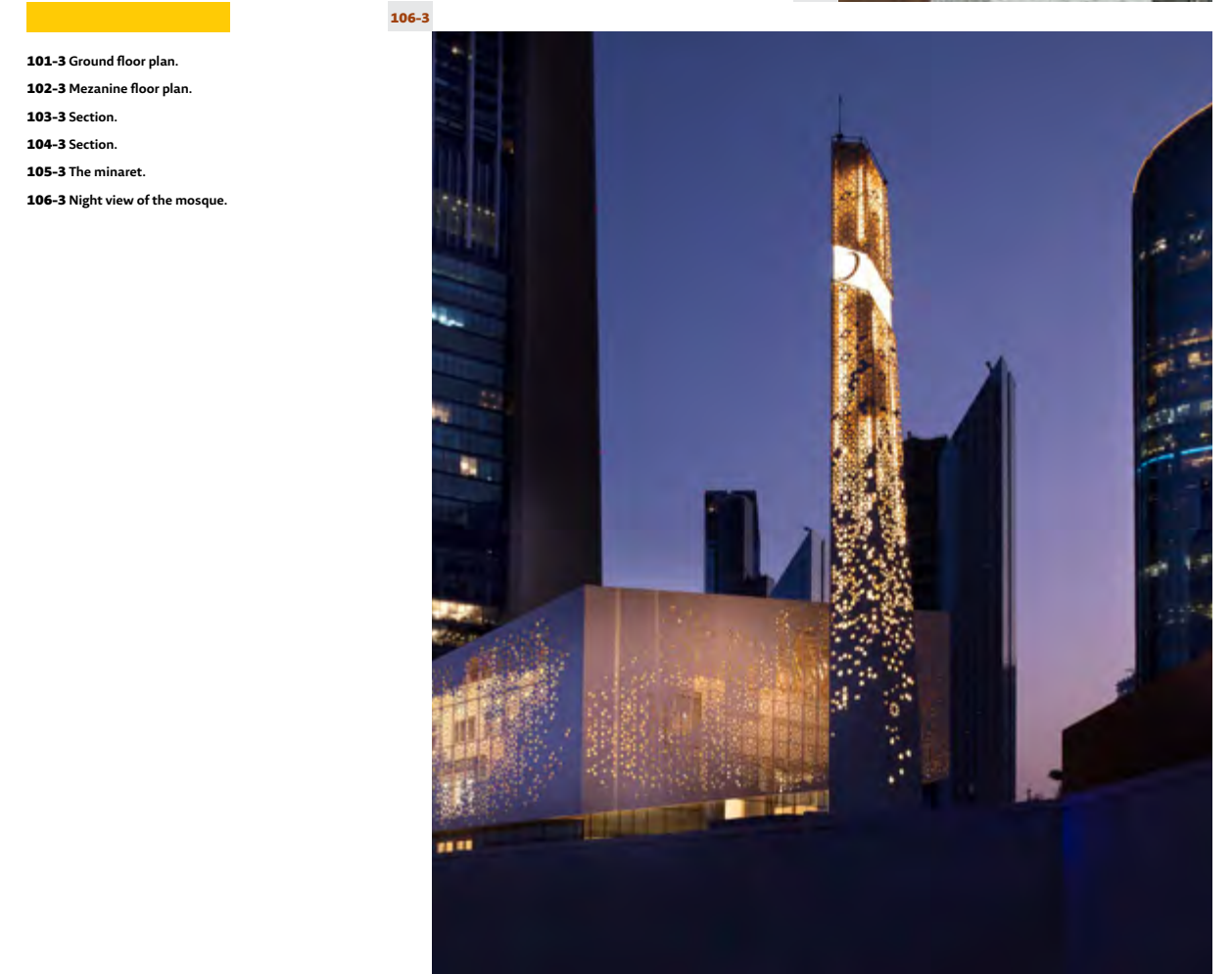
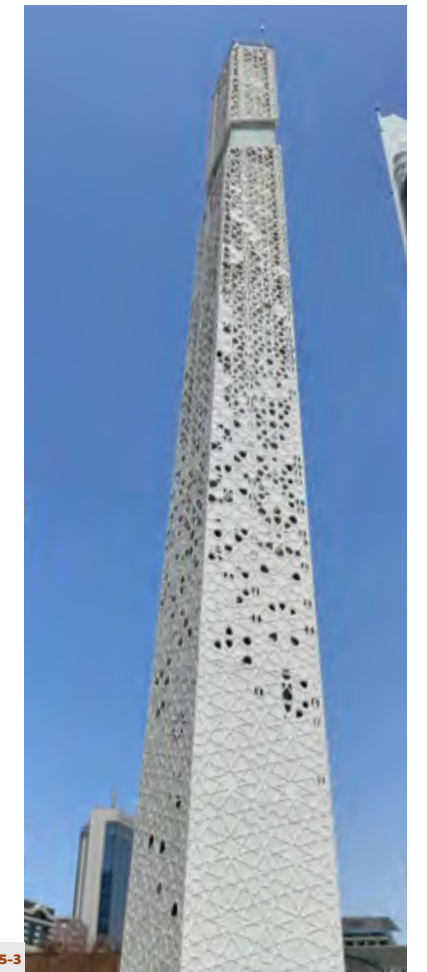
Interestingly, the decision was for a mosque, not a musalla,² contrary to the case in most commercial centers. A mosque in which the five daily prayers are to be held as well as Friday and Ramadan Tarawih rituals. Also taken into account was the requirement of making it accessible and serviced 24 hours a day from street level through elevators and escalators.

In addition to the internal capacity of the mosque, it was noticed that the possibility of praying in the outer area, just behind the mosque, can accommodate an extra 675 worshippers in case the mosque is full on the inside. The mosque also includes a mezzanine for women's prayers, a small library, and two residential suites for the imam and muezzin.

The mosque was constructed in the form of a simple glass cube enclosed by a perforated decorative screen slightly inclined towards the Qibla. The perforations vary in density according to the desired intensity of external light penetrating into the various internal spaces. The architect has stated that the design of this decorative screen was inspired by its use in traditional Islamic architecture. He refers to it as a reinterpretation/appropriation of the Mashrabiya to suit a contemporary context. This so-called "reinterpretation" undoubtedly raises many controversial questions, as it has been overtly overused, time and again, in many a contemporary experiment in mosque design, albeit with varying degrees of success, some of which are poignant and others – just vulgar and kitsch.

2 A 'musalla' is a small type mosque or praying room.

Figures (101-3), (102-3)
Figures (103-3), (104-3)



101-3 Ground floor plan.
102-3 Mezzanine floor plan.
103-3 Section.
104-3 Section.
105-3 The minaret.
106-3 Night view of the mosque.



107-3

Analytical description of the building's exterior

While the exterior of the mosque has a fairly simple design, the interior tends to be rather more elaborate. The simplicity of the general composition of the building lies in its parti: a straightforward cube-within-a-cube. Composite rectangular geometry was chosen as a formative language, in line with the iconic gate building of the Dubai International Financial Center. The whole area was originally called Gate Avenue.

Attached to the body of the outer cube, the most visually distinctive element of the mosque's design, is a 'mashrabiya' screen, which acts as a protective 'veil'. It provides shade and privacy for certain areas while receding in other public zones.

The Mashrabiya screen wrapping around the mosque uses the above discussed decorative pattern that accommodates openings of different dimensions and densities depending on the function of the space behind the screen. The screen is porous around the main prayer hall while becoming rather opaque around the service areas.

In a similar manner, the perforated screen theme extends further to embrace the body of the minaret. Perforation starts dense at the bottom and becomes less so at the top, where it (the screen) is slightly interrupted before reaching the very top of the minaret to reveal its bearing inner body with the emblematic crescent on it; the screen soon re-appears, albeit with a more intense perforation and greater transparency.

Since the mosque is surrounded by skyscrapers, the architects had to pay extra attention to its roof design, as it is visible to the surrounding buildings. It had to be visually connected to the rest of the mass, so they treated it as if it were a fifth 'façade' (almost an extension to the mashrabiya). Furthermore, the treatment of the floor area immediately surrounding the mosque was paramount, not only for its being visible from the surrounding skyscrapers above, but also from the floors under it, for through a horizontal window/opening, glimpses of the mosque can be seen clearly from the commercial walkway on the lower floor. Thus, interestingly here, we have an almost a sixth 'façade' visible!

The building's exterior ground treatment includes landscaping, both hard and soft. Designers fell back on the constituent typologies

of the mosque in shaping the hardscape, such as the placing the ablution areas and drinking fountains externally, in addition to the seating areas for taking off shoes and preparing for prayer. All of the aforementioned is further supported by luxurious urban furniture such as water pools, benches, rubbish bins, and lighting fixtures. Meanwhile, the softscape design introduced large planters with trees suitable for the climate, under which is a green grass surface surrounded by a pew that incorporates benches for seating. All of these local treatments are part and parcel of an integral interior landscaping scheme that covers the whole commercial strip (the spine in particular) not just the mosque area. Also noteworthy in this regard is the provision of bicycle parking spaces to allow local residents and workers in the DIFC access to the mosque via bicycle (if not on foot) to reduce the use of cars in line with the commitment to the environmental standards of sustainability adopted by the architects and the rest of the engineers of the project.

107-3 Ornamented skin in the upper part of the elevator.
108-3 Detail of the sky light.

Figure (108-3)



108-3

Despite the effective utilization of transparency on the side walls, and contrasting it with a solid element of the anterior wall, the large chandelier hanging from the ceiling of the sanctuary remains the dominant and most influential visual element.





109-3

Analytical description of the interior of the building

The transparency of the mosque's volume allows for a kind of visual continuity between its inner sanctuary and the surrounding outer spaces. Despite being rather crammed into a cubic shape with a limited footprint, the interior's design is an adequate, highly faithful 'translation' of the project's program. The latter, in addition to the main prayer hall, includes a women's prayer hall on the upper mezzanine overlooking the main hall below. It has, as stipulated by local bylaws, a separate entrance and separate services. The program also includes the usual ablution services, toilets, and, interestingly, a small library. There is also, as is customary in the mosques of the Emirates, two discreetly attached apartments for the imam and the muezzin, placed in the top level of the mosque.

By and large, the design of interior of the prayer hall is simple, almost minimal, in line with the overall character of the 'Gate Avenue' project in terms of its modern lines and materials. Its transparent glass walls are visible from the congregational level

inside (and the pedestrian level outside). At a medium height level, the effect of the screen starts to affect the atmosphere of the inner space visually and climatically. Additionally, the treatment of the Qibla wall came with luxurious panels of selected marble that were carefully split in a symmetrical manner to articulate its inner vein formations of the rock.

Despite the effective utilization of transparency on the side walls, and contrasting it with a solid element of the anterior wall, the large chandelier hanging from the ceiling of the sanctuary remains the dominant and most influential visual element. This chandelier was inspired, according the architects, by the muqarnas³ of traditional Islamic architecture, but the stone of the latter was replaced by glass (crystal) in the former. We can say that the designers here are looking for cautious consensual solutions that allow the mosque to belong to the contemporary globalized environment, without abandoning its semantic historical references. We believe that compromise solutions are often tainted by some concessions and are less daring than those that seek innovation without hesitation.

³ The 'muqarnas', which is a transition and filling element that provides a three-dimensional image, is an architectural element that fills the inner parts of the semi-domes with its honeycomb shape. In addition to providing a transition and filling role,

109-3 Qibla wall and part of the prayer hall.

110-3 Part of the prayer hall.

Figures (109-3), (110-3)

Figure (110-3)



110-3



111-3



112-3

Technical Analysis (Technology and Sustainability)

The Dubai International Financial Center's (DIFC) Gateway Street project, including its mosque, has received both LEED's⁴ Gold certification from the US Green Building Council and the Green Building Certification. This is evidence of the level of architectural and high-tech treatments that drive the building's sustainability and environmental efficiency. The DIFC Grand Mosque was awarded this certification for successfully meeting prerequisites and approvals across the nine standard measures of building excellence, from integrative design to human health to use of material.

Further, the sustainability consulting firm AESG has worked to assist the architects in incorporating many innovative features into the mosque design through the strategic selection of credits with the highest sustainability impact while also having the lowest constraint on design. The credits obtained, such as water reduction, were relevant at the regional level.

The materials chosen are mainly local, with a high degree of recycled content, including concrete, glass and steel, which have been selected for their high durability. Suffice it to say that since the mosque was built and is managed by a private foundation, AWAf, it is very well maintained, except for the water pool area outside (the reflecting pond) which may need more attention.

4 'LEED': Leadership in Energy and Environmental Design.



113-3

Conclusion

The added value to mosque architecture provided by the DIFC Grand Mosque is perhaps its high sustainability standard. Although it presented important points in terms of architectural form and style, namely transparency, it did not achieve what could be considered a clear breakthrough that opens future horizons for the 'cause' of contemporary mosque architecture. What seems clear is that the accommodational reconciliatory solutions adopted by the architects here rendered the design a domain for the existence of formal configurations that did not necessarily produce a consistent innovative resolution.

111-3 Windows detail.

112-3 Main entrance to the prayer hall.

113-3 Ablution area.

Figure (112-3)

Figure (113-3)

MAYOR MOHAMMAD HANIF JAME MOSQUE

A space between
life and death

Mayor Mohammad Hanif Jame Mosque

Location: Azimpur within Lalbagh in Old Dhaka | Bangladesh

Owner: Mayor Mohammad Hanif

Architect: Shatotto

Area: 5030m²

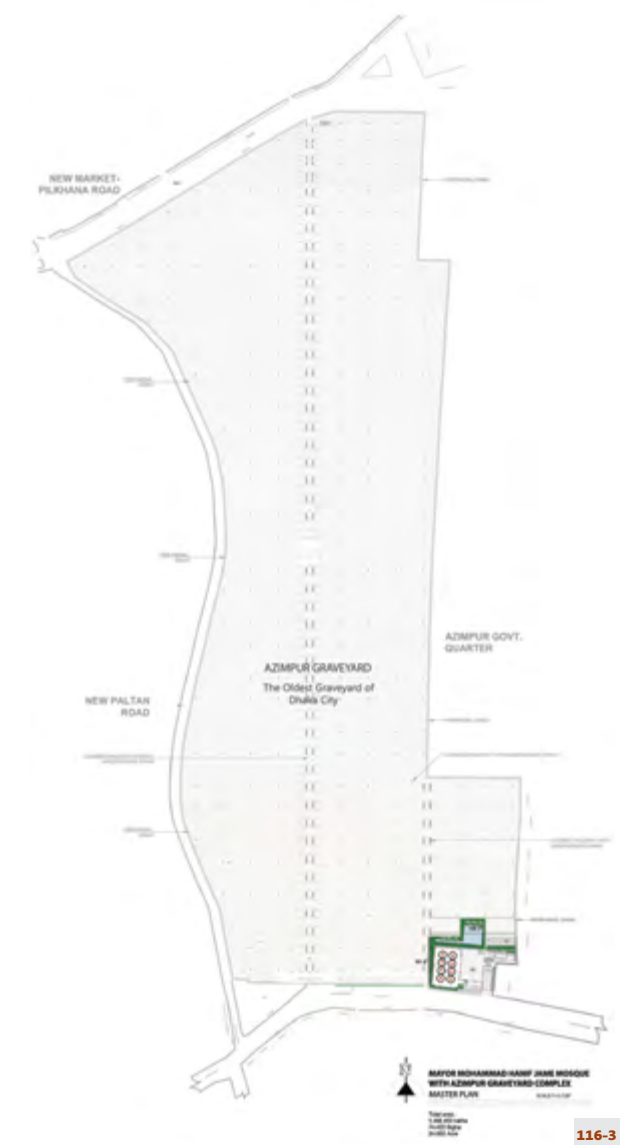
Completion date: 2018

Capacity: 1200 worshippers

Type: Juma'a Mosque



114-3

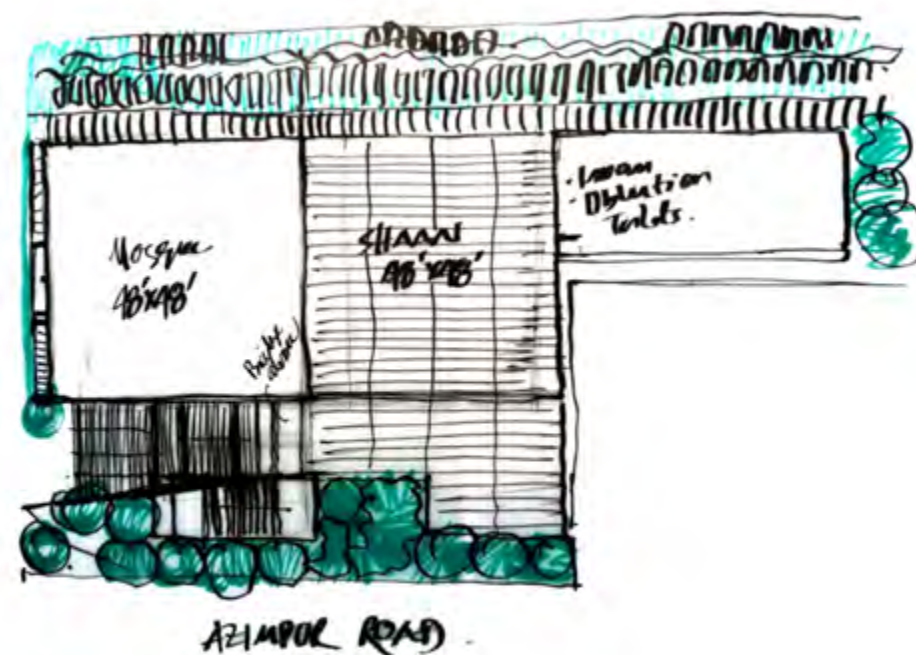


116-3

114-3 Areal image for the mosque and cemetery.

115-3 Sketch showing the relationship between different components of the project.

116-3 Site plan.



mayor mohammad hanif jame mosque schematic zoning

115-3

The Mayor Mohammad Hanif Jame Mosque is yet another mosque in a line of mosques that Bangladeshi architects have steadily introduced to contemporary mosque architecture experiments in the past few decades. So much so that we are encouraged to venture to say that they have now evolved their own distinctive style or modus operandi. It is not easy to pinpoint the sources of this style, but we can make a conjecture that the new style has roots and indirect influences from ancient Islamic Mughal architecture. On the other hand, there could be a modern link to what has become a special style of modern architecture indigenous to Bangladesh, emerging from it, a sort of 'regional' or to be more precise, a 'critical regionalism', as in the term coined by Kenneth Frampton.

In developing their presumed style, perhaps the main influence on Bangladesh architecture, this 'version' of modern architecture in particular, may be traced back to the works of Louis Kahn and the legacy he left behind in their country (even city). A legacy of forms constructed mainly with concrete and brick, echoing local Mughal architecture, both in form and color. Thus people identified with it and were not left with the sense of alienation that they sensed previously with the advent of the early modern style(s).

Figure (114-3)

Figure (115-3)

Added to this is, of course, another non-architectural dimension: a general popular sense that not only embraces the reality of the mosque as an institution with its embedded symbolism, but religious life as a whole, with remarkable sincerity and love, a sincerity that touches everyone who visits this beautiful Islamic country and mixes with its kind inhabitants.

The unique location of the mosque, in itself, has not only an embedded symbolic dimension but more importantly a life lesson, being built on a plot that has a busy, lively street market form on one side and a cemetery form on the other. It seems that the dichotomy of life and death appears unrestrained here, since the mosque inadvertently represents a path to the afterlife! These eschatological meanings, packed into this small place, represent the invisible symbolic dimensions that one feels at the thresholds of this mosque.

The relationship of the mosque to the urban environment

The Mayor Mohammad Hanif Jame Mosque was built between 2016 and 2019 in old Azimpur, in the center of Dhaka, capital of Bangladesh. Administratively or municipally, the city of Dhaka is divided into two parts: Dhaka North City (DNCC) and Dhaka South City (DSCC). The mosque is located in the southeastern corner of the 'Azimpur' cemetery, which was Established in 1850 on the edge of ancient Lalbagh in the Mughal Empire. The site itself thus forced the designer to subconsciously attend to some threads of history; even if he had tried to do away with its overwhelming presence, he must have adhered to some local presences that make the building belong to the place and represent a natural extension of it.

Figure (116-3)

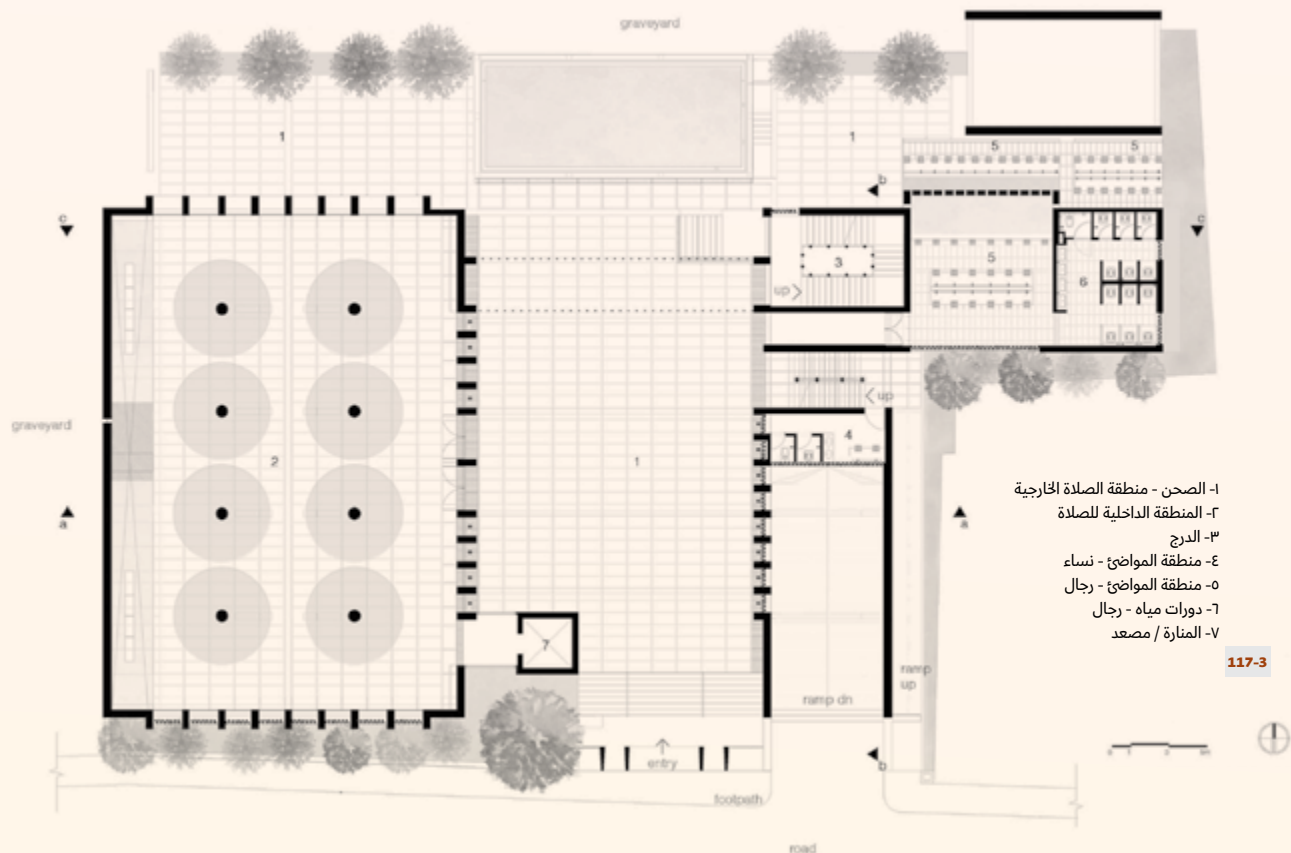


Figure (117-3)

Figure (118-3)

Figure (119-3)

Analytical description of the building from the outside

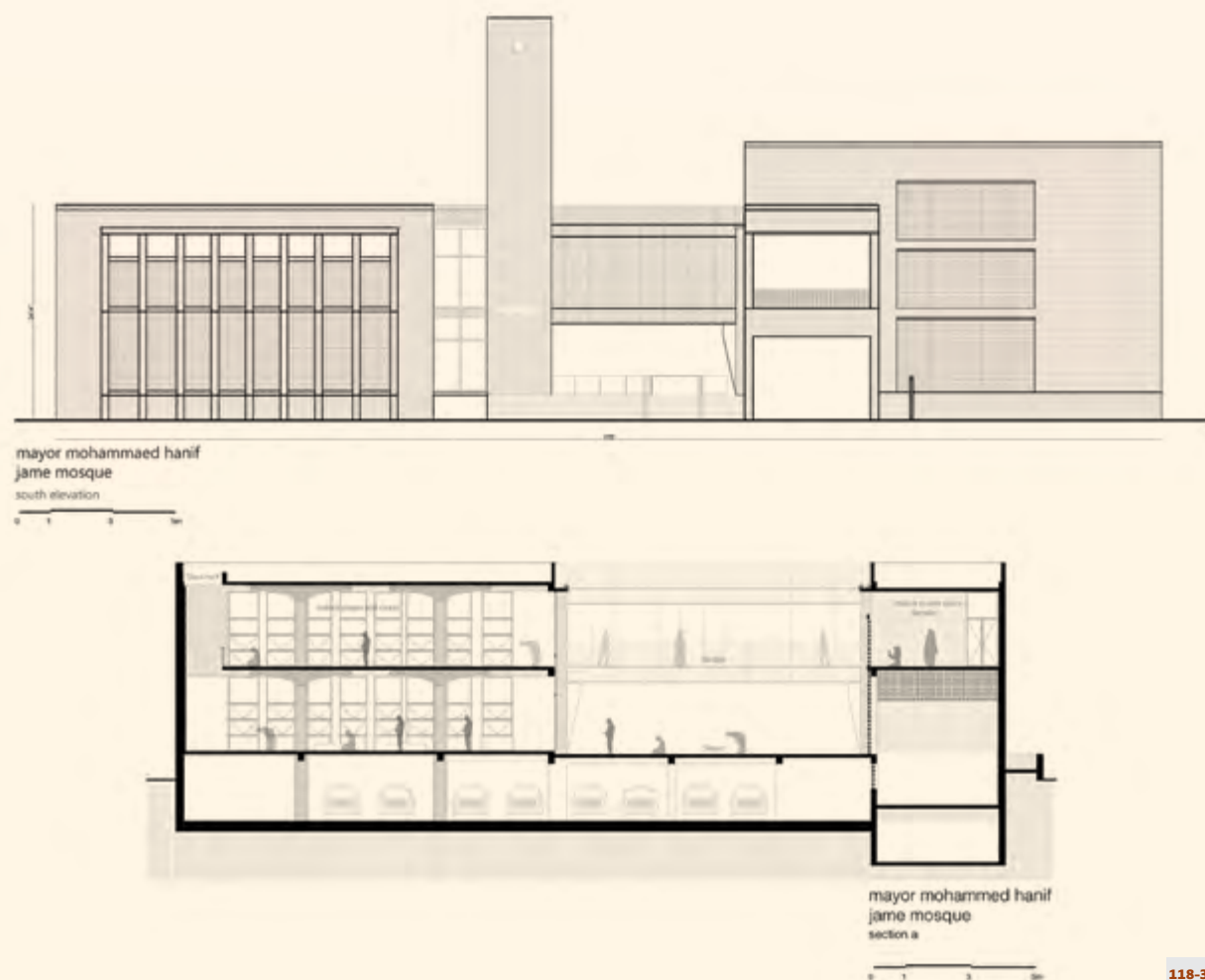
The external composition of the Mayor Mohammad Hanif Jame Mosque simply reflects the architect's interpretive articulation of its standard functional program on the one hand, and an active response to its unique building site on the other. The result was mainly an enunciation of two disparate blocks that enclose a central courtyard. In addition to the two main blocks there is a vertical minaret volume and a complementary transparent (horizontal) corridor connecting the two main blocks.

The first block is dedicated to the sanctuary (haram), containing a praying hall for men on two separate levels. Connected to the sanctuary block is the minaret mass (which also serves as an elevator) from its eastern side toward the courtyard. As for the second block, on the eastern side, which spreads vertically to three floors, it contains the women's praying hall and the living quarters for the mosque's curators, in addition to services supporting the mosque as a whole.

The mosque gained its name from the late Mohammad Hanif, the first mayor of Dhaka (after independence), in honor of his legacy and contributions to the city and the people of Bangladesh in general. As a public servant, he led a series of revolutionary efforts that gave his municipality more control over the capital. Interestingly, his grave is located in the adjacent Azimpur cemetery dominating the site.

When the mosque building was proposed in 2015, people asked why a new building was needed in this particular location. But the mayor had a larger vision in mind. Allocating a large part of the cemetery to the mosque, with an area of 16,500 square feet, had the virtue of bringing about much needed redevelopment to the deteriorated cemetery area: the construction of suitable passages between the rows of tombs as well as the reduction of flooding problems due to monsoon rains. Moreover, an elevated walkway was constructed that not only allowed people to move from one end to the other, but also made the cemetery a garden and a public resting place. It was developed so that the mosque built on its edge becomes the culmination of the project in this area and serves to sustain its preservation.

- 117-3 Ground floor plan.
- 118-3 Elevation and section.
- 119-3 The open space between the prayer hall and service building.



118-3



119-3



120-3



121-3

Surely, the most important element in the volumetric structure of the mosque is the courtyard or sahen. Not only does it represent the heart of the project, but it also acts as both an entry point and a four-way linking 'joint'. It separates the two blocks of the mosque from the eastern/western sides, and from the side perpendicular to them it connects the space of the southern street to the cemetery.

The courtyard is bordered on the street side by a concrete 'frame' (a gate gesture) that announces that the courtyard is also an entry foyer. This welcoming frame constitutes the beginning of a south-north axis, which is reinforced by a second, less articulated frame, formed by the bridge connecting the two masses of the mosque. This frame is like that of a painting, showcasing the cemetery/garden. Being open towards the sky, the courtyard has another axis which could be added to the others: the heaven-earth vertical axis – a subtle axis loaded with symbolism.

The mosque structure is built out of reinforced concrete covered with local reddish-brown brick, a building material which has a long local tradition going back to the time of the Mongols. The architect here, Shatotto, presented an elaborate set of brick detailing, especially in the perforated walls of the mashrabiya (traditional Islamic window architectural element projecting outward, or what is locally called 'the jail'). The mosque blocks and their surfaces were devoid of the traditional features associated with mosques, such as the dome, arches, and the typical traditional decorations. Even the minaret, which is not announced by the use of the muezzin's voice as much as the text of the words of the call to prayer written entirely on two of its square sides (vertically) in both Arabic and the local Bengali languages.

Analytical description of the building from the inside

The interior spaces of the Mayor Mohammad Hanif Jame Mosque surprise us by varied treatments, different from their counterparts used outside, especially in the space of the men's prayer hall – a sanctuary which contains several striking and innovative design elements. The most important feature that distinguishes it is the eight 'mushroom' pillars that dominate the internal scene in general. Such structural "mushrooms" do not need beams to carry the roof above, they start slender at the bottom and subsequently spread out upward toward the ceiling to almost touch with their neighboring pillars.

The concrete surfaces of the pillars were left exposed, without cladding or ornamentation, just a subtle setback could be noticed before they touch the ceiling, which gave room for the placement of lighting elements on the one hand, and reduced the visual impact of their mass, on the other. The mushroom pillars are further repeated on the upper floor of the sanctuary in exactly the same way used on the lower, to support the last roof slab.

120-3 The minaret.

121-3 The prayer hall as it looks from the outside.

Figure (123-3)

The most important feature that distinguishes it is the eight ‘mushroom’ pillars that dominate the internal scene in general. Such structural “mushrooms” do not need beams to carry the roof above, they start slender at the bottom and subsequently spread out upward toward the ceiling to almost touch with their neighboring pillars.



122-3 Detail of the external partition.
 123-3 Ablution area.
 124-3 Part of the building façade.

What is remarkable about both slabs of the first floor and the last roof is that they do not extend to meet the Qibla wall, but rather recede from it by about two meters to make way for a daylight shaft that allows for a 'cascade' of light to spill onto the Qibla wall. This is the second influential feature (alongside the mushroom pillars) in the design of the sanctuary space. Further, it must be noted that there is no mihrab or even central focal point in the space of the haram, the entire Qibla wall was designed to be perceived as a mihrab!

Subtle floor treatment further confirms the aforementioned idea of an open space without focal points, as the upper light well resulting from an offset slab corresponds to a similar onyx tiled ground patch along the Qibla wall. On this onyx surface extends, in a way that interrupts its continuity, a horizontal plank of wood compensating for the lack of a mihrab indication. Hereon, the imam can stand to lead prayer. On the right hand of the imam's designated space are several wooden planks superimposed on top of each other to form steps leading to a platform for the preacher to stand. The onyx treatment extends further to embody another new idea: lines 'underlining' and defining the position of prayer, especially in prayers performed at night times, when these lines appear luminous in a spectacular way. This implies, of course, that there are no carpets on the floor of the sanctuary, as in many modern mosques in Bangladesh, only luminous onyx lines punctuating the sumptuous areas of porcelain tiled floors.

Similarly, the floor treatment in the courtyard of the mosque continues in the exact manner used in the sanctuary, except that the prayer defining lines are paved from the inside with white porcelain. It is worth noting that this paving treatment continues also to include the surface of the haram's roof, an additional space which can also be used for prayer during times of congestion; access to it is either by the stairs in the opposite block, via the bridge (which is called the 'Sirat') or by the elevator inside the minaret (for people with special needs and the elderly).

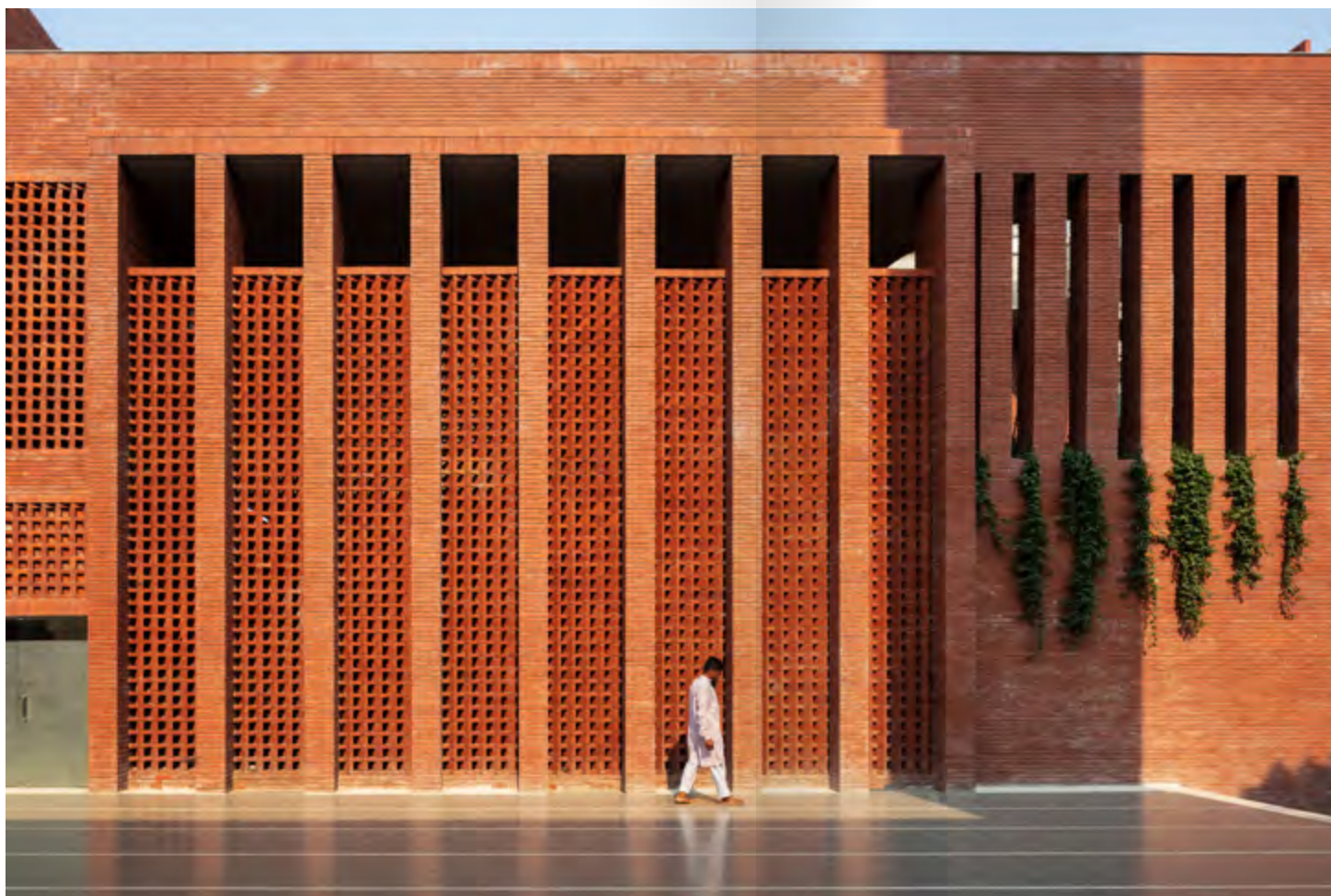
In general, the interior spaces of the mosque, with its materials and spatial treatments, work in harmony with the exterior spaces, especially the cemetery/garden which constitutes both an actual and symbolic extension of the courtyard toward the horizon. Moreover, the urban configuration of the mosque, along with the adjacent cemetery, constitute a hierarchical series of interconnected spaces that enhance the presence of the visual scene and indicate, in various ways, the influence of religious ritualism which usually represents a deep field for defining the place and its identity. The courtyard offered by this mosque may be viewed as a space for acquaintance, it works at the level of the city as a whole, as it is an essential link between visitors to the cemetery and mosque worshippers. This established interactive relationship consecrates this place as one of the main links to the old city of Dhaka.



122-3



123-3



124-3

Technical Analysis (Technology and Sustainability)

In terms of construction techniques, the mosque relies on an internal structure of reinforced concrete, clad from the outside by a full layer of red brick. The strategy of deft manipulation of the bricks, in terms of perforation (galli), contributed to, simultaneously, thermal insulation, ventilation, and light filtration. The galli also serve to enhance visual privacy, and provide a strong indicator of the building's role, for as soon as you see the mosque from the outside, its cultural and spatial affiliation are apparent. The character of this mosque, in this particular region, represents a contemporary outlet for the creation of critical regionalism, and contributes to the creation of what we can call an 'open-ended local architecture'. It is an architecture that attracts a sense of perpetual renewal reflected in the idea of a 'parallel heritage' that does not accept stillness and repetition, while at the same time does not abandon its sources and roots.

However, we must emphasize here that, from a practical point of view, the architectural formation strategy adopted in this mosque was not quite sufficient to climatically moderate the atmosphere of the building, as it had also to be equipped with air conditioning units for use in periods of extreme heat.

As for the monsoon seasons, it is sufficient to just operate the ceiling fans, as indicated by the award reviewer in his technical report. And since the mosque's ceiling is not very high, hotter air currents do not rise to subsequently escape through the roof openings to ensure natural ventilation. Rather, ceiling fans compensate for the role of air conditioning between the northern and southern openings.

- 125-3 Inner spaces connected with external environment.
- 126-3 Prayer hall.
- 127-3 Glass detail.

Conclusion

The success story of modern mosques in Bangladesh constitutes indeed a phenomenon worthy of our attention. It is a phenomenon, if not a 'school' of mosque architecture, because it has a set of characteristics that unite it, and a spectrum of creative variations within this perceived unity that divide it and give it its particularity.

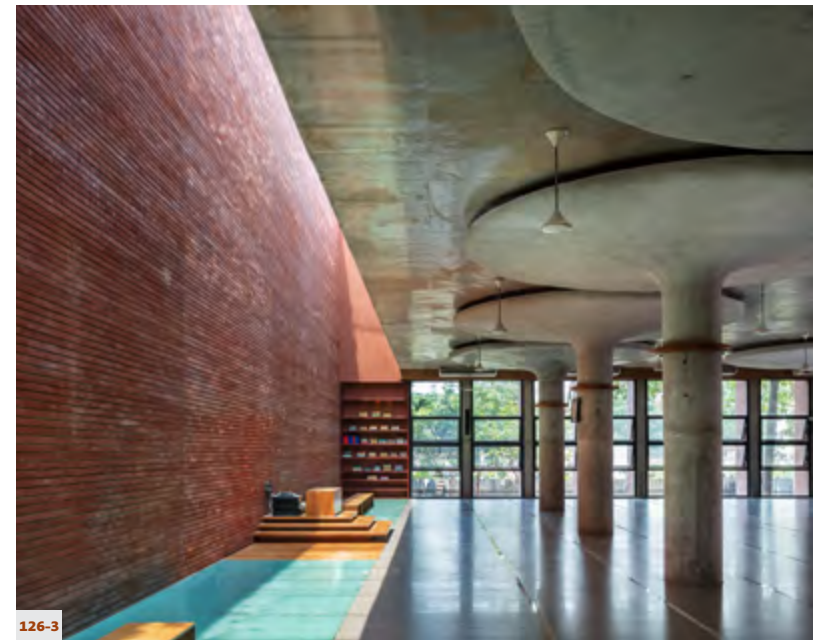
As is the case with the Mosque of Mayor Mohammad Hanif, it does not derive its architectural language from the Mughal mosques or from other mosques in the Islamic world, but is rather original and unique in its own right, with a language rooted in tradition, in terms of material, lineage, and spirit. It is new and contemporary, but it is not alienating. Perhaps herein lies the 'secret' of the difficult balancing equation that Bangladeshi architects have managed to solve through a multiplicity of judicious design experiments. Of course, these remain experiments and may contain certain defects and not provide final answers.

The design of the Mayor Mohammad Hanif Jame Mosque is a stark example of this fact, for despite providing a positively ambiguous outer envelope, and an effective volumetric spatial configuration (especially the courtyard), the use of mushroom pillars in a low ceiling space (repeated on two floors) made that space feel 'compressed' or 'crammed', a lost opportunity for otherwise achieving a distinctive high ceiling prayer space. This is in contradiction to what can be seen in works of the pioneers of modernity, such as Frank Lloyd Wright, Pier Luigi Nervi, and others. Although the justification may be the large number of worshippers to be accommodated, but in this case it would have been appropriate to rely on the use of a normal post and beam structural system, which is less 'consuming' of space. Whatever the case, and in order to conclude on a positive note, it is credited to the architect that he retracted the roof/ceiling slabs a little before they reach the Qibla wall, slightly mitigating the issue.

Perhaps this mosque is one of the examples that demonstrates design incongruity between the inside and the outside. In reducing visual unity, this incongruity constitutes one of the essential challenges of contemporary mosque architecture which, surely, invites a multitude of bolder experiments!



125-3



126-3



127-3

PAKISTAN NAVY MOSQUE

Rigorous Architecture for
The Navy Community

Pakistan Navy Mosque (Masjid Umm Saleh)

Location: Karachi | Pakistan

Owner: Pakistan Navy

Architect: Farhan Dia and Zahed Muhieddine

Area: 1371m²

Completion date: 2015

Capacity: 1100 worshippers

Type: Juma'a Mosque



128-3

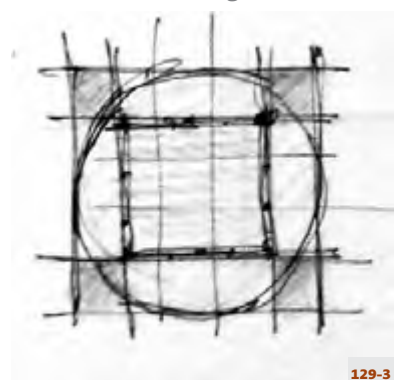
128-3 The mosque and its surrounding urban space.
129-3, 130-3 Conceptual sketches.
131-3 Site plan.

Figures (128-3), (129-3), (130-3), (131-3)

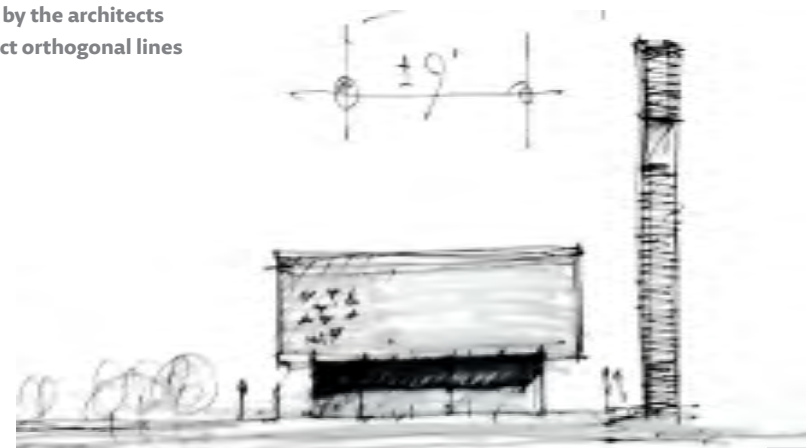
This is a remarkable example of how a mosque, subject to certain strict objective requirements and conditions, found an answer in adopting a modern architectural character for Pakistan's Navy Mosque. The architects seized this unique opportunity to present a design that confronts these requirements with their embedded challenges.

Although the challenges were numerous, they were primarily economic, given the limited resources available. Secondly, there were symbolic challenges: choosing an architectural language to express a fusion of two 'identities', one pointing out the usual religious functions provided by a mosque, the other formulating an additional 'spin' to the established language of mosques which would point out to this mosque belonging to a particular part of the society – the Pakistani Navy. The solution devised by the architects was one of a mosque composed with strict orthogonal lines and formal, austere, rigorous volumes.

It is assumed by most in the profession that using symbols and symbolism in architecture entails tapping into a sort of virtual reservoir of stored meanings which may be deciphered and interpreted by the local community, at least, if not a broader audience. This assumption does not imply that the interpretation of an architectural design is perceived and interpreted identically for everyone; rather, it holds that there are hints that often indirectly lead to the underlying meaning, which may or may not be understood by each individual encountering a built form. The Navy Mosque designer's embracing of the geometric rigor in the composition of this building drive, on the one hand, a departure from traditional heritage mosque architecture of Pakistan, but on the other hand and at the same time, acknowledges it in a most subtle way.



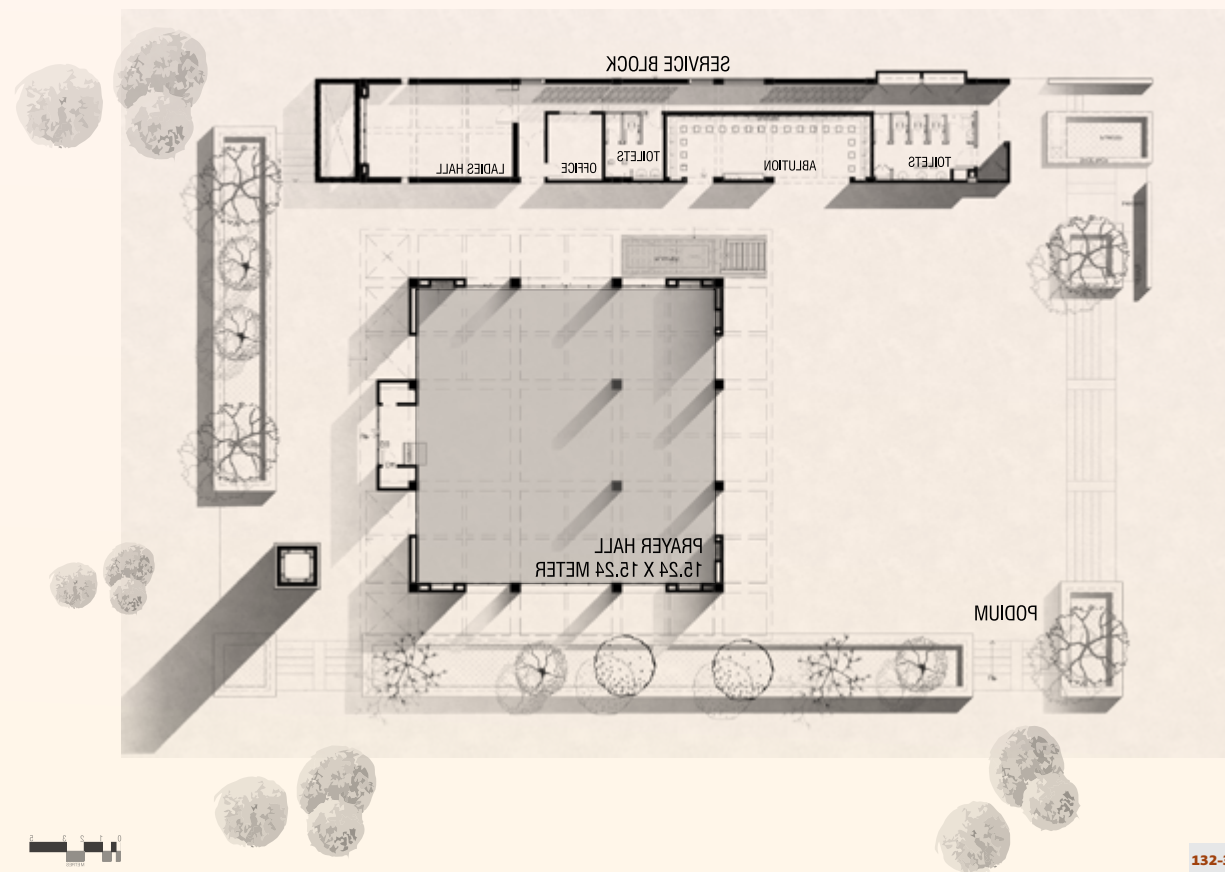
129-3



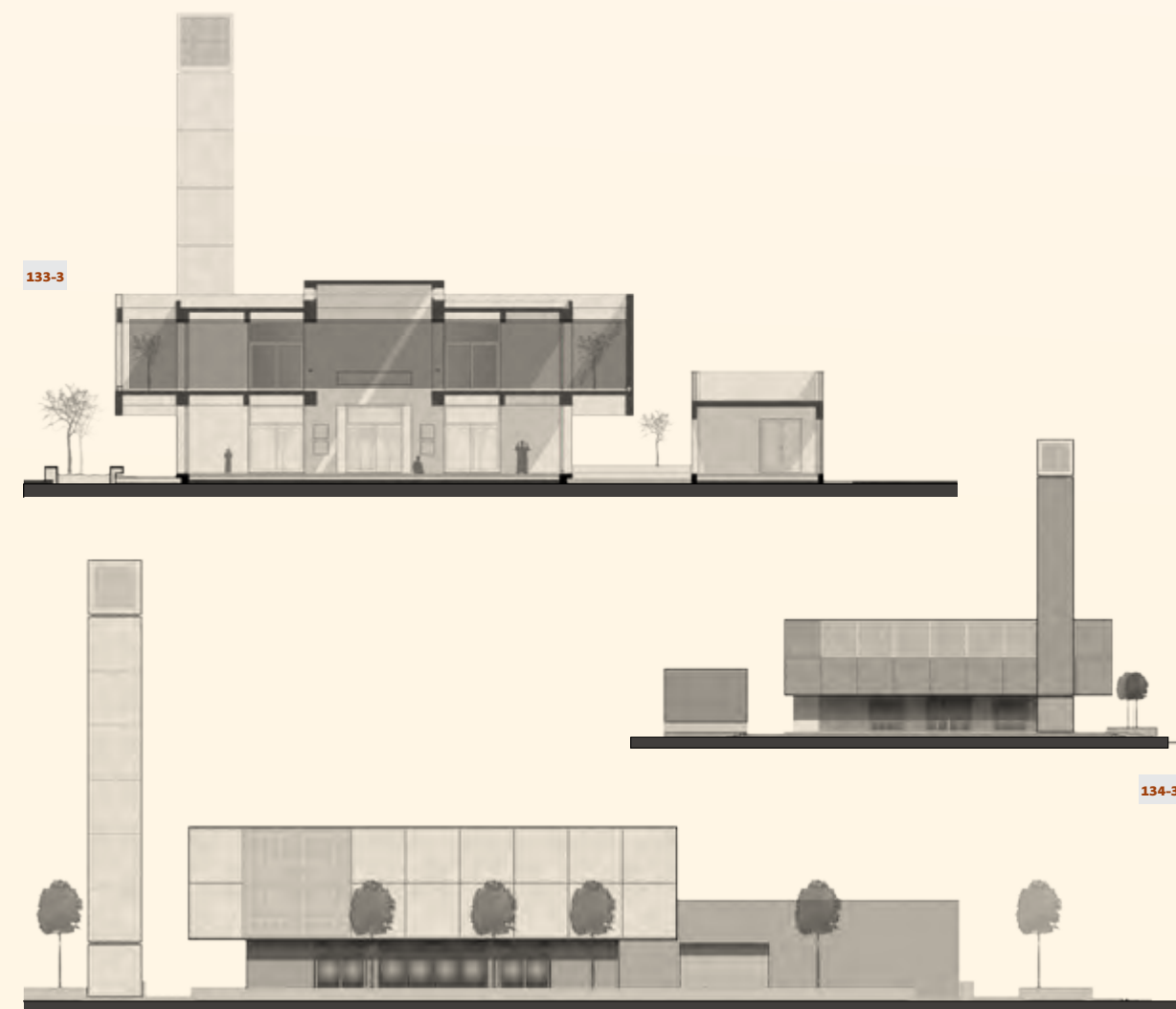
130-3



131-3



132-3



133-3

134-3



135-3

Figure (131-3)

These stored meanings, mentioned above, helped this design concept to express itself in a final composition that is balanced and accepted, to a large extent, in what is referred to as 'parallel heritage'; that is, 'heritage in the making'. This concept signifies a different direction in architectural design to what is currently prevalent in the region and pushes for novel values that would, hopefully, contribute to the defining of what we are seeking to describe in our present book (and the other previous volumes): the mosque of the future.

General architectural analytical description (the relationship of the mosque to the urban environment)

The Pakistan Navy Mosque (Umm Salih Mosque), completed in 2015, is located in the Sailor's residential compound in the southern part of the city of Karachi, close to Sandspit Beach in the Islamic Republic of Pakistan. The complex is located 3 km to the northeast of the waterfront in an area shaped like a peninsula with a length of 4 km and a width of 2 km. The area is separated from the city by a strait bordered by lush mangrove forests, which in turn form a green belt 3 km wide to the northeast of the waterfront.

Construction of the Sailor's residential compound, which houses the mosque, began on a previously vacant lot in June, 2010. Construction took place sporadically over the next eleven years. For the most part, the compound was designed to serve as an integral neighborhood for rookie mariners and their immediate families. In its current configuration, the area of the complex is about 25 hectares with borders measuring approximately 1,900 meters in length. The compound includes more than seventy, four-story residential units with a typical configuration of four houses grouped together around a shared courtyard. Further, the compound is equipped with modern services including, but not limited to, water, waste water, power, etc. The overall neighborhood, which cannot be accessed by the public for security reasons, is controlled by a single checkpoint.

In the middle of this area, the mosque was opened in 2015. But, due to lack of funds, it opened with construction incomplete. Only the first floor was built, leaving the construction of the front yard postponed until sufficient funding was available. However, this did not greatly affect the integrity of the mosque's components and their functioning as a consolidated whole.

Visually, the mosque is the central geometric point of the marine compound, in close proximity to all parts of the neighborhood. As a result, no car parking area has been included in the master plan for the mosque (for security reasons), rendering the area around the mosque completely pedestrianized.

It is clear that this mosque serves a community that has its own security needs, and therefore it represents one of the examples of neighborhood mosques that have recently begun to develop within closed (gated) communities. This makes the concept of 'acquaintance', which permeates throughout this book, of deep importance, as the mosque brings together this semi-homogeneous community. In order to understand this spreading model, we can also look for new ideas that are developing within private residential complexes. These models render the mosque as an extension of the private social space and contribute to transforming these small communities into family-like ones.

The architectural design of the mosque was carried out by SCHEMATICS Architecture, a respected private architecture firm based in Karachi. The principal architect in charge of designing the mosque was Mr. Farhan Diaa in collaboration with architect Zahid Mohiuddin.

The brief received from the client was quite specific in its requirements. Nevertheless, the architects (the company) received significant support from the Pakistan Navy authorities with regards to approving the design concept and promptly initiating the construction process.

132-3 Ground floor plan.

133-3 Section.

134-3 Elevation.

135-3 Main façade.

Figures (132-3), (132-3), (132-3)



Analytical description of the building from the outside

With its setting and distinctive minimalist design, this mosque stands out clearly within its surrounding area. This is in contrast to the architecture of the residential complex with its repetitive, standardized blocks. Its visual presence is enhanced by its elevation by means of a podium, rising above the natural surface of the ground. This podium may be seen to constitute a sort of compensation for the absence of a mosque courtyard on the one hand, and on the other hand the podium secures visual continuity of the mosque and its users to the wide open spaces without obstruction, to the south, north, and east.

The architects' strategy focused on achieving simplicity, clarity, and elegance of the forms. Leaving the mosque's structures exposed, employing flat roofs and ribbon windows, in addition to placing a few free columns (pilotis) on the roof which are revealed to viewers outside the mosque through multiple large openings in the top floor exterior, all remind us of early modernist architecture, especially recalling the 'Five Points of Architecture'¹ formulated by Le Corbusier in the 1920s.

The aesthetics and functionality of the mosque's building, associated with early modernist architecture, were not the only design characteristics. The current discourse of sustainability, and the compelling environmental considerations, forced the architects to make their design keep pace with the zeitgeist, its problems

1 The 'Five Points' include: 1) use of 'pilotis' 2) free design of the ground plan, 3) free design of the façade, 4) horizontal or 'ribboned' windows, 5) roof garden.

and concerns. These concerns prompted them thus to "adapt" their chosen "modernist" architectural language, with climatic environmental-friendly treatments commensurate with the site's climatic challenges (i.e., the high annual temperatures and high levels of humidity common in Pakistan). The challenge was met primarily by using intensive architectural design without resorting to costly artificially-added materials harmful to the environment: making use of setbacks, shading, and roof height differences (which resemble a flat dome, so to speak) which functions according to the principle of a 'chimney', naturally moving the air within the space. (see section)

The mosque consists of three masses: the main two-story mosque mass, the service block, and the minaret. These three are placed on a rectangular-shaped platform base measuring 144 by 108 feet, the main entrance of which faces east, leading to what looks like the frontal courtyard of a mosque, a forecourt to be exact. The shape of this forecourt is a square, and the three masses that make up the mosque were distributed within an offset inner square within the outer square, becoming the basis for the architectural parti, or, according to the technical report: "a square-within-a-square." The inner and outer squares were further divided into a "modular" grid in the form of square units 9x9 feet. These modules calibrate the ordering system of the entire building, both horizontally and vertically, in such a way that the dimensions of the mosque block became 54x54 feet (meaning 9x9 modules).

Figure (135-3)

Figure (136-3)

136-3 The minaret and side elevation.
137-3 The prayer hall.



137-3



The extensive glazing used on all four sides of the building, as well as the sash windows above the atrium space, allow for a sumptuous overflowing of light into the interior space throughout the day. These windows also allow for a great deal of transparency between the inner space and the external views.



138-3

All three forms that make up the mosque complex, were kept exposed (FFC, or 'fair-faced concrete') without any cladding. Surfaces are only 'adorned' by the pleasant traces of the casting molds. However, there are also limited surfaces where hollow concrete blocks were used (what is known locally in the Indian subcontinent as 'jali' or 'panjara') which added a dynamic touch that somehow compensated for the absence of ornamentation!

Analytical description of the building from the inside

The interior spaces of the mosque demonstrate a close connection with the character of the mosque's external treatment, in terms of the openness and flexibility provided by the adopted structural solution; this also holds true for the clear lines and simplicity of all details.

The extensive glazing used on all four sides of the building, as well as the sash windows above the atrium space, allow for a sumptuous overflowing of light into the interior space throughout the day. These windows also allow for a great deal of transparency between the inner space and the external views.

The interior of the prayer hall contains only two simple columns, which led to preserving it as a continuous space, free from visual obstacles between worshippers and the Qiblah wall or the Imam. This also positively affected the requisite continuity of prayer lines. In addition, this quality of openness was much appreciated by the teachers who were able, due to the flexibility of the internal space, to group the students in several ways according to their number and the type of lessons or lectures delivered.

As is the case outside, elements of the structural system of the building can be easily 'read' due to the 'honesty' of the architectural expression. Structural elements were not concealed or covered. On the contrary, according to the suppositions of modern architecture, and the international style in particular, these constitute the 'ornament' (or what compensates for it) of a new era.

The sense of clarity and simplicity in the interior space(s) is (are) enhanced by the special use of light colors and a limited range of materials: two types of grout (rough and fine texture) sand-colored floor tiles, and gray marble which further help in defining the prayer lines.

Nevertheless, the architects admitted that, although the interior was executed almost entirely as planned, the chaotic additions, such as fans, electronic prayer time indicators, clocks, etc., disrupted the purism dictated by the architectural idea.

Technology and sustainability

Due to the salty, humid, oceanic climate, a major design consideration was erecting a structure that resists corrosion. While the building's structure was carried out in standard reinforced concrete, much attention was paid to the selection of finishing materials, especially protective coatings.

The technical report states that Ressi PlastoRend 120 grout was used as a base coating applied to the framework and fillers of the concrete blocks. With the risk of becoming too technical, it's perhaps worth mentioning that choosing Ressi PlastoRend 110 (Fair Face Plaster Finish) as the finish layer has its advantages, especially the way the V-shaped "grooves" are cut as instructed by the design team. These grooves were sealed with a highly concentrated version of Silblock (Water Repellent Sealer) developed specifically for the project.



139-3



140-3

138-3 Harmony between the minaret, building mass, outdoor spaces.

139-3, 140-3 Simplicity of the mosque façade and sides.

Figure (142-3) Figures (140-3), (141-3) Figures (138-3), (139-3)

The adjoining service block is a separate building altogether, measuring 18 by 108 feet, and containing the principal facilities required for the operation of the mosque: restrooms, ablution rooms, office of the imam-khatib, and mosque staff. A separate hall (18 by 27 feet) has been further allocated as a prayer room for women, with a separate entrance and appropriate services. Furthermore, an additional space for prayer was intended in the open air, in the form of several canopy umbrellas emanating from the same modular unit of the mosque. Sadly, it has not been installed – yet.

The minaret, rising 72 feet in height, completes the massing scheme of the mosque, balancing its two horizontal blocks with its towering vertical presence. In proportioning it, the architects adopted the same modular unit, horizontally and vertically, so that its mass became 1 x 8 cubic modular units.



141-3

In terms of sustainability, the technical report prepared for the Al-Fozan award stated that no significant impact on the environmental balance and its components was observed during construction: the site was a flat land free of vegetation, so no trees were cut down and replanted to give space to the mosque (with mangroves fringing mainly on the coastal line) and the landscape was not modified before construction began. Accordingly, there was no need for topographic settlement or massive excavation work.

On the other hand, upon completion of the construction activities, the spaces surrounding the mosque were meticulously designed and implemented to ensure the quality of the public spaces through careful selection of trees (primarily endemic species).

Internally, it was noted that despite cross ventilation inside the mosque, which proved to be an effective tool for creating thermal comfort, other necessary measures were found: additional ceiling fans, which were not part of the original conceptual design, were installed to ensure further constant air circulation.

Environmentally sustainable approaches also include wastewater reuse. Since the ablution water has so little pollution (gray water), a decision was made to reuse it for irrigation and rinsing purposes. Thus, the accumulated water is pumped continuously into the aquifer to irrigate the plants during the dry season.

In terms of social sustainability, since its opening, according to the imam, the mosque has turned into one of the main landmarks in the area. Many people thus seek permission to access the complex to see the mosque or attend Friday and congregational prayers and flag gatherings.

Conclusion

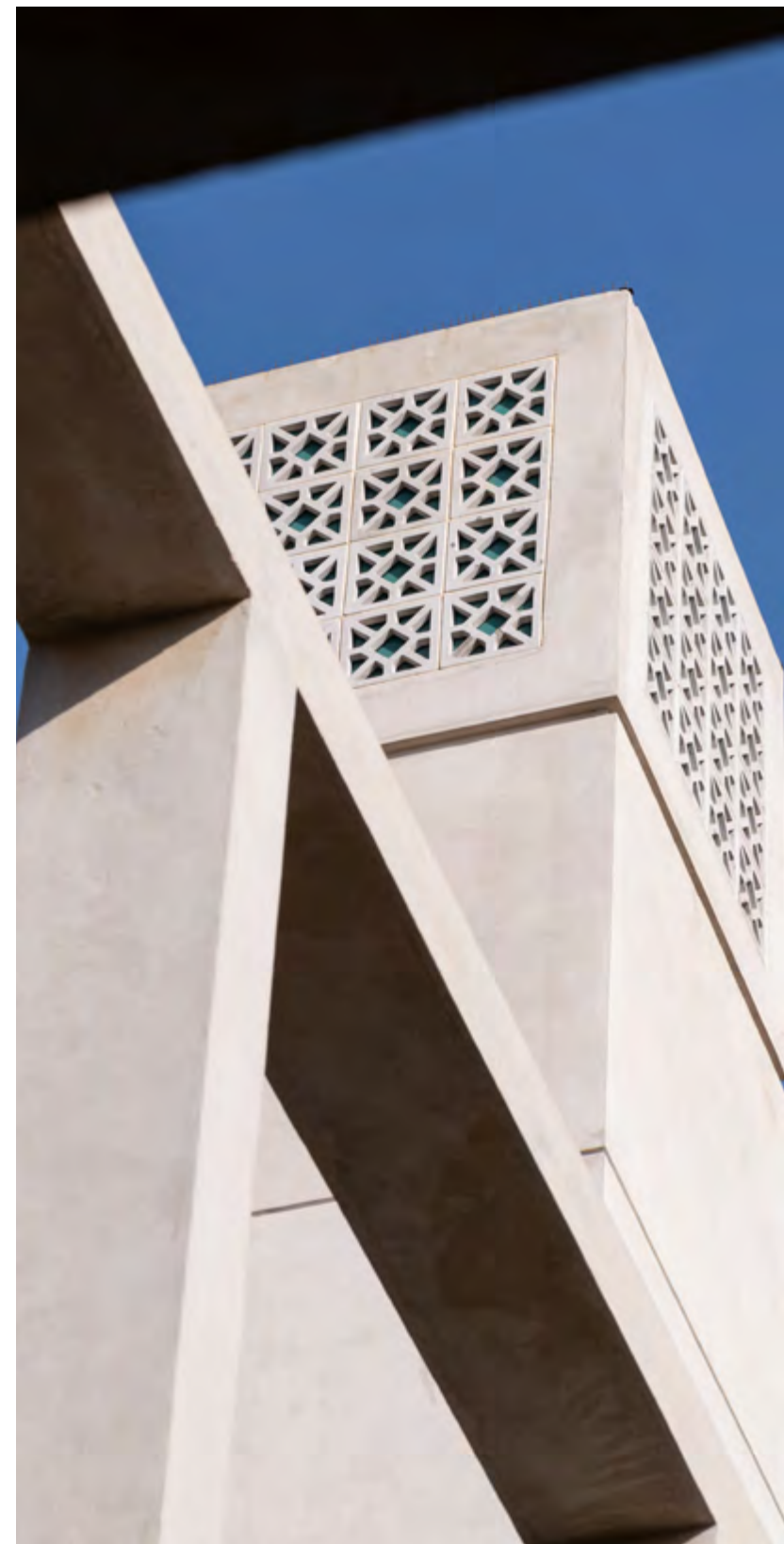
The Pakistan Navy Mosque (Masjid Umm Saleh) in Karachi city, Pakistan, is a remarkable architectural experiment in contemporary mosque architecture. It has two complimentary yet distinct merits: its architectural language (or its formal visual presence) and its successful social performance.

In terms of language, the architects present an architectural scheme that belongs to that of 'modern' (not contemporary) architecture, a scheme that embodies an uncompromising break with the dominant local-traditional architectural language of mosques.

The design choice of this architectural language has an important additional justification (in addition to keeping up with the zeitgeist): adopting such an austere 'formal' language, commensurate with and reflecting the rigor of the military character of the Pakistani army and its mighty navy, on the one hand, and on the other hand, the scarcity of financial resources, a fact that actually led to the non-implementation of the entire mosque scheme at present.

As for the social performance of the mosque, it could perhaps be said that it has gone beyond its original raison d'être, which was presumed to be and confined to serving the members of the Pakistani Navy and their families. It turned out that, due to its ample space and services and special religious atmosphere, it managed to attract a broader social mix, living in areas outside the military security zone within which the mosque is located!

Thus, its function was no longer confined to prayer only, but rather, inadvertently, upgraded to a multi-use social center. It has become a meeting place for different generations to pray, learn – a true place for inter-acquaintance, لتعارفوا! Lt'arafu!



142-3

141-3, 142-3 Different views of the upper part of the minaret.

Haji ABDUR RAUF MOSQUE

Visual Familiarity and
Urban Humility

Haji Abdur Rauf Mosque

Location: Malegaon | India

Owner: Haji Abdur Rauf

Architect: NBZ Architectural Consultants

Area: 900m²

Completion date: 2016

Capacity: 850 worshippers

Type: Juma'a Mosque



143-3

Figure (143-3)

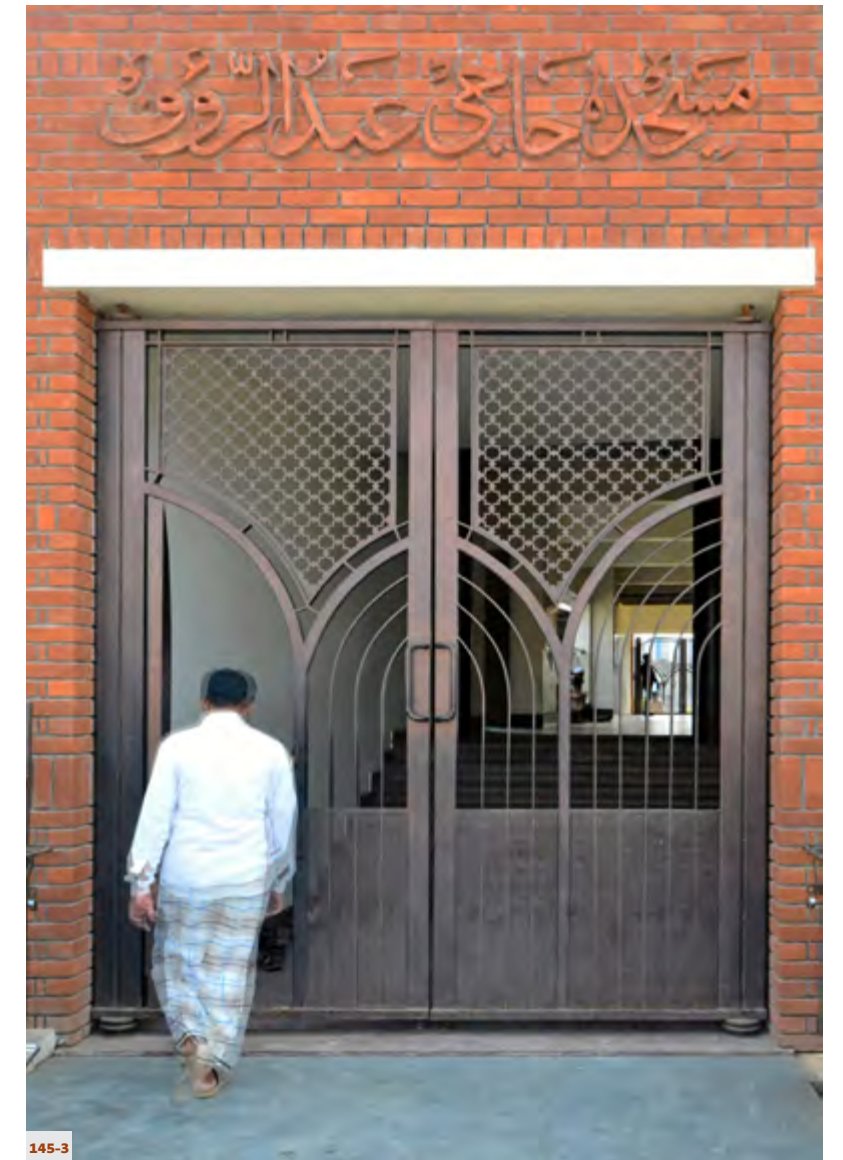
Every mosque – indeed every project – has its own story, albeit with varying degrees of intensity, significance – and even drama. In most cases, a mosque’s story constitutes a narrative worth considering in order to understand the surrounding circumstances that led to its final embodiment. Haji Abdul Rauf’s mosque is an ideal example in this regard. In 2007, Haji Abdul Rauf, having shifted from the kerosene business earlier in his career, was the owner of a collection of power loom textile factories, known as Janta Garden, passed away. His will stipulated building a large mosque in his town “in order to draw closer to God with an ongoing charity project, and praise be to Him Almighty for His blessings on the family after poverty.” This is a typical story of a virtuous custom among many philanthropists in India (and certainly many other places in the world).

Haji Abdul Rauf had made the preparations for building the mosque long before his death, starting with the search for a suitable piece of land. From the outset, his desire was to establish a “unique” building that would stand out among the 460 mosques in the city, thus he made sure that the site selection would accommodate such a unique mosque. Eventually, the selection settled on the current 900 square meters of land purchased in 2001 in the eastern part of Malegaon, overlooking the intersection of three roads, one of which is the widest in the city (the National Highway). The Architect Mushtaq Ahmed of NBZ Architectural Consultants was entrusted with the design of the mosque. He was well known by Rauf as he successfully designed the family’s textile factory previously. In February 201, Haji’s wife, in honor of his will, laid the foundation stone of the mosque. A few months later, she too passed away, as if she had lived long enough to warrant the fulfillment of her late husband’s wish.

Figure (144-3)



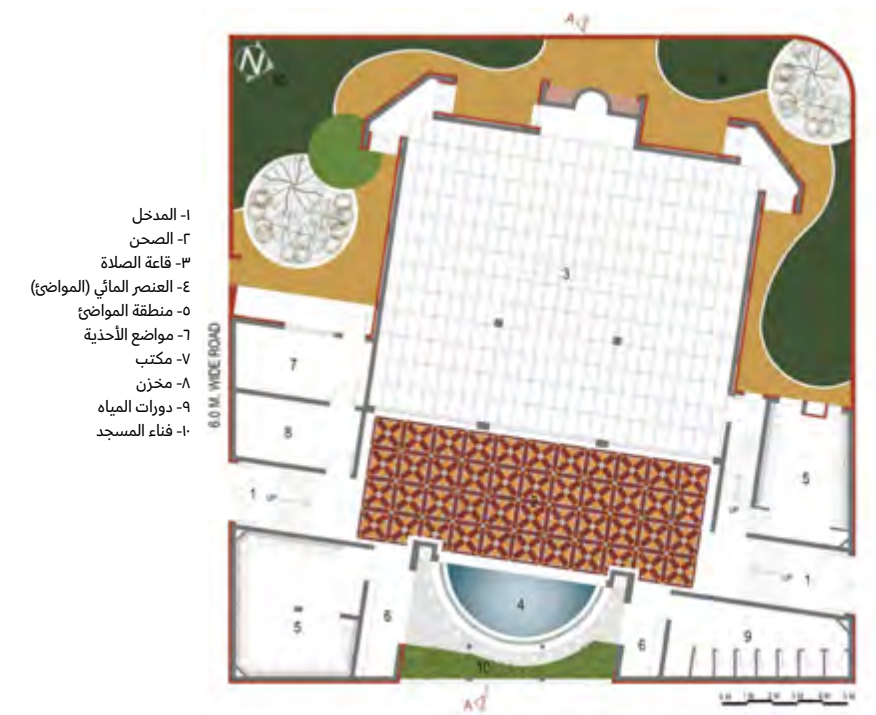
144-3



145-3



- 143-3 External view of the mosque.
- 144-3 Top view.
- 145-3 Main door of the mosque.
- 146-3 Ground floor plan.

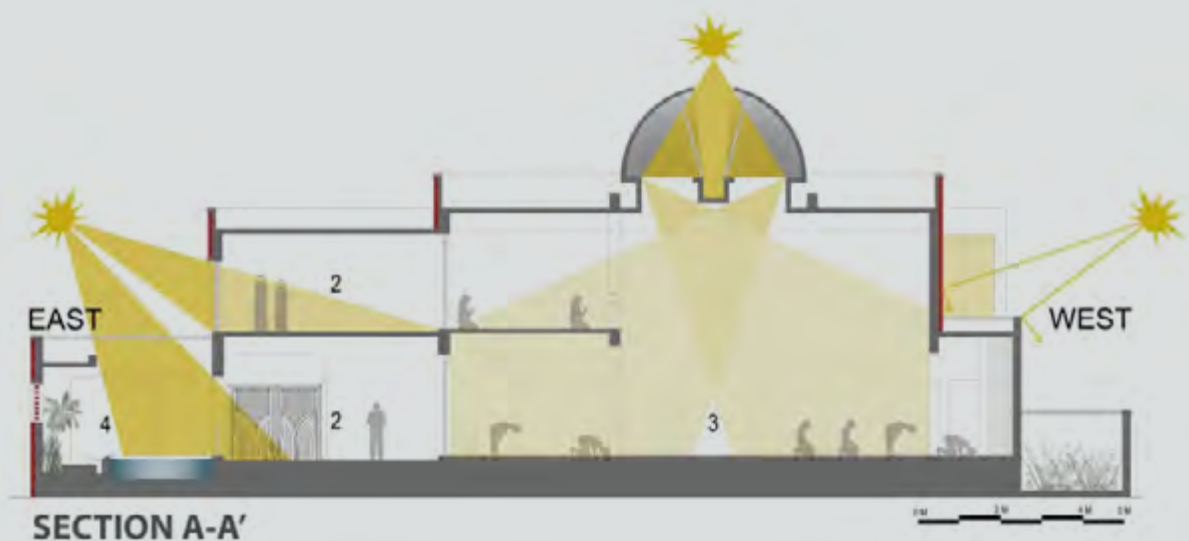


146-3

- 1- المدخل
- 2- الصحن
- 3- قاعة الصلاة
- 4- العنصر المائي (المواضع)
- 5- منطقة المواضع
- 6- مواضع الأحذية
- 7- مكتب
- 8- مخزن
- 9- دورات المياه
- 10- فناء المسجد



147-3



148-3

The relationship of the mosque to the urban environment

At the time of its purchase, the land chosen for the construction of the mosque, was mainly agricultural, with little surrounding buildings. However, the surrounding area started to develop in parallel to the construction work of the mosque and has continued since. By this, a sense of belonging and community identification developed towards the mosque. For the community, it became 'Lal Masjid', meaning the 'Red Mosque', following the color of the bricks that covers it from the outside.

Despite the funding for construction flowing from the family trust, the construction took many years to complete under the direct supervision of Mr. Mushtaq Ahmed, who was keen to further expand the mosque to accommodate 850 worshippers.

Finally, the mosque was inaugurated on October 21st, 2016, with a grand opening ceremony attended by more than twenty-five thousand people. The first prayer was led by Maulana Arshad Madani, where worshippers flocked from all the surrounding areas to overflow the mosque's capacity, thus celebrants gathered around the mosque in an exuberant manner - Haji Abdur Rauf's will was fulfilled!

It is interesting that the story of each building contributes towards creating its image in the public's mind. This mosque, in particular, gained its mental image and social identity from the deep desire that Haji Abdur Rauf had to build a mosque that brings people together and contribute to the development of its surrounding.

Figure (145-3)

We must pay attention to the unique typology of the mosque in particular, compared to other religious buildings: its presence typically serves as a catalyst for urban growth around it, as is the case of this mosque. In fact, the mosque, throughout history, has played an essential urban development role. One of the basic morphological principles of the Arab-Islamic city is that the mosque was to be built first, and then the city or village would then grow and develop around it.

In any case, perhaps this mosque needs further study to identify its contribution to the creation of the urban fabric around it, as it restores the early example of the mosque around which Arab/Islamic cities and villages were created.

- 147-3 First floor plan.
- 148-3 Section.
- 149-3 The minaret.
- 150-3 Side façade.





151-3



152-3

Analytical description of the building from the outside

At first glance, the composition of the mosque does not appear to deviate much from the traditional style. However, we must say that despite the surrounding tradition of Indian-Mongol mosque architecture, it is hard to detect any such influence on the design of this mosque other than its red-brick cladding.

The Hajj Abdur Rauf Mosque is thus distinguished from the outside by the color of its red surfaces resulting from the brick courses that cover it completely. These bricks were imported from Gujarat, which is quite famous for this building material. The brick courses however, were elegantly sealed by a single course of white stone on the top.

From a volumetric point of view, the mosque consists of three simple volumes, the center of which is topped by the distinctive dome. Next in importance is the cylindrical minaret that ends with a minor dome (protruding from the minaret's cylindrical body; i.e., a cylinder topped with a hemisphere). Thirdly, there is the prominent barrel vault, which is a volume that covers the entire spacious stairwell. Furthermore, two secondary vertical volumes echo the minaret, they constitute two wind/light catchers (malqafs) placed at the corners of the Qibla wall.

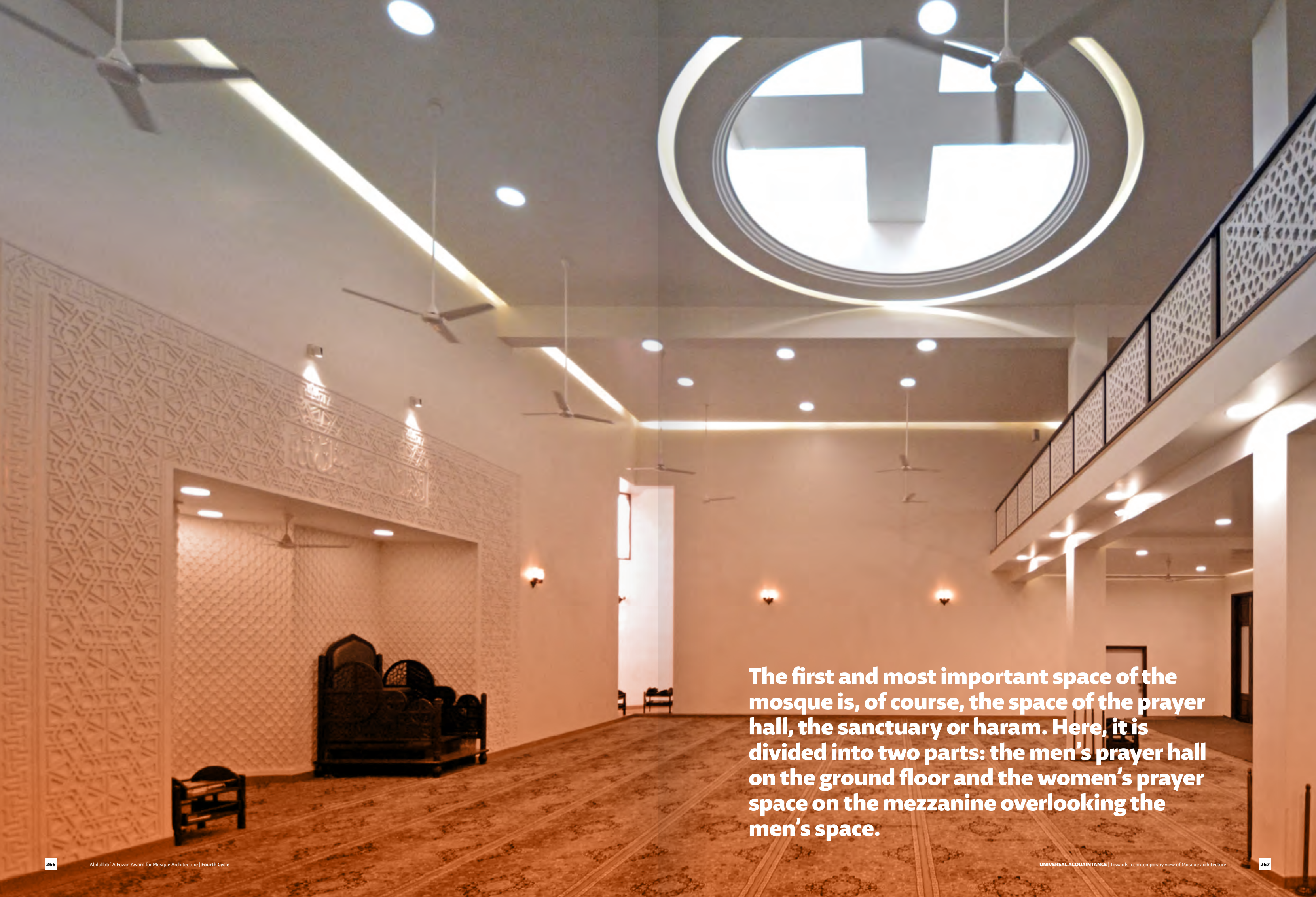
The mosque volumes are surrounded from the outside by a boundary wall built with the same red brick and white seal used in the building. Although the wall gives a sense of relative separation from the surroundings, still, because of the fact that it is constructed from the same brick material, somehow it prepares the viewer for the appearance of the mother block – as if a visual precursor. In addition, behind the brick border wall there is a simple metal fence which encircles a green area planted with trees and shrubs. Both the boundary wall and the fence make it somewhat difficult for a person who arrives for the first time to move around the mosque as they create a visual and kinetic barrier. However, as one follows the fence, one reaches the two entrances of the mosque which are marked by two iron gates facing each other. Despite this, the mass of the mosque remains clearly visible: when Hajj Abdur Rauf bought a total of four connected plots of land to build the mosque, he insisted on keeping one of them empty, the one at the opposite end of the mosque, in order to maintain a permanent visual legibility and presence in relation to the surrounding neighborhoods.

Hajj Abdur Rauf's visual awareness of the position of the mosque refers us to the inseparable visual relationship that a mosque should have with its surroundings. It's a relationship characterized by both prominence and humility. It is important to note that mosque architecture did not deviate from this balanced relationship until after the mosque turned into a dominant iconic edifice, in stark violation of the basic Islamic value system.



151-3 A courtyard containing outdoor ablation zone and shows the minaret and part of the side elevation.

152-3 Study area.



The first and most important space of the mosque is, of course, the space of the prayer hall, the sanctuary or haram. Here, it is divided into two parts: the men's prayer hall on the ground floor and the women's prayer space on the mezzanine overlooking the men's space.



153-3

Analytical description of the building from the inside

Accommodating the functional program in the Haji Abdur Rauf Mosque follows the traditional scheme, with slight modifications (if not innovations) imposed by the site (especially the direction of the Qibla wall).

The first and most important space of the mosque is, of course, the space of the prayer hall, the sanctuary or haram. Here, it is divided into two parts: the men's prayer hall on the ground floor and the women's prayer space on the mezzanine overlooking the men's space. What is most striking about the space of the haram is the innovative dome in the middle of its ceiling. It has a shape resembling a lotus flower, a plant that is highly revered locally, and in the Far East in general. The function of this dome is not limited to covering the roof, or even in the symbolic aspect that expresses the mosque; rather, it was designed for natural ventilation and lighting. In addition to the role of the dome, lighting and ventilating the sanctuary is further supported by two vertical spaces placed on the two corners of the Qibla wall. Together with the dome, they form an innovative climatic ecosystem.

The Qibla wall is topped with a wide retraction connected to the space of the courtyard which contains both the mihrab and the minbar. To the right of the mihrab, there is a large pulpit in the form of a huge high chair, so that the preacher is visible to all worshippers; there is also a small pulpit to the left, which is used for occasions or lessons of lesser prominence than Friday sermons or that of feasts (e.g., Eid al-Adha, the Feast of Sacrifice). The sanctuary is preceded by a spacious entrance hall, on both sides of which are entrances, and right in front of which is the sanctuary. Behind it, moreover, is



154-3

an eye-catching courtyard with a semi-circular ablution pool. This pool has special circular ablution stools that enhance the visual effectiveness of its radial/polar shape. The rest of the mosque's services, such as formal ablution rooms and toilets are located to the right and left of the pool's space.

Historically, the symbolism of water within mosque architecture in Central and South Asia is deep-rooted; it represents a cultural and environmental tradition supposedly depicting images of paradise. Walking through a place with a water feature thus is like walking over the rivers of paradise: the 'fruit' of payer – the main pillar of religion.

The interior space's design and quality of finishes contrasts (even contradicts) with its exterior counterpart in terms of its abstract language and its brickwork aesthetics. The use of decoration and embellishments of mediocre quality can be noticed inside, both in its carpets as well as screens known locally as 'jali'. The same impression applies to the mosque's accessories: lanterns, lighting elements, wall clocks, etc., all of which give reason to speculate that one or more people interfered with or altered the original interior design by adding elements that differ in style and taste from that of the architect, who sadly died at the end of the completion period!

Unfortunately, this practice is usually widespread in more than one Islamic country, where the 'custodians' of the mosque give themselves the right to interpose their sense of taste in design matters, which negatively affects the visual quality of mosques and reduces their artistic and usable values.

(Technology and Sustainability)

The Technical report for the building, presented by the award's technical reviewer, stipulates that from a sustainability point of view, the architect dispensed with the mechanical/electrical systems (especially ventilation) and designed instead a natural system based on a compact network of a series of openings and windows, some visible and others hidden in a subtle, deliberate manner. Furthermore, all mosque spaces are naturally lit, in many cases by indirect lighting which prevents glare and radiation.

Surely, the most prominent feature of the ventilation/lighting system is the dome at the center of the prayer hall, as it dissipates light and helps with ventilation. Its upper part is made of glass installed through two crossbars, the sides of which are provided with openings where hot air rises from the haram and is exhausted from the main prayer hall at the top. However, there are ceiling fans in the main prayer hall and its mezzanine floor that help circulate air at peak times, but are not necessary at other times.

153-3 Reflection of the daylight on the inner spaces.

154-3 Main lobby connecting the outdoor spaces with the prayer hall.

All other spaces, including bathrooms, staircases and the imam's facilities, have vertical openings and skylights concealed above, which bring in diffused light and allow for airflow. These ventilation openings have been suitably protected at roof level to prevent water infiltration into the interior space during rain.

Furthermore, the roofless courtyard, the entry foyer void, positioned between the ablution facilities and the main prayer hall, is connected to the prayer hall by folding glass doors. These doors bring in light, and when opened, air seeps smoothly into the mosque's main prayer hall.

In general, the architecture of the mosque tends to be balanced, with few failures in the interior decorations. The external shape and its geometry enhance the surrounding neighborhood and express the actual functions that make up the mosque. The focus on making use of local materials in construction, even if brought in from neighboring places, clearly contributed to confirming its general features, especially at the level of color, detail, and ventilation elements, resulting in a clear visual impact.

155-3 General outdoor view of the mosque.

156-3 Circular sky-light from the mezanine floor.

Conclusion

The questions raised by this book revolve around two points. The first is: what new ideas, concepts, or notions can we learn from the architecture of any of the shortlisted mosques? It seems that such a question poses great challenges about what is meant by 'new', and what each mosque was expected to introduce that could be counted as so in its architecture.

We can say that the design of the Haji Abdur Rauf Mosque, in relation to both its physical surroundings and its cultural context, is a noteworthy innovative (new) experiment in modern mosque architecture of India. To be clear, it constitutes an example of evolution, rather than that of fundamental change, in a country that has a long tradition in Mughal-Islamic architecture.

The other contribution of this mosque is the philosophy of 'Universal Acquaintance' that the mosque highlights, not as architecture, but as a way of life...

We could perhaps agree on the Islamic premise that the mosque is a social product based on piety before being an architectural product per se. A large part of the success story of this mosque is attributed to the farsightedness of its founder and his courage to invest in a new architectural style that expresses the spirit of the times. It creates a social sphere that realizes the message of prayer, balancing the special relationship between man and society as well as facilitating the relationship between human lineages and their Creator!

The Haji Abdur Rauf Mosque can be considered to be a remarkable example of the above. Its presence, as a landmark of a distinctive design, had a positive impact on the economic stability of the community, as it contributed to preserving the values of the land in the region and its real estate worth.

The role that this mosque played, which is mostly absent from the minds of many of those interested in mosque architecture, deserves to be highlighted for future planning and scientific research.

155-3



156-3



AMAN MOSQUE

Visual Veiling and Unveiling

Aman Economic Zone Central Mosque

Location: Aman Economic Zone (Narayanganj), Dhaka | Bangladesh

Owner: Aman Group

Architect: Bayejid Mahub Khondker

Area: 7788m²

Completion date: 2020

Capacity: 600 worshippers

Type: Juma'a Mosque



157-3

In this design experiment, it is interesting to observe how the architect de-constructed the traditional typological elements of the mosque: courtyard, arcade, sanctuary dome, then subsequently re-constructed them in a completely new way, all veiled behind a built-up green earthen mound.

The usual rectangular courtyard (sahen), which conventionally precedes the sanctuary (haram) of the traditional mosque, becomes in this design a circle that surrounds the sanctuary; the peripheral sanctuary prevalent in historical mosques becomes here central, surrounded by the courtyard. As for the dome that usually rises above the roof of the sanctuary, the architect chose to abandon it, in favor for a modern internal ghosted substitute.

قيدنھما قلناہ عیسمما قتلخ ۷۰۱-۳
 یخاھما دلنقا لاشخہ یراھ و قلیصیما
 عیسمما قتلہ راج
 دلنقا و قتلہما ۸۰۱-۳

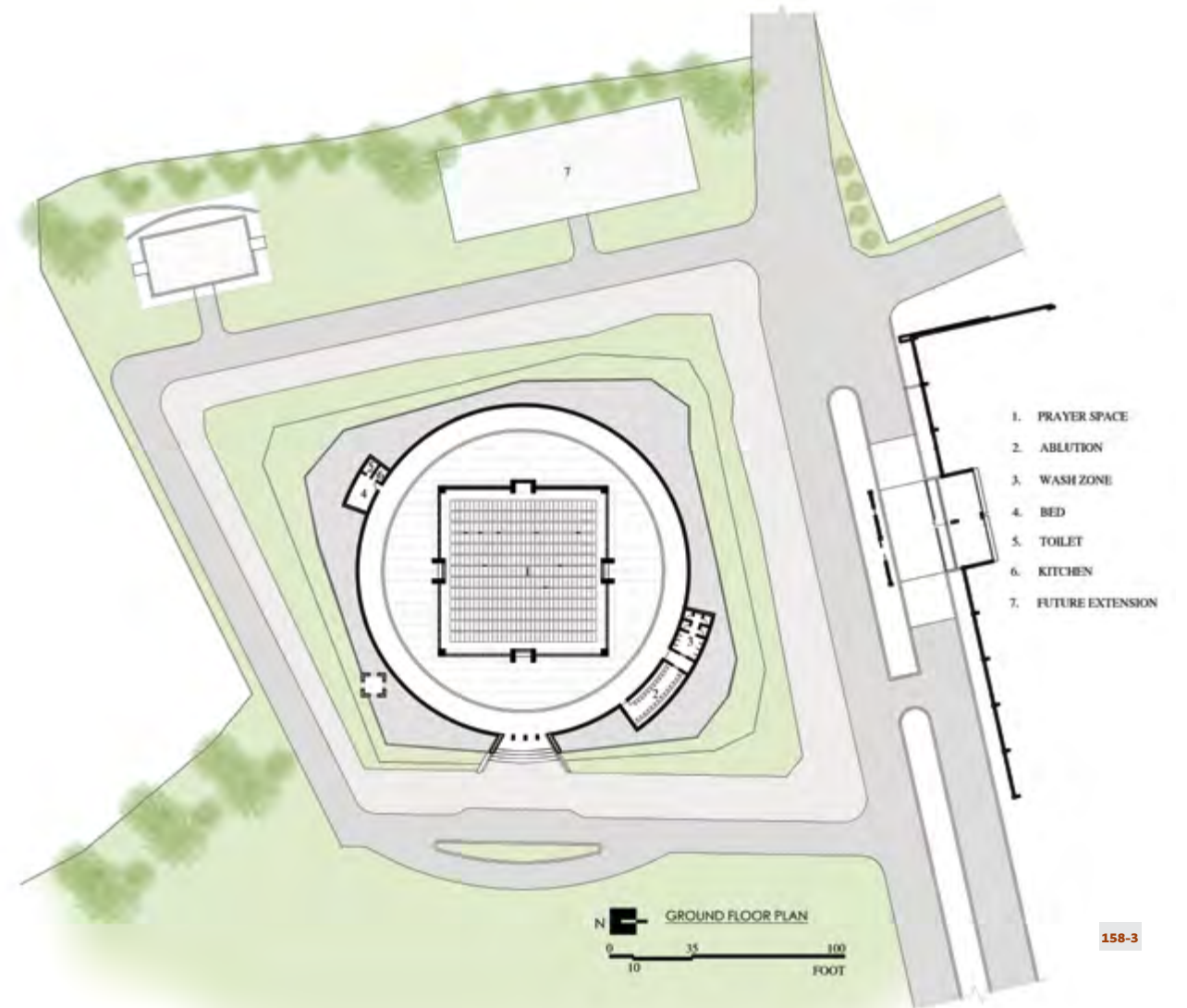
But that's not all. In addition to the architect's innovative endeavor to recombine the elements and components of the mosque on the formal level, he further made a semantic analogic 'investment'. The cube of the white mosque has become analogous, albeit in a subtle, indirect way, to its black counterpart of the honorable Ka'abah – with the circle surrounding it further echoing the circles of circumambulation (Tawaf) around the Ka'abah!

All this 'drama' takes place within an built-up earthen mound that isolates the mosque and veils it from the surrounding noisy industrial aria, to otherwise create an atmosphere of peace and security – Aman – the literal name of this mosque.

We can speculate with a fair degree of certainty that the design of the Aman Mosque derives its language, generally, from the design method introduced by the late American architect Louis Kahn during the 1970s, particularly when he was commissioned to design the state parliament building in Dhaka and other buildings on the sub-continent.

In this regard, two important points must also be mentioned. The first is that the language of modern architecture that characterized the works of Louis Kahn is greatly influenced by historical architecture, especially in the aspect of monumentality. This monumentality is not only articulated by scale, but places great emphasis on the relationship between geometry and structure, in what Kahn called the notion of 'order'.

(۱۰-۱۰۱) ۳۳۳



158-3

The second relevant point to be noted is how the past two generations of architects in Bangladesh have been influenced by the architectural legacy of Louis Kahn and his unique way of interpreting modern architecture using both concrete and bricks through his theory of Order. Kahn's influence has been evident in the past few years, not only in this mosque, but also in the (Aga Khan) award winning Bait Ur Rouf Mosque (Marina Tabassum, architect) in Dhaka, among others.

What attracts us most about the Aman Mosque is its seemingly simple, non-explicit language. This is not a contradiction, but rather a paradox resulting from the introduction of the built-up, earthen mound. The mosque's mass accordingly has become not revealed easily. Rather, it opens up and appears gradually. This interesting visual drama did not require many design additions or elaborate manipulations, only the adding of this separating element (the mound) between the mass of the sanctuary and the space outside.

The relationship of the mosque to the surroundings

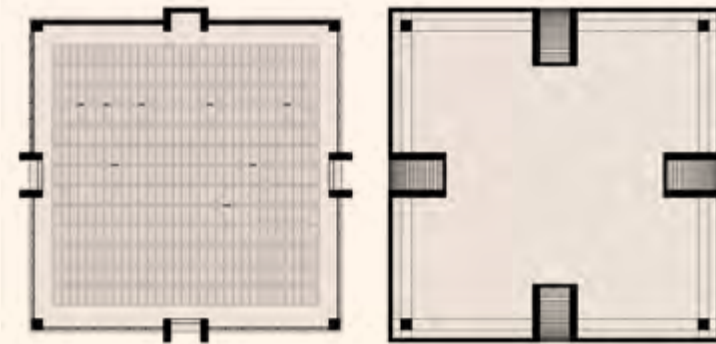
The Aman Mosque is located within an economic area bearing the same name. It is the part of the Narayangaj District close to the archaeological site of Panam. This area is barren land on the banks of the Meghna River, which flows into the Bay of Bengal. As part of the 150-acre Aman Economic Zone, the mosque was built between 2016 and 2018.

This building represents an unusual type of mosque, as it is situated in the midst of an industrial park rather than an urban agglomeration. Suffice it to say that this mosque is said to serve as a contemporary symbol of Bangladesh: a developing country that is steadily shifting from an agricultural economy to a market economy and undergoing industrialization. This rapid transformation is being led by the elite of Bangladesh, such as the Aman family and the Aman Economic Group, patrons of this mosque.

(۱۰-۱۰۱) ۳۳۳

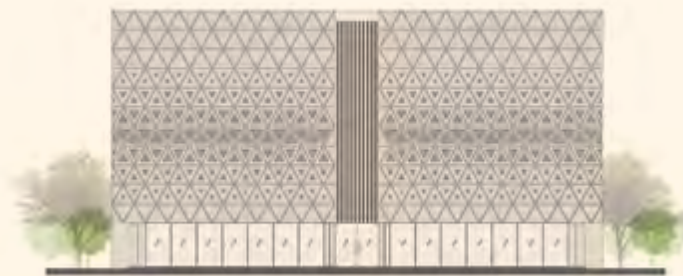


159-3



160-3

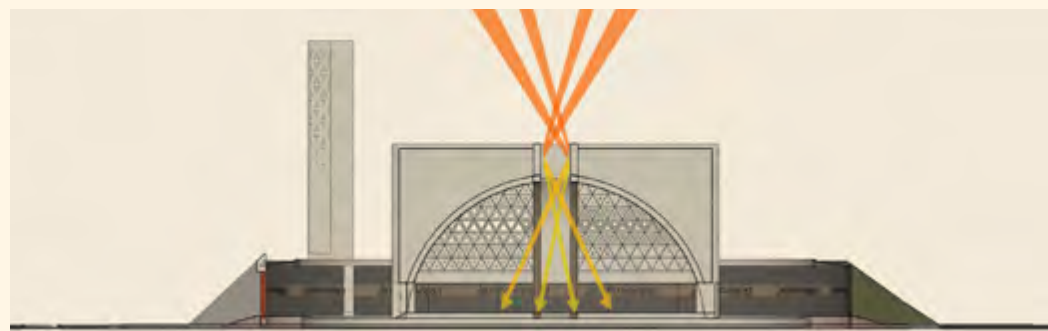
161-3



162-3



163-3



164-3

The Aman Economic Zone is part of a governmental program to develop special economic zones that receive special economic facilities and benefits to help investors and developers establish factories. In the case of the Aman Economic Zone, the government changed the use of the land from agricultural to industrial and allowed the construction of a port on the edge of the river adjacent to the site to facilitate the development and optimal service of the area.

Accordingly, it must be born in mind that here we are not dealing with the mosque in terms of its usual architectural features only, but rather "a symbol and a celebration of the state's quest for economic transformation," as indicated by the technical reviewer who visited the area. This point is very important for Bangladesh, which takes on new economic dimensions due to the manufacture and supply of products for use around the world, especially textiles. Thus we are in front of a mosque that carries implicit messages indicating the great transformations that Bangladesh is currently experiencing.

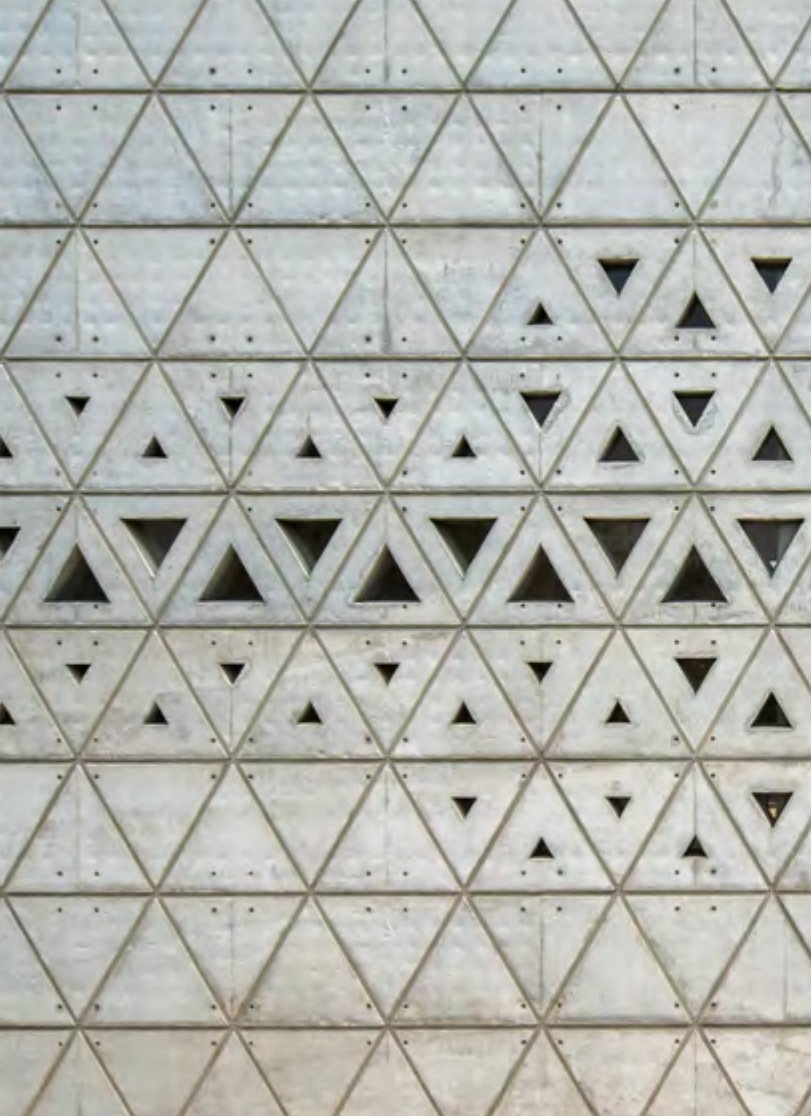
Within the Aman Economic Zone, there are many industrial facilities located side by side in one place: one of the largest cement factories in the country, a bottling and packaging facility, a shipbuilding facility, and another for the production of food and beverages, in addition to the supplementary facilities that serve the area as a whole, such as offices and accommodations for construction workers. The Aman Economic Group, owners of the economic zone and sponsors of the mosque, are led by three brothers from the Aman family which is famous for its religiosity. They see building the mosque as part of their religious responsibility to the working community in the area.

With the increasing industrialization of Bangladesh and more capital entering the country, facilities and industrial parks are receiving more care and attention including more attention to architectural design, facility management, and operation. This also helps attract investment to these facilities, as they look to become production centers for larger global brands. As part of this endeavor, the owner company appointed Nakshabid Architects to design the masterplan and industrial facilities, with a particular focus on designing the mosque to become what they described as the "crown jewel of the economic zone".

- 159-3 قطاع طولی.
- 160-3 و 161-3 المساقط الأفقية.
- 162-3 الواجهة.
- 163-3 و 164-3 دراسات مناخية.
- 165-3 مكونات المسجد من الأعلى.



165-3



166-3

Analytical description of the building from the outside

A visitor approaching the gate of the Aman Economic Zone is surprised by the mosque's outstanding (rather ambiguous) position within a green, built-up, earthen hill/mound rising four meters above the ground on the right side of the zone's gate. From this mound, with its circular footprint, the body of the white cubic mosque emerges with its volume perforated by a network of triangular holes/openings that start wide at the bottom and gradually get smaller towards the top (suggesting the idea of a 'mashrabiya' with triangular geometry, an architectural element suggested by more than one mosque in this book).

Locating the mosque near the gate of the industrial area as a whole proved to be a judicious design decision as workers are able to take the opportunity to start and/or end their day at the mosque. Another virtue of placing the mosque near the gate of the industrial complex is in attracting people from outside the industrial area to perform Friday prayers at the mosque. Thus, the mosque creates a permeability that is not usually experienced by such industrial areas, and in effect creates a pleasant religious association: the right of neighborhood for the neighboring community. This could be related to the permanent role of the mosque as such: creating new social ties. Those ties are not universal acquaintances but rather particular.

٣-١٦٦ تفاصيل الفتحات في الواجهة.
٣-١٦٧ علاقة قاعة الصلاة بالفناء
الدائري والمنزلة.

From a compositional point of view, the cubic mass of the sanctuary is ensconced within a circular space hollowed out of the earthen mound. Worshipers enter the mosque through a tunnel-like corridor carved into the surrounding earthen mound. Further, from the slanted surface of the mound, to the left of the entrance, emerges the graceful minaret of the mosque, with its walls perforated with the same triangular lattice system found in the sanctuary façades.

Analytical description of the building from the inside

In analyzing the design of this particular mosque by dividing it into the internal and external may entail a methodological fallacy, for the external formation (the green earthen mound) as the first element that we encounter when we visit the mosque cannot be completely considered the 'external' architectural part of the design. In fact, it belongs to a landscape architecture idea which the architect created in order to isolate the building from its noisy industrial surroundings, thus forming an inner oasis of peace and (AMAN).

The mound dramatically paves the way to the 'interior' part (in the usual sense) of the design. Thus it is possible, in a certain sense, to consider the design of the mosque, as a whole, an 'internal' design. This paradox, which the architect puts before us, is perhaps the major innovative virtue of this design. Such innovations led to what was described above as the de-construction of the traditional typological elements of the mosque:

Courtyard (sahn). Visitors or worshipers must cross a tunnel permeating the green mound to reach the courtyard of the mosque. This unusual courtyard is of a circular shape, concentric with the center of the square forming the sanctuary.

Arcade (riwaq). The circular courtyard is surrounded by an arcade concentric to it; it is a most fascinating innovation, indeed unique in mosque architecture as such. Although its circular shape emanates from the same circle engraved in the green mound, it is an arcade without any columns defining it, just a cantilever slab extending from the roof of the green mound above. The edges of the circle forming the arcade contain the facilities attached to the mosque buried in the body of the mound: the ablution hall, bathrooms, and the imam's housing. Both arcade and courtyard serve as spillover spaces from the sanctuary hall in times of overcrowding.

تصميم (المنزلة) (المنزلة) (المنزلة)

تصميم (المنزلة) (المنزلة) (المنزلة) (المنزلة) (المنزلة)

تصميم (المنزلة)



167-3

قاعة الصلاة نفسها فراغ مهيب بعقودها
القوسية الأربعة المتقاطعة. وفي مركز
التقاطع ينفرج مربع oculis مركزي
مفتوح للسماء ينير الحرم بمساعدة الفتحات
السقفية الجانبية والجدران المثقبة (على
شكل المشربية).





168-3

The prayer hall/sanctuary (haram). Subsequent to passing both the arcade and courtyard, one enters the sanctuary space through the wide doors that open from three sides/façades (except for the frontal Qibla wall). These glass doors are designed in a way that they can fold over each other in a manner that allows the inner space of the sanctuary to merge and unites with the space of the courtyard outside it. Black paving lines defining the prayer rows help in this unification, linking both the exterior with the interior visually and functionally.

With its two, massive intersecting arches, the prayer hall itself is an imposing volume. At the center of the intersection, a central square oculus opens to the sky, illuminating the sanctuary with further help of both the side ceiling openings and perforated walls (in the shape of the mashrabiya). The latter, with its organic, non-additive decorative effect, is the only ornamental element in the mosque, apart from the strip of Arabic calligraphy surrounding the four walls of the mosque, with the phrase "God is great" written in repeated Kufic script.

The Niche (mihrab). The space of the sanctuary culminates with a mihrab integrated with the two load-bearing frames that define it between them, (it is noted that the pulpit minbar is absent, although we are certain that Friday prayers are held in this mosque.)

Structure: Despite the formal description presented above, it must be emphasized that the resulting architectural form blends with its structural system completely, in application of the theory or notion of 'order' in design, presented by Louis Kahn. Order theory stipulates (among other ideas) that the structural system is the basic generator that controls architectural form. Architects on the



169-3

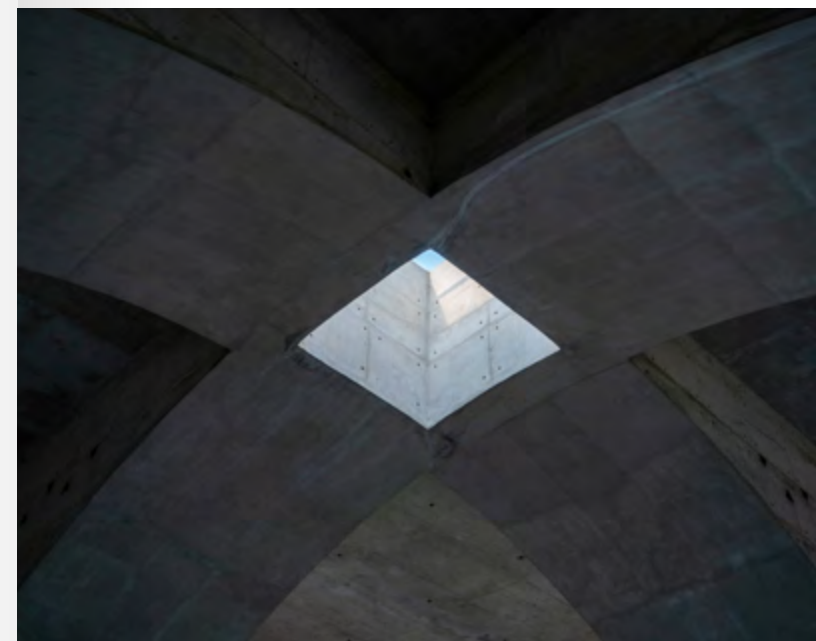
قیبلیتھا قوجاھاا نہ ختہ ۴-۲۱۲
 دہلیکا لعلقلمسوع قلملاا دلکتہ ۳-۲۲۱
 قذلقاا رلد یخکتہ رتاع قیعیلملا
 دھنواا نہ نہ نہالست
 قیعیلملا دہلیکاا غلنہ عا ۴-۷۱
 ہفقساا نہ

subcontinent, especially in Bangladesh, seem to have assimilated this idea completely, especially in its tectonic aspect.

The impressive structural system of the mosque's sanctuary results from the intersection of two double frames emanating from the axes of the mosque's square extruded in the form of a (+) sign, approximately 4 meters apart from each other. Furthermore, the corners of the square are supported by four columns that retreat slightly from its edges. By this simple structural configuration (peripheral and central) the roof of the entire mosque is suspended.

It must be noted that the central (double) frames were not left in the form of a perpendicular rectangle, but were cast in the form of semicircles. This gives the feeling of an invisible 'ghosted' dome that engulfs the space of the mosque and gives the worshipers a sense of intimacy that compensates for the 'strangeness' that may seep into minds as a result of the modern character of the mosque. It is remarkable how these double arches are reflected on the white marble surface of the floor of the mosque, giving the illusion of a complete sphere – not just a hemispherical dome.

As for the construction system of the minaret, it is comprised of four pillars in the form of the letter L (equilateral) on each of the corners of its square extrusion. In contrast to the covered surfaces of the mass of the sanctuary, the minaret begins solid from the bottom and gradually (parametrically) becomes closer to transparency with an increase in the size of its openings as we move towards the top.

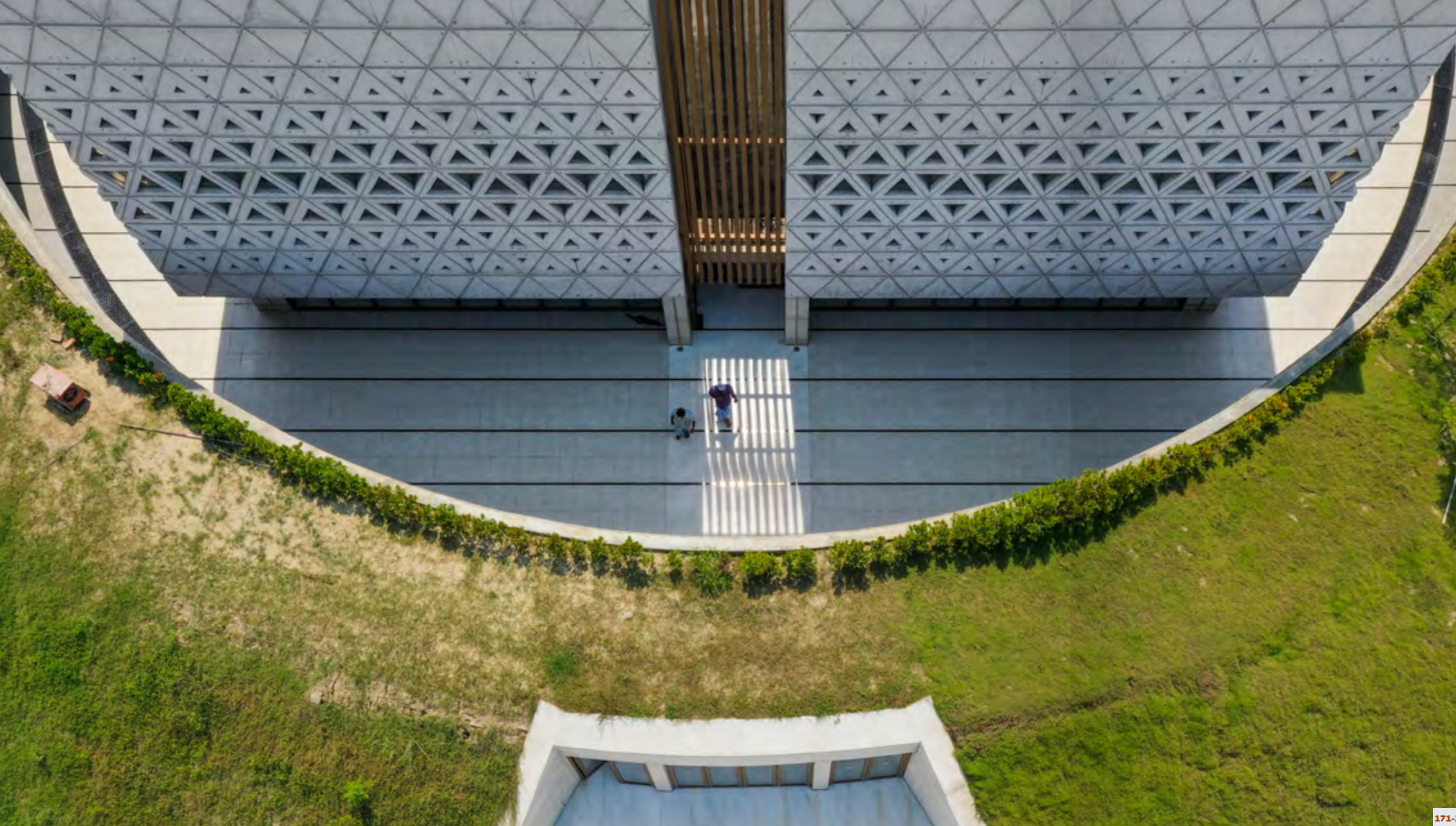


170-3

Technology and Sustainability

Although concrete may not be considered a sustainable material that should be used widely, especially in the climate of Bangladesh, it is interesting to note that the concrete used for construction of the mosque was brought from the cement plant close by in the Aman area. This reduced the carbon footprint that would have otherwise resulted from importing cement from afar. Further, the steel mesh used to reinforce the concrete (and the mashrabiya mesh) comes from recycled steel from the neighboring shipbuilding facility.

Although the sponsors of the mosque did not specify incorporating air conditioning and ventilation systems into the building, the architects chose working around this point as a precaution via several ways to ensure thermal comfort. The artificial mound alone is a massive thermal insulation element. It also helps to create a microclimate via a well thought-out ventilation system. Windows and folding glass doors under the walls of the mosque (except for the Qibla wall) allow cold air to pass through the interior space of the mosque from three directions when opened. The air itself is somewhat thermally filtered, thanks to the surrounding artificial mound. Suffice it to say that due to the high ceiling of the mosque, the hotter air rises to the top, drawing into the prayer hall the cooler air from below. That air touches the floor of the mosque, which is tiled with polished white marble, and which remains cool, due to the absence of carpets. This is the case in several mosques in Bangladesh. (The Bait Ur Rouf Mosque is an example).



The interior of the mosque does not need any electric lighting during the day, as natural light floods the sanctuary through longitudinal openings along the perimeter of the ceiling. In addition to the upper day lighting from the ceiling and sides, light is pleasantly filtered through a large number of triangular openings (mashrabiyyas) spread on the walls.

At night, the mosque is lit with an elegant hidden lighting system (without any heavy chandeliers, as in most 'traditional' mosques) thus appearing from the outside more like a beautiful lantern that illuminates the desolate industrial area. As for the sanitary facilities, they are 'buried' under the soil of the green mound and naturally lit and ventilated by upper glass skylights carved into the surface of the mound like light cannons.

Conclusion

In addition to the added values that the Aman Economic Zone Central Mosque brings to modern mosque architecture, it must be noted that it is in harmony with the Universal Acquaintance motto of this book and its critical premise Lita'arafuo "So that you may know each other."

However, the acquaintance in this mosque is not a universal one, but rather internal or local (i.e., between the workers of the economic zone itself) and external, between the workers in the region and other neighboring areas, especially during Friday prayers.

It is an important experiment in the seldom addressed case of constructing mosques within industrial, rather than an urban area. Thus, it joins another experience mentioned in this book (The Gargash Mosque in Dubai's Industrial Area).

By all accounts, we must emphasize that the experiment presented here should be viewed as an example of how to think about the mosque of the future without totally breaking with the past. For it is not characterized by ambiguity, but rather reveals its sources strongly, even if those sources were recent. Thus, we can consider this design as one of the smart examples that emphasize our idea of a parallel, innovative heritage without severing its links to the specific creative nucleus of the structure and identity of the mosque.

يلعبنا دنشاه ري لانا لنعما ١٧١-٢
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 قذلة لنعمة

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CENTRAL

MOSQUES

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LJUBLJANA ISLAMIC CULTURAL CENTER

A forum for Acquaintance

Ljubljana Islamic Cultural Center

Location: Aman Economic Zone (Narayanganj), Dhaka | Bangladesh

Owner: Ljubljana Islamic Center

Architect: Bevk & Perović

Area: 14080m²

Completion date: 2020

Capacity: 850 worshippers

Type: Central Mosque



1-4

The 'Forum for Dialogue' could be the slogan the architects of this remarkable mosque had in mind when designing it, a mosque which is indeed an added value to the heritage of contemporary mosque architecture and which requires our attention.

Dialogue, in a certain sense, is the basis for 'acquaintance' which is implied by the meaning of the motto of our book, embodied in the Divine Word "Li-ta'arafou" which we have translated as Universal Acquaintance.

The fact that the mosque is built in the city of Ljubljana, Slovenia, Eastern Europe, containing a modern style cultural center that blends with its surroundings, made it capable of not being just an ordinary mosque for Slovenia, but a virtual bridge between Islamic culture and the European Union.

The mosque and its cultural center opened in February 2020 as the very first mosque in Ljubljana, after overcoming an unimaginable 50 years of financial hurdles and right-wing political opposition for the initial application of construction!

Slovenia thus is the last state of the former Yugoslav Republic to have its mosque, "making Ljubljana a capital rather than a provincial town on the edge of the world," as the opening press release put it. Actually, it was acknowledged that its distinguished architecture became a mediator between the entire city of Ljubljana and the Islamic community, which consists mainly of the population of Bosnia and Herzegovina.

It is a sophisticated architectural complex, which became a tourist attraction and sought after meeting place for the local community. In doing so, it contributed to the positive dialogue and harmonious relationship between the Islamic community and the people of Ljubljana. The association of the mosque with additional cultural and sporting events increased its general social impact, and it became an arena for people to meet and "get acquainted" in a less formal manner than when they met only to practice strict rituals of worship.

(ع-أ) / ٢٤٣



2-4

What is also interesting, according to the architect's words, is that the construction of the mosque complex itself was a catalyst for effective urban change over the entire area. There will be a new bus station, a museum of railroad history, and even a housing development. Even though some areas around the mosque still look unpolished, in a couple of years, the zone will be landscaped and fully urbanized.

The train tracks that usually cut through cities typically create irregular divisions of the land parcel lot shapes. This is exactly what affected the shape of land on which the mosque and its center were built. The mosque is located in the heart of this area, facing the Kaaba, while the other buildings of the complex as a whole are aligned parallel to the non-perpendicular borders of the land, resulting in an intimate series of free open spaces, each with its own unique character and its various views of the surrounding landscape. According to this spatial/mass distribution, it was possible for the spaces of the mosque and its supporting buildings to extend safely towards the surrounding yards at the time of peak use (Friday prayers and holidays). In the narrow plot angles on which it is difficult to build, were treated as terraced gardens with ponds and semi-public spaces, providing a beautiful and useful buffer between the surrounding industrial areas and the center's plot.

The relationship of the mosque to the urban environment

This Islamic Center is located near Ljubljana's Central Train Station, in what used to be an area outside the masterplan or the city. However, the transformation of the area began with the relocation of the old industrial functions out of the city and the reintegration of the entire site into its central area. Being endowed with enormous potential, it is currently subject to rapid urban transformation in the midst of which the mosque and its cultural center took on a distinctive position, one that an Architectural Review article expressed by saying:

*"At night, the electric light emanating from the cube of the mosque and the vertical of the minaret becomes an almost tangible expression of a new center of gravity in the middle of what was until recently a badly lit and poorly connected part of the city. The beacon in the center of these surroundings addresses the city with what is arguably the most optimistic statement of urban renewal in Ljubljana in the last few decades."*¹

1 <https://www.architectural-review.com/buildings/beacon-of-reflection-islamic-and-cultural-centre-in-ljubljana-slovenia-by-bevk-perovic-arhitekti>

١-٤ تكوين صارم من الخارج مع تقسيمات هندسية منتظمة للواجهات.
١-٥ يتكامل المسجد مع محيطه العمراني وينسجم مع مكوناته.

(ع-أ) / ٢٤٣



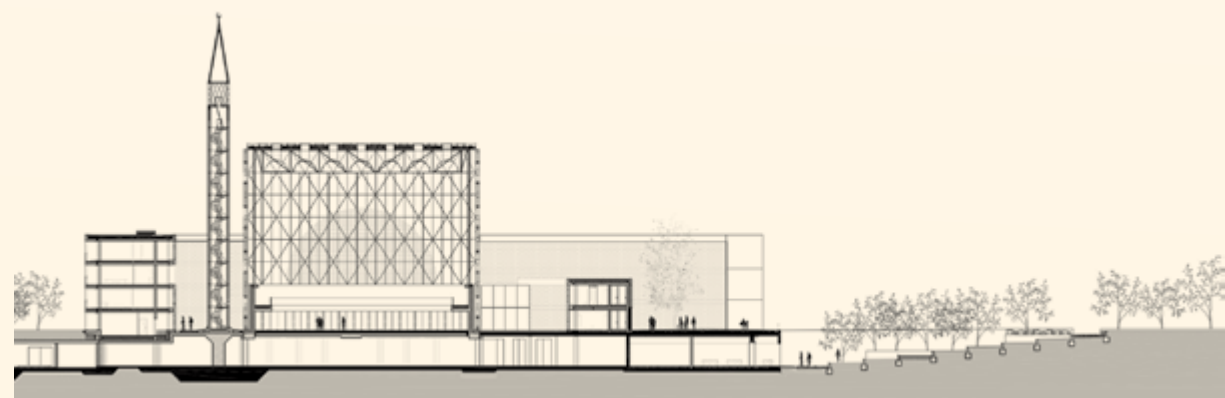
(٤-٣) المخطط

It should be noted that the way the masses are distributed in the site is similar to that of Louis Kahn's Dominican Motherhouse project, with its dissonant angles. Of course, this is rare in the tradition of modern architecture which relies mainly on orthogonality in architecture and urbanism. But it is prevalent in the heritage of Ottoman architecture and its religious complexes, especially the buildings of the "Kulliah" and "Takiyyah" typologies, which influenced the Balkan countries and the former Yugoslavia throughout the history of Ottoman rule.

(٤-٤) المخطط

- ٤-٣ المسقط الأفقي للطابق الأرضي.
- ٤-٤ قطاع طولي.
- ٤-٥ صورة جوية من الأعلى توضح قاعة الصلاة والكتل المحيطة بها.

3-4



4-4

Analytical description of the external design of the center's buildings

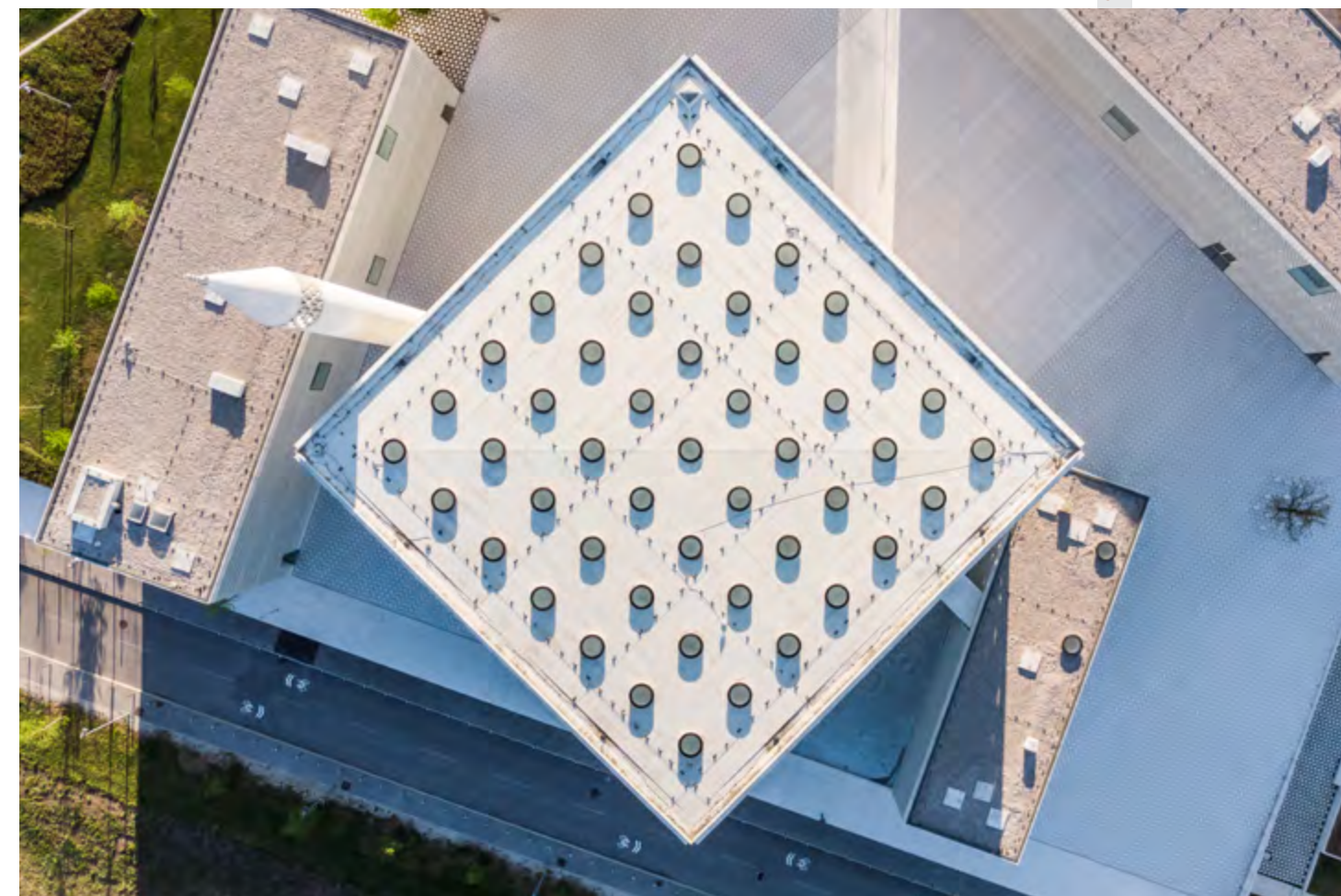
The Islamic Center's compound consists of five separate blocks, the middle and largest of which is the mosque. The mosque block, with its cubic shape and graceful minaret, is located in the heart of the land in a dominant manner. It is separated from the rest of the blocks by courtyards and gardens, the most effective of which is the entry and gathering plaza defined by both the cube of the mosque and the library block (with residences above it).

The main mass is built of a steel frame structure that forms a cubical volume with dimensions of 32/32/24 meters in the shape of a thick, but at the same time transparent grid, while the base of the cube is impermeable and filled with white concrete on the ground floor level to ensure the privacy of worshippers.

The design of the minaret follows the same style as the cube, albeit in a reversed compositional way: most of its cylindrical body is made of exposed concrete, while the upper part of it returns transparent and perforated to remind of the steel structure of the cube of the mosque. Consequently, the concrete material returns to crown the minaret with a pointed cone, reminiscent of the distinctive Ottoman minarets spread in the Balkans, Bosnia, and other places.

(٤-٥) المخطط

5-4





6-4



7-4

The outer skin is the most distinctive feature of the whole project. It is in the form of a network grid of diamond-like rhombuses that are repeated throughout the complex and echoed with a verity of dimensions and scales, giving the place a coherent formative visual unity.

The use of oak wood reduces the effect of steel and concrete, counterbalancing them in terms of giving a warm natural touch, in contrast to the two rather cold industrial materials. This is most evident in the entry foyer consisting of a group of doors along the entry façade, as well as in the inner layers that go along with, and are parallel to, the external steel grid. The plan for using the aforementioned materials extends to all blocks of the project: the library block, the theater, and the classrooms block, in addition to the ablution services block and bathrooms that are connected to the mosque's entry foyer via a corridor resembling a small bridge.

Analytical description of the interior design of the center's buildings


The Mosque

Because of the high transparency that characterizes the structure of the mosque, with its enveloping grid, many of its external characteristics are reflected in its internal space. As we mentioned above, the mosque is a large cube, and its load-bearing façade is composed of a structure in the form of a perimeter grid with a structural unit in the shape of the letter V (and inversion Λ) to form the shape of a rhombus.

The structural grid-lattice was left as it is, exposed; the idea of the architects was to express a sense of structural honesty and invest in its geometric aesthetics. From a practical point of view, making the structural system peripheral freed the floor area of the mosque's space from any pillars that would have otherwise impeded the continuity of the prayer rows, thus securing the necessary visual continuity to the Qibla wall (with its minbar (pulpit) and mihrab (Qibla wall niche)).

٤-٦ الشبكة الزخرفية الهندسية للواجهة.

٤-٧ تعبير المئذنة عن ارتباط تاريخي بالمآذن العثمانية لكن بتعبير غير صريح وغير مباشر.

The image shows the interior of a mosque. A large, suspended dome made of a metal grille with fiberglass domes hangs from the ceiling. The floor is a light-colored, polished material. Several people are sitting on the floor in the foreground, and one person is sitting on the floor in the background. The walls are white with some Islamic calligraphy and a circular emblem. A staircase is visible on the left side. The overall atmosphere is bright and modern.

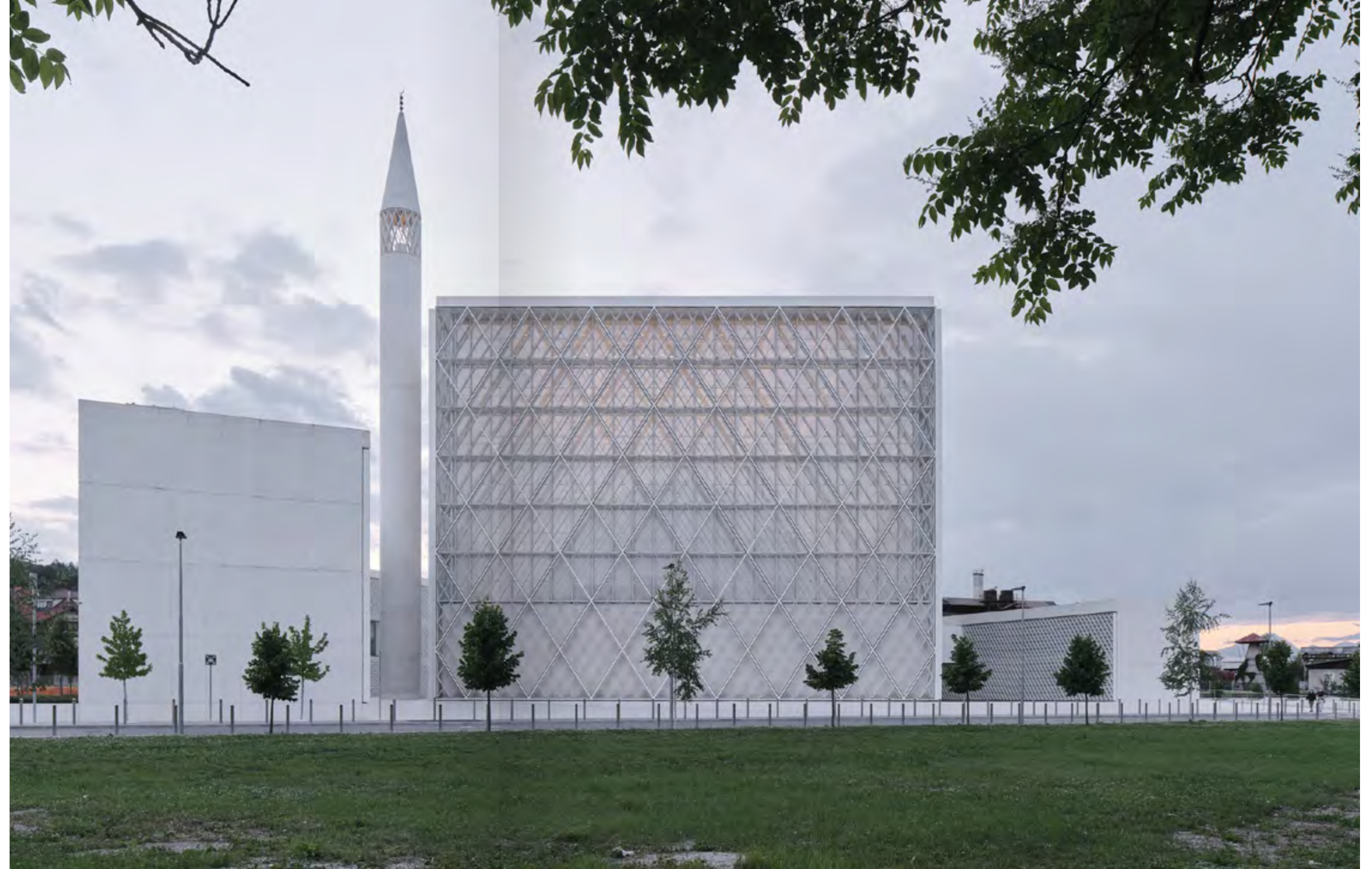
Hanging from the ceiling is a 7x7m modular metal grille with lighting elements in the form of small fiberglass domes. However, the dominant element of the entire interior space (and perhaps the entire design idea) is the suspended interior dome.



A-B

Hanging from the ceiling is a 7x7m modular metal grille with lighting elements in the form of small fiberglass domes. However, the dominant element of the entire interior space (and perhaps the entire design idea) is the suspended interior dome. It is, as it were, a 'ghost' dome, which compensates for the requirement of the presence of an actual dome in traditional Ottoman mosques – albeit with a new and striking innovative interpretation. This interpretation represents an unprecedented compositional breakthrough: instead of the dome being the most prominent element outside (on top) of the mass, it became here as if the cubic space of the mosque had swallowed it inside, hiding it from external view!

This dome is a subtle 'geodesic' hemisphere with a bent triangular surface structure, in harmony with the triangular structure of the outer lattice. It is suspended from the ceiling by cables that can be regulated so as to lower the dome in order to clean the blue cloth (membrane) that covers it. The blue color of the dome, resulting from its translucent (opaque) fabric, was intended to give the viewer a feeling more like looking at the dome of the sky, in addition to echoing the Blue Mosque in Istanbul in a most subtle indirect way.



P-Q

It is important however to note that the presence of the dome is not merely decorative or symbolic. Rather, it has the function of diluting the glare of sunlight filtering in from the walls and ceiling of the cube. Also, its position in the middle of the space helps to break down the huge scale of the cube, bringing it closer to that of the worshiper – a human scale indeed. It can be said that the general character within the space of the mosque is the result of the effect of the transparency of the dexterous lighting based on the placement of carefully calculated layers in order to filter the light that floods the inner space of the cube to varying degrees.

The mihrab, which is made of stainless steel, is designed as a separate element from the Qibla wall of the mosque's cubical body. The reason for this was to give exceptional importance to this key element of the interior. Similarly, the minbar, could also be considered as an element of furnishing, in according with the locally inherited Ottoman heritage. To the left of the mihrab there is also a minor minbar (chair) of low height for the purpose of secondary religious lectures and lessons.

8-4 جزء من القبة الداخلية التي تهيمن على قاعة الصلاة.
9-4 واجهة المسجد مكعب زخرفي صريح تحيط به بعض الكتل الهادئة المتناغمة مع تكوينه.

Supportive facilities to the mosque complex

The Islamic Center's program further includes vital facilities that support the mosque program: museum exhibition halls, educational and sports facilities, a distinctive restaurant, and housing...

The interior of the center generally communicates with its exterior counterpart continuously throughout the site to emphasize a sense of the unity and to create a social atmosphere integrated with that of worship. The design of the interior spaces for all these facilities is highly practical with inherent elegance and high functionality. Accordingly, the interior elements were designed from high-quality materials to be flexible on the one hand, and highly durable on the other. It is also worth noting the invisible parts of the project, the basements, contain a large gym and fitness center, a spacious parking garage, as well as a geothermal heat pump and technical systems equipment.

٤-١٠ قاعة الصلاة من الخارج - تكوين بصري ملفت.
٤-١١ قاعة الصلاة من الداخل.

Technical Analysis (Technology and Sustainability)

It was decided from the outset by the architect, that to achieve sustainability, high quality, rather expensive materials, had to be used – they should be considered as an investment for the future. The target was to achieve durability and quality that would ensure less future maintenance costs.

In terms of heating and cooling, the complex is heated and air-conditioned by a system of geothermal heat pumps, moving a liquid through tubes that run between the walls or double ceilings and circulate throughout the building as well as passing through the ground (the 'geo' in geothermal) to exchange heat into or out of the complex, depending on season. There is natural cross ventilation, with additional artificial ventilation in certain places as needed. The architects also used spatial logic topology to orient buildings so that they provide either light or shade according to the different seasons.

In terms of lighting, it can be said that as a result of judicious design decisions, the building is filled with genuine natural light, benefiting from it throughout the long winters. The large glass surfaces are always doubled with a kind of 'built-in' canopy, as well as drapes and wood-patterned grilles to protect from the hot summer sun. On the other hand, it is mentioned that electric lights were placed in strategic places, and the inner courtyards were provided with street lights sparingly due to the limited use of the center at night.

In terms of acoustics, it is noted that the space of the mosque is equipped with a traditional acoustic system, which has been slightly modified due to the presence of semicircular shapes made of fiberglass which capture and absorb sound well.



10-4

Conclusion

This pioneering architectural experiment in mosque architecture must be noted with great distinction, in terms of its brilliance and progress on several levels. The production of its forms stem from a deep understanding of both time and place, resulting from serious research into its cultural/religious dimension:

Understanding time, with its technical requirements of construction and building materials, in addition to taking into account the priority of sustainability standards and the new architectural aesthetics that emerge from them (not revealed or appreciated until the last few decades.)

On the other hand, the architect understood the importance of the place (geography and history) on which the mosque was built: Eastern Europe, with its ideological transformations (from socialism to liberalism and market economy) and modern geopolitics (the disintegration of the former Yugoslavia). Moreover, the multiplicity of cultural relations/interaction of the place with Western Europe on the one hand and the Islamic world that ruled it for many centuries on the other.

The result is that the architectural design of the Ljubljana Mosque and its cultural center reflects a deep awareness and an advanced vision of the aforementioned set of conditions of existence, and of the architects' creative ability to produce a spatial/volume combination that absorbs and transforms them into a vibrant contemporary socio-cultural environment – for acquaintance!

(٤-١١) قاعة الصلاة (٤-١٠) قاعة الصلاة



11-4

AUSTRALIAN ISLAMIC CENTER

Acquaintance through Transparency

Australian Islamic Center (AIC) Mosque

Location: Newport, Melbourne | Australia

Owner:

Architect: Glenn Murcutt, Hakan Eleveli

Area: 1000m²

Completion date: 2019

Capacity: 800 worshippers

Type: Central Mosque



12-4

Some examples of mosque architecture that have emerged in the Islamic world (Ummah) reflect experimental attempts that go beyond the mainstream, offering truly novel solutions.

Throughout the geographical expansion of mosque architecture in past centuries that coincided with the expansion of Islam, new adaptive solutions developed, proving that the mosque, as a building type, is quite capable of crossing and mixing with other cultures without compromising its main function, proving that while it's a building type that is persistent in its function, it intrinsically allows for a great variety of formal experimentation, the observation of which is a fascinating phenomenon to observe.

١٢-٤

١٢-٤ قاعة الصلاة من الأعلى توضح
فوانيس الإضاءة الطبيعية.
١٣-٤ و١٤-٤ رسومات أولية أثناء تطوير
الفكرة المعمارية.

With its declared slogan: "promoting inclusivity," perhaps the mosque/Islamic Center in Newport-Melbourne, Australia is the closest to the slogan of this book, "Universal Acquaintance," and its general premise. Despite the differences of opinion regarding its architecture, it undoubtedly presents one of the most important innovative experiments in mosque architecture in the twenty-first century – if not the most important one.

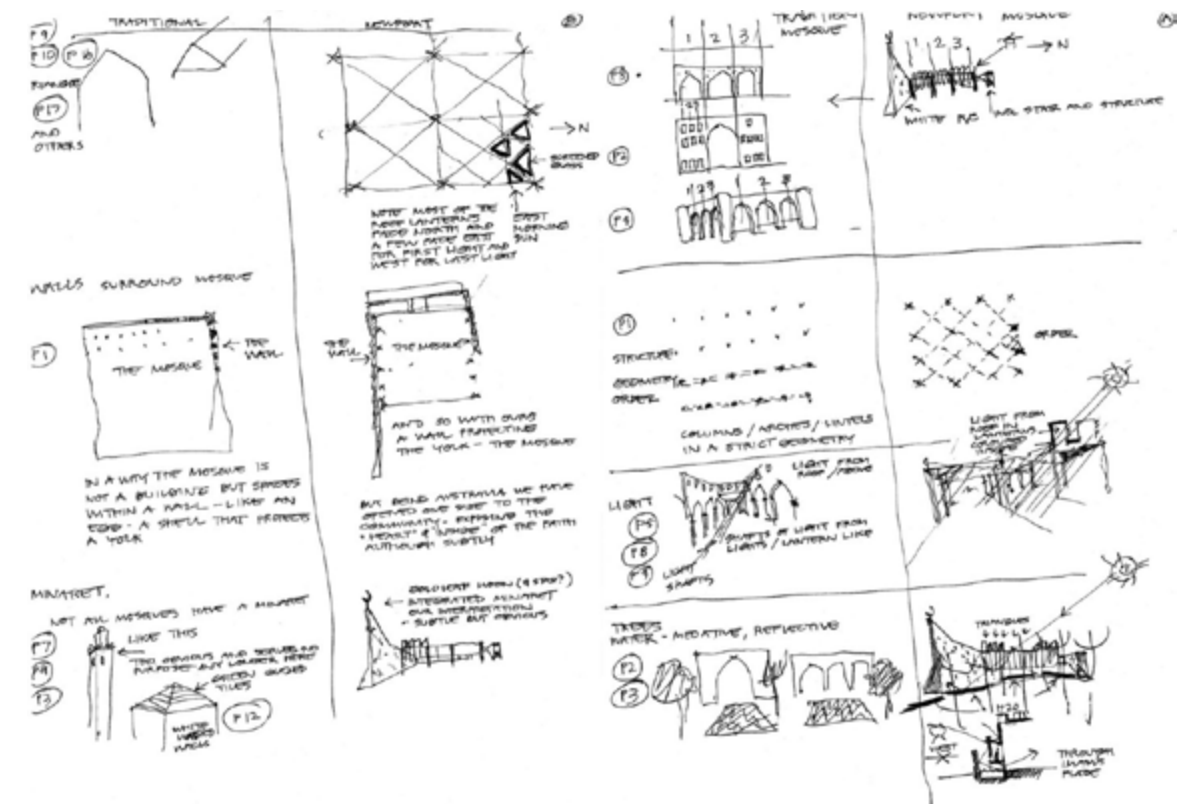
The relationship of the mosque to the urban environment

The Australian Islamic Center (AIC) mosque is located at 23–27 Blenheim Road, Newport, Victoria, a 20-minute drive southwest of Melbourne. It is adjacent to multiple recreational facilities, such as a golf course to the west, a miniature railway amusement park to the south, a public park to the east, and a secondary school to the north. These various facilities occupy vast land areas with a relatively low building density.

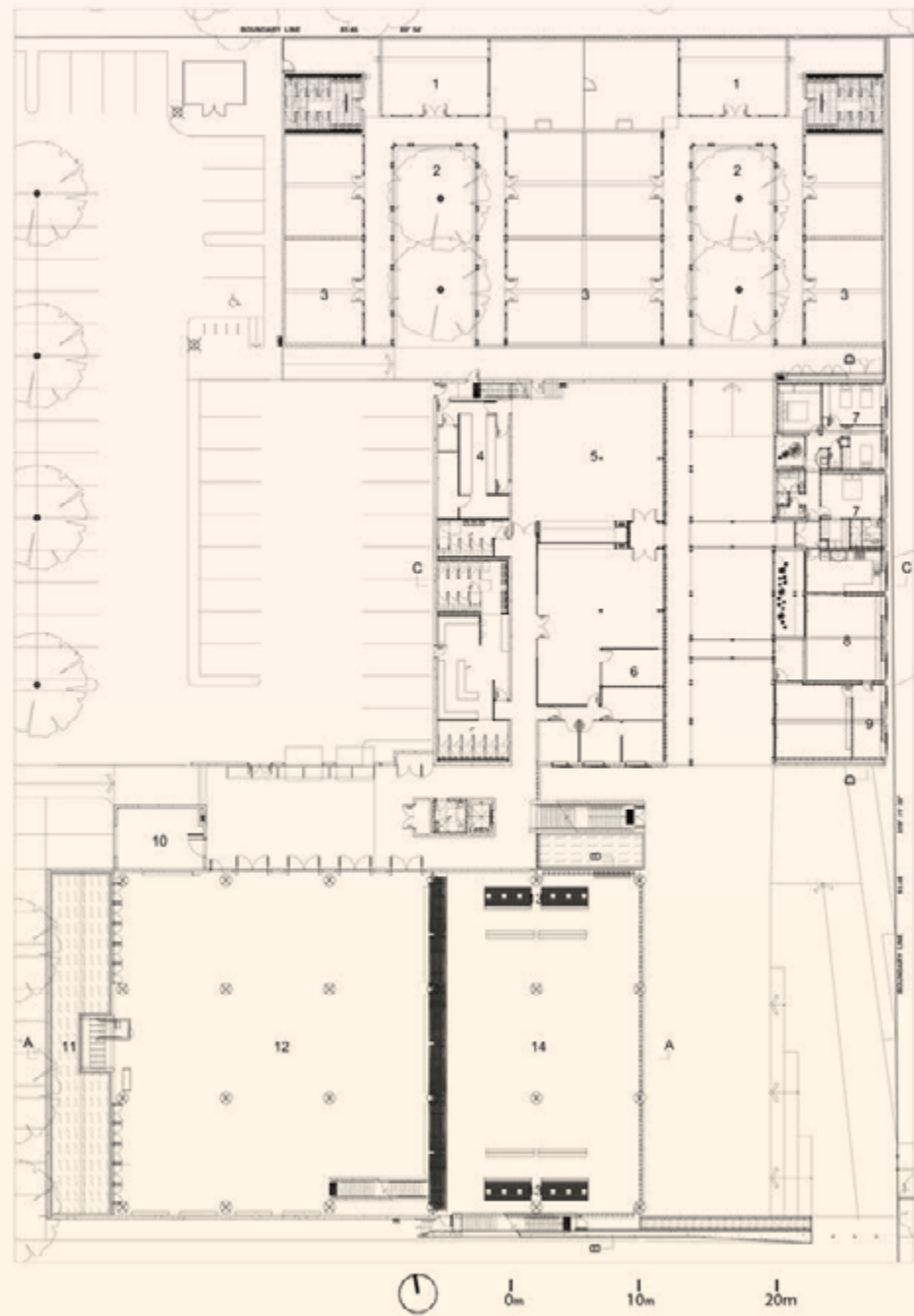
The mosque was designed by Glenn Murcutt, Australia's most celebrated Pritzker Prize laureate, in collaboration with Hakan Elevli, a Melbourne-based architect who has gained valuable experience designing several mosques in Melbourne. Among the 340 mosques that serve the more than 600,000 Muslims in Australia, this mosque, and perhaps the Punchbowl Mosque in Sydney as well, can be considered the only mosques that attempt to express a modern Australian mosque identity.



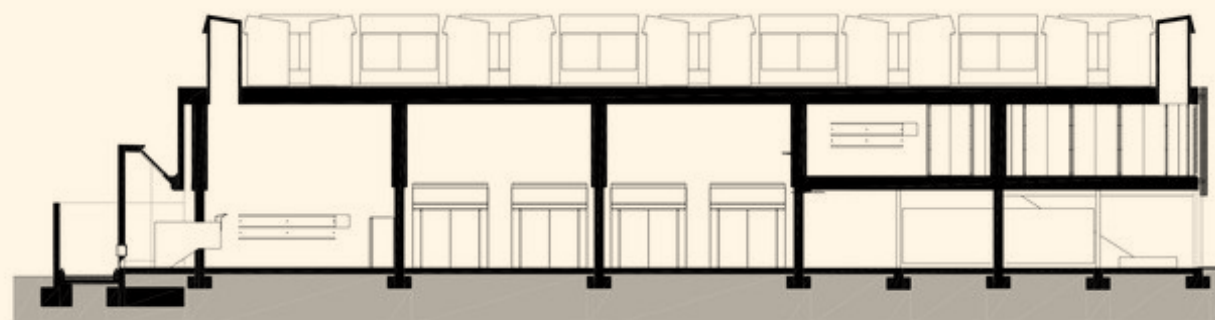
13-4



14-4



15-4



16-4

The client is the Newport Islamic Society (NIS), an Islamic organization in West Melbourne, while the contractor is Hadarco, led by Mohamed Hadara. When the preexisting Newport mosque (Bilal bin Rabah Mosque) reached its maximum capacity in 1995, a plan arose to develop a new mosque with educational facilities for the youth around it. After years of surveys and discussions with the Hobson Bay City Council, particularly in terms of the non-Muslim community's resistance to the project, the council finally granted a plot of land on Blenheim Road (formerly a stud paddock) to be purchased for the construction of the mosque. What was the architect's response to the non-Muslim community's resistance to the project? He emphasized the concept of transparency!

Analytical description of the building from the outside

The Australian Islamic Center is a self-contained volume preceded by a spacious, open courtyard, a space for the gathering together of worshipers, punctuated by eucalyptus trees. This open courtyard is connected to another covered one under the upper floor of the mosque (the women's prayer space). This courtyard (named 'Veranda' in the plans) somehow replaces the element of the courtyard in the traditional mosque scheme. In the front of the covered courtyard, the glass entrance doors are located along the entire rectangular, eastern side of the mosque.

As for its southern side, a solid wall of exposed concrete strangely emerges in replacement of the minaret in the traditional mosque; the architect did not wish to explicitly 'declare' the minaret with a high vertical mass, as expected and as is usual. Instead, he implicitly 'suggests' it in the form of this long, horizontal wall that extends from under the mosque toward the outer yard with a welcoming gesture.

There is no specific operational function that this wall/minaret performs in its proposed configuration (i.e., the call to prayer) nor is there any semantic sign that reveals it as a minaret. Only a beautiful, golden crescent (semiotic sign) towers over the last inclined part of the wall. It should be noted that this crescent was designed by the artist Simone Lemone as an added accessoire, not as an intrinsic architectural element. Nevertheless, the crescent helps the viewer perceive the minaret abstraction (wall), and the entire built form for what it is, a mosque. In this way, the wall cum crescent performs one of the traditional functions of the minaret: declaring to the world (in general, and Muslims in particular) that this is an Islamic place for worship of Allah.



٤-١٥ المسقط الأفقي.
٤-١٦ قطاع طولي.
٤-١٧ لقطة تفصيلية لواجهة قاعة الصلاة توضح فوانيس الإنارة الطبيعية وتشكيل الحوائط الخارجية.

١٥-٢١



قُبَيْلِهَا تَبَارَكَ رَبُّهَا وَهُمَا إِلَهُ وَجْه
خَلْقِهِ وَالنَّبِيُّ مَعْشَرًا يَهْتَدُونَ
قُرْبَةَ تَحْدِثُهَا خَلْقًا خَيْرًا مِنْهَا
نَلَاكَ رَبُّكَ لِيُؤْتِيَكَ مِنْهَا خَيْرًا
وَيُخْرِجَكَ مِنْهَا إِلَىٰ مَقَامٍ مَّجِيدٍ
سَمِعْنَا وَأَطَعْنَا إِنَّ رَبَّنَا
كَرِيمٌ



19-4

تصميم (18-4)

The most distinctive, innovative, and influential element of the design, externally and internally, is embodied in the huge, multi-colored 'lanterns', a compositional unit/motif repeated 96 times on the roof, each weighing more than a ton. In these lanterns, the two systems of the structural ceiling and its service spaces are united in an integrated geometric system supposedly inspired by Islamic patterns. But here the architect did not use the pattern as an added ornament, but rather as an integrated architectural/technical structural system. From a critical viewpoint, we find that these lanterns have replaced the domes and arches (and perhaps muqarnas) that characterize the halls of the sanctuary (haram) in traditional mosques.

The ceiling's grid pattern is based on six rows, 1.4 meters in length on the Qibla side, and 8.77 meters in length on the perpendicular side. The modular grid unit is 8.32 x 8.77 meters for the columns, which is then multiplied by 3 x 5 units. The lanterns' triangular geometry is derived from superimposing one grid perpendicular to another, with a 45° angle of rotation applied to it. The triangles included in the horizontal grid extend 2.8 meters upward to form a prism, but each of their upper faces is slightly inclined, by 15 degrees, to ensure rainwater runoff.

18-4 حائط المسجد يرتفع من طرفه ليشكل مئذنة رمزية تشير إلى وظيفة المبنى.

19-4 تشكيل كتلة قاعة الصلاة فكرة مبتكرة لخلق مجالات للتشكيل الجمالي مهرون بتوفير الإضاءة الطبيعية طوال النهار.

The longest side façade of the mosque is covered with 11.52 mm thick colored glass. The lanterns are directed in the four cardinal directions: 21 yellow lanterns facing east, symbolizing the future or heaven, 21 red lanterns facing west, symbolizing blood or strength/courage, 27 blue lanterns facing south, symbolizing sea-sky or infinity, and 27 green lanterns facing north, symbolizing nature or life...

The zinc alum paneled lanterns sit atop metallic plywood and are capped with hand-painted gold (inspired by the Al-Aqsa Mosque's dome in Jerusalem). It is noteworthy that the range of colors chosen was inspired by the designer's extensive study of mosque architecture around the world, which he carried out after being commissioned. With the east and west lanterns along the Qibla, the hierarchy of the front and side façades is clear. As the sunlight passes through the lanterns located at latitude 37.81° and longitude 144.97°, an array of colors illuminate the prayer hall, revealing the different seasons and times of the day. The daily path of the sun is mainly captured by the yellow lanterns in the morning and the red lanterns in the late afternoon, and the light intensity of the green and blue lanterns varies between winter and summer. The most visible reflections occur during the summer, when the sun's path is at its highest.

تصميم (19-4)



In its design, the architects were keen to make the inside of the building closely connected to the outside through the idea of transparency, especially in the main prayer space, which is a rectangular prayer hall (hypostyle) that consists of meeting three spans perpendicular to the Qibla direction and defined by columns.



20-4

Another characteristic feature of the mosque from the outside is that the volume that includes the mihrab and the minbar protrudes from the Qibla wall – in the Qibla direction. Instead of a single block design, the mihrab is divided into three successive concrete openings (louvers) that hover over a 5-meter-wide, reflective front water garden. Louvre openings soften the mihrab's mass by dispersing sunlight onto the concrete and water surfaces. Horizontal gaps between the openings frame the top of the surrounding landscape to avoid drawing the viewer's attention toward the parking lot and golf course outside.¹

In terms of external landscaping, the architect added three reflective water gardens with edges of black marble. They are strategically located along the side of the Qibla wall in front of the mihrab and on the sides of the eastern backyard.

In addition to their role in cooling the indoor air, they 'soften' the boundary between surfaces. Encircling these water gardens are planters of blooming flower in summer and golden berries in autumn, adding a sort of natural decoration to the otherwise plain surfaceS.

1 These practical solutions add subtle 'touches' to many of the mosque's details, but are invisible to the public (as evidenced by the lanterns covering, the concrete flowing over the mihrab, and the cut pipes of the gutters).

Analytical description of the building from the inside

In its design, the architects were keen to make the inside of the building closely connected to the outside through the idea of transparency, especially in the main prayer space, which is a rectangular prayer hall (hypostyle) that consists of meeting three spans perpendicular to the Qibla direction and defined by columns, each 42.58 x 8.77 m. The hall is surrounded by double-height concrete walls 250 mm thick, with a series of glass doors along the entire length of the main entry façade from the east at the front of the covered court. On the other hand, an artificial pond, or what we can consider a water garden, was built to surround the mihrab and the Qibla wall from the western side.

The capacity of the prayer hall is approximately 500-800 worshippers, with a total area of 1,207.4 m²: the men's hall has an area of 656 m², with a spacious reception area behind it of 437 m². The latter contains a distinctive ablution corner on its side and shoe racks that work together to form transparent dividing walls on both sides. As for the mezzanine floor, it is reserved for women, and it is about 437 m² located directly above the entry court.

As stated above, the design of the roof of the sanctuary is characterized by an innovative lantern element. The triangular lanterns function as skylights, provide vivid color to the space, and are carried on twenty-four secondary columns forming a rectangular network extending 8.32 m from east to west and 8.77 m from north to south.

Additional facilities adjacent to the prayer hall include a special hall for funeral ceremonies, and next to it are toilets and showers. Also overlooking the prayer hall from the north side are administrative offices, a library, an elementary school consisting of twelve classrooms, a restaurant, and a gym (taking into account the separation of males and females to ensure privacy). In addition, there are 122 car parking spaces on site and 31 spaces along the adjacent Blenheim Road. The AIC complex was planned in three phases. The first phase, consisting of a mosque, library, offices, gymnasium and restrooms, has been completed. The second phase, the restaurant and school, is nearing completion. The third phase, which is a multi-purpose hall, a double-decker car park, and a side entrance from Ross Road, will be developed in the near future.

The main feature of the interior space of the mosque is the nature of the moving sunlight rays emanating from the lanterns (and the openings of the private space containing the body of the mihrab and the minbar). All this creates a set of colorful reflections, sparkling on the walls, floors, and columns that border the space of the prayer hall. These lanterns also help, through their geometric lines, to confirm the sense of direction towards the Qibla in the space as a whole. The monochromatic colors of the wall, ceiling, and columns (gray and white) are neutral, serving to counterbalance the vibrant colors of the lanterns. Emphasizing this neutrality further is the carpet element, which was designed to somehow mimic the concrete texture of the walls and complement them with its lines defining the prayer rows.

- ٤-٢٠ المحراب تبره الإضاءة الطبيعية الهادئة.
- ٤-٢١ بعض تفاصيل الغلاف الخارجي من الداخل.
- ٤-٢٢ فوائس الإضاءة الطبيعية من الداخل.

٢٠-٤

٢١-٤



21-4

As for the false-ceiling under the lanterns, and the columns that support it, they were painted white to lighten the interior and confirm the structural honesty of the interior space. While the mosque is flooded with bright colors during the day, we find, on the other hand, that the inner space of the mosque has dim lighting at night, dominated by gray and white colors, an effect of LED lighting.

On the side of the Qibla wall, around the mihrab, a strong relationship with the outside was maintained through the concrete openings overlooking the water. While direct sunlight from the west is blocked, its reflected light makes the concrete look alive and animated, interacting with the ever-changing colors of the sky, while the reflection of sunlight from the water garden illuminates the interior space with minimal glare. In addition, the gaps between the openings allow worshippers inside to view the eucalyptus trees planted outside.

The wall of the outward-facing mezzanine floor, which the architects refer to as a 'veil', consists of three layers of louvers. The medium horizontal steel louvers were tilted upwards to preserve privacy for the women. The vertical glass louvers further act as a secondary 'skin', and also multiply the reflection of sunlight. The inner glass wall isolates rainwater, but at the same time allows daylight to pass through in a soothing manner.



22-4

٤-٢٣ جزء من الفضاء الداخلي.
٤-٢٤ تمثل فوانيس الإضاءة الطبيعية
عنصر الزخرفة الأهم في المسجد.



٥-٤٤

Technical Analysis (Technology and Sustainability)

The mosque mainly uses a passive cooling/heating strategy to regulate the Melbourne climate, which typically ranges between 15–26° C in the summer and 7–13° C in the winter. The mihrab and entrance walls consist of full-length operable glass doors, and the lanterns' hoods are equipped with an electrically controlled exhaust outlet to vent heat, like a chimney. During the summer, the doors are opened to allow cross ventilation through the water gardens in the mihrab and the veranda areas. The heat inside the prayer halls rises to the ceiling and is released through the lantern outlets. In the winter, the doors and lantern outlets are closed. In extreme temperatures, 0–5° C in the winter and 37–39° C in the summer, heating or air conditioning is turned on to heat or cool the prayer hall. The floors of the first few rows—mostly used for daily pray—are heated during the coldest part of the winter. Rainwater collected from storm water pipes is stored in a 20,000 liter underground tank and used to water the landscape and provide water to the toilets. Water from the grid is only use for wudu, drinking, and other purposes where rainwater is not usable. Additionally, the roof above the office and library is covered with 200 m2 of solar panels to cover most of the daytime electricity needs of the complex and send extra energy to the grid as well, especially in the summer.

To support social activities, the mosque has various spaces for events, including the open courtyard, veranda, prayer halls, and the futsal field. As the multipurpose hall has not been built yet, most events, such as wedding ceremonies, Islamic courses, lectures, and fire emergency training and tours, are hosted in the prayer hall. According to AIC members, exposure to the mosque sanctuary encourages conversations and discussions with non-Muslim visitors to explain Islam and clarify misleading perceptions. In addition to donations (sadaqahs), the maintenance and operational costs are supported by income from communal functions, such as from the gymnasium, restaurant, and primary school.

٤-١٤



٥-٢٥

Conclusion

Whether on a local or global scale, building the Australian Islamic Center in Melbourne was no ordinary event. Locally, it is considered the most important 'cultural' building in Australia since the construction of the Sydney Opera House.

The AIC is a mosque that adopts a new architectural language stemming from the aesthetics of transparency and openness, the aesthetics of technology and sustainability. It does not speak in the language of useless, superficial mimicry of historical forms imported from a different time and another place – like, alas, most Islamic projects in Ummah (the Islamic world). From this viewpoint, it is an architectural experiment very much worth studying and considering!

It is fair to say that the members of the Newport Islamic Society (NIS) have been successful and far-sighted in their investment and successful in their choosing an architectural team that included the most famous architect in Australia (a non-Muslim) to translate their aspirations and vision of a mosque with an Australian identity, a congregational mosque ('Jame' is the term in Arabic), a mosque that 'gathers' together – literally – Muslims and non-Muslims, for acquaintance – for Universal Acquaintance...

٤-١٥



٥-٢٥

THE ASH-SHALIHEEN¹ MOSQUE

In Arabic, Shaliheen means valid/pious people.

Basic empirical data based on a report by Dr. Mohammed Al Naim

Deep Retrieval of Tradition across Place and Time

The Ash-Shaliheen Mosque

Location: Bandar Seri Begawan | Brunei

Owner: Ministry of Religious Affairs

Architect: Abdel-Wahed El-Wakil

Area: 2100m²

Completion date: 2012

Capacity: 500 worshippers

Type: Central Mosque



It is rather difficult to separate the architecture of the Al-Salihin Mosque in Brunei from the architect who designed it. Mr. Abdel-Wahed El-Wakil, is an architect with arguably the most distinct style and even has a school of thought in designing mosques in the 20th century attributed to him. It's a school that derives its principles from a long-standing and continuous construction tradition that is about to be extinct – except for his contributions and that of a handful¹ of other architects who follow in his footsteps.

It is well known that El-Wakil is one of the few architects who contributed, through their designs of the last quarter of 20th century, in the rooting of a regionalist-style school of architecture, one that has a long story of multiple reactions toward the historical reservoirs of Islamic architecture, some of which will be raised here.

Whatever the case, it is really remarkable to find a mosque of this style being built at the end of the first quarter of the 21st century! It represents 'variations and continuity', as opposed to 'invention and innovation' This is originally the philosophy of El-Wakil, who does not subscribe to the modernist agenda of originality and 'innovation' in architecture, but rather has the conviction of building-on traditions, rather than breaking with them, albeit with a process of incremental variations on its themes based on passed-on wisdom, craftsmanship, and 'mastery'...!

Regardless of our present position on this philosophy, we must look at it in its original spatio-temporal context, even if this mosque actually belongs to the very near present. This makes us raise some questions about its school of thought and craftsmanship, towards which it shows a complete commitment until today.

The main problématique here is that the style of this mosque (and El-Wakil's architecture in general) is based on forms stemming from mud brick (and possibly stone) construction techniques with their resulting vocabulary/types, such as arches, domes, and vaults (possessing what he calls their special 'alchemy')...Does this style thus still gain its existential legitimacy in contemporary

mosque architecture by reproducing its forms and recycling them with material with different 'chemistry' – not Alchemy – and a completely different construction logic?

Despite any critical position that may be directed to this mosque in terms of not presenting anything new in regards to the future of mosque architecture, still we cannot stress enough that what it represents is a tradition that must continue, albeit parallel with the 'opposing' line of 'innovation'. These two 'lines' had better not be mutually exclusive! And that the former's stance most certainly has a place in contrast to the feverish fascination with innovation and 'originality' on which the discourse of modern architecture theory (ideology) thrives.

It should be emphasized that it is necessary for the chain of continuity (silsilah sharifah) of this 'traditionalist school' to remain alive, but within its initial point of departure, conditions of existence, and strict logic... it has to be consistent and faithful to its moral ground that gave it its legitimacy!

Although the scope of this short account certainly does not allow for a thorough discussion of the architecture of El-Wakil and his contributions, still, two observations must be made here to understand the background effecting the Ash Shaliheen Mosque: the lineage of El-Wakil's architecture and its origin on the one hand, and on the other hand, no less important than the first – his philosophy!

It is known that El-Wakil's architecture stems from his apprenticeship with the leading Egyptian architect Hassan Fathi with his unique view and principles. Later, he developed these principles and expanded their horizons to integrate other Islamic styles, which he combines with ingenuity and unparalleled mastery. Without a doubt, the architect is a 'master' of his own style and is most probably the only legitimate heir to the Hassan Fathi School.

٢٧-٤ الموقع العام.

٢٨-٤ منظر جاني عام للمسجد.

٢٩-٤ المسقط الأفقي للطابق الأرضي.

٣٠-٤ وظائف المشروع.

1 Maybe even less than a handful.



28-4



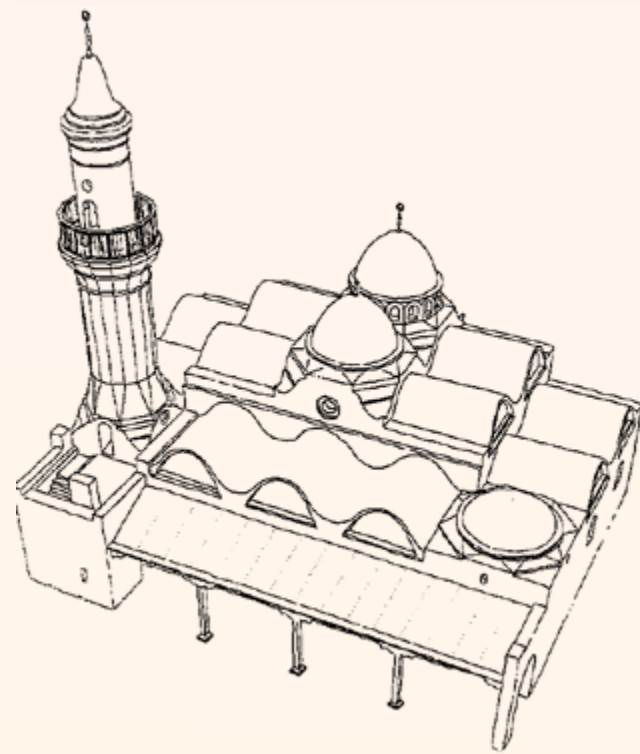
Additionally, Master El-Wakil's philosophy, on the other hand, stems from his philosophical affiliation (or let's say his being influenced) by the 'traditionalist' school² that believes in the existence of an eternal wisdom and inherent primary universal truths that constitute a source for all major world traditions/religions³. It is most important to note that this school of thought is made up of a group 20th centuries thinkers who share a common critique of modernism, as such, in all its manifestations and productions – including architecture!

With this background, El-Wakil comes to this mosque in Brunei with philosophical doctrines and expertise in this style; expertise gained from building mosques and residences in many places around the world, especially in Egypt and Saudi Arabia. It is indeed interesting to critically observe the way he adapted his style, with its distinct typologies, and regenerated it in different geographical areas with endless variations – especially in this Ash Shaliheen Mosque...

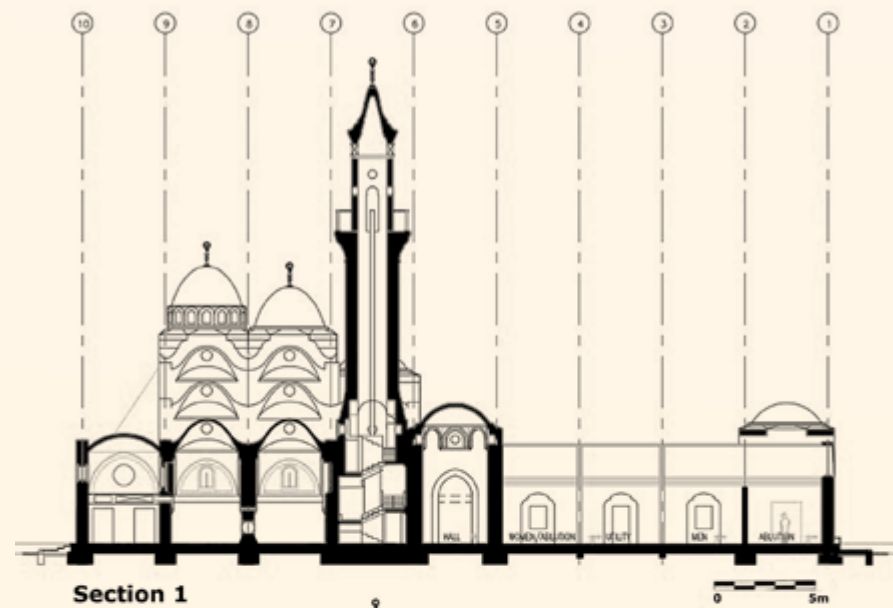
2 "The Traditionalist or Perennialist School is a group of 20th and 21st century thinkers who believe in the existence of a perennial wisdom or perennial philosophy, primordial and universal truths which form the source for, and are shared by, all the major world religions." See: <https://www.google.com/search?q=traditionalist+school+of+thought&aq=chrome.1.69157j0i51213j0i22i30i625j0i22i30i2.6540j0j15&sourceid=chrome&ie=UTF-8>

3 This school uses traditions/religions interchangeably.

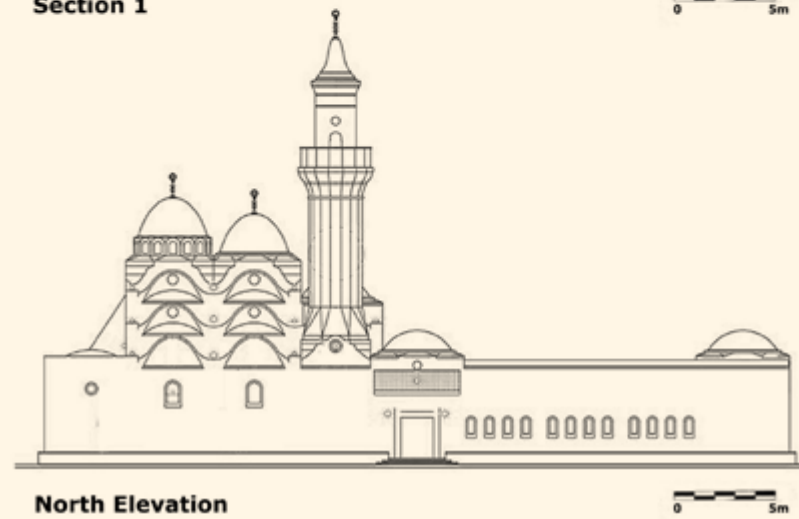
30-4



31-4



32-4



33-4

The relationship of the mosque to the urban environment

Second only to the home (and workplace), mosques are generally the most visited social institution in Brunei Darussalam. Against this background, the Ash Shaliheen Mosque was built in a prime location in the heart of the capital, adjacent to the governmental office complex, and was inaugurated in June 2012. Although in the heart of the capital, it is barely visible, due to its distance from the main street and the dense, lush green zone that obscures it.

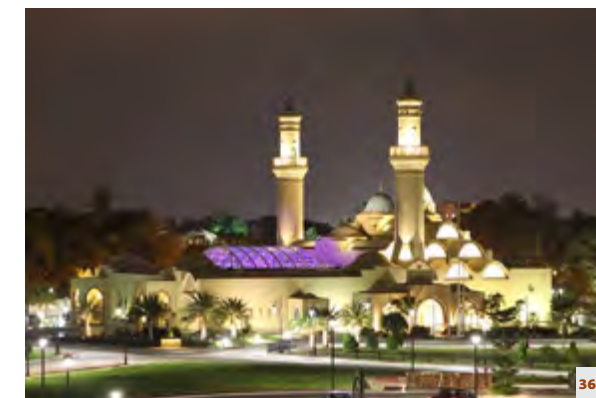
A short distance from this lush, green zone, the site is bordered, on the south, by a gated government housing complex



34-4



35-4



36-4

that can be accessed directly from inside the mosque site through a private gate. In addition to the mentioned complex, there is another residential compound on the western outskirts of the site occupied by employees in the private sector. Despite this, the mosque remains far from community participation in terms of the activities it was supposed to be filled with. Whatever the case, the site, with its open green spaces, remains generally well-maintained. During a site visit, the award's technical reviewer (Muhammad Al-Naim) was informed that those spaces, and their parking area, are used for public holiday celebrations and festivals in general.

Dr. Al-Naim also noted an important point related to the site and its limited success on the social level: "the responsibility here does not fall on the architect," he exclaimed, "but rather on the planner and decision-maker who chose the location of the mosque in a governmental area subject to strict security control, far from crowded areas, and surrounded either by major public roads or private housing complexes."

The mosque is well established and deftly connected to the surrounding landscape; however, community participation is low due to the distance of the mosque from the city's attractions and active events. According to the interviews conducted by the award's technical reviewer, the mosque is not filled even during Friday prayers! During his field visits, he had the opportunity to perform the noon, afternoon, and sunset prayers, in the course of which he found that the number of worshipers was surprisingly (and regrettably) small, as the first row of worshipers in this large mosque was barely complete! When asking the locals about the reason, it was mentioned that this is due primarily to the distance of the mosque from the residential areas and that thus it can only be reached by car. It was also noted that the mosque was almost empty of worshipers on weekends due to the suspension of work in the government compound – the only apparent supporter of the mosque's regular occupancy.

Although the mosque is equipped with spacious social services such as classrooms and a multi-purpose hall that is supposed to be used for religious teaching, lectures and other special occasions,⁴ still, this did not contribute to increasing the number of visitors to the mosque.⁵

Architectural description of the exterior part of the building

The mosque is mainly a symmetrical mass located within an area that is partly designated as a car parking area, while the other part is a garden with striking landscape treatment.

Although the mosque is a single continuous mass at the ground level, it is distinguished from a volumetric/spatial point of view by two parts: the entry section, in the middle of which is the courtyard (sahen), and the sanctuary section (haram, or prayer hall). The first (containing the entrance and ablution services) is covered by small flattened domes, barely visible to the eye level of a pedestrian. As for the haram section, it is dominated by domes and vaults that rise hierarchically, reaching a climax towards a central dome. However, the central major dome at the peak is preceded by another minor central dome of slightly lower height and a further third, even smaller dome, at the entrance of the prayer hall. The two domes are surrounded on each side by seven graded barrel vaults thus: two domes, three barrel vaults, and two domes respectively.

٤-٣١ منظور عين طائر يوضح التكوين الجيومترى للمسجد.

٤-٣٢ قطاع طولى.

٤-٣٣ الواجهة الشمالية.

٤-٣٣ و٤-٣٤ و٤-٣٥ مشاهد خارجية نهائية وليالية.

4 Which the imam uses according to demand for teaching the Qur'an and the Arabic language...

5 A problematic matter indeed by way of post-occupancy evaluation.



Emerging from the first module of the units that make up the plan of the building are two minarets built in a shape close to those of an Ottoman style. It should be noted that in the original design, only one minaret was planned, while the addition of a second minaret was approved later. The minaret(s) could be classified as an Ottoman style because of their circular plan resultant cylindrical body, in contrast to the less graceful Moroccan-Andalusian minarets, which consist of a square plan and a body extruded from it, without significant transformations or modulations.

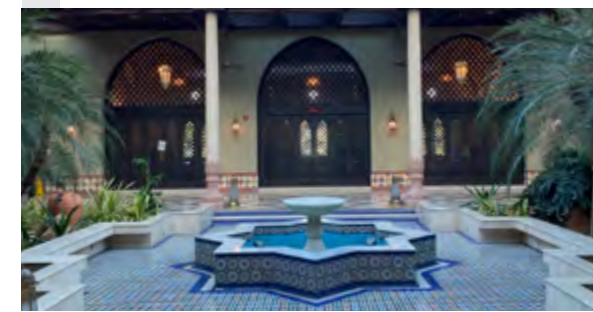
In terms of the external treatment of the mosque's surfaces, we find that, in contrast to the rich interior claddings, they are of simple brownish-yellow color that have been smoothed in a way that resembles that of organic bricks. Despite the seeming simplicity of the exterior from afar, when approaching the mosque, the intense attention to detail that distinguishes the works of the Master appears. In this, El-Wakil was influenced by the principle of 'arborescent', introduced by the architect and critic John Ruskin, meaning 'intensification and escalation' in crystallizing the details as one gradually comes closer to the building.

Architectural description of the interior of the building

Program-wise, this mosque adopts a conventional scheme in the distribution of its internal spaces in terms of placement and sequence. Accordingly, there is, of course, the sanctuary space, with its men's prayer hall on the lower floor and the women's same at the upper mezzanine. Both halls are preceded by an arcaded courtyard that leads to the mosque's services (ablutions for both sexes with separate toilets). The mosque also contains a multi-purpose hall for special events.⁶

The character of the internal spaces in general is a reflection of the mosque's volumetric/structural composition resulting from its domes and vaults; their crescendo-like hierarchical interaction with each other creates the desired religious ambiance – and even what could be described as 'visual drama.' Through windows and doors, spaces of the mosque open up to the inner courtyard more than they open to the outside. The windows are not left plainly open though, but are appointed with covers of perforated wood mashrabiyas to filter the light and decorate the space.

38-4



6 The MPH can be reserved via email.



- ٤-٣٧ الرواق المحيط بالفناء المغطى.
- ٤-٣٨ الفناء الداخلي للمسجد.
- ٤-٣٩ قاعة الصلاة من الداخل.

39-4



4-٣٧



Through windows and doors, spaces of the mosque open up to the inner courtyard more than they open to the outside. The windows are not left plainly open though, but are appointed with covers of perforated wood mashrabiya to filter the light and decorate the space.



40-4

Despite the quality of both the design and the execution, the main impression generated by the interior spaces remains one of excessive decoration and extravagance. However, sometimes we find that decoration and construction merge, as is the case in the stones of the internal arches in which stones alternate: the red and white coursing reminiscent of the 'Ablaq' stone of the mosque in Cordoba. As for the rest of the components, they are decorated with applied ornamentations, as is the case of the interior surfaces of domes, vaults, and as is the case of walls, floors, and even the capitals and bases of columns.

What mostly distinguishes the aforementioned interior spaces is the high quality of the implementation of the interior ornamentation and decoration. In addition to the elaborate architectural design, original masters who inherited their craft through generations were flown over to Brunei. Master El-Wakil, knows them very well and knows how to lead and cooperate with them as a team.⁷ The mosque also contains high-quality accessories that have been purposefully handcrafted for the mosque, such as lighting elements, column casings, doors, and even furniture. Last, but not least, we must mention the elaborate Arabic calligraphy works reflected in the Qur'anic verses that adorn and grace the entire place.

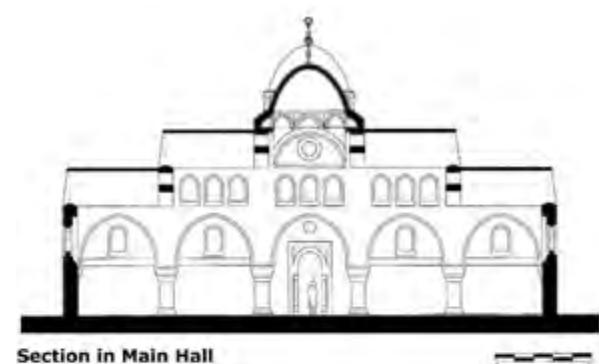
Technical Analysis (Technology and Sustainability)

This architecture of El-Wakil, carries with it many proven sustainability strategies through a long and unbroken tradition. But when examining their application in this mosque, two problems emerge: the first is the rationale of transferring this model, originally suitable for hot and dry areas, and applying it in a geographical area with a tropical climate (with high humidity and rain). The other problem stems from the fact that the efficiency of this model, with its structural forms and architectural vocabulary, is originally based on the logic of brick construction, with its simple, inexpensive, environmentally friendly techniques and properties. Surprisingly,

in the Ash Shaliheen Mosque, these forms were mimicked using reinforced concrete, a material that has a different construction logic and low environmental efficiency when compared to thick-walled bricks of excellent thermal insulation.

Further, it goes without saying that the courtyard spatial type is an integral part of the proposed building style, and which the building type typically opens up to for ventilation, lighting, and circulation. However, here, due to the hot climate and heavy monsoon rains, it proved unsuitable. Consequently, a decision was made to cover the courtyard with a movable glass roof (albeit without the knowledge of the architect). This roof is in the form of a barrel vault generated by an arc, the shape of which is foreign to the geometry of the mosque's existing ones. With its gigantic scale, the impact of this arch visually distorts the beautiful system of arches that run throughout the building.

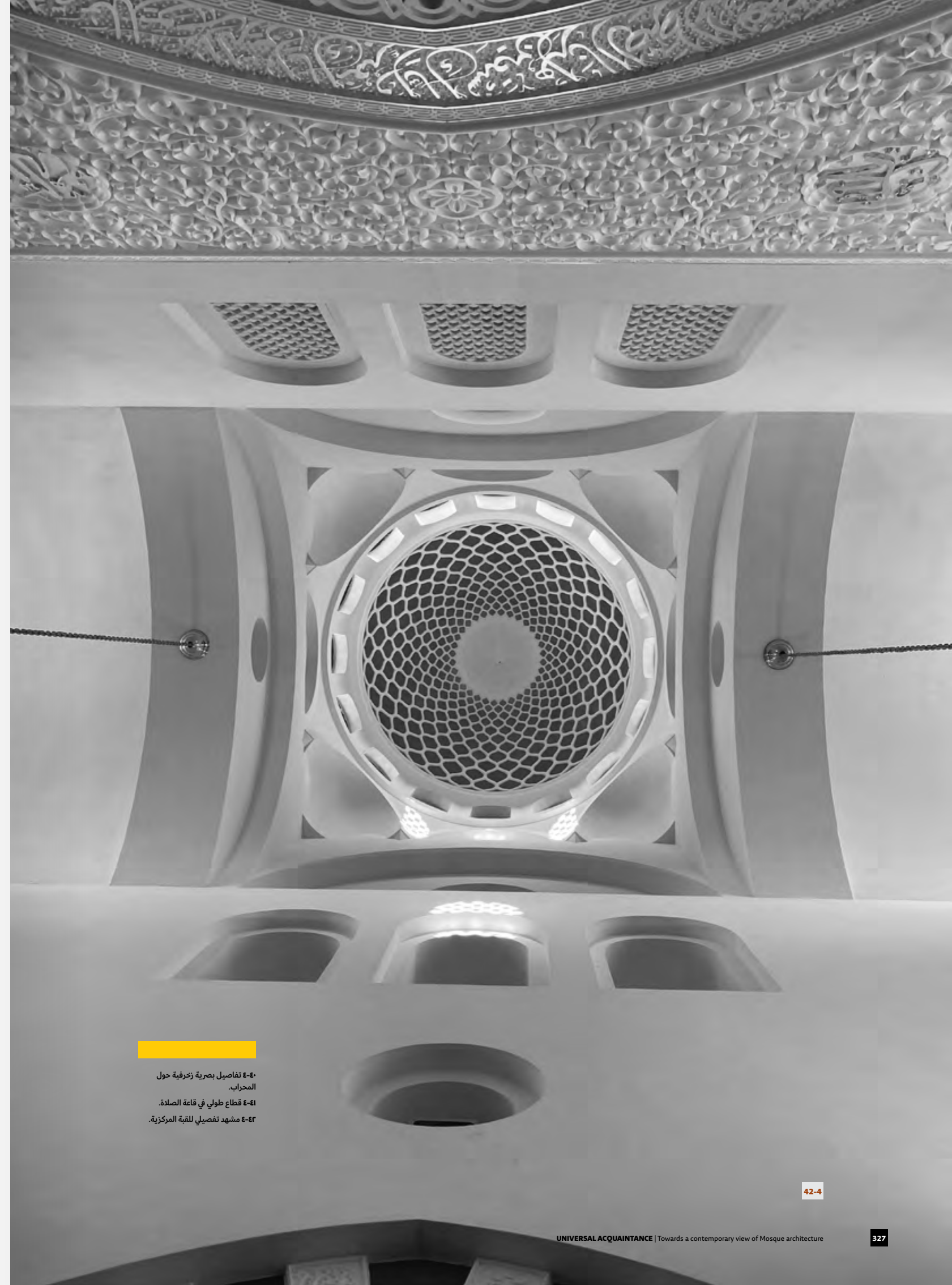
Now despite the aforementioned problems, the architect followed strategies that mitigated the weather factors which were added later, embodied in the perforated wooden panels on the window openings and the bottom of the domes.



Section in Main Hall

41-4

7 For example, the handcrafted Moroccan 'zellig' woodwork, marbled tile, etc.



42-4

- 40-4 تفاصيل بصرية زخرفية حول المحراب.
- 41-4 قطاع طولي في قاعة الصلاة.
- 42-4 مشهد تفصيلي للقبة المركزية.

42-4



- ٤٤٣-٤ أحد الأروقة بتفاصيل تاريخية وسقف مقبب.
- ٤٤٤-٤ تفاصيل أثاث.. خزانات المصاحف.
- ٤٤٥-٤ تفاصيل زخرفية.
- ٤٤٦-٤ مكان الوضوء.

However, a number of remarkable paradoxes, resulting from redundancy, are noted in the use of this supposedly 'environmentally friendly' building style. The mosque relies heavily on mechanical air conditioning because the main prayer hall does not have enough windows that can be opened to let in fresh air. No matter how many worshipers are present at different prayer times, the mosque is excessively cooled, and many worshipers, as the technical reviewer pointed out, have been seen wearing jackets over their seasonal clothes to ward off the cold weather in the hall! He further commented after his visit to the mosque: "One wonders if this waste of energy and money is happening because mosques are exempted from paying the price of energy bills to cool and illuminate their buildings and their surroundings!"

Conclusion

As mentioned at the outset of this short account, it is difficult to separate the architecture of the Ash Shaliheen Mosque from the architect who designed it.

Master El-Wakil presents us here with a sort of abridgment of a style he developed based on that of Hassan Fathi. However, this is not the place to compare and explain how the El-Wakil's style emerged from that of Fathi and later departed from it, but it can be said that the former, as manifested in the Ash Shaliheen Mosque, moves much more freely, with his usual eclecticism from and between Islamic styles from east and west. This is in contradistinction to the latter's austere, highly disciplined method with respect to managing architectural vocabulary and syntax. Although El-Wakil is definitely the heir of the well-defined



44-4

building tradition of Hassan Fathi, moving within it with great mastery, still, it is perhaps legitimate to ask that although his professed philosophy depends on extracting the latent wisdom inherent in indigenous architecture: why build a mosque in the 21st century's east, in a hundreds of years old style from the far western end of the Islamic world? ⁸

What local wisdom did the architect draw upon to hybridize with the styles he imported? It's difficult to sense any Malay features in this mosque, although we read in Wikipedia: "the righteous Mosque in Brunei was designed to reflect the spatial characteristics of Malay architecture." It is a description that seemed to our technical review far from the reality of the implemented building.

To conclude, we must mention here that in this mosque, El-Wakil recalled almost the same ideas he used in a Mosque in Houghton, South Africa. This raises a serious question about the possibility of this style ever being exhausted from repeating itself in different places and times!

⁸ Mostly Moroccan (Moorish), Andalusian, perhaps with touches of Ottoman styles (especially the minaret).



45-4



46-4

THE GREAT MOSQUE OF ALGIERS

Constructing an Image
of The 'Self' in Front of
The 'Sther'!

The Great Mosque of Algiers

Location: Algiers | Algiers

Owner:

Architect: Jürgen Engel, KSP Engel Architekten, Frankfurt

Area: 40000m²

Completion date: 2020

Capacity: 37000 worshippers

Type: Central Mosque



47-4



48-4

47-4 Areal view of the mosque.
48-4 Location view of the mosque.
49-4 Site Plan.



49-4

In contrast to some of the small (even mini) mosques discussed in this book, the Great Mosque of Algiers (also known as 'Djamaâ el Djazaïr', and sometimes as the 'Mosque of Algeria') presents us with a gigantic scale, almost unparalleled in the entire history of mosque architecture. With the completion of its construction, just two years ago, it became the third mosque in the world in terms of area (after the two holy Mosques in Makkah and Madinah) while its minaret is the absolute highest!

The mosque started as a design submission to an international competition organized during the holy month of Ramadan in 2008 AD. The competition required that the message which all presented mosque designs should convey was the Islamic identity of Algeria, for despite the passing of time, including more than one hundred and thirty years of colonialism (1830-1962 AD) with its concomitant foreign influence, Algeria has preserved its beliefs and identity. This mosque should be, the competition solicitation information instructed, an embodied image that consolidates this preservation.

Many challenges and questions are posed here. Economically/locally in terms of its great cost, and politically/globally in terms of the primary goal of its construction: namely, the display of an image that consecrates the ethos of a free and independent Algeria, after decades of suffering and a million martyrs... An image of the 'self' in front of the 'other' (Europe, Algeria's northern neighbors, and France in particular, the country's former colonizer).¹

¹ Political issues shall seldom be discussed here, just the architectural dimension.

The relationship of the mosque to the urban environment

With an area of 400,000 square meters, the Great Mosque of Algiers is located on a privileged plot of land overlooking the Mediterranean Sea. The capacity of its prayer hall is approximately 37,000 worshippers, while the sum of its separate other spaces can accommodate, combined, what could possibly reach 120,000 worshippers.

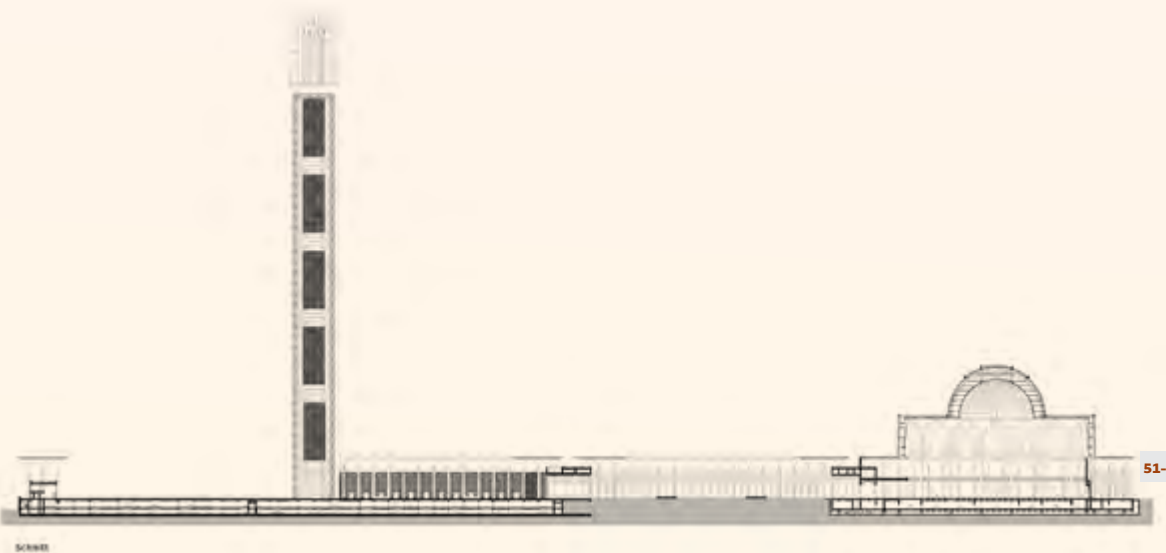
As mentioned above, the competition brief stipulated that the mosque should embody a symbolic and historical dimension in addition to its religious function. This historical dimension is linked to Algeria's self-image as a nation after its auspicious independence from a colonialist power that attempted to obliterate its Islamic identity.

In the mid-1960s, the late President Houari Boumediène (Hawwâri Būmadyan) commissioned the celebrated Brazilian architect Oscar Niemeyer to undertake several major projects in Algeria, four of which were implemented. In this context, there were plans for a predecessor to the Great Mosque of Algiers, but regrettably, those plans never materialized.

The unrealized Niemeyer state-mosque, designed to depict a drop of water-shaped building floating over the sea, was a revolutionary design that could have suited Le Corbusier's architectural vision for Algeria, a vision which would have infused the idea of 'modernity' to post-colonial Algeria.

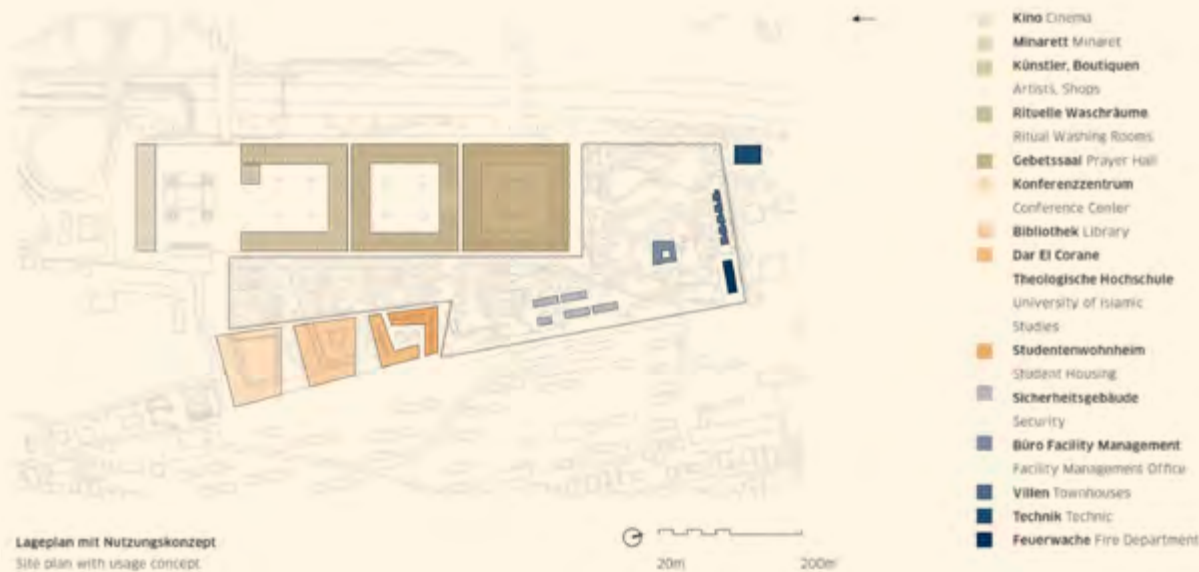


50-4



51-4

NUTZUNGSKONZEPT
USAGE CONCEPT



52-4

The relationship of the mosque to the urban environment

Nevertheless, after extensive deliberations, the competition organized by the Algerian Ministry of Endowments in 2008 to build the Great Mosque of Algiers resulted in the participation of many famous international architects. Following an intensive scrutiny of the submissions, the construction contract was awarded to KSP Engel Architekten. Accordingly, a special follow-up agency was established to handle implementation matters under the name "The National Agency for the Realization and Management of the Algiers Mosque" "ANARGEMA". The project's program was not limited to it just being a large mosque, but rather it became an integrated spiritual, cultural, and social destination, in addition to serving as the nucleus for an urban development plan for the region as a whole.

It is noteworthy that the monumental complex of the Great Mosque of Algiers, also known as the 'Bouteflika' Mosque (after the name of the former president) has generated much discussion among stakeholders of all walks of life, not only as an advanced architectural achievement, but also as a project with a political agenda that constituted one of the priorities of the former president: to project his vision of a 'moderate' Islam, open to the world at large. It is clear that the use of such a building, with its dominant emotional religious presence, represents a continuation of the historical precedence in which the mosque as such played the role of a political symbol that reflects the prestige of the state and its cultural and political message.

The mosque is located in the municipality of Mohammedia at Metija, about 10 kilometers east of the capital. It is a dominant presence in an area overlooking the Gulf of Algiers, east of the historic old town (the Kasbah, a UNESCO World Heritage Site²) and along an important road that leads from the airport east toward the old town. The mosque area is connected to the park's cornice, a promenade which extends along its Mediterranean Sea shores, parallel to the new road that was built recently. There are many ways and means leading to the mosque coming from the outskirts of the city. It can be reached by foot, bike, car, bus, or tram; it is even equipped with a helipad for formal, emergency, and ambulance missions.

The mosque was planned to be more than just the site of the state mosque; rather, it is an integrated urban area, comprised of a cultural center, a school for studying the Qur'an, a park, a library, a staff housing area, a fire station, a museum of Islamic art, and a research center on the history of Algeria.

² See: <https://whc.unesco.org/en/list/565/>

50-4 Ground floor plan.

51-4 Section.

52-4 Mosque Components.

53-4 A courtyard beside the minaret.

53-4





54-4 Minaret and side elevation.
55-4 Archades around mosque's courtyards.

54-4



55-4

The technical report of the mosque argues that the foundations for its design were mainly derived from the site and its surroundings, as its goal was also to find a place of special character, with its buildings and spaces, to achieve a positive impact on the surroundings, a place that welcomes and accommodates people and raises the general quality of life. It is therefore not only a religious center and meeting place for people in Algiers, but also a catalyst for urban development in the entire eastern sector of the city.

Analytical description of the building from the outside

Because of the sheer size of the Great Mosque of Algiers, with its gigantic program, it seems that the architect was forced to adopt a structuralist design strategy.³ This strategy enabled him to control its innumerable parts and integrate them into a coherent whole.

In its design therefore, the entire complex appropriates a modular structure consisting of four square units arranged and linked linearly, each measuring about 150 by 150 meters. It forms an arrangement of an ascending spatial sequence towards the climax – the Qibla:

The **first** square module, is the preliminary courtyard, to the south. It is a gathering and entry space, accessible vertically from the parking garage areas; from the south, it is bordered by just one building (one side of the square module) that contains a cultural facility, arcades, and entry/exits pavilions from the basement parking area.

³ See: *Strukturalismus in Architektur und Stadtebau (Dokumente der modernen Architektur)* by Arnulf Lüchinger, Krämer, 1980.

The **second** square module, represents a preparatory 'joint' courtyard, containing arcades on three of its square sides, while the fourth is left open framing the space for the 265 meter-high minaret. The minaret itself is a gigantic structure that deserves independent scrutiny because of its unusual program and its multifaceted connotations. In addition to it being a traditional minaret of a mosque, it is also a beacon visible from the sea, a landmark on the city's skyline, in addition to the fact that it large enough to contain administrative activities: a museum and a viewing platform!

As for the **third** square module, it constitutes the formal courtyard of the mosque (the sahen), with arcades and services extending on its four sides. These arcades form circulation corridors on whose side ablution services extend on two levels.

The **fourth** and last square module, contains the sanctuary block (the haram, or 'prayer hall'): two overlapping volumes crowned by a lofty dome. The dimensions of the block are those of the basic modular dimensions, 150 x 150 meters, resting on 618 mushroom-type pillars, with, intriguingly, octagonal cross-sections⁴. The dome is double-layered steel structure, 45 meters high and 50 meters in diameter; its peak is seventy-two meters above ground level.

⁴ The 'octagon' shape is a highly significant symbol in Islam: a) recalling the eight angels carrying the throne of Allah (hamlat al-arsh as described in Qur'an 40:7 and 69:17 b) embodying the idea of 'new beginning' (birth, rebirth, etc.) from the Torah of the Hebrew Bible (the Torah being one of the five Divine Revelations of Allah to humanity recognized by Islam)

فراغ الحرم قاعة بيضاء مائلة للون العاجي، ذات مقياس هائل، يتألف من كتلتين متصلتين وعلى ارتفاعين، أحدهما أخفض، على الأطراف، والآخر أعلى في المنتصف. وفي منتصف الفراغ الوسطي، ترتفع القبة الضخمة التي يبلغ قطرها ٥٠ متراً ليتدلى من مركزها الداخلي ثريا مذهبة ضخمة من الكريستال، يبلغ قطرها حوالي ١٦ متراً.



56-4



57-4

These aforementioned four square modules form an integrated platform 4x1 module, with a total length of approximately 600m and a width of 150m. Under this platform there are parking spaces, for approximately 4,000 vehicles.

From a spatial point of view, the four units create a mass/space rhythm that visually creates a distinct experience, a feeling of moving from a worldly place to a sacred domain, a feeling that gets sharper as one approaches the sanctuary.

To the north and southeast of the platform containing the four formative units of the mosque complex is a large park located at the opposite side of the supplementary (non-spiritual) activities of the mosque complex. It is important to note that both the park and the four extended mosque blocks form a cohesive whole. It is difficult to separate one from the other and together they contribute to the strengthening of the urban environment, giving it spatial and visual character.

Analytical description of the building from the inside

It is difficult to describe the internal spaces of a huge sprawling project like the Great Mosque of Algiers in which the external courtyards overlap with the internal spaces of the sanctuary and its services, especially since the technical rapporteur of the award was not 'allowed' to visit the mosque for various reasons (especially since it had not yet been officially opened yet).

Still, what makes it possible to construct a fairly clear mental image is that the main compositional element of the project as a whole is a recurring 'theme' that unites the different scenes of the complex with variations in shape – the mushroom pillar. As indicated by the

(ع-و) رفا

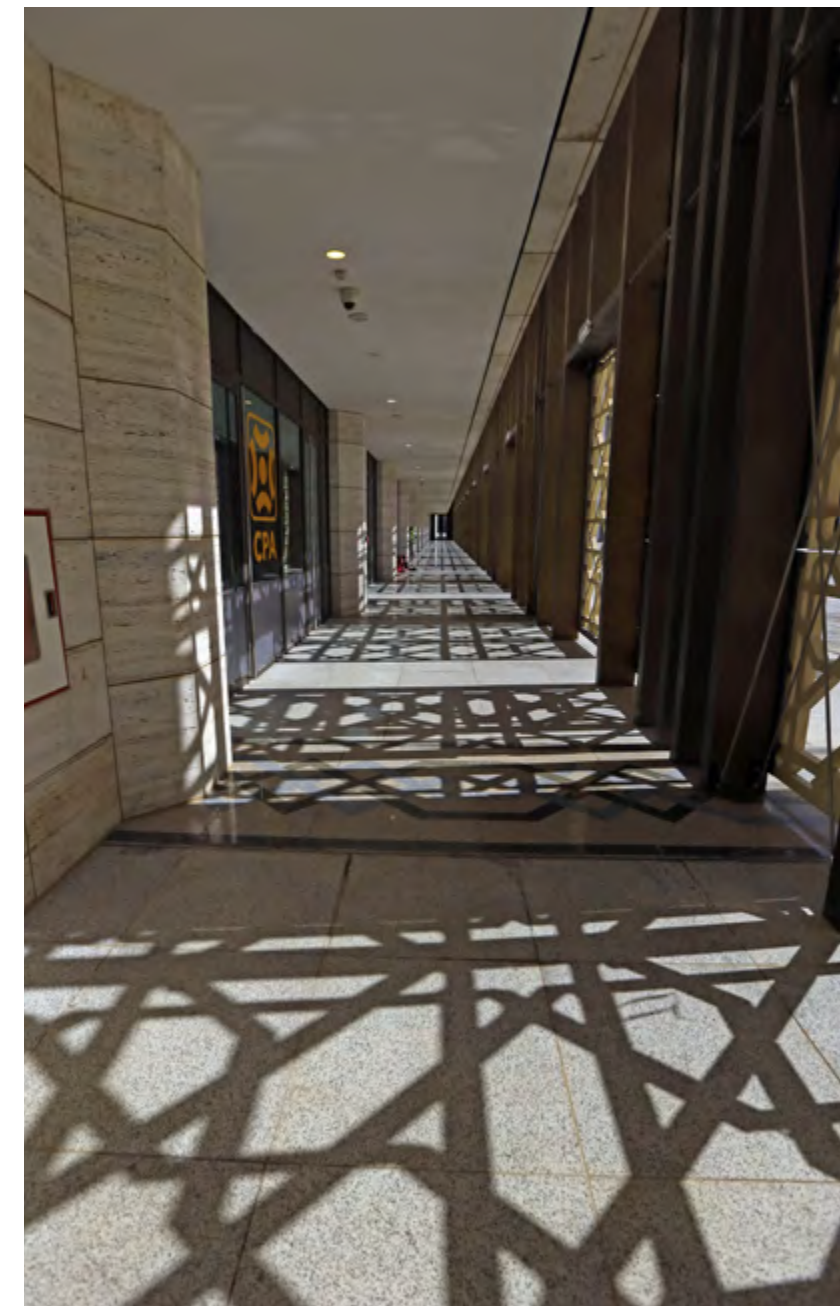
designer, this pillar was inspired from the Calla lily (*Zantedeschia*), a plant native to Africa. It is a recurring theme, a leitmotiv, to borrow a musical term, that unites the different spectacles of the complex with variations in shape, scale, and cladding.

This mushroom pillar, along with all its variations, is most evident in the main sanctum space, the haram, in terms of scale, which starts (relatively) small at the marginal edges (along the sub-module arcades) and soon rises until it reaches its apex, 45 meters in height around the dome, with its octagonal crown-like sides (the other sub-module corresponding to the courtyard module).

One of the visual advantages of the juxtaposition of any two (or more) pillars is that, as they meet, an imaginary arc between them appears - without it being intentionally designed to be so. This, however, is a well-known 'maneuver' that was used extensively by architects in the last century, in order to give buildings a 'pseudo-Islamic' character without resorting to building arches that are not of a structural nature. From here comes the general impression that the scene is familiar, as it resembles many structures spread around the world, from the Kingdom of Saudi Arabia to Lebanon, right up to Europe (e.g., Centro Islamico Culturale d'Italia - Grande Moschea di Roma⁵, the Islamic Cultural Center of Italy – the Grand Mosque of Rome).

5

See: <https://www.facebook.com/centroislamicoculturale>



58-4

56-4 Front archade beside the prayer hall courtyard.

57-4 One of the gates.

58-4 One of the walkways.

The space of the sanctuary is a white ivory-colored hall of enormous scale, consisting of two connected (telescoped) volumes with differing heights, one of which is lower on the edges, and the other of which is higher in the middle. In the middle of the latter, the huge dome with a diameter of 50 meters rises, at the center of which is placed an enormous chandelier, 1.6m in diameter.

The ivory-white color, in the space of the sanctuary, is consistent except for a rectangular area cut from the Qibla wall, with an area of 300 square meters, distinguished to highlight and frame both the mihrab and the minbar. This area is clad with amber-honey hued onyx marble. The mihrab, set back within this rectangular surface area, was designed, with its distinctive arch, in a lavishly over-ornamented Moorish/Andalusian style. To the right of the mihrab is a traditionally-styled wooden minbar; however it is an added piece of 'furniture' rather than a built-in architectural element.

Decoration/ornamentation, which play a major role in the design of the interior spaces of the mosque, were carried out (according to President Bouteflika's personal instructions) by skilled workers and craftsmen from Algeria itself. Further, Arabic calligraphy, with its Qur'anic verses and words, played a complementary role to the geometric patterns in terms of the overall decoration scheme. An astonishing 6 km of Islamic scripture adorn the walls of the haram and other buildings of the complex (interior and exterior), some engraved into stone surfaces using a laser technique.⁶³²

Speaking of decoration, it is important to note that although the Grand Mosque was intended to be a modern expression of its era, technically and formally, the architect acknowledged "the importance of ornaments for people." In this spirit, the cultural buildings on the south side of the complex, the religious school, the library, a conference center – are surrounded by a decorative, geometric metal grid architectural element (mashrabiya) that act as canopies and screens to ensure privacy. Further, the 'theme' of this traditional screen reappears on the minaret (albeit built of concrete and fiberglass). The screen/mashrabiya element was also used in the façades overlooking the courtyards to give a cohesive visual unity that serves to mitigate the impact of the scale of the massive pillars.

Some of the interior elements have been extensively ornamented. For example, the huge gates inside the corridor/arcades between the courtyards were covered with copper-engravings that had a shine as if they were the lid of a giant jewel box. These appear in full splendor in the inner side of the sanctuary hall, where the decoration is increased and the shapes, colors, and materials become richer and more luxurious. This is also evident at the entrance side walls, where they're covered with floral bands and geometric roses, in contrast with the low reliefs executed in 'wet' plaster (using the 'stencil' technique and then meticulously stained and painted).

6 See: <https://www.aps.dz/algerie/74097-grande-mosquee-d-alger-un-chef-d-oeuvre-architectural-et-un-monument-religieux-et-culturel>

59-4 Top view of the mosque.

Special verses from the holy Qur'an were selected to take their place on the friezes of the internal and external façades of the complex as a whole. In addition to the meaningful content of these verses, there is their visual articulation, all with different types of calligraphy: the soft and curved forms of the Thuluth script prevail in the interior, while the Kufic script was aptly chosen for the exterior. According to the architect, a stunning area of 2 kilometers of Qur'anic verses have been inscribed. It was expected that in such a huge and multi-rhythmic space, the decoration would play a major role in giving the spaces their visual identity. However, we must acknowledge here that it is a poised decoration, even if it starts to be quite dense in some areas.

Technology and Sustainability

Given the enormity of this project, with its symbolic and moral importance for Algeria as a country, those working on it had to face the complex technical challenges of the site and the options available for its local implementation in a sustainable and coherent manner. One of the main challenges in Algeria is that the facilities should be predominantly earthquake-resistant. Earthquakes occur often in Algeria, especially in Northern Algeria where the Great Mosque is located. Therefore, most of the relevant advanced building research outcomes have been applied to this project to create structures capable of withstanding earthquakes – especially the extraordinarily tall minaret.

According to the architect, "the cubic shell used in the project has many advantages, as it is an essential element adopted in steel building structures. Buildings becomes gradually lighter as we go up, greatly reducing the effect of horizontal forces in the event of an earthquake. At the same time, steel structure buildings systems were uncomplicated to assemble and easily calibrated afterwards using visible bolts and nuts (and prefabricated beams).

Now, if the mosque did not succeed in setting an example in terms of adopting sustainable solutions at the technical level (the huge carbon footprint resulting from the construction of this giant project), it is nevertheless expected to succeed in terms of social and economic sustainability, by providing many job opportunities via newly introduced and incorporated activities put forward to revive the region as a whole.



59-4

Conclusion

It is perhaps necessary to turn directly to a question, so important for us in this book: with its great cost and size, what did The Great Mosque of Algiers, Djamaâ el Djazaïr, add to the 'cause' of contemporary mosque architecture?

It is rare in our time (indeed throughout history) to build a mosque of the magnitude of the Great Mosque of Algiers. The immense logistical complexities surrounding such a gigantic undertaking, in terms of goals, budgets, and so forth, are by all means understandable. But it is really unfortunate that, with all its harnessed assets (like many of the 'state' mosques erected elsewhere) we couldn't but find it a missed opportunity that could have otherwise resulted in a pioneering, blood renewing, architectural experiment for mosque architecture in the twenty-first century.

The result, unfortunately, is a harsh, stiff architectural language that inspires awe instead of reverence. It came to superficially mimic historical vocabulary, which had its cause, aesthetics, and necessity at its time of building. Here however, it is forged with incompatible materials and conflicting constructional logic.

This does not negate the virtues of the mosque in terms of the urban development of the region and the inevitability of citizens benefiting from it – but at what price, and what cultural message is being communicated?

Of course, the whole experiment should not be repudiated, as it is an unprecedented endeavor which raises many questions that may face mosque architecture in the future. The experiment in itself is worth thinking about and requires more scrutiny. Perhaps the final question that this experiment may raise is that: Do we really need mosques of this magnitude, to express the ethos of a religion or a nation?

MASJID CYBERJAYA 10

Sustainability and Social Integration in a Mosque

Masjid Cyberjaya 10

Location: Kuala Lumpur | Malaysia

Owner: Cyberjaya Community

Architect: Juterias Design Workshop – Mr. Khoo Boo

Area: 20234m²

Completion date: 2014

Capacity: 1100 worshippers

Type: Central Mosque

In addition to being a place of worship, Masjid Cyberjaya 10 presents us with a stark example of the broad spectrum across which a mosque can play in empowering the society to positively integrate with both its urban and natural environments. In doing so, its design character reflects lessons learned from the simplicity of traditional Malayan houses rather than the grandeur of its temples.

The main issue that we may encounter in critically examining this mosque, however, is that its design is based on an almost literal translation (or rather transposition) of the language of traditional wood tectonics of Malayan houses/temples¹ into steel, without any apparent effort to adapt its style or develop its aesthetics to further the cause of Contemporary Mosque Architecture.

Masjid Cyberjaya 10 was built to meet its local community's essential need for a religious center within the fast-growing residential/commercial development area of Cyberjaya. This project forms part of the general masterplan for an affordable housing project that provides the community as a whole with the basic amenities of dwelling, learning, hospitalization, and a cemetery.

The program of the Cyberjaya 10 mosque complex comprises mainly a prayer hall (haram) and attached blocks for living and leisure, in addition to an important charitable amenity: the dialysis clinic. With this extended program, the aim of establishing this complex was to redefine the role of the mosque in a densely populated area, not only as a place for religious gatherings but also as a public domain that can bring people together for acquaintance (in harmony with the title word of this book) especially since the Malaysian society is distinguished by its ethnic diversity.

1 which is based mainly on a long tradition of building with wood, and an inherited craft of building carpenters (teachers).

60-4 Site plan.

61-4 One of the courtyards.

Analytical description of the building's architecture from the outside

Before the construction of the mosque's complex commenced, the general site of five acres was relatively flat and barren. This provided opportunities to determine the best arrangement of the program during the planning phase. Thus the flat topography of the terrain allowed for an optimal embodiment of the program's constituents.

The project's site is located between two adjacent residential complexes, one to the east and the other to the west; they are connected by a common entry space most suitable for pedestrians. Moreover, two main streets run parallel to the location of the site, providing more access to the mosque from the bordering northern and southern areas.

It is noted that the mosque is located in a distinct urban area, surrounded by a variety of residential complexes and commercial activities brought together by a distinguished urban infrastructure network. This facilitated the complex's integration into the urban environment, and enhanced ease of access, especially the road's link with public transportation.

Furthermore, around the site there are beautiful natural parks and landscape formations that give a sense of integration with nature. Accordingly, it was concluded that the project should be broader than being merely a place for performing the proscribed five daily prayers; rather, it was, from conception, intended to be a place that provides the community with various services and places within large outdoor natural areas open for leisure and socializing throughout the day.

As stated above, it is clear that the design of the mosque is inspired by the traditional Malayan architecture. In particular, its design language, vocabulary, and syntax are similar to the architecture of the Kampung Laut Mosque in Kelantan, the oldest surviving mosque in Malaysia, believed to date back to the 18th century. This similarity is widely noted in the design of the roof of the prayer hall, in addition to the shape of the external entrances.

The outer area of Masjid Cyberjaya 10 consists of wide, covered passages, a traditional verandah (serambi) and several courtyards, all leading to the massive main prayer hall which is preceded, at the entrance court, by a rammed-earth minbar wall.

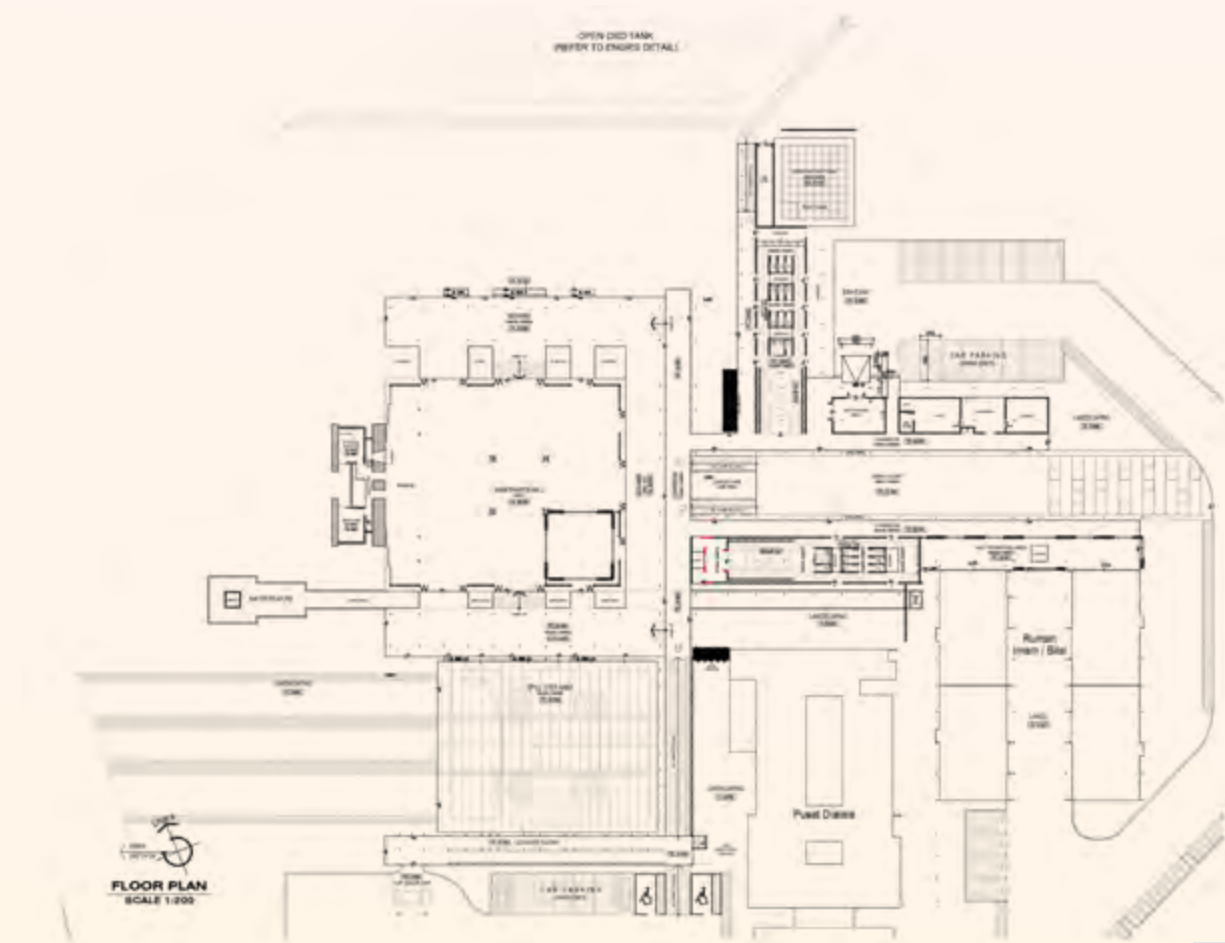


- 1- مدخل مقطى
- 2- مسار الحديقة
- 3- منطقة مكشوفة
- 4- المئذنة
- 5- قاعة الصلاة الرئيسية
- 6- الشرفة
- 7- مكان مفتوح للوضوء
- 8- غرفة متعددة الأغراض
- 9- استراحة الإمام والمؤذن
- 10- مكتب مدير المسجد
- 11- مخزن
- 12- مخزن
- 13- قاعة للوضوء ودورة مياه للرجال
- 14- قاعة للوضوء ودورة مياه للسيدات
- 15- غرفة الجنائز

60-4

61-4





62-4



ELEVATION 1

63-4



SECTION X-X

64-4



65-4



66-4

The scattered courtyards are used for many community events and social activities (such as 'tai chi'), while the main courtyard, adjacent to the main prayer hall, serves as an extension of the haram, inner prayer space. This last is a courtyard surrounded by areas planted with Ketapang trees, known locally for resembling umbrella shading canopies. In addition, the surrounding landscape is filled with aromatic plants such as pandan², lime, and jasmine.

In the prayer hall, the passive cooling system was constituted through the roof's consisting of three layers, one above the other, allowing hot air to escape through gaps at the top, in addition to the fact that these gaps allow light to enter during the day, thereby dispensing the need for electric lighting. Further, the design quality of the blocks surrounding the prayer hall was enhanced by the addition of a pond containing local fish on the south side and planters under the roof on the other. As the building is integrated with the surrounding greenery, the veritable transparency created by the large casement windows and bi-fold doors further allow a cool breeze to enter the mosque.

2 Pandanus amaryllifolius (pandan) is an herbaceous plant that grows well in Southeast Asia. Its fragrant leaves are used for cooking in South and Southeast Asia.

62-4 Ground floor plan.

63-4 Elevation.

64-4 Section.

65-4 Section.

66-4 Outer open areas and water surfaces within the mosque.

In this context, it is important to note that the minaret of the mosque was built separately from its main mass, 'inside' one of the rivulets in the outer garden. Similar to the prayer hall, the building material for this minaret was steel frame as well. It consists of four sections, graded on top of each other, in line with the roof(s) of the sanctuary haram. However, the muezzin can't reach its top to perform the ritual call for prayers (azan); instead, four loudspeakers have been installed facing the four cardinal directions (in an almost improvised manner!). Still, although devoid of any semantic indications, such as the crescent or verses of the Qur'an or even 'Islamic' patterns, this minaret is perhaps the only external architectural element that indicates that the building is a mosque. This clearly shows that the philosophy of the 'transcultural mosque' can be felt here, as its composition presents a message rooted in local Malayan architecture without sacrificing its main (fairly new) function(s).

All mosque facilities surrounding the main prayer hall are located strategically on the eastern side of the site. These facilities, which include sanitary services for both males and females, were built mainly of mud brick brought from nearby local sources. All brick-tiled facilities are surmounted by a steel frame roof that rises slightly above the walls, leaving below spaces suitable for air flow.

In the neighboring area, dedicated for a dialysis center, it is duly noted that the main feature that distinguishes its space is a courtyard with a large water pool. Treatment rooms overlook this courtyard directly to ensure the psychological comfort of patients during the exhausting process of dialysis. When it is raining, the slanted roof of the buildings drain the rain water via small gutters into the central pond of the courtyard.

As a whole, the mosque complex is immediately surrounded by local fruit trees of which some thirty different species have been planted. Furthermore, linear rows of 'ketapang' and 'pulai' trees provide ample shade for those walking through the pathways, along which visitors enjoy the scents of the jasmine and other aromatic trees.



67-4

This deep integration between the masses of the mosque and its natural and urban surroundings makes us raise many questions about the phenomenon of other contemporary mosques, which often appear separate, rather aloof, from their context.

Analytical description of the building from the inside

The interior space of the mosque is characterized by the dominance of its steel frame structure of white columns supporting the intersecting beams that carry the roof. The three-tiered steel frame roof rests on four columns (four-column prayer halls being a common pattern in mosques), giving the interior space a sense of spaciousness and visual continuity in the Qibla wall direction. Structural 'honesty' can be considered here as a tendency that changes what we're accustomed to seeing in a traditional mosque, which is typically crowded with decorative formations that make the structural elements take a rather secondary role from a visual point of view.

67-4 Steel structure and brick walls techniques.

68-4 The prayer hall.

69-4 General view of the mosque.

In constituting the main focal plane for all worshippers, the Qibla wall is undoubtedly the most important design element in the mosque. It has been given a special solid tactile treatment that distinguishes it from other materials used in this mosque, in contrast to the other transparent façades consisting of large glass doors and windows. From its opposite side, this wall insulates the interior space of the mosque, soundproofing it from the noise of a busy road outside that overlooks the new, densely urban development.

With its specific design scheme, Masjid Cyberjaya 10 appears to grow naturally from the inside out in response to the requirements of the program. Architect Khoo Boo stated that it was a wonderful feeling for him to return to the mosque after its completion and see the prayer hall in use just as he had hoped.³ He observed that the number of trees planted by the local community in the garden has also increased since the construction of the project began, giving it a natural frame that totally embraces it.

Mr. Kho Boo indicated that the selection of the different materials from which the mosque was built was done with the aim of providing what he called a "warm visual experience for users," an experience enhanced by linking the mosque to its natural surroundings in an "organic way."

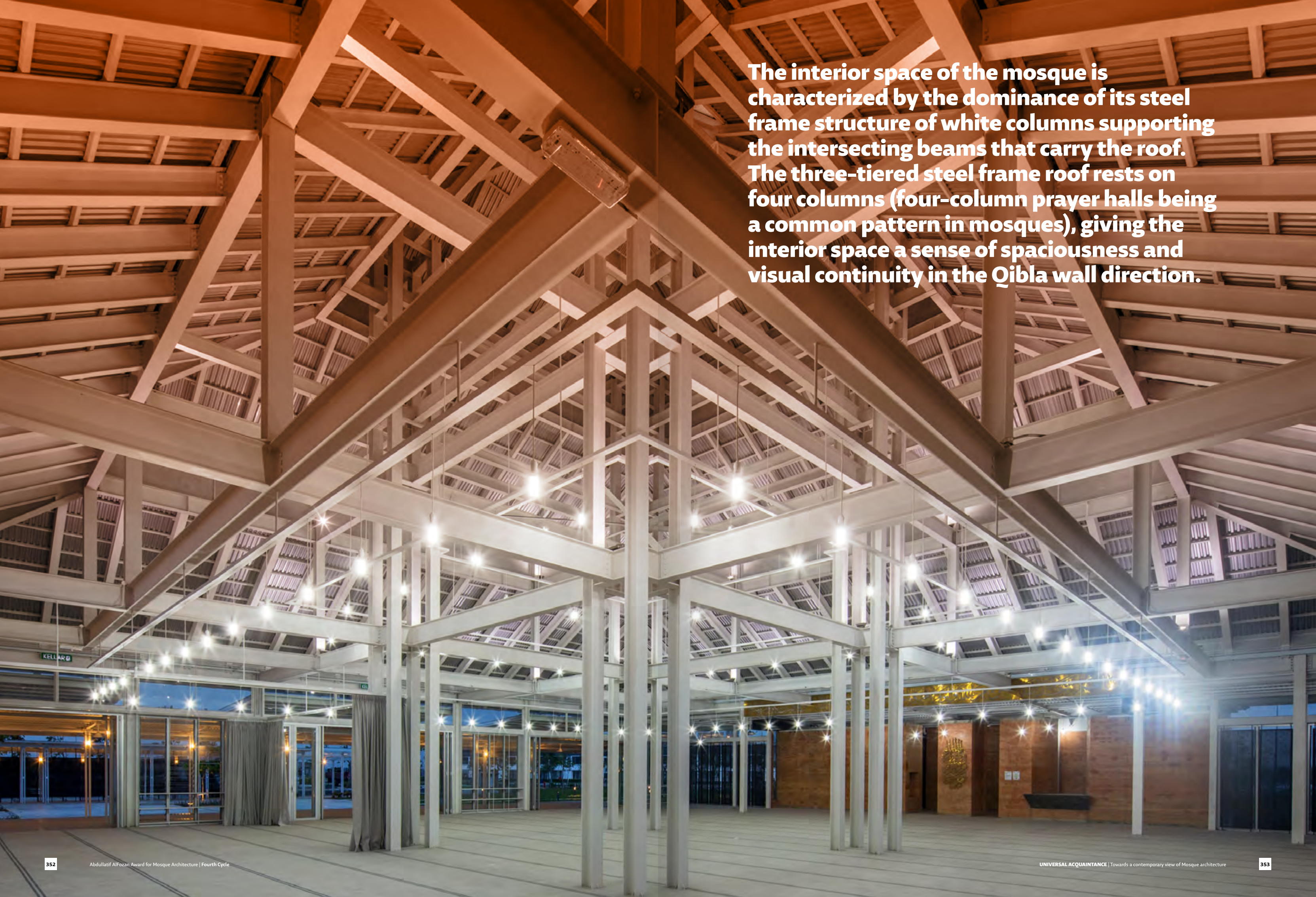
3 Unpolished technical report by Dr. Mohammed Mashary Alnaim, 2022, to which this account is indebted.



68-4



69-4

The image shows the interior of a mosque, characterized by a complex, multi-tiered steel frame structure. The structure consists of numerous white columns and intersecting beams that support a high, vaulted ceiling. The ceiling is composed of a dense network of wooden beams, creating a textured, grid-like appearance. The space is illuminated by numerous small, warm-toned lights suspended from the ceiling, creating a soft, ambient glow. The floor is a light-colored, polished surface. In the background, there are large glass windows and doors, some with curtains, and a brick wall. The overall atmosphere is one of modern architectural elegance and spaciousness.

The interior space of the mosque is characterized by the dominance of its steel frame structure of white columns supporting the intersecting beams that carry the roof. The three-tiered steel frame roof rests on four columns (four-column prayer halls being a common pattern in mosques), giving the interior space a sense of spaciousness and visual continuity in the Qibla wall direction.



70-4



70-4 Ablution area.
71-4 The minaret.

Technical Analysis (Technology and Sustainability)

(ع-10) ٧٧

One of the main merits of the design of Masjid Cyberjaya 10 is its use of technologies that indicate an advanced environmental awareness of the designer, who placed sustainability considerations (in their broadest sense) at the top of his priorities. This is evident in the careful selection of various building materials to allow the building to maintain its splendor despite the factors of time. Therefore, the building materials were kept in their natural state without artificial additions; this considerably contributed to the ease of the building's final finishes. In this context, as an example, special perforated geo cell screens were used in order to mitigate direct sunlight, as they act as a filter, similar to a mashrabiya. In harmony with the quality of the materials used in general, the geo cell screens were installed in a way that enhances the overall sensory experience that the mosque provides.

Unexpectedly, the architect, stated that he was inspired by the details of the façade of the Institut du Monde Arabe in Paris, France, and sought to "localize" it in Cyberjaya due to its environmental efficiency.⁴33 However, the geo cell screens used in the case of this mosque are much less sophisticated than those used in Paris, and at a lower cost, and with materials that can be recycled and maintained in an easier, less expensive way. On the other hand, a double façade element was implemented in the Qibla wall to filter direct sunlight facing the prayer hall, albeit with the addition of a simple decorative element that enriches the overall experience of the mosque.

Some walls were built with rammed-earth, extracted from the soil of the same site. This of course saved transportation costs with all its otherwise fuel consumption and resulting pollution. As for the ordinary bricks from which the building-blocks attached to the mosque were constructed, they were also sourced from areas not so far from the site. These walls were carefully constructed, course upon course, resulting in an attractive façade in terms of texture and rhythm.

(ع-10) ٧٧



4 Unexpected because of the great difference between the contexts of the highly urbanized Paris and the semi-rural Cyberjaya.



71-4



72-4



73-4

The same goes for the floor paving scheme, as it was important for the architect to take into account the variations in the texture of the materials to suit and accommodate the divergence between sunny and rainy days. Thus, the floor of the mosque's balcony was paved with the most sustainable and environmentally friendly granite stone. It is well known that granite remains particularly cool on hot days which encourages worshippers to use the outdoor balcony more often.

On the whole, sustainable design strategies were adopted with the hope that the materials used in constructing the mosque would age in harmony with the life cycle of the surrounding plants and trees, requiring minimal maintenance and aging in an organic way.

The architect indicated that simply placing the prayer hall between two cultivated and open areas would ensure that the mosque would be "self-ventilating." In addition, folding doors, clear glass and Nako louver windows that cover all four sides of the prayer hall increase air flow between these two open areas.

The environmental efficiency of the building also extends to the design of the roof with its three layers and skylights, not only to provide daylight but also to cool the space by allowing hot air to circulate vertically outside the prayer hall. This is generally a sustainable design philosophy that uses natural breezes, augmented with electric fans, to eliminate any unnecessary electricity costs during prayer times. This, along with the addition of the western water pond adjacent to the prayer hall, helps to circulate fresh and cool air throughout the mosque. During his visit, Dr. Mohammed Al-Naeem, technical reviewer of the award, noted that this design philosophy ensured that it was highly effective on rainy days in Cyberjaya.



74-4

Conclusion

Design wise, the Masjid Cyberjaya10 mosque may not present any clear breakthroughs in terms of a novel language for mosque architecture. Nevertheless, it gives an added value to this architecture by providing a model worthy of mention and respect, not only for being a mosque with high environmental efficiency, but also for being a mosque with high social effectiveness.

Here, the notion of the mosque was stretched, from being a mere building that serves a devotional religious function, to an integrated compound which provides a lively domain of outstanding social services to its surrounding community. It also changes the perception of the mosque from being a building with a single block, to being an assembly of synergistic masses that spread, starting from the central block of the mosque outward to the surrounding natural environment.

Masjid Cyberjaya 10 is a clear example of a transcultural mosque, although its local architectural message is striking in its details and visual affiliation. It is important to note in this respect that the diversity of ways in which mosques have been embodied throughout history constitutes one of the basic aspects through which we are supposed to read the philosophy of 'Universal Acquaintance'. With its local/global dichotomy, the mosque is exceedingly persistent in its function, while also intermittent and divers in its formal representation(s).

72-4 Front area of the prayer hall.

73-4 The mihrab.

74-4 Inner courtyard.

DOĞRAMACIZADE ALİ PAŞA MOSQUE

A Threefold Gathering Place

Doğramacızade Ali Paşa Mosque

Location: Bilkent University, Ankara | Turkey

Owner: Bilkent University

Architect: Erkut Şahinbaş

Area: 4563m²

Completion date: 2007

Capacity: 550 worshippers

Type: Central Mosque

Apart from its merit as a modern experiment in mosque architecture, it should be noted from the outset that this mosque has a notion that particularly resonates with our title "Universal Acquaintance." For on the one hand, its compound includes a chapel for Christians and on the other a synagogue for Jews. It furthermore contains an additional virtue that reflects the title: although it is a private mosque for a private university, it later became open not only to the surrounding public, but to the city of Ankara as a whole. The mosque became the link between the university and the city.

Still, whoever expects this Turkish experiment in modern mosque architecture to be on the footsteps of the Sancaklar Mosque, which won the last cycle's Fozan Award, may be rather disappointed. In designing this mosque, Architect Erkut Sahinbas, adopted not a revolutionary approach, but a rather conservative one. Although attempting to introduce significant innovative interventions, the design still preserved the general 'flavor' of the traditional Ottoman mosque. It seems that the architect was betting on playing safe within the familiar Ottoman mosque patterns, rather than creating a new typology freed from the burden of the past.

In other words, we are presented here with a rather 'polite', meticulously calculated attempt to break free from the old style, a break that does not make locals feel 'alienated' or shocked by the 'new'.¹ Although the architect used classic Ottoman elements that seem familiar, still, he 'played' with these elements in an elaborate way, introducing radical modernization at times, and simplifications/abstractions at others.

It cannot be denied that the school of thought that attempts to deal with and develop the historical vocabulary has its supporters, even today, differing greatly from the direct mimicking of history. However, we must mention here that the degrees of development vary greatly: from absolute abstraction of historical elements, to superficial visual improvements. Still, it remains a formalistic 'school' that has not gone beyond dealing with form until the present time!

Completed in August 2007, the Doğramacızade Ali Paşa Mosque was built as part of Bilkent University in Ankara which was founded in 1984 by Professor İhsan Doğramacı. İhsan's father, Ali Pasha Doğramacı, was the mayor of Erbil, and the mosque is named in his honor. İhsan, a pediatrician and well-known academic in Turkey, participated in the establishment of other public institutions of higher education and served, among other high profile positions, as the President of Ankara University. It is worth noting that Bilkent University (derived from the Turkish language "bilim kenti" or "city of science and knowledge") is a private, non-profit university distinguished for its high quality teaching and

1 See The Shock Of The New, by Robert Hughes, an excellent overview of modern art & architecture. Knopf; Revised, subsequent edition (August 13, 1991).

75-4



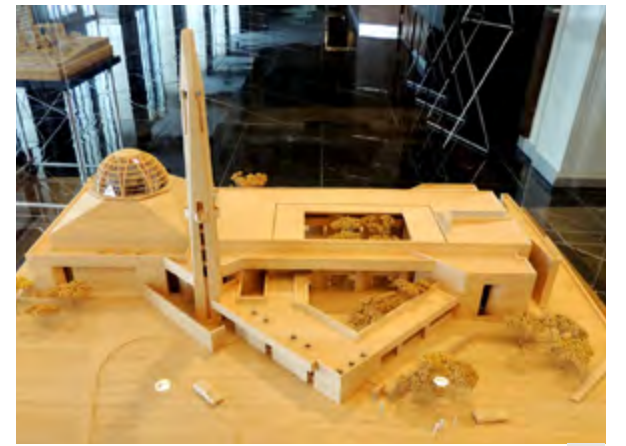
research. It currently has more than 12,000 students studying in ten faculties and three graduate schools. What also distinguishes the university is its international student body, as there are students from more than 60 different countries.

The relationship of the mosque to the urban environment

The Doğramacızade Ali Paşa Mosque was primarily designed to serve the campus community of students and staff. However, due to its proximity to a large shopping mall, it also serves customers and employees of nearby shops and restaurants. Later, the wider community of the city of Ankara started using it as a mosque for religious ceremonies on specific occasions, such as funerals, a wide-spread custom prevalent in Turkey.

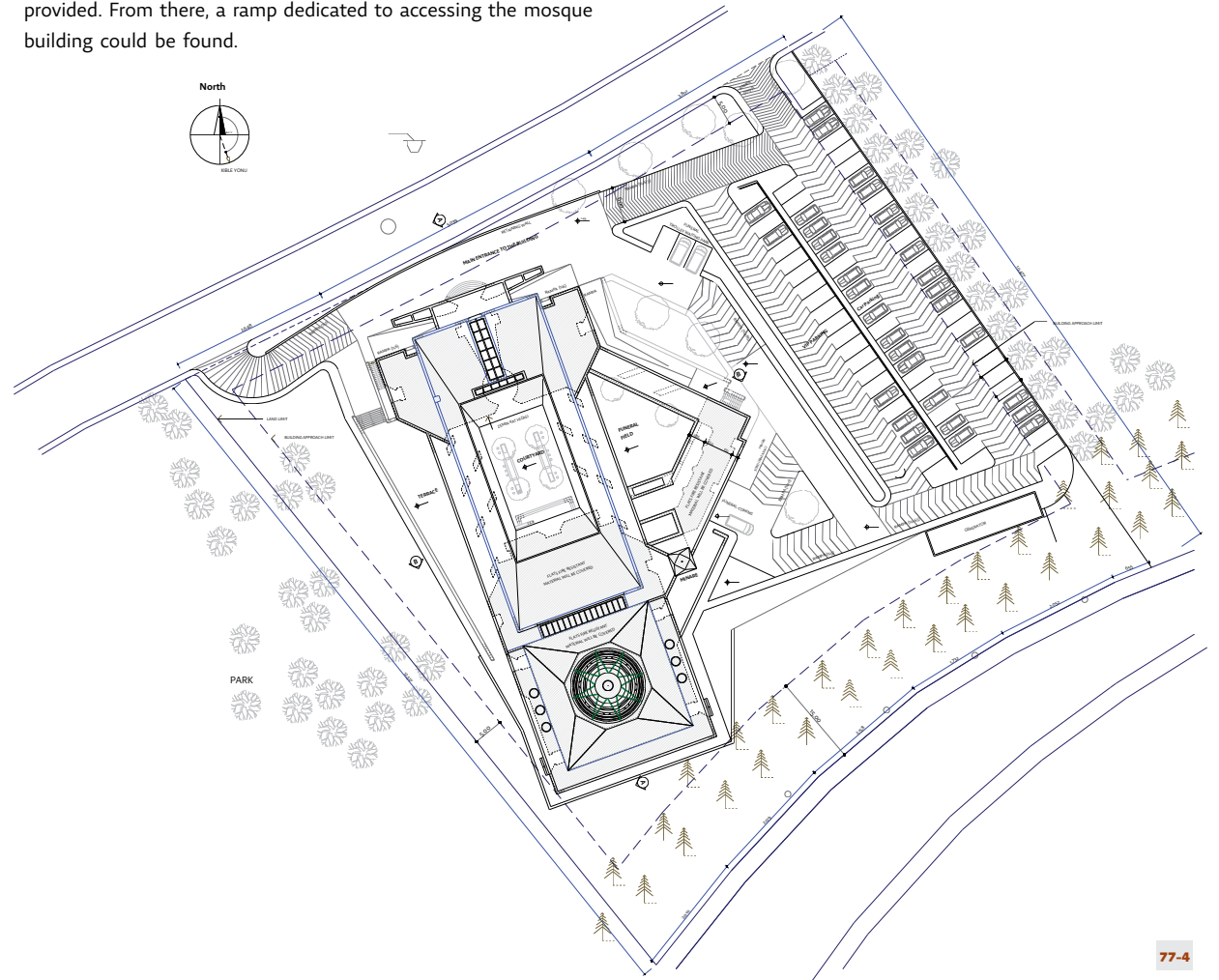
The building is located on a large plot of land at the University of Bilkent, close to an important ring road surrounded by lush green areas and a large parking facility. Inside the mosque complex, we find the hall of a funerary shrine dedicated to the father of Professor Doğramacı, which is also a common tradition in Turkey for important personalities.

The land of the mosque is an integral part of the university campus, which is a vast area of 11,944 square meters, close to an important ring road from which the silhouette of mosque's dome and minaret can be clearly seen. The terrain of the overall site slopes down towards the mosque, and the surrounding grounds have been developed as a formal garden with a sumptuous car parking area slightly hidden under it. Although the mosque can be reached on foot from some of the campus's buildings, most visitors reach the mosque by car. For people with special needs, direct access from the parking lot to the mosque's courtyard has been provided. From there, a ramp dedicated to accessing the mosque building could be found.

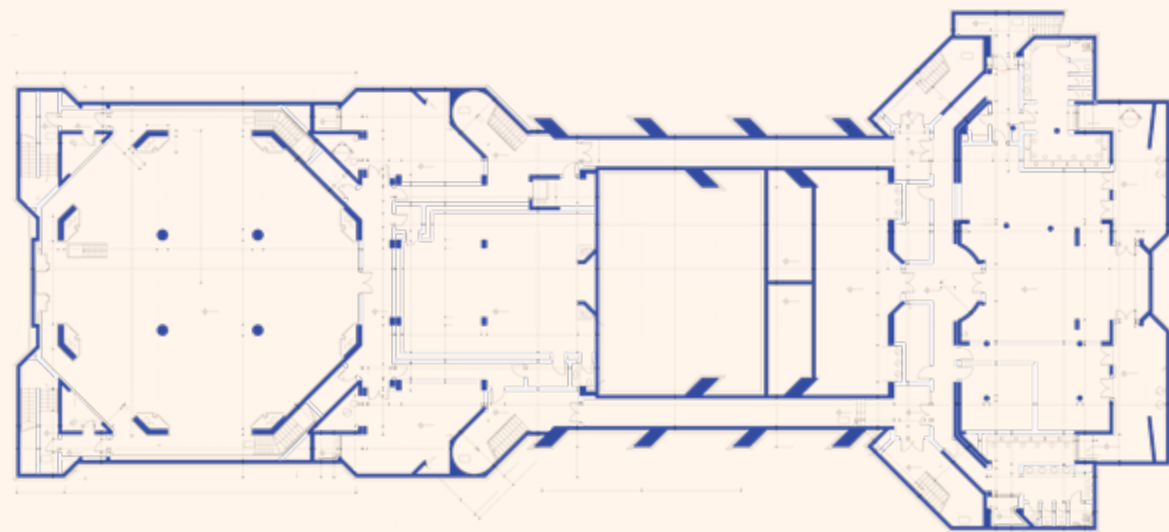


76-4

75-4 An image of the image with the surrounding green area.
76-4 A model showing mosque components.
77-4 Site plan.



77-4



78-4



79-4



80-4

Ablution areas are located in the basement of the mosque complex, and can be accessed via an elevator located in the middle level. The basement also contains the additional male prayer hall while the level above it houses the women's prayer area with its relevant services.

It is interesting to observe that a new tradition has developed in contemporary mosques in Turkey: placing ablutions and toilets at the basement floor, far from the haram of the mosque, not only to ward off moisture and repulsive odors but also to give visual autonomy and prominence to the mass of the mosque without otherwise interference from any of the neighboring blocks.

In terms of the program, the mosque is no longer only designated for use by the university community. With the passage of time, it has been upgraded to the status of an 'official mosque' (they call it a Protocol Mosque) of the city of Ankara. Its strategic location within a large visible park which prominently overlooks the city of Ankara, helped it gain this status.

Moreover, in addition to the mosque's usual program of prayer halls for both men and woman, ablutions areas, etc., the main revolutionary point in this mosque is embodied in the fact that it contains two extra components: a chapel and a synagogue to serve

Christian and Jewish students and teachers. However, as for their actual use, the authorities are still waiting for adjustments to be made to Islamic jurisprudence in Turkey, to allow the followers of the three Abrahamic²34 religions to worship, together, in the same place!

Combined by a common entrance, the two halls in question are located on the northwestern side opposite the courtyard and the Qibla direction. They are also open from their southern side to the mosque's main courtyard. With this encircling around the courtyard, it becomes symbolically an integrating space for the followers of the three Abrahamic religions. Further, the mosque has an additional courtyard (or a double courtyard) that can be used as a place for prayer during crowded times.

Analytical description of the building from the outside

In terms of massing, this mosque follows the traditional Ottoman mosque plan: the dominant mass of the prayer hall (haram) open to a courtyard (sahn) surrounded by arcades. However, the architect here reduced the heights significantly, and focused on giving the general composition a quasi-podium dominated by horizontal lines and intentional elongation that contributed to stabilize the building's masses and integrate them remarkably well within the topography of the surrounding area. The only vertical elements rising from this horizontal platform are the single minaret and the octagonal based dome above the prayer hall.



81-4

2 Islam, Judaism, and Christianity all descended from Abraham and all worship the same Allah (God, YHWH), and are therefore commonly referred to as the 'three Abrahamic religions'.

- 78-4 Ground floor plan.
- 79-4 Elevation.
- 80-4 Elevation.
- 81-4 Outdoor area.
- 82-4 The main façade.



82-4

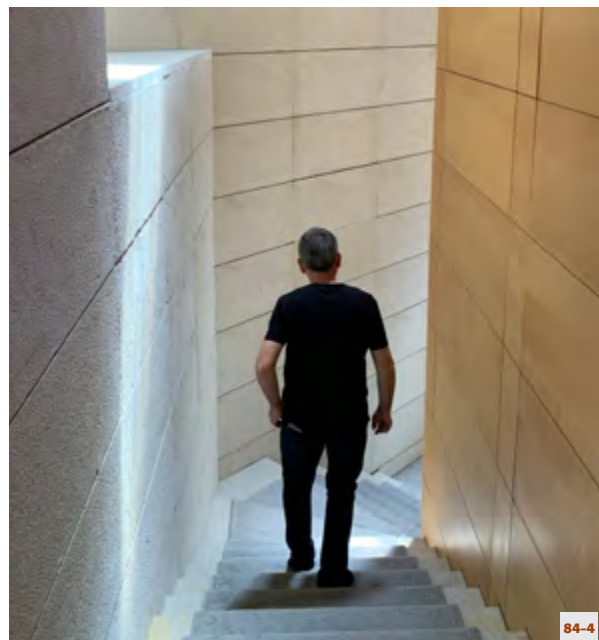


83-4

The external façades of the mosque's complex are clad with Turkish travertine stone in a manner consistent with the prevailing general cladding scheme of the modern university campus. Because of the character of the general planning of the university campus, which relies on the juxtaposition of individual blocks for each function and not their adhesion into a cohesive fabric, we find that the mosque is not directly linked to any other building in the vicinity. However, as with all parts of the site, there are views of the surrounding areas (and from the surrounding areas) which create a strong feeling of connectivity to both campus and city as a whole, despite its fairly significant distance from it.

The mass of the main prayer hall of the mosque is, without a doubt, the dominant element of the overall scenery. It has an octagonal shape in the traditional Ottoman style and a central dome resting on a large 'neck'. But every aspect of the Ottoman tradition ends there, as the general appearance of the mosque, up close, gives a very modern impression. The consistent use of a limited range of materials and colors leads to an overall feeling of calmness and tranquility. It is said that this tranquility (sakeenah) is partly the reason for the mosque becoming so popular with people from all over Ankara, especially their use of it for funerals and prayers for the dead.

The mass of the mosque complex is completely symmetrical, except for the mass of the minaret on the left side of the Qibla and the additional entrance courtyard attached to the central courtyard on the nearer east side. The axis of symmetry starts from the north side opposite the Qibla, with a gate succeeded by an entrance hall, to its right the synagogue can be found and to its left the chapel. A foyer then opens into the large formal courtyard, which ends with a gateway to the prayer hall (the sanctuary). The courtyard is enclosed on the eastern and western sides by what looks like a portico in traditional mosque architecture. But here, it is not composed of the graceful rhythms of columns and arches, as in traditional Ottoman architecture, but rather of huge pillars extruded from parallelogram plan. These pillars (or buttresses) are inclined with regard to the main axis of the mosque at an angle of 45 degrees. This angle prepares for a visual transposition from the orthogonal mode geometry of the northern part of the mosque to the massive octagonal geometry that forms the Great Prayer Hall (Al-Haram).



84-4

83-4 Part of the mosque.

84-4 Inside staircase.

85-4 The dome and part of the prayer hall.



86-4

The mihrab is also reminiscent of its ancient Ottoman ancestors, but the novelty in it is evident in the stepping muqarnas on an inclined surface parallel to the Qibla wall, slightly offset from it, in contradistinction from the muqarnas generated as a result of the interaction of the cylinder and the sphere with the cube in older mosques.





86-4

Above the octagon, a gilded neck reminiscent of the Dome of the Rock in Al-Quds Al-Sharif, can be noticed above which a modern glass dome emerges, reminiscent of the dome of the German Parliament (Reichstag) designed by Norman Foster at the end of the last century (1994-1999), all of which were built beautifully and with elaborate details, giving the entire complex the feeling of a high level of craftsmanship.

Analytical description of the building from the inside

The inner space of the mosque is characterized by a sense of calmness and serenity conducive for worship. This is a result of the design strategies used in terms of the use of a limited number of materials in construction, the use of few colors, and limited decoration. There is also a deft treatment of scale: from the lofty heights of the dome down to what look like niches on the sidewalls.

86-4 Detail of the metallic partitions.

87-4 The minaret and part of the mosque's mass.

The interior walls are paneled in maple wood, giving the interior a very warm glow, especially in the harsh Ankara winters. The details of the claddings are very elaborate, as all the technical systems are integrated within it in a way that never allows them to affect the general spiritual ambiance.

There are a few noticeable motifs or Qur'anic calligraphy panels for which traditional Ottoman mosques are famous, filling the main hall or the rest of the mosque complex, especially the women's hall. The last mentioned hall was decorated with perforated wood panels so as to obscure the view from the men's hall.

The octagonal main prayer hall, with its glass dome, supported on four pillars, represents the compositional culmination of the entire mosque complex. With its stained glass panels, the dome is almost completely responsible for the natural illumination of the prayer hall, albeit supported by lighting provided by hidden longitudinal slits along the peripheral octagonal walls. The dome is complemented on the bottom side by a chandelier with three rings, on which artificial lighting elements are placed in the style prevailing in Ottoman mosques (with a little simplification); with the upper dome, these rings form an integrated formal whole in the middle of the mosque's space. This chandelier is one of the interior elements that the architect kept from the ancient mosque heritage. Added to it is the minbar, which came as a separate piece of furniture rather than a built-in architectural element. The mihrab is also reminiscent of its ancient Ottoman ancestors, but the novelty in it is evident in the stepping muqarnas on an inclined surface parallel to the Qibla wall, slightly offset from it, in contradistinction from the muqarnas generated as a result of the interaction of the cylinder and the sphere with the cube in older mosques.



87-4

Technical Analysis (Technology and Sustainability)

The mosque has an integrated modern computer program that controls all technical systems such as lighting, heating and air conditioning. This sophisticated system is integrated into the interior design scheme in a very thoughtful way, allowing for special serrated cavities hidden between the cladding panel groups and ventilation grilles. The result is that they are hardly noticeable to visitors.

It is worth noting that the mosque is equipped with an underfloor heating system, in addition to a cooling and ventilation system with high environmental efficiency. The computerized system that controls the internal micro-climate of the mosque is most useful in pre-programming a heating time shortly before performing the prayer, which leads to significant savings in energy.

These special service cavities are further used to install the audio system's elements. As mentioned above, the prayer hall is covered with a glass dome, which in itself is a technical feat of engineering; around the lower part of this dome, i.e. the neck, acoustic absorption and reflection panels, made of maple wood, were installed to control the sound in a way that suits the large prayer hall space. There is also a technological innovation that should be noted with respect to the ablutions and bathrooms, as they feature innovative ergonomic seats that have been specially developed to make ablution easier and more comfortable. This design proved so successful that mosques from all over Turkey copied and imitated it.

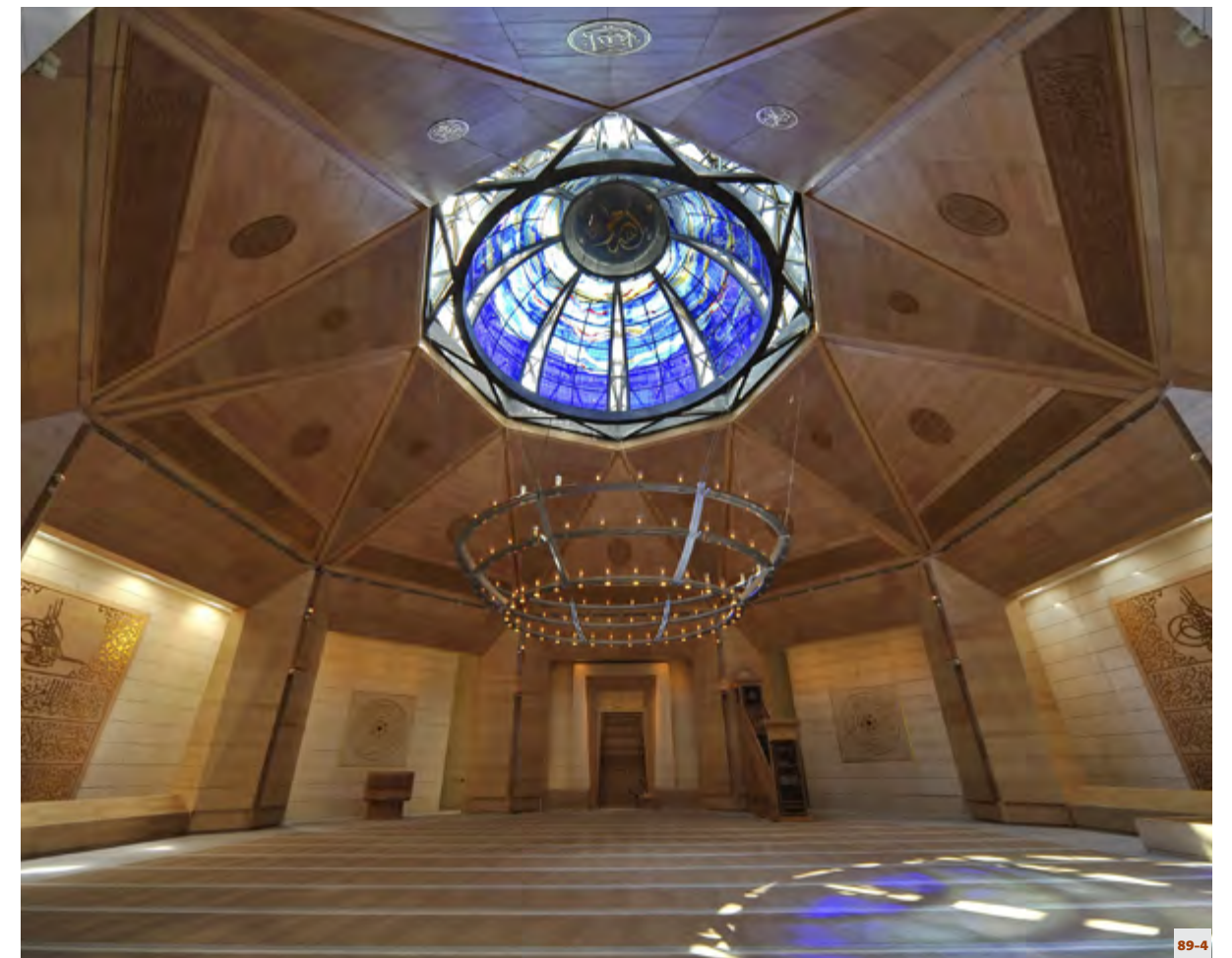
Conclusion

It is necessary to state that the design of the Doğramacıade Ali Paşa Mosque is a remarkable experiment within the framework of attempts to develop rather than revolutionize mosque architecture. It is, however, a mosque that auspiciously serves not only Bilkent University's students, staff, and visitors, but extends to serve the city as a whole, becoming what is known as a 'protocol mosque', authorized for use on special religious occasions.

Although the mosque incorporates traditional mosque architectural elements, such as the octagonal shape of the prayer hall, the dome, the minaret, the minbar, the mihrab, the Qibla wall, even the four pillars that help to define the prayer hall, still the design can be seen as a serious attempt at a modern interpretation



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of the Ottoman Mosque. Perhaps this experiment, which represents a sort of bridge between historic and future mosque architecture, provides contemporary ideas that contribute to 'historical criticism' not as a history formed in the past, and relegated to the past, but rather as a history that still influences the imagination of architects throughout Ummah (the Islamic world), and even other architects who deal with mosque architecture as if part of the past, not as a part of the future, coming history. In other words, the historical product is not to be perceived as completely static, even if it has been produced in the past, but rather it is a living, evolving virtual entity that is open to new interpretations. The design of this mosque is a clear attempt to break the 'isolation' of confined historical precedents, with all their accumulated experiences, and put them in a place where they can contribute to a better understanding of the mosque of the future.

Apart from our rather stylistic discourse, it is important to give full credit to the Doğramacıade Ali Paşa Mosque for being an unprecedented place for Universal Acquaintance, integrating students and academics with the wider community of all three Abrahamic faiths to worship the One, true God... isn't this the true – literal – meaning of a mosque? Jami': the 'gatherer'.³

³ Jami' جامع in Arabic means a place for gathering. It is interesting to note also that Al Jami' one of the 99 Divine Names: the Gatherer (who gathers the opposites).



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88-4 Ablution area.

89-4 Main hexagonal prayer hall.

90-4 External view of the mosque.

PENZBERG MOSQUE

Open Environment for Cultural Interaction

Penzberg Mosque

Location: Penzberg | Germany

Owner: Penzberg Islamic Forum

Architect: Alen Jasarevic of Jasarevic Architekten

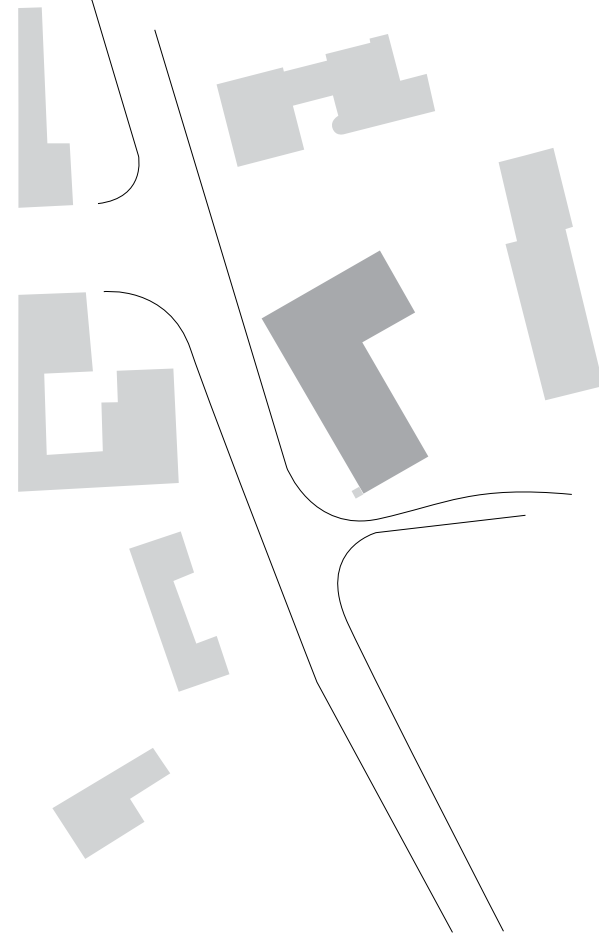
Area: 1725m²

Completion date: 2005

Capacity: 600 worshippers

Type: Central Mosque

Basic empirical data based on a report by Dr. Co Govers



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The story of the Penzberg Mosque, also known as the 'Penzberg Islamic Forum', is a success story on many levels relevant especially to this book. With its entrance resembling an open Qur'an, this mosque literally embodies the motto of this book: Litaarafou (Universal Acquaintance). In fact, the verse containing this motto is fully inscribed on the pages of the depicted Book both in Arabic and German.¹ However, Penzberg Mosque's architectural success is not limited to the design 'innovations' that were introduced to the mosque's basic typologies, but rather to the way they were reinterpreted in a modern design language, a language that not only fulfilled the aspirations of the migrant users but also resonated with the aesthetic sensibilities of the host community. With their simple cubic plastic forms, these aesthetics, stemming from a 'functionalist' perspective, is almost a pure German invention, dating back to the beginning of the modernity period, especially the legacy of the Bauhaus. But, it is by no means a cold, utilitarian simplistic functionalism; rather, its simplicity stems from a building tradition of noble craftsmanship and austerity with a special spiritual temperament. A cursory glance at the Penzberg Mosque reveals its affiliations with the legacy of this language: the minimalism tradition of Mies van der Rohe, the graceful abstraction of De Stijl, and the tradition of the Deutscher Werkbund in general.

1 "O mankind indeed We have created you from male and female and made you peoples and tribes that you may know one another" 49/13. know one another i.e., acquaintance.



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With both competence and vigilance, the architect adapted this local version of pure modernity to envelop the program of the mosque building. Nevertheless, he was in breach of one of its major prohibitions (as introduced by Adolf Loos): the use of ornamentation. With this breach, the building's 'style', chronologically speaking, moved a step further toward post-modernism, whose architecture not only tolerates decoration, but rather encourages it. The result was that the mosque became not only accepted by the German host community, for its use of a 'familiar' architectural language, but it also aroused their curiosity in a certain way.

This small mosque was built in 2005 by the Islamic community in Pensberg, southern Germany. The community commissioned architect Alen Jasarevic from the Jasarevic Architekten office to present architectural designs that reflect their new vision for the Islamic community in Germany.

Penzberg is a small city in the state of Bavaria, whose population is predominantly conservative Roman Catholic and Evangelical Christian (Lutheran, Seventh-Day Adventist, etc.), as is the case in the whole of southern Germany. When the number of Muslim immigrants in the region began to increase in the second half of the last century, it was therefore reasonable to expect some sectarian tensions. Surprisingly, these immigrants were very well received by the other religious communities in the city, so much so as special places of worship were provided for them within Catholic and Evangelical churches. Thus, good relations between different communities grew and have remained warm to this day. However, when the Muslim community began to further increase in size, as a result of the migrations that took place after the dissolution of the former Yugoslavia, and as a result of the refuge of other groups as a result of international conflicts that included several Islamic countries, there was a strong feeling of the need to find special, independent places for them to establish their mosques. For this reason, the Islamic community in Penzberg launched a major campaign to collect the necessary funds to build a mosque and a social centre that would bring them together. Consequently, land was chosen on the outskirts of the city, in a quiet area surrounded by a variety of houses and shops, within easy reach of the city centre.

The built mosque is not a monumental building, as one would expect, but rather a modest structure designed in a minimalistic modern style. Its program was not limited to a place for worship, but also included supplementary functions that elevated it to the status of a culture/social centre; it included amenities open to all, with the aim of integrating and serving all religious denominations. Media attention has been widely drawn to this mosque as an "experiment" that could constitute a future model to be emulated for the design of other mosques.

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The relationship to the urban environment

The mosque is located in an area just outside the centre of Penzberg, where the overall uniformity of the prevailing architectural style necessitated the emergence of a set of variations on this unity, in terms of verity building heights and the multiplicity of traditional pitched roof shapes. The surrounding area is mostly residential, with a few shops, such as the DIY store right across the street from the mosque. Here, the mosque building, with the simplicity of its form, blends remarkably well with the surrounding built environment.

The mosque consists of an L-shape flat mass clad with local white stone. With time, the need to expand the mosque's initial program appeared; another block was added as an extension of the mother block, containing, among other amenities, a restaurant that serves traditional foods from the countries of the newly settled Muslim communities (mainly Bosnia, Turkey, and Syria).

The Islamic community in Penzberg, called the Penzberg Islamic Forum, has succeeded in establishing excellent relationships of friendship with the wider community in the city. Muslims felt the need to reciprocate the hospitality they had initially received from the local Catholic and Evangelical Christian churches, when they were allowed to use their own churches and parish centres. This beautiful reciprocation payback response was embodied in the symbolism of the mosque's door with its open arms gesture of a mosque open to all. As long as visitors took off their shoes at the hallway behind the door, they were welcomed to enter the prayer hall without any discrimination. It is worth noting that women are not obliged to cover their hair, they only do so voluntarily and out of courtesy for their Islamic hosts. All visitors are patiently

and welcomingly guided by Ms. Gönül Yerli, Vice President of the Islamic Forum, who is an academic expert on interfaith dialogue. The visitor can also meet with open-minded imam Benjamin Idris to discuss religious affairs if they wish.

Imam Idris and Ms. Yerli explained to the technical reviewer dispatched by the Al Fozan Prize, Co Govers, that their goal is to establish a modern, local Islamic 'way' based on openness, transparency and peaceful coexistence, suitable for the society in Germany. Their efforts in combating the (previously) prevailing intolerance of Muslim people resulting from a lack of knowledge of Islam has been bearing fruit with the passage of time and on different occasions. During the COVID-19 lockdown, school children from the local community, regardless of their religion, came to use classrooms and learning facilities in the community centre, to do their homework on days when schools were closed and they could no longer tolerate being confined to their homes. They were surprised by the spaces provided by the mosque and the feelings of tranquillity it transmits. This prompted them to learn more about religion and the Muslim people in their neighbourhood.

90-4 Site plan.

91-4 The mosque from a distance.

92-4 External mass of the prayer hall.

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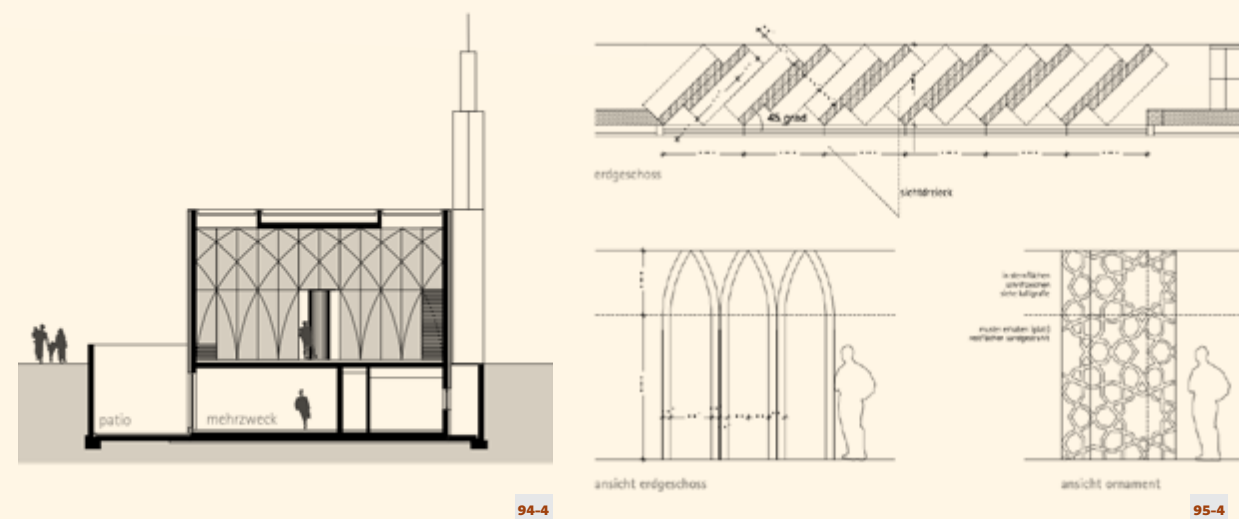
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- 93-4 Ground floor plan.
- 94-4 Section.
- 95-4 Details.
- 96-4 Side façade.
- 97-4, 98-4 Mosque components.
- 99-4 External night view.



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95-4



Analytical description of the mosque from the outside

The mosque is a three-story building, including a floor on the lower level (the basement). The mosque program comprises a prayer room (haram) for men, a prayer room for women, separate ablution areas for both, in addition to a library and a community centre. The latter contains classrooms, offices, a private reception hall, and a small residential apartment.

With its gentle human scale, the height of the mosque's mass is in harmony with the surroundings – adjacent housing and retail shops – both in form and function. Although the slender minaret indicates that the building is a mosque from a distance, its flat roof suggests that it can also accommodate other functions when viewed from a distance or from cars passing by the adjacent road.



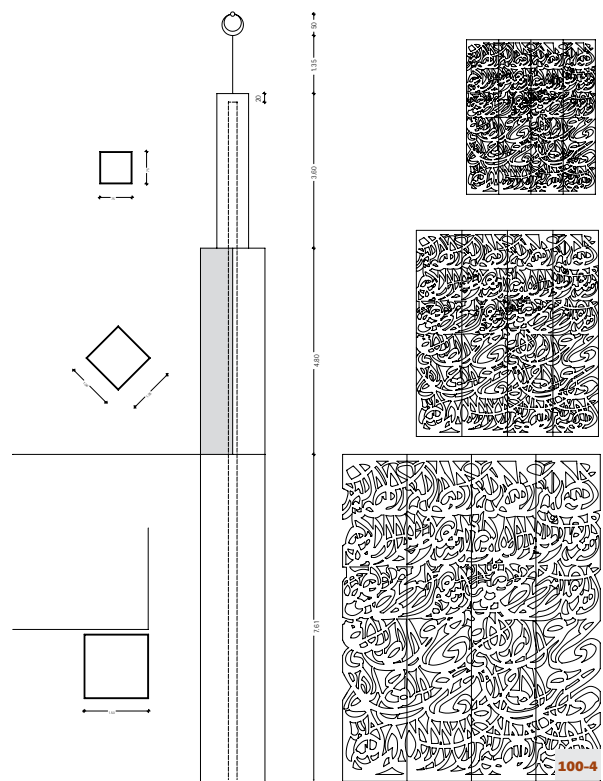
The western façade, parallel to the road, is set back just enough to allow parking in front of the building. This is where we find the main distinctive entrance marked by the two large concrete slabs mentioned above. The gate, behind the latter, is a modern iron door open to all (according to the message of the mosque). As for the southwestern corner, a thin minaret made of perforated steel, based on Arabic calligraphy, rises. This façade contains two windows, a small one that lets light into the library during the day, while the other is a large semi-transparent window occupying the entire southern side (the Qibla wall). It constitutes a glazed façade decorated with ornaments based on Islamic motifs through which light enters the prayer hall in a filtered manner. Despite the transparency that appears from the outside, the possibility of exposing the worshipers in the prayer hall to passersby on the street is very limited, due to the placement of curved concrete elements in the interior. These concrete architectural elements meet with the windows at an angle that partially obscures the vision. These elements, framing the side window, are decorated with the same decorative motif used in all elements of the mosque. This is reminiscent of arcades that precede the façade in traditional mosques.



(E-04) 96-4

(E-04) 97-4

(E-04) 98-4



(100-4) (101-4) (102-4)

(103-4) (104-4)

The fact that the use of patterned glass allowing a rather restricted view into the interior, preserving the privacy of worshippers yet having a certain visibility rarely seen in a mosque anywhere in the world, is a powerful gesture that reflects the open attitude of this Muslim community, while also keeping with Islamic sensitivities toward privacy. This openness, which is also reflected through the front door welcoming gesture, along with the modesty of the overall form of the building, is seen as the most important element of the design, helping to make this mosque not just an 'acceptable' element of the Penzberg townscape, but one loved by all who proudly speak of it as "our mosque," whether they are Muslims or non-Muslims.

The mosque is bordered on its south side by an open front yard, where it is possible to gather and park more visitors' cars. This façade is, as hinted above, entirely glazed with opaque blue glass. The façade is setback one meter from the property line, allowing it to reflect the surrounding environment. This is another judicious gesture from the architect to further confirm the idea of the modesty of the mosque and its lack of dominance over the surroundings. Only the minaret mass, at the corner of the building, deviates from the uniform height of the building, the effect of this height, however, is mitigated by the fact that it is a light minaret, perforated with swirling Arabic calligraphy, has made it the most appreciated feature of the mosque in the neighbourhood. The wider community too, considers it a work of art that contributes to beautifying the city's vistas. Actually, the minaret is the most innovative element in the mosque as a whole, being a vertical element counterbalancing its horizontal configuration – from a compositional point of view. What led to this innovation was

the need to comply with local laws that do not allow the sound of the call to prayer to be announced at the times of prayers, as this could cause inconvenience to the neighbours. The alternative – and innovative – solution was to inscribe the words of the call to prayer (adhan) in an artistic way on the steel surfaces of the four sides of the minaret and then hollowing out the surrounding spaces, leaving only the inscribed words of the adhan to form the minaret. This minaret has thus become – quite literally – the visual embodiment of the call to prayer! With this idea, the city council's ban on the sound of the call to prayer was respected, yet this 'tower' kept calling to prayer, visually, not a mere five times a day – but constantly and perpetually!

There are many open spaces behind the mosque, along the right angle forming its two wings (in the shape of the letter 'L'), where people gather and meet before and after prayers. This space houses a variety of community service amenities that are fully open to the wider public, as the design of the entire building embodies openness to the wider community.

100-4, 101-4 Minaret details.

102-4 Outdoor space.

103-4 Woman prayer hall.



102-4



103-4



It was possible to obtain the blue colour by sandwiching, between the glass panels of the facade, thousands of pieces of glass fragments resulting from the recycling of juice bottles..



104-4

Analytical description of the mosque from the inside:

It is interesting that Gönül Yerli, vice-president of the Islamic Forum, mentioned that visitors often comment with astonishment on the mosque's lack of a dome when looking at it from the outside. But as soon as they enter, they are amazed at the simplicity of the design and its effectiveness in achieving a distinct Islamic worship atmosphere. The realization of this 'atmosphere' is the result of a set of careful design treatments. First, there is the Qibla wall, which fills the prayer room with blue light but does not blind it, so to speak. This is achieved in the south-facing wall by installing special opaque glass. Structurally, this glazed façade is supported by elegantly curved steel elements that further give hints of traditional arches - without explicitly declaring them. It was possible to obtain the blue colour by sandwiching, between the glass panels of the facade, thousands of pieces of glass fragments resulting from the recycling of juice bottles..

Secondly, the architect returns to using the curved shape of the steel that he used in the Qibla wall again, but now in the curved concrete elements on the western facade. These elements obscure the worshippers from exposure through the glass, preserving their privacy in their prayer positions.

Both the glass and concrete elements, in addition to the ceiling of the prayer hall, are decorated with an Islamic motif incorporating the ninety-nine Divine Names within. These were executed by the artists Lutzenberger & Lutzenberger from the neighbouring town of Bad Wörishofen, in cooperation with the calligrapher Muhammad Mandi from Abu Dhabi. Although this collaboration resulted in a very contemporary vision, still it refers to the traditional origins of the calligraphy. Its implementation as part of the concrete work created a warm texture, counterbalancing the 'coldness' and rigor of the structural system.

104-4 Internal view showing windows ornamented with Islamic motifs.

105-4 The blue glass bottles wall.

The height of the internal halls is surprisingly low, however, the design of the curved arcade-like concrete elements draws the eye upwards and gives the illusion that the inner space is higher than it really is. Further, the height of the artwork on the Qibla wall also creates a strong feeling that increases the aesthetic sense of the prayer hall and gives it spaciousness and simplicity.

With regard to the interior elements (typologies) of the prayer hall, it is remarkable that the design of both the mihrab (niche) and the minbar (pulpit) are consistent with the design of the minaret, in terms of material used as well as the methods of perforation and cutting applied to the material to show the aesthetics of Arabic calligraphy. This is not a common design choice but rather a creative and unique one. The sheer craftsmanship of perforation gives a feeling of warmth and grace - the opposite of what might be expected from a 'cold' steel work.

Technical analysis and sustainability

The mosque was built of reinforced concrete with flat roofs and stone clad walls. As mentioned in the interior description above, the southern façade is the Qibla wall, which was entirely made of glass. Because of its vast surface area, it had to be supported by a steel frame of thin section arch-like elements. The glass and its support system that comprise this wall was developed in a unique way: not as a structural framework but as a work of art. Between the glass panels of the façade, a layer of broken glass, recycled from drinking bottles was pasted, according to a special technique, in order to control the light and create a relatively opaque effect.

Further, the structural system of the mosque was only decided upon after reviewing several options, and was implemented in such a way that enabled members of the community to participate in undertaking the largest possible amount of work in the construction, each according to his/her ability and experience. The final choice was a solid construction with simple, but high quality, exposed concrete surfaces. Its visual appearance was enhanced, however, by the incorporation of decorative elements within the concrete moulds.



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In addition to the reinforced concrete structural system, the steel construction sector, traditionally strong in Penzberg, partially contributed to the construction of the mosque by taking part in the manufacturing of the minaret, elements of the Qibla wall, the minbar and the mihrab (perforated steel panels). The shared participatory work of the actual construction of the mosque created a stronger bond between the members of the community on the one hand, and the Islamic Forum body on the other.

There is another technical innovation worth mentioning: the use of metal pipe elements adjacent to the main reinforcement of concrete in order to provide climate control of the interior space. Water rings buried in the concrete ceiling heat the floor of the mosque and also cool it in the summer. The system used is further supported by a photovoltaic system on the roof to increase its efficiency (this mosque is the first mosque in Germany to be equipped with a photovoltaic system). This has resulted in total heating/cooling energy savings of 60%. In addition, the building envelope is highly insulated, which increases the efficiency of indoor climate control.

Other innovations are mostly focused on aspects of social and economic sustainability. Firstly, the aforementioned decision to involve local labour as much as possible in the construction of this mosque has created a strong relationship with the local community and has made members of the Muslim community more proud of this mosque.

Secondly, the decision to include a community centre in the mosque, with educational spaces in the basement, was an act of engagement and empowerment for the local community. At this centre, great emphasis is placed on improving language skills of the German language, so that the expat community establishes a strong and sustained bond with their new home. Of course, religious teaching is available in a variety of languages, including Bosnian and Turkish.

The pivotal role played by Günül Yerli, vice-president of the Islamic Forum, who is an expert in the field of comparative religions, led to the establishment of ties with the Christian community (both Evangelical and Catholic) and led to the occurrence of joint activities and trips involving the three communities, even taking them to visit distant places as far as Cordoba and Seville, to learn more about each other's religions and the cultural influences

they left on each other. It should be noted that the goal of Imam Benjamin Idris to create a modern German form of Islam, open to all, is reinforced by the modern and open interpretation of the mosque's architecture as implemented with such eloquence in the Penzberg Mosque.

Conclusion

The Penzberg Mosque / Penzberg Islamic Forum is a truly remarkable example of how the founding of a mosque on 'foreign' territory,² can be a positive catalyst for strengthening relations between a minority immigrant community and the broader non-Muslim society.

Thus this mosque is not to be seen as a mere architectural product, but an integrated social project. All concerned parties and stakeholders, in both the Islamic and local communities, came together to plan, build, manage, and operate it. Over years of dedicated hard work, and with some external financial support³ this immigrant community has managed to establish not only a place of worship but also a symbol of modern Islam and an example of positive integration with the host community.

The main driving force behind this project was, undoubtedly, the meeting of two minds: an enlightened imam and an open-minded academic.⁴ Together, they decided that this mosque had to express a fresh vision of contemporary Islam, and that transparency should be an important feature of the design.

Thankfully, the architect Alen Jasarevic, who comes from a Bosnian Muslim background, managed to crystalize this vision. The effectiveness of his design came from the sensitive way in which he dealt with the client's brief to meet the expectations of both expatriate Muslims, and at the same time, the sensibilities of the German host community. The fact that everyone is welcomed to visit the mosque has led to visitors coming to see this mosque from all over Germany – and even from abroad. With this visit, they are never disappointed, but rather emphatically surprised.

An important part of the success story of this mosque lies in devoting its spaces not only to religious ceremonies, but also other ceremonies and even academic/schooling activities. An 'open door' policy has succeeded in attracting people from the wider community of Penzberg and promoting relations between the Islamic community and their Catholic and Evangelical Christian neighbors. Hence the architecture of the Penzberg Mosque is not only a faithful expression of its local open-door policy, but more importantly, it is an embodiment of a much broader Qur'anic message of Universal Acquaintance, a *raison d'être* for Creation's variety!⁵



107-4

2 "Forseign," according to the status quo geopolitically – or rather – geo-religiously on a map.
 3 from Sheikh Dr. Sultan Bin Muhammad Al Qasimi, Ruler of the Emirate of Sharjah and Member of the UAE Supreme Council.
 4 Vice president of the Penzberg Islamic Forum, who is an academic expert in communication and interfaith relations.
 5 Creation's variety: gender-wise (male/female) and tribes and peoples, as stipulated in our adopted Qur'anic verse for this book...

106-4 Details of the depth of the openings.

107-4 One of the classrooms.

CONCLUSION

A Vision for the Future Mosque Architecture in Critical Context

This conclusion provides a critical overview of the issues facing mosque architecture as articulated in the shortlist of mosques selected for the fourth cycle of the Abdullatif Al Fozan Award for Mosque Architecture (2020-2023). The Award uses rigorous criteria to adjudicate mosques and the shortlist in this book represents an exceptional array of mosques around the world that were built during the last two decades, at the beginning of the new millennium. Here we pose a series of questions about mosque architecture over the last century, and how the principle of 'acquaintance' and the theory of parallel heritage can contribute to the rethinking of how we conceptualize mosque architecture as a whole.



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We begin by asking how mosque architecture stopped functioning as a hub for modern Arab and Islamic art and architecture. How were mosques built historically, how are they built today, and how might they be built in the future? This tumultuous historical trajectory has been marked by rupture rather than continuity with regard to the last two centuries, and particularly the first half of the nineteenth century. This dynamic continued to escalate to the point where mosques were constructed without regard for their architectural surroundings. Mosque architecture no longer had any real influence on other visual arts and architecture. In understanding why, it might be beneficial to undertake a detailed historical analysis of mosque architecture over the nineteenth and twentieth centuries. This was the topic that Dr. Khaled Azab addressed during a workshop that the Abdullatif Al Fozan Award held at the Bibliotheca Alexandrina in Egypt on 25 July 2018. Dr. Azab emphasized that there had not been any systematic documentation of mosques built during the last two centuries, even though most mosques around the world were built during the last two hundred years. One significant development subsequent to Dr. Azab's presentation (and likely as a result of his lament) is 'mosqpedia' (www.mosqpedia.org), an online 'wiki' or encyclopedia-type resource focused solely on mosque architecture. It currently highlights the architecture and architects of more than 850 mosques around the world, and its database is growing. It's affiliated with the Al Fozan Award. It contains some level of analysis and of course pictures of each mosque, but there's a need for more depth, more 'documentation', facilitating deeper 'knowledge'. Other notable resources such as archnet.org (with more than 19,000 listings related to mosques) and the 'Islamic Architectural Heritage Database' (see <https://www.islamicarchitecturalheritage.com/>) hosted by the Research Center for Islamic Heritage, Art and History (IRCICA, see www.ircica.org), a subsidiary of the OIC consortium seem limited to pictures and essential identifying details without any significant documentation of each mosque. While these developments are highly encouraging, more depth is needed and as a result contemporary mosque architecture is facing a crisis of documentation and knowledge, as well as a declining influence in the architectural sphere. There has also been a clear deterioration in the craftsmanship and hence also the economic value of mosque architecture.¹

In examining the mosques covered within this book, we can see there is a crisis of visual identity as well as a crisis of technique in mosque architecture. However, mosques continue to provide a space for social cohesion and mutual acquaintance, even if these connections are somewhat circumscribed by various parameters governing the use of the space. Mutual acquaintance remains the functional purpose at the heart of mosque architecture. Even if peripheral elements may have changed over time, this function is integral to the mosque and would be difficult to shift. It provides continuity across diverse cultural and geographic contexts and technical approaches. This cohesive purpose is one of the driving forces shaping the future of mosque architecture. Future directions in mosque architecture might experiment with forms and structures that serve and expand upon this function, but they won't and they can't alter it. In conclusion, experimenting with new forms serves

1 al-Naim, Mashary Abdullah, (10 August 2018), "Mosque Architecture: Connections and Disconnections," Abdullatif Al Fozan Award for Mosque Architecture, alfozanaward.org.

the broader purpose of developing synergy between the theoretical and practical dimensions of mosque architecture. How might we create structures that foster this kind of synergy?

Throughout Islamic history, mosque architecture has deeply shaped the architectural craft. Various crafts and industries emerged in connection with mosque architecture, which also served as an important economic impetus for the further development of visual arts over the centuries. A community of artisans was formed that developed innovative approaches to mosque architecture throughout Islamic history. This prompted the development of other spheres and fostered new architectural forms. Mosque architecture spurred waves of innovation in arts and architecture and established an economic market in this field that lasted centuries. It also expanded horizontally to help create architectural schools that encompassed other kinds of buildings. We believe that mosque architecture lies at the heart of Islamic architecture because it was both a source of innovation and an economic driver. In examining the trajectory of Islamic architecture, it is evident that many architectural ideas and forms began with the mosque and were then adopted as part of other kinds of structures.

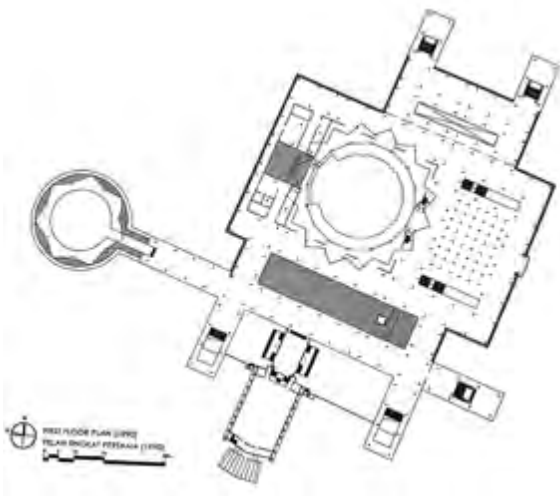
Experimentation is a key element in creating forms that reflect the cohesive purpose of the mosque. In this book, we have explored how all fields contain both a theoretical and practical dimension. Mosques embody the synergy between the tangible and intangible in Islamic civilization. This convergence enables the mosque to maintain a consistent visual identity and functional purpose across a broad geographic space. This is true even as particular elements and styles constitutive of mosque architecture grow and develop. We are not endeavoring to recreate this previous trajectory, which

would be at odds with the notion of parallel heritage, but rather to embrace the duality of theory and practice upon which any architectural paradigm must be grounded. Here we use a capacious definition of theory that encompasses society, culture, and politics, and an understanding of practice that takes into account craftsmanship, availability of resources, and the economic milieu. Mosque architecture must be understood in the context of the interplay between these interconnected factors.

Here we must ask: Why did this economic clout and creative influence come to an end? How has the mosque become isolated from its surrounding architectural context? These critical questions require rethinking contemporary architecture and how these institutional and structural shifts have contributed to the mosque's estrangement from its previous spheres of influence. We believe this is part of a larger crisis that extends beyond mosque architecture to our current position within human civilization. Our influence in economic and artisanal spheres has shrunk to the local level, which means we have much less influence at the global level. The mosque is the first institution to feel the effects of this decline, since it was also the primary catalyst in fostering innovation, creating economic opportunity, and building a community of artisans. This matter merits further study, since there may be other reasons behind this decline.

One of the many reasons that the Abdullatif Al Fozan Award for Mosque Architecture was established is to revitalize the role of the mosque at both the theoretical and practical level. The mosque is the most crucial element of Islamic architecture in generating visual arts and architectural innovations, and in fostering the development of crafts and industries tied to mosque architecture. Rebuilding the standing of mosque architecture is no easy task and will require work across several spheres. This should start with comprehensively documenting mosque architecture and building a deep (and wide) knowledge bank – not only of mosques already built, but also of mosques in various stages of conception, design, and construction (adding a metaphorical 'windshield' and 'side windows' to the current small 'rear view mirror' knowledge base, a resource critical to the success of parallel heritage)² – in order to engage with the challenges that contemporary mosque architecture is facing. We need to think about how to develop a new critical approach to mosque architecture. How can we plan for the future while we remain struck in the past? This is not to say that we should blame all contemporary issues in mosque architecture on a failure to engage with the future, but Islamic architecture will need to adopt a new critical framework, and new supporting resources to cross this threshold.

2 For example, imagine an extension of mosqpedia.org or other online mosque architecture database that includes the hundreds or thousands of Al Fozan, Retal, etc. architectural design competition submissions that weren't short-listed as well as those that were. Such a resource would support the transformation to a parallel heritage-driven architectural practice. Such a resource could also push mosque architecture and architects back into more of a thought-leadership position they enjoyed in ages past.



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When we say that mosque architecture leads to the sense of an 'Architectural Ummah', this is not just sentimental fluff. There is a big difference between bringing the Ummah into being on a political level –which some consider infeasible at the present time, if even desirable at all, as Ummah is a virtual/spiritual reality that exists through Allah already (Allah said: "As for Ishmael, I will bless him also, just as you have asked. I will make him extremely fruitful and multiply his descendants. He will become the father of twelve princes, and I will make him a great nation." (Tawrat, Genesis, 17:20)³ – and achieving the sense that the Ummah really exists in the built environment, in addition to its existence in the virtual/spiritual realm, through a widespread contemporary style of mosque architecture. But such a claim raises eyebrows if it is not backed up by actual concrete examples. In this sense, the diverse mosques included earlier in this book could be said to form a sort of condensed overview of the 'Architectural Ummah'. As a further example, there is also the work of Malaysian architect Dato Baharuddin Abu Kassim, who designed the National Mosque of Malaysia (Masjid Negara locally) in 1963 (with construction completed in 1965). Abu Kassim engaged with two issues in his contributions to mosque architecture. First, the east Asian style of building mosques was rooted in long-standing Chinese and Malay architectural heritage, which is characterized by an architectural style with broad ceilings and water landscaping. This architectural culture in general, and the region's mosque architectural culture in particular, utilized wooden columns and stilts sunk either into the ground or waterways. Secondly, the mosque was located at the center of Kuala Lumpur, the capital of Malaysia, and needed to be both integrated with the urban fabric as well as attractive to the many passersby. It also needed to incorporate the notion of modernity, the style adopted by the new nation which had become independent only a few years before the mosque was built. These two guiding principles inspired the architect to build

³ The Tawrat (Torah), is one of the five Divine revelations of Allah to humanity recognized in the Holy Qur'an. The five include the Qur'an, the Tawrat (Qur'an 5:43-45), the Zabur of Dawud (Psalms of David, Qur'an 4:163), the Sahifah of Ibrahim and Musa (Scrolls of Abraham and Moses, Qur'an 87:18-19), and the Injil of Isa Ibn Maryam (the Good News (of eternal life with Allah in Paradise) of Jesus, son of Mary, Qur'an 5:46-47; 57:27).

the mosque that we see today, more than a half century later. Abu Kassim's mosque clearly embodies a rupture with tradition and demonstrates a departure from repetitive architectural forms.⁴

The Kuala Lumpur mosque was built among gardens and includes wings that come together to form entrances. This evokes regional mosque architecture and uses concrete columns that are meant to resemble coconut palms in the prayer hall, whose main dome is a folding concrete roof. The mosque remains a very modern gathering space, even now, many years after it was originally built. It embodies local memory and traditions while also serving as a key urban hub at the heart of the capital. This mosque exemplifies the notion of 'Universal Acquaintance' and embodies the concept of an 'Architectural Ummah'. It also is an early example of incorporating bold new forms into mosque architecture.

This notion of risk-taking brings us back to the principles of Arab rationalism as set forth by the Moroccan philosopher Mohammed Abed al-Jabri, who is known for his work on reason ('aql) versus revelation (naql). He aimed to shed light on the concepts underpinning the development of Arab rationalism over fourteen centuries of Islamic history. We argue that reexamining these methodological foundations that shaped Islamic and Arab thought and cultural production can help us understand how mosque architecture developed and why particular forms persisted for centuries. We contend that early Umayyad architecture, especially the Dome of the Rock (not a mosque per se, but an Islamic shrine and the believed location of the start of the miraculous Isra' and Mir'aj night journey, among other important spiritual events⁵) and

⁴ al-Naim, Mashary Abdullah, (Saturday, 4 May 2019), "Mosque Architecture: Heritage and Repetition," al-Riyadh, Saudi Arabia.

⁵ Other significance attributed to the site of the Dome of the Rock, in addition to the Night Journey, include: the location where God created the world and the first human (Adam), the location where Ibrahim almost sacrificed his son Isaac, and the location of the Jewish Temple built by David's son, Solomon (which housed the Ark of the Covenant and Allah's Presence), which is believed by many (along with the mobile 'Tent of Meeting' used in the Sinai Desert for forty years and described in the Tawrat) to be modeled on Allah's Temple/house in Heaven. Detailed instructions provided by Allah for the architectural design and construction of the Tent of Meeting can be found in the Tawrat (Exodus 25-27 and 35-40). Allah's instructions for the architectural design and construction of the Temple are also provided in the Hebrew Bible (Joshua, Judges, 1-2 Samuel, 1-2 Kings, 2 Chronicles 3:1, etc.).



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0-2 الموقع العام والمسقط الأفقي للمسجد.
0-3 مدخل المسجد وتظهر فيه الأعمدة على شكل أجنحة طائفة.

the Great Mosque of Damascus, constituted a paradigm shift that reflected the development of ijthad (independent reasoning). This produced a new kind of mosque architecture that had not been seen before. However, mosque architecture later fell into the trap of repeating existing architectural forms (taqlid) with much less space for innovation.

We will examine the four main concepts that are used in the context of knowledge production in Islamic societies: taqlid (uncritical acceptance of existing precedents), ijthad (independent reasoning), 'aql (reason), and naql (transmitted knowledge). Taqlid assumes the greatest degree of adherence to existing precedents, whether ideas, texts, or other structures and concepts. This concept is linked to the idea of naql, which holds that transmitted texts, i.e., the Qur'an and Hadith, their exegeses, and the material forms produced through and conveyed by these texts are the only valid source of knowledge. This school of thought does not promote independent reasoning (ijthad) or reinterpretations of the original sources and relies upon the first explications of these texts for reference. On the other hand, proponents of ijthad contend that texts should be placed in their specific temporal and geographical contexts, and that 'aql (reason) can be employed in analyzing texts. Likewise, material forms can be produced according to the context of how people are living during a particular point in history. We argue that taqlid and naql have dominated the history of mosque architecture, and that until the end of the eighteenth century, the role of ijthad was marginalized. At this juncture, a confrontational and independent mode of reasoning emerged that merits further study, since it reflects a certain discontent with the past hegemony of taqlid and naql.

It is evident that the principle of naql underpins repetition in mosque architecture. This culture of conformity produced the same repeating style that we recognize as a 'typical' historical mosque. Little space was given to individual variation. Ijthad usually reflects the ability of individuals to engage in innovation and renewal, and to disseminate new ideas within society. Mosque architecture in particular has grappled with this hegemony of traditional historical form. Some even attribute spiritual feeling within the mosque to the repetition of historical architectural forms and the interplay between the tangible and intangible. However, spirituality and reverence are not derived from architectural elements, except in a general way. We find ourselves up against the hegemony of naql and taqlid in how we, as a community of practice and our clients, develop conceptions of mosque architecture. Mosque architecture remains shackled to this paradigm until the present day, but the last two centuries have significantly reshaped this field.⁶

Are we now embarking on an era of innovation (ijthad) and building a bolder culture that will produce new approaches to mosque architecture? How far might this new culture take us from historical directions in mosque architecture? There is no denying the existing discontent regarding contemporary orthodoxy in mosque architecture. This situation stems from significant deficiencies in the style of historical mosques over the last two hundred years, which created unstable hybrid forms. These problems exacerbated the alienation of the mosque from its surrounding spatial and visual environment. This was also at odds with historical mosques, which were aligned with their surroundings even if they contained repetitive forms. Such challenges are likely to eventually lead to alienation from historical architectural roots, as has happened with mosque architecture. It is therefore necessary to develop a new approach consistent with current and future directions for mosque architecture in order to allow the field to develop more freely beyond the parameters of architectural orthodoxy, while at the same time continuing to engage with the surrounding urban milieu.

⁶ al-Naim, Mashary Abdullah, (18 October 2018), "Taqlid and Ijthad in Mosque Architecture," Abdullatif Al Fozan Award for Mosque Architecture, alfozanaward.org.

We might trace the development of the concept of parallel heritage to an urgent need to move beyond taqlid, which has contributed to stifling reason ('aql) and the curtailment of independent reasoning (ijtihad). Parallel heritage is part of ongoing intellectual ijtihad that looks to the future. It draws upon past experiences only within the context of direct experimentation regarding whether to continue to use a particular form or to adopt a new approach. The Umayyad contribution to developing a new approach to Islamic architecture through ijtihad was successful. However, it was not followed by similarly bold efforts to rejuvenate mosque architecture. These later approaches were reluctant to build upon earlier innovations. Parallel heritage therefore advocates for new ideas linked to the same source. This was true of the Umayyads to a significant extent, but they rarely repeated their approach, as those who came after would do, but rather tried to push the original idea further.

It is worth considering how mosque architecture can reflect these approaches. How should contemporary practitioners develop a new approach rooted in ijtihad, and which employs modern techniques to produce mosque architecture that reflects the spirit of this historical moment? Parallel heritage aims to liberate mosques from historical orthodoxies that produced strange hybrid forms. At the same time, this new approach should not undermine the principles that have governed the function of mosque architecture. The core function of the mosque must remain constant, even as certain elements that many expect to see in mosques might change. The theoretical laboratory that the Al Fozan Award for Mosque Architecture has created provides space to test these ideas as they develop. There have been various endeavors in this regard, including international conferences in mosque architecture that the Award has organized in recent years.

During the 2nd International Conference on Mosque Architecture, held in Kuala Lumpur on 25 November 2019, the Award focused on future directions for mosque architecture in research and practice. This seems like a simple question at first, but in fact encompasses diverse philosophical, urban, political, social, and economic dimensions. In order to prepare for this conference, we held a workshop on mosques in Malaysia in the administrative capital of Putrajaya in coordination with the Department of Islamic Development Malaysia (JAKIM) on Wednesday, 20 November 2019. During this workshop, Dr. Adri Noh, a professor of Islamic studies, made a compelling argument regarding the mosque as another "mercy to the worlds" (Qur'an 21:107). He noted that the letters in the Malay word rahmah could stand for rahmah (mercy), aman (safety), hormat (respect) mesra (from masarra, or joy), alami (nature), and harmoni (harmony). This effort to draw connections between these words and the deeper meaning that mosques can evoke attests to the importance of the philosophical dimension of mosques, which is infrequently examined in Arab culture.⁷

⁷ al-Naim, Mashary Abdullah, (Saturday, 23 November 2019), "The Mosque: Between Architecture and Politics," al-Riyadh, Saudi Arabia.

Dr. Noh observed that this philosophical vision is universal and affirmed the deep cultural resonance of mosques. He also noted that the letters in the Arabic word for mercy, rahma, could similarly be linked to other words: rahma (mercy), haya (life), multaqa (meeting place), and tawasul (interconnectedness). These concepts reflect the notion upon which this book, *Universal Acquaintance*, is based. Although there are many other words and broader meanings the mosque encompasses, the point is to demonstrate that there are latent dimensions in mosque architecture that have not yet been fully explored. This is because we previously confined ourselves to a traditional approach. However, the conference in Kuala Lumpur began to explore some of these dimensions.

The notion of the 'mosque of the future' is a topic of interest to mosque architects and to architects in general, since mosque architecture around the world is currently in crisis. This question relates to how mosques engage with their social and urban context and to the need for more in-depth technical studies of mosque architecture. There are also certain kinds of conduct that visitors to a mosque are expected to follow during their time in there on a daily basis.⁸ In his opening remarks at the Kuala Lumpur conference, Sultan bin Salman Al Saud stated that one of the key principles underpinning future construction of mosques was that mosque architecture should be simple and avoid wasteful or excessive cost. Simplicity itself is a deeply-rooted architectural principle that is not easily achieved. German-American architect Ludwig Mies van der Rohe was fond of saying "less is more." We might think about how that principle could play out in the simplicity of mosque

⁸ al-Naim, Mashary Abdullah, (Saturday, 30 November 2019), "A Global Approach to the Future of Mosque Architecture," al-Riyadh, Saudi Arabia.

architecture. This philosophical concept was discussed at length at the conference. Some alluded to US architect Louis Sullivan, who famously said that "form follows function." Future mosque architecture needs to adhere to its intended function in order to avoid excessive ornamentation. Maintaining this cohesive purpose is an integral part of mosque architecture.

Over the course of history, mosque architecture has been overloaded with as many as fifty added elements, as one study noted. These elements became defining features of mosque architecture during the modern era. Herein lies the crisis: Modern mosques during the last century have become alienated from their historical contexts. It has become necessary to search for new frameworks for the future directions of mosque architecture through focusing on philosophical content and spiritual value, which are tied to an understanding of earth as a place for prostration and a means of purification, as per the prophetic Hadith.

The conference went beyond these philosophical questions and also included scholarly papers that dealt with the relationship between the mosque, economy, and contemporary structures of governance. Other papers dealt with environmental questions that mosque architecture might engage with in the future, especially regarding renewable energy and conservation of water resources. Some speakers raised the question of innovation and the development of new ideas, given that mosques historically functioned as a laboratory for innovation in Islamic civilization. This indicates there is extensive space for experimentation in mosque architecture, and that mosque architecture can contribute to developing architecture as a whole, just as it has done in the past. However, we must adopt an entirely different approach than in the past and pursue deeper connections between modes of thinking and production in order to foster new ideas.

One of the main drivers for the development of ideas is scholarly research. In the case of mosque architecture, we are talking about a universal phenomenon—prayer—in a universal building—the mosque. There are diverse avenues of inquiry into this question of mosque architecture, where local variation exists alongside universal tenets. This building is integrated into people's daily lives and provides the parameters for the daily schedule that Muslims follow. Muslims comprise almost one-fourth of the world's population and are spread throughout all parts of the globe. Mosques are the primary space shaping the social structure of Islamic communities around the world. The five daily prayers are "enjoined on believers at fixed times" (Qur'an 4:103). This creates set times to pray but also organizes worshippers' daily schedules in great detail. This was discussed at the 3rd International Conference on Mosque Architecture, which was held in Kuwait from 14-17 November 2022. The conference was organized by the Abdullatif Al Fozan Award for Mosque Architecture in coordination with Kuwait University and the MBI Al Jaber Foundation, taking place three years after the Kuala Lumpur conference.

This conference adopted the theme "The Mosque: A Cross-Cultural Building," which refers to more than fourteen centuries of cultural history during which the mosque engaged with local contexts. It usually reflected local architectural roots while at the same time remained committed to a universal purpose that remained constant. There was both variability and constancy (e.g., building the Qibla Wall in the direction of the Kaaba, etc.) regardless of local context. Indeed, this meant the local context would in fact be adapted to the mosque. The history of mosque architecture and the spatial and technical adaptations that arose in response to it constitute an important legacy. In other words, despite certain constants in mosque architecture, it was also quite flexible in allowing local architectural cultures, identities, and techniques to shape its diverse forms. The trajectories of mosque architecture that arose out of these diverse contributions have not yet been studied in depth, but they constituted significant typological diversity with regard to cultural production and the local geographic and technical contexts.



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We can also draw connections between the Award's work and realism, which parallel heritage draws upon in order to create the future. Realism is grounded in what we might call 'the power of the present moment', which is derived from an understanding of the current, the status quo, without examining either the past or the future. However, this understanding of the present also serves as the primary catalyst for creating the future. This notion is integral to refining interpretations of creativity in line with a constantly shifting world. The power of the present moment charts a path to the future in order to foster new yet relatively consistent approaches. Each of these ideas shifts in accordance with the context from which they are generated. These ideas, therefore, must be refined and developed in order to transcend their own, original parameters. The conferences and scholarly meetings held in conjunction with the Award aim to achieve this goal. Even if such goals have not yet been fully realized, engaging with the present moment will enable us to bring about this kind of paradigm shift in the future.

We might redefine parallel heritage as occupying a third space in engaging with the present moment. Parallel heritage embodies the current epoch and sits at the intersection of past and future. The power of the present moment is a crucial point of connection in generating a vision for the future. Parallel heritage must be forward-looking in the midst of a constantly shifting now. There is a deep connection (on multiple levels) between this concept of parallel heritage and the "Knower of the seen and the unseen" (i.e., Allah, Qur'an 13:9). Given that parallel heritage operates in the former realm (of the "seen"), how might it shape the future (the currently "unseen" to humanity)?

Generally speaking, the "unseen" is unknowable to us humans. Reason endeavors to understand reality and comprehend its meanings, while the unseen embodies that which is unknowable to humanity. It seems the secret of the pursuit of knowledge since the beginning of creation lies in this clash between the worlds of the seen and unseen, or, stated another way, the nexus of the seen and unseen. Dr. Abdullah Husayn of King Saud University in Riyadh discussed the architectural dimensions of this concept. He argued that architecture belongs to the tangible domain of the "seen," but also extends beyond the realm of reason to include latent

and intangible dimensions of objects that are difficult to define, architecture has the ability to interact with the soul, the essence of one's being, which is especially relevant to mosque architecture. This space between the seen and unseen enables us to further explore key questions about tangibility, reason, and meaning that are raised in the Qur'an.

Blaise Pascal, the eminent French mathematician of the 17th century who, among many accomplishments, used probability theory to encourage people to believe in Allah and live a virtuous life⁹, distinguishes between two kinds of reason: the *esprit de géométrie* and the *esprit de finesse*. For Pascal, the *esprit de géométrie* deals with principles that are tangible but removed from everyday usage. Our minds must be defective if they cannot reason from principles so large that they are impossible to miss. Meanwhile, the *esprit de finesse* is the form of reason used every day, whose principles are in common use and which are visible to all. In this case, it is necessary to grasp all the main principles and have an exacting mind in order not to reason falsely from known principles. In a similar vein, Descartes¹⁰ wrote that: "By a little attention, I discover innumerable particulars respecting figures, numbers, motion, and the like, which are so evidently true, and so accordant with my nature, that when I now discover them, I do not so much appear to learn anything new, as to call to remembrance what I before knew."¹¹

Given that the unseen is intangible and the realm of the seen nevertheless includes unseen elements, ways of knowing

9 There are many explanations of Pascal's argument for the existence of Allah on the internet. Here's one that's relatively simple and clear as a starting point: <https://philosophy.lander.edu/ethics/notes-pascal.html>. Christian teaching describes the 'Holy Spirit' of Allah coming to live inside a person as a gift from Allah, as a result of belief in Allah (and the Injil of Isa Ibn Maryam) and loving Allah by following His commands (John 14:15-24, Acts 5:32). For those who have experienced Allah's presence (Holy Spirit) within them, it goes beyond probability theory to actual proof of Allah's existence, for that person, as well as personal encouragement, teaching, and comfort from Allah.

10 Rene Descartes, another eminent French mathematician, but from the 18th century, is attributed with coining the phrase, "cogito, ergo sum" (I think, therefore I am) as a first step in attaining 'certain knowledge' (i.e., mathematics). He is also responsible for the 'X-Y Cartesian Coordinate System' learned by Algebra students everywhere.

11 al-Naim, Mashary Abdullah, (Saturday, 13 March 2021), "Reason and the World of the Seen and Unseen," al-Riyadh, Saudi Arabia.

the unseen must stem from sensory perception but also extend beyond the material world. There must be ways to seek truth outside tangible and material knowledge, which is what the Qur'an directs us to do. The unseen can thus be divided into the relative unseen (that is, unseen by the rest of mankind) and the absolute unseen known only by God alone. The Qur'an addresses the world of the seen and the relative unseen, and urges humanity to seek fields of knowledge outside that which can be directly known. Here we can draw connections between the forward-looking nature of parallel heritage and the concept of the relative unseen, which drives us to further develop human knowledge.

The 3rd International Conference on Mosque Architecture, held in Kuwait, explored new directions beyond historical architecture, which preoccupies many researchers interested in engaging with the power of the present moment. Instead, the conference also focused on challenges currently facing mosque architecture. Mosque architecture has spread around the world as part of the globalization of architecture, but unfortunately continues to transmit the same tired approaches without putting thought into new innovations. These challenges include integrating mosque architecture within the urban fabric, as well as the need to create modern spaces around the mosque to handle foot and vehicle traffic. It is important that the mosque is not isolated from its surrounding context because the mosque is a space for gathering together and for Universal Acquaintance. This intangible element of the mosque is tied to latent meanings embodied within its architecture. However, mosque architecture has conformed to certain recognized patterns without any serious effort to experiment with new forms. These issues span elements of conduct, technique, and visual identity that the mosque embodies.¹²

Mosque architecture is facing a pressing challenge: to distinguish between its historical and present functions, which will require redefining the mosque as an independent social institution. By this we mean that each mosque should come to function as a separate institution. Historically, the local community shaped the mosque and took care of it, so that the community had a sense of belonging to a particular mosque. People would talk about "their mosque" and had a sense of community ownership over the mosque's affairs. These cultural and social relationships are almost nonexistent today, and no alternatives have been developed, except to have the government become responsible for looking after mosques. This has significantly eroded the direct connection that once existed between the mosque and community.

This book demonstrates that intellectual engagement with mosques in general, and mosque architecture in particular, is continuing. The debate over cultural and religious dimensions of this architecture reflects a conflict between a hardline traditional approach to the mosque as comprised of only its component parts—dome, minaret, etc.— and an elitist current that wants to move away from tradition. There is also a political element to the traditionalism versus modernization debate in mosque architecture. For example, Russian scholar Dr. Efim Rezvan observed that mosques in Chechnya are all politically driven. For example, the Argun Mosque embodies a symbolic political presence that underlies all elements of architectural development. This political dimension is not specific to Chechnya; there is a longstanding connection between politics and mosque architecture that has shaped the latter's trajectory.

12 al-Naim, Mashary Abdullah, (Saturday, 12 November 2022), "The International Conference on Mosque Architecture," al-Riyadh, Saudi Arabia.

However, there are complex and sensitive issues that have largely been neglected in this field thus far. The mosque is an important sacred space in Islamic society, but it is also a symbolic site that determines the parameters of Islamic culture and fosters new ways of thinking in the community. The dominance of political considerations in some contexts means that these political forces hold sway over cultural and intellectual activity. Since things are starting to change, why are some scholars continuing to argue that political factors remain a dominant force in shaping mosque architecture?

These questions were discussed at length during the Kuala Lumpur conference. Mosque architecture remains a very expansive field that extends beyond the conflict between traditionalist and modernizing forces. Other key issues pertain to the environment, conservation of non-renewable energy, rethinking urban space, and the cohesiveness of the community.

The National Mosque in Kuala Lumpur, as already discussed above, contributed to changing stereotypes about historical mosque architecture. This mosque was an important site of controversy during the 1960s, when a debate emerged about the viability of modern architecture, a stage we do not even seem to have reached. Mosque architecture was important center of renewal in the Islamic world, which incorporated new ideas and attested to the possibility of setting aside certain historical legacies. Mosque architecture has also been raised in discussions of heritage regarding the extent to which adherence to these traditions reproduced collective understandings of Islamic cultural norms and identity. This era also witnessed the rise of postmodernism within architectural criticism, mostly notably with Robert Venturi's seminal work, *Complexity and Contradiction in Architecture*, in 1966. It is worth noting that the mosque in Kuala Lumpur was designed prior to the emergence of postmodern architecture and has often been overlooked in this critical genealogy.

In 1969, an international competition was held to design the Faisal Mosque in Islamabad, Pakistan. The Turkish architect Vedat Dalokay won the competition and began designing the mosque in 1976; construction was completed in 1986. First, it is worth noting that this design was the product of the debates of the 1960s and the conflict over modernity and tradition that led to the rise of postmodernism. Second, this mosque in particular departed from historical patterns in mosque architecture and paved the way for new innovations. Dalokay's work was informed by his knowledge of historical legacies of Turkish mosque architecture, and he aimed to creatively disengage from orthodoxy in a way that marked a major rupture with architectural tradition. Like the work of Baharuddin Abu Kassim, Dalokay's mosque attested to architectural innovation in an Islamic world that sought to rejuvenate tradition and engage with modernity through reinterpreting existing legacies in entirely new ways.

Why has this approach not persisted or succeeded to a greater extent? Why has there been such violent backlash in favor of history and tradition that has set mosque architecture on a different path? It seems that individual attempts by certain architects and scholars to rejuvenate architectural thinking and practice have come up against vehement traditionalism throughout the region. When postmodernism and its limited historicism emerged, efforts to rejuvenate mosque architecture receded, while regionalism prevailed. Conformity to traditional styles returned, although postmodernism made possible a certain degree of divergence from historical precedents. However, key efforts to engage with the history of mosque architecture through more progressive

critical methods were lost. Mosque architecture now suffers from a significant degree of hesitation regarding whether to pursue new forms and affirm the role of mosque architecture in contemporary contexts or to adhere to historical stereotypes embedded in the region's architectural imagination.

During this period, we lost an opportunity to boldly create a parallel heritage to challenge historical traditions. This was because of the lack of a methodologically consistent theoretical framework to help foster new ideas. We contend that the notion of parallel heritage can begin to bridge this gap through neutralizing fervor for tradition and absorbing new ways of thinking within an integrative framework to set a new course for mosque architecture. This is not just wishful thinking; this project endeavors to establish a comprehensive methodological framework that can harness the power of the present moment both in practice and in theory.

One key moment in this regard was the COVID-19 pandemic. The COVID-19 crisis created an entirely new reality and shifted our fundamental understanding of the function of the mosque during this period. This temporary shift created a new moment in mosque architecture, both in theory and in practice, that made it possible to dissect the purpose of the mosque and rethink our approach. COVID-19 produced philosophical questions about the role of the mosque: while prayer can happen anywhere, social cohesion can't be achieved without collective prayer in a place known to and shared by a particular congregation. According to the prophetic Hadith, there are many virtues to praying at home, especially for men performing sunna (non-obligatory) prayers. Communal prayer is not obligatory, but according to the Hadith, collective prayer is twenty-seven times superior to individual prayer. The mosque's function is evident from the word for mosque in Arabic (masjid), which is linked to the act of prostrating oneself in prayer (sujud). It is at that moment of prostration, of humbling themselves before God, that the worshiper is closest to God and experiences spiritual moments. The mosque serves to foster community and develop mutual acquaintance, even though prayer can theoretically occur elsewhere.¹³

Having to perform prayers outside the mosque during COVID-19 created space to think flexibly about the broader meaning of the mosque beyond the physical structure. This enabled us to think of mosque architecture as a cross-cultural practice stretching across diverse geographies. The COVID-19 crisis provided an opportunity to think about the meaning of prayer outside the physical space of the mosque and to search for moments that reflect the connection between God and His creation. We find ourselves at a creative juncture with spiritual potential to strengthen prayer as a unique space for the soul to connect with God, regardless of the material surroundings. In these moments, soul and mind produce spiritual understanding, a process which is facilitated by simple intangible and tangible creative space.¹⁴

The duality of tangible and intangible space paves the way for dialogue about religious and worldly matters and can foster ideas about spiritual experiences that clear the mind and elevate the heart. It is in these moments that what is hidden deep within becomes manifest, vanquishes our yearning for individuality, and dissolves all discord. Sulaiman al-Zakari, who is not an architect

13 A mosque and its community also serve to help people in developing the regular habit of prayer and worshipping Allah in a way that would be less likely to occur if everyone prayed at home. In addition, more experienced/knowledgeable members of the community can coach and come alongside less experienced/knowledgeable members.

14 al-Naim, Mashary Abdullah, (Saturday, 9 May 2020), "The Trajectory of Mosque Architecture," al-Riyadh, Saudi Arabia.

but is engaged in the field of mosque architecture, has argued that in these moments an internal spiritual edifice is created by the worshiper that cleanses the soul. In these moments, we forget all worldly affairs and strengthen our relationship with God. This spiritual state does not necessarily have to occur within the mosque, but rather refers to what happens internally within the worshiper regardless of where the prayer is performed. The COVID-19 crisis enabled us to engage with this internal spiritual architecture in which we have access to deeper levels of meaning.

These moments promote the pursuit of creativity in tangible and intangible places of prayer. They affirm that we must make the most of these moments of inspiration, which rarely occur in our lives. Recording and delving into these moments embodies the spiritual, spatial, and humanistic purpose of the mosque. There is an element of timing to such spiritual moments; they are fleeting instants we are unable to record that leave an impression on our souls. Each of us has a special time during which these moments occur, which lead us to new spaces that bring us closer to God.

Rediscovering the creative nucleus within diverse local cultures in mosque architecture is a crucial element of mosque architecture. How does this creative essence that produces the mosque draw upon diverse cultures and civilizations of which the mosque has been part, either historically or during the present day? This question has special analytical importance, especially with regard to implications for the future. The nucleus of the mosque draws upon and brings together diverse cultures, and overcomes any discord between them. This fifth principle of parallel heritage is that the creative nucleus that provides the impetus for civilizational progress must have its own independent identity. In the case of Islamic civilization, this notion of progress differs from the Western definition in two respects. First, it is embedded within a set of existing values in addition to the creative nucleus. Second, it does not aim to seek progress for progress's sake but rather to create new ways of thinking to develop human civilization. This concept also lies at the heart of the purpose of the mosque and of Universal Acquaintance.

All ideas are rooted in existing thought, and that source determines the future trajectory and scope of the field. French philosopher Paul Ricoeur challenged the hegemony of Western culture which saw itself as the source of all new thought. He argued that the world would lose a great deal if it ignored the "creative nucleus" unique to each civilization. There is a crucial link between this creative nucleus and cultural identity, especially with regard to the inventory of ideas as well as the theoretical and material output which constitutes intangible and tangible dimensions of identity. There is an intrinsic connection between this discourse of revitalizing identity and the five principles of parallel heritage.

The creative nucleus of a civilization has generative potential for defining the ideas and values of that society. This happens at three levels. First, there is the humanistic creative nucleus, which refers to shared ties between people. Second, there is a collective nucleus in each civilization, i.e. the DNA that is unique to members of a particular community, even though some of these biological features are common to all humanity. Third, there is the creative nucleus of a particular group within a given civilization, which has a remarkable ability to foster diversity within that nucleus itself. These three levels are consistent with the three kinds of identity outlined in the Qur'an: "O humankind! We have created you male and female and made you into nations and tribes so that you can pursue universal acquaintance. Verily, the most noble of you in the sight of God is the most righteous of you. God is all-knowing and

all-aware" (49:13). We should clarify here that this understanding of identity is similar to the concept of the creative nucleus in that the larger encompasses the smaller. Diversity within the unity of the creative nucleus is not at odds with the foundations upon which the broader parameters of the nucleus is built.¹⁵

The creative nucleus of each civilization is marked by difference and diversity; this is a universal principle that cannot change. People are wired to create identities derived from their creative nucleus. Each civilization has a unified creative core which encompasses diverse identities and their divergent ideas. Parallel heritage centers around this notion of diversity within the unified creative nucleus of each civilization. Each particular identity lacks meaning without the diversity of other identities, and these identities are rooted in a unified whole that brings a group of people together to form a civilization with a unique creative nucleus.

Humans have a remarkable ability to create their own identities. The creative nucleus serves as a magnet that attracts those who belong to it to gather together and foster new identities together, even if this undermines their previous identity. Conflict always stems from redefining these nuclei, especially in cases of fragility or fracture, which consequently leads to fragmentation of identity.

To address this reality, the Abdullatif Al Fozan Award for Mosque Architecture and Aramco's King Abdulaziz Centre for World Culture (Ithra) organized a conference in mid-November 2021 on mosques and Islamic art. This conference tried to call attention to efforts to recover sources of inspiration and create a new trajectory for the future of mosque architecture and its potential intellectual and creative output.¹⁶

The speakers endeavored to build bridges between the past and future and posed questions such as: What next? What can the world learn from Islamic visual arts? How does the mosque in particular serve as a laboratory for inspiration that provides the groundwork for developing unique artistic identities that diverge from the artistic forms that preceded them? We might also ask: Can we create a similar milieu in the future with regard to the alignment of theory and practice? The objective here is not to create similar output but rather to foster conditions that have previously

15 al-Naim, Mashary Abdullah, (Saturday, 3 July 2021), "The Creative Nucleus and a New Identity," al-Riyadh, Saudi Arabia.

16 al-Naim, Mashary Abdullah, (Saturday, 27 November 2021), "The Mosque and the Future of Islamic Art," al-Riyadh, Saudi Arabia.

been conducive to experimentation in mosque architecture. This approach could challenge some aspects of parallel heritage in looking beyond history for organizing principles. This conference could help us reexamine this principle in relation to the power of the present moment, even in evaluating the past. This matter merits further study and remains to be fully resolved.

In recent decades, theoretical debates in Islamic arts have focused on documentation and preservation. Some have argued that these objectives should form the crux of any future work in the field. However, this vision remains shackled to a narrow understanding of preservation, rather than dismantling current approaches. It is surprising that this recent conference is the first conference of its kind, as if these issues were not being debated elsewhere. Some material that was presented at the conference came from individuals or individual institutions, as if these issues did not concern public cultural institutions. We believe that this is an important message for future debates: creating a different future will require new perspectives on the past. It will require forming institutional partnerships and developing objectives that delve into historical genealogies, many of which stem from historical mosque architecture. With regard to parallel heritage, it is important to preserve and study history. However, parallel heritage does not contend that this historical trajectory must necessarily continue into the future or even hold sway over the present. This is another issue that is at odds with popular understandings of history in contemporary Arab and Islamic cultures.

We must reaffirm here that any efforts aimed at documenting and studying the arts cannot be fully realized in a single conference or even several conferences, but rather will require further work to create new traditions that can produce a creative intellectual knowledgebase. Future directions for mosque architecture could provide fertile ground for fostering these traditions. In other words, we need to construct non-traditional traditions. Some might ask: How can traditions be non-traditional? This is one of the issues that was discussed at length during the conference: How can we produce creative and inspiring traditions outside the context of existing historical legacies? This book aims to develop non-traditional and forward-looking traditions through dismantling and reexamining the status quo.

We can get a sense of these future trajectories for mosque architecture through the mosques presented in this book. However, these cases are only a small sample of current architectural experimentation within the greater 'Architectural Ummah'. We can nevertheless, from these case studies, glimpse into the potential directions that will doubtless contribute to shaping the mosques of the future. We might need to more fully develop the theory of parallel heritage in order to provide a framework to absorb these new traditions. Further research and inquiry may be necessary in order to understand how social connections are formed through mutual acquaintance, in and around the mosque, but this book certainly marks the first step along that path.

١٢٦ perspective effect
٩٢ polyhedra
٣٠٤ promoting inclusivity
٣٠٤ Punchbowl
١٧٣ purism

R

١٣٩ raft
٢٢١, ٢١٩, ٢١٧ RMJM
٢١٧ RMJM FZ-LLC

S

٢٤٩ Sands Pit beach
٢٥١ SCHEMATICS Architecture
٢٣١ Shatotto
٢٢٦ soft landscape
٣٠٠ spatial logic
٣٠٠ Synchronic

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٢٩٣ The Dominican Motherhouse
٢١٨ The Gate Avenue
٢٢٨, ٢٢٢, ٢١٩, ٢١٨ Gate Avenue
٢٥٤ the international style
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٣٩٣ Typological Diversity
٣٤٦, ٩٩ typology
١٣٤ Tyrolian finish

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٩٢ Ulin in

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١٢٦, ٧٩ vanishing point
٢٠٩ vector metamorphosis
١٠٧, ١٠٥ Voronoi

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٣٣١ KSP Juergen Engel Architekten

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٢٣٣ Lalbagh
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٢٥١ Le Corbusier
١٣٤ Lekki
٣٠٧ Lemone, Simone
٣٩٨ LONAARD
٣٨٢ Lutzenberger + Lutzenberger

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٢٦٠ Malegaon
١٩٣ metropolitan area
٧٧ minarets ban
١٢٣ minimal
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١٢٦ monumental
٦٢ Monumentality
٣٤٥ Mr. Khoo Boo

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٢٧٧ Nakshabid Architects
٢٦٠ NBZ Architectural Consultants
٢٥٩ للاستشارات المعمارية NBZ
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١٤٢ offset
٢٣٧ onex

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٣٩٣, ٥٥ Paradigm
٣٩٣, ٥٥ Paradigm Shift
٢٠٩ parametric
١٣٤ Patrick Waheed Design Consultancy
١٠٤ patterns

٣٧٤ Deutscher Werkbund
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٢١٩ DIFC Mosque
٩٥ diffused
٦١ Dismantle
٣٧٥ DIY
٢٣٣ DNCC
٢٣٣ DSCC

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٢٥١ Five Points of Architecture
١٩١ Force majeure
١٠٠ Form Finding

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٢٦٥ Gujarat

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٩٠ accessory building
٦٠ Acculturation
٣٠٤ acquaintance
١٣٤ Ade Shokunbi
٣٧٤ AEG

٣١٥, ٣١٤, ٣١٢, ٣٠٤ AIC

٣٩٨ AKDN

٣١٨ alchemy

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٣٣٣ ANARGEMA

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٣٢١ arborescent

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٣٨٢ Bad Wörishofen

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١١٨ brutalism

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١٣٤ Caleb

١٠٥ CEBRA

١٣٤ Chois

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١٣٤ Crescent Bearers

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