



Revitalizing the Essence of Muamalah Practice into the Contemporary Mosque Typologies

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Abstract. This research explores the evolving roles of mosques beyond worship across various periods and their relevance to contemporary Muslim needs. Traditionally serving as spaces for devotion and community development, mosques have expanded into multifunctional centers, addressing educational, social, politic, and economic needs. Today, contemporary mosques increasingly serve as Islamic centers, emphasizing muamalah practices that focus on social interactions and community services. This transformation reflects society's shifting demands, leading to the inclusion of facilities such as event spaces and medical services. Through a literature review, this study investigates three key areas: the implementation of muamalah practices throughout history, the social functions of contemporary mosques, and case studies of contemporary mosques to assess the potential integration of muamalah programs. The analysis is framed using cross, dis, and trans-programming theories to explore how these concepts can revitalize the five categories of muamalah—education, social services, economy, politics, and miscellaneous needs—within mosque designs. The findings suggest that contemporary mosques can effectively implement disprogramming and transprogramming design methods to reintroduce these faded muamalah functions, making them more relevant to the evolving needs of the Muslim community.

Keywords: Muslim Community, Mosque Typology, Religious Architecture, Architectural Programmatic, *Muamalah* Space.

1 Introduction

Religion serves as a guide for individuals in seeking life's purpose and offers direction in acting and thinking according to moral values. Islam, as the second largest religion in the world, is embraced by approximately 24.5% of the global population [13]. The existence of Muslim communities around the world can be seen in the presence of mosques. Mosques are not only a place to fulfill the spiritual needs to Allah (glorified and sublime be He), but also act as a center of social activities for Muslims (muamalah) [4][11][17]. In the rules of Islamic behavior or fiqh, there is a discussion of how humans must relate to each other to meet their needs in their daily lives, this is referred to as muamalah. Relationships between people or reciprocal relationships are important to create harmony between people, to create a harmonious and peaceful society [6]. The

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scope of muamalah includes social activities, economics, political law, etc [1]. To understand the essence of the presence of the mosque, we need to see how Muslims were engaged in and around the mosque when the mosque was first established by the Prophet Muhammad (peace be upon him). This essence comes with the intention to make the mosque a center for the development of the Muslim community [16].

In the early period of Islam, the Prophet Muhammad migrated from Makkah to Yathrib (Medina) to escape the increasingly intense persecution by the Quraysh clan. When he reached his destination, Prophet Muhammad (peace be upon him) built his first mosque in the village of Quba, a suburb of Medina. This mosque was built as a multifunctional institution, not only acting as a place of worship but also as a center of social, political, and educational activities [16]. One of the main functions of the mosque is as a means of socio-political control as well as a center of religious activity, equipped with various facilities such as madrasas, dormitories, libraries, and shops, all of which aim to improve the quality of life of individual Muslims [11]. Quba Mosque reflects a major transformation, marking a revolutionary new era in Islamic history. Therefore, Quba Mosque is considered the “gateway” that ushered in all the things that the holy city of Medina later represented, which became the center of the development of Islamic religion, culture, and community [16].

After residing for four days, he continued the hijrah to Medina and built his second mosque, The Prophet's Mosque. This mosque was built in 622 AD when many other tribes and communities were still opposed to the emergence of Islam as a new religion in the center of Medina. Therefore, in addition to functioning as a place of worship, education, and social, there are also more specific political functions, such as military training, storage of equipment, treatment of war victims, and as a center of government [5]. Nowadays, the Prophet's Mosque is where the tombs of the Prophet Muhammad and the caliphs are located and is the main destination for Muslims to make pilgrimages and worship.

Referring to the perspective of the Al-Quran and Sunnah, the function of the mosque is divided into four, namely theological, worship, ethical & social, and scientific & educational functions. The theological function is intended as a place to carry out activities that reflect obedience and submission to Allah (glorified and sublime be He). The worship function is a continuation of the theological function, where the mosque becomes a place of self-purification from all forms of worship other than Allah (glorified and sublime be He) with appropriate worship practices. The ethical and social functions discuss that the mosque is not just a building, but aims to build hearts and characters according to the teachings of Allah (glorified and sublime be He). Socially, mosques also protect from bad weather, protecting people from danger by providing economic and social security. The scientific and educational function is indicated by the presence of a pulpit for lectures and sermons at Friday prayers. Education in the mosque is not only theoretical but also practical in its teachings [10][15].

As time went by, activities in mosques began to expand to become more pluralistic, especially in social aspects. Many activities and events have emerged in mosques to accommodate the shifting social culture, such as funeral homes or wedding venues [4][17]. Occasionally mosques also host meals and drinks, youth discussions on current religious issues, children's recitals, and so on. It can be said that the existence of

mosques has always focused on the function as a place for Muslims to worship and socialize in accordance with Islamic principles or what is also known as muamalah, as stated by Omar et al. "Mosque institutions should not only be the center of religious practice but also the center of community welfare and social activities". Historically, the mosque has served as a center for receiving zakat, zakat fitrah, jizyah, kharaj, ghanima, and fai'. Moreover, mosques are also considered as centers of economic development among Muslims involving business transactions, loans, and other related matters [12]. Despite the increase in the variety of muamalah functions today, some fragments of the mosque's old functions have been lost and eroded by the times.

Meanwhile, in terms of its typological development, the mosque as the support of the Muslim environment and society has undergone many adaptations and changes that have resulted in various mosque typologies [12][17]. According to a study conducted by Asif et al, mosques today no longer have most of the communal facilities that early mosques had [11]. The shift in mosque culture and development has led mosque architecture to focus only on purely religious activities. The impact of this is the weakening of the mosque's role in the Muslim community [4]. During the time of the Prophet, the mosque had a complex typology to fulfill its needs. However, today the space complexity is decreasing and followed by increasing functional demands. In response to this, a new typology emerged, namely the Islamic center, which is commonly known as a communal mosque because it has a special hall that is not used for worship, but for social events such as funeral homes or weddings [17]. An Islamic center is a physical space that acts as a place for various Islamic activities, such as nurturing and developing individuals according to the basic teachings of Islam, including worship, muamalah, taqwa, and da'wah [14].

This research will try to discuss the typology and function of the mosque from the time of the Prophet to the Islamic center as the center of social and religious activities of the surrounding community. Given that some of the previous functions of the mosque have been lost, and the condition of the development of mosque typology is increasingly inadequate to fulfill the missing role, it is important to study the essence of the existence of mosques in the early generations that are still relevant, so that mosque architecture in the future can be developed into a place that is following what the Prophet Muhammad (peace be upon him) sought when the mosque was first established both in terms of function/activity, and its physical form [16]. We can see that mosque architecture needs to be reviewed for its role in the Muslim community, and there are at least four aspects that need to be discussed, specifically how mosques can help the Muslim community in terms of education, social, economic, and political.

2 Research Methods

The research conducted in this paper is based on qualitative research with the target of understanding the essence of the mosque's presence in the Muslim community. The study emphasizes the collection of data on activities in and around mosques during the early days of Islam. Furthermore, the researcher also conducted research on how mosque architecture developed and adapted to the activities and needs of Muslims from

the early days of Islam to the present using a narrative approach from the literature within the scope of functional aspect of the mosques to find the essence of how mosque architectural program patterns were implemented by Muslim communities in various eras.

The analysis carried out is literature analysis or secondary analysis, which means that researchers analyze data that is not collected by researchers but data that has been written by previous researchers on three key areas: first, the social functions recorded and implemented during different periods of mosque development; second, the social functions evident in contemporary mosques; and third, case studies of contemporary mosques that reflect how social activities shape their architectural form.

Researchers employ the social constructivism assumption approach by emphasizing mosque function based on social activities that have been going on for centuries. The findings are presented in a clear narrative, synthesizing the researcher's insights with the collected literature [8]. We do this to formulate possibilities in presenting alternative program patterns that are appropriate and relevant to revitalize the essence of the presence of mosques in the early days of Islam to the typologies of contemporary mosques. From this point, we re-analyze the relationship between the mosque as the main function of worship with muamalah programs that are considered valid or relevant to the practice of muamalah today. This analysis will describe the relationship of each function space in the position of its implementation of the mosque typology through Bernard Tschumi's programming theory, namely cross-, dis-, and trans-programming which is scenarized through the assumption of a logical general narrative.

3 Result and Discussions

3.1 Mosque Architecture and Muamalah

The mosque has historically played a multifunctional role, as evidenced by the dual categories of time-specific and general functions in the Kutub Al-Sittah (the six major Hadith collections). The ten general functions of a mosque include a place for deliberation, Friday prayers, worship, funeral prayers, I'tikaf, learning and advice, rest, poetry recitations, healing, and community consultation. Additionally, there are nine specific functions tied to particular circumstances: inviting people, issuing legal rulings, holding war parades, trade discussions, debt collection, accommodating polytheists, ihram (such as at Masjid Dzulhulaifah), housing captives, and distributing property.

Over time, many of the mosque's original roles have been reallocated to other institutions. For example, trade functions have moved to government-regulated spaces, health needs to medical institutions, and military functions to state forces. This shift reflects the evolution of social structures and the specialization of certain societal roles. As social needs have expanded, many activities once centralized in the mosque are now distributed across various locations [4]. Consequently, modern mosques often focus primarily on their spiritual functions, while the broader social roles, collectively known as muamalah, have diminished.

An often-overlooked aspect of muamalah in early mosques is the use of fragrance, which played a significant sensory role in the spiritual environment. The attendant of

the Dome of the Rock was supposed to disseminate the fragrance of firewood twice a week after spraying the entire mosque with perfume composed of musk, ambergris, saffron, and other luxurious materials, according to an Umayyad custom [2][8]. This is not limited to the rock dome; it is a typical sensory activity. Even today, early Islamic holy structures like the Kaaba and the Prophet's mosque in Medina continue to use sweet fragrances [2]. This tradition is rooted in Islamic beliefs that fragrance is closely associated with paradise [8]. Historical records show that Umar bin Khattab (may Allah be pleased with him) ordered mosques in Medina to be perfumed on Fridays and during Ramadan, following the Prophet Muhammad's (peace be upon him) guidance to deodorize mosques using perfume [2].

These fragrant rituals are symbolic of deeper muamalah practices, representing the mosque as not only a place of worship but a space that connects the physical and non-physical realms [2]. Early Islamic figures, such as Hazrat A'isha (may Allah be pleased with her), the wife of the Prophet Muhammad (peace be upon him), instructed to perfume the Kaaba because it is preferable to offering gold and silver. According to this narrative, scent is more significant than visual appeal. This connection between scent and spirituality highlights how muamalah transcended interpersonal relations, creating a holistic worship experience through sensory engagement. Today, the use of fragrances remains integral in sacred spaces, though other forms of muamalah have been lost or diminished [8].

In sum, while mosques have retained their core spiritual functions, the evolution of social needs has led to a narrowing of their broader muamalah roles. The role of scent in mosque practices exemplifies how early Islamic traditions engaged multiple senses to foster a rich, communal religious environment, something mosque architecture could aim to reintroduce in contemporary forms.

3.2 The Development of Program and Activity Patterns in Mosque Architecture in Various Eras

Mosque architecture began as a simple four-wall structure intended as a place for the Prophet Muhammad (peace be upon him), the Muhajirin, and the Anshar to gather and develop the Muslim community in Medina. The mosque that was built when he came to Medina, namely the Quba Mosque, symbolizes freedom, maturity, victory, and is also a true symbol of the arrival of the Prophet, Islam, and Muslims in Medina, and the emergence of new directions and new goals for the people. Furthermore, Prophet Muhammad (peace be upon him) continued emphasizing the importance of the Quba mosque. His efforts were not limited to words; he also took action. According to a narrative, the prophet said, "He who purifies himself in his home, then makes one prayer at the Quba' Mosque, will receive a reward equivalent to that of umrah (the lesser pilgrimage)". The Quba Mosque is a significant prototype that should always be consulted while attempting to comprehend the mosque's essence, according to its history and the Messenger's message. Quba Mosque served as the model for the revolutionary new period in Medina and the pre-Islamic era in Mecca. It was the first mosque and a microcosmic hub of community growth [16].

Following the Prophet's return to Makkah and his successful overthrow of the Quraish clan, the mosque evolved with the primary goal of serving the local people as a multipurpose building. The Caliph, or leader of the Muslim community, also underwent changes and shifts, which were replaced by other changes in the mosque. Regarding how the mosque became the hub of Muslim society in different areas, the caliphs had differing opinions. There are occasions when the mosque transforms into a school with classrooms, boarding houses, and a cemetery owned by the mosque's founder. Additionally, there were occasions when the mosque's uses for the market, commerce, and education converged [17].

This progression shows that the multifunctionality of the mosque both during the time of the Prophet and during the caliphate has a functional convergence capability that is very flexible in presenting service functions for the surrounding community. This is also still visible when we read the study conducted by Dr. Tarek Galal Abdelhamid on Islamic complex mosques in Egypt highlights how contemporary mosque complexes like the Al-Siddiq Al-Khairi Complex in Al-Zawiya Al-Hamra incorporate medical centers, while the Armed Forces Mosque in Heliopolis hosts event halls and offices [17]. Such developments reflect the mosque's enduring flexibility in converging religious and social functions. As communities needs evolve, the mosque has consistently adapted, reflecting its essential role as more than just a place of worship but a service hub for the surrounding environment [15].

3.3 The Muamalah Space on Contemporary Mosque Typologies

Despite the diversity of their look and architectural styles, Jihad Awad's study of contemporary mosques in the United Arab Emirates shows that there is some commonality in their spatial design and organization. The identification of this pattern creates a link to the formation of mosques. The study's findings indicate that contemporary mosques typically feature an imam's house, minarets, and designated spaces for ablutions and restrooms in addition to a second prayer room and a women's prayer room. A gallery (Riwaq) is a feature of every Jami' Mosque. For tiny mosques or mushola, the gallery (Riwaq) is often arched at the front door. In the past, courtyards were also important enhancing components. They were bordered by Riwaq and occasionally had a fountain for ablutions. However, these days, plazas that serve as communal spaces in urban areas have taken the role of courtyard elements [7].

One significant development in mosque typology is the Urban Mosque, which emerged in Western cities with large expatriate Muslim populations. Dr. Akel I. Kahera et al. describe these mosques as Islamic centers that serve not only religious purposes but also as community hubs for displaced Muslim groups. These centers, by fostering collective worship and social bonding, illustrate the critical role of muamalah in supporting diverse Muslim communities in the diaspora [3]. The inclusion of social spaces within these mosques reflects the necessity of muamalah as a bonding force, allowing Muslims from different backgrounds to connect and engage with one another.

Contemporary mosques based on Dr. Tarek Galal's study can be categorized into five categories: mosques with event halls attached to the main mosque building, mosques with centralized design and unconventional blocks, mosques with event halls

in the lower position of the mosque, Islamic complexes in multi-story buildings, and complexes with special designs. These categories reflect how contemporary social needs such as providing space for weddings, funerals, and other communal events shape mosque architecture. The presence of event halls, for example, demonstrates how social functions are physically integrated into the mosque, providing spaces where worship and muamalah activities coexist [17]. Each category illustrates how mosque architecture adapts to meet evolving social dynamics, particularly in Egypt. The combination of social and worship functions in these contemporary mosque designs reinforces the mosque's historical role as a hub for both spiritual and communal life.

By analyzing these typologies, we gain a deeper understanding of how muamalah as a form of social interaction continues to influence mosque architecture. This ensures that mosques remain central to the social and spiritual wellbeing of Muslim communities. As we explore these five categories, we will use Dr. Tarek Galal Abdelhamid's study as a reference to examine the combination of social and worship functions and their impact on the form of contemporary mosques. This approach will further highlight how mosques maintain their historical role as both spiritual centers and social service hubs.

Table 1. Muamalah Program on Contemporary Mosques Based on Dr. Tarek Galal Abdelhamid's Study.

Mosque Name	Muamalah Program	Description
Mosques with an events hall		
Misr University of Science & Technology in 6th of October City	Event hall & Courtyard with riwaq	The mosque at Misr University has a separate main building with an additional building for events presenting a courtyard with riwaq between the two.
Sheikh Zayed Islamic Center (A) in Al Sheikh Zayed City	Event hall & Courtyard with riwaq	There are two Islamic Centers in the city, both similar, but the Sheikh Zayed Islamic Center (A) places the main entrance of the building between the main worship space and the event hall so that the mosque has an additional space attached and directly meets the main building and is not separated by a courtyard with a circular portico with a small dome roof.
Suspended mosques with central design and unconventional block		
Police Mosque in Sheikh Zayed City	Event halls on the ground floor	Event halls in this building can be accessed from the ground floor, building accents are inspired by the Far East and use slanted walls in the main worship space on the 2nd floor.
Al-Rahma Mosque in Nasr City	Event hall, Medical services, Rest houses,	The muamalah program implemented in this design is located in the same block but has different access from the worship hall. The

		Pharmacy, Hall for memorizing Qur'an.	entire muamalah program is focused on the outside area on the 1st floor.
Suspended mosques with event halls attached at the bottom			
Hassan Al-Sharbatly Mosque in New Cairo	Several event halls on the ground floor		The mosque has two floors that separate the muamalah function on the ground floor, and worship on the upper floor.
Al-Siddiq Center in Sheraton Heliopolis	Islamic Event hall on the ground floor, library on the third floor, and courtyard with riwaq		With three floors, the Islamic center uses the ground floor as an event hall and the third floor as a library.
Islamic complexes in multi-storey building			
Al-Siddiq Complex and Clinics in Al-Zawiya Al-Hamra	Medical center		Muamalah program in the form of medical activities is located above the mosque on the ground floor.
Anwar Complex in Berket an Nasr	Al-Kareem Medical center and hospital with specialties		The Muamalah program implemented is a medical center and hospital that accommodates various specialties. The mosque is located on the ground floor, with the hospital on the upper floor.
Complexes with special design			
Al-Mosheer Tantawy Mosque in Nasr City	Event halls on the ground floor		The application of the event hall in this design is separated into four buildings, each event hall is devoted to one gender and encircle the main building for worship.
Armed Mosque in Nasr City	Forces Event hall and office		Three identical buildings with different functions, 2 buildings are used for worship and one is used for an event hall with offices behind it.

The case studies from Dr. Tarek Galal's research reveal that in contemporary mosque designs, the worship function is consistently placed in proximity to muamalah functions, yet remains separated by transition zones such as floor level changes or spatial divisions. This architectural arrangement ensures that the sacred nature of the prayer area is preserved, while maintaining close connections with the social functions of the mosque. The flexibility of mosque design ranging from a single building to a complex of several structures illustrates the adaptability of mosque architecture to meet the evolving needs of the community it serves. This interplay between spiritual and social functions showcases the mosque's potential to transform, aligning with its role as both a place of worship and a center for community life.

3.4 Indicators and Analysis of Space Functions

In this discussion, a function analysis will be carried out based on literature data related to the use of mosque functions at a certain time. To determine the appropriate criteria

and indicators, this research will be guided by the results of a congress held specifically to discuss the function of mosques in Mecca in 1975. The role and function of the mosque are officially recorded by emphasizing that an effective and productive mosque includes 6 things, namely providing worship-related spaces, such as separation of women-only entry and exit areas; has a social and communal function, which can be completely separated from worship. It can also be recreational for both children and adults; enhancement surrounding resources with learning facilities, through lectures, sermons, and teaching in general; support the economy with rational programs; welfare of worshippers with public facilities or charity programs with distribution of aid to the needy; finally, providing space for judicial activities, from marriage, divorce, funeral arrangements, to discussion sessions on daily issues [11][12].

The 1975 congress in Mecca identified six essential functions of an effective mosque, ranging from providing worship spaces to supporting economic and social welfare activities. These functions emphasize not only the mosque's role as a spiritual center but also as a hub for community life, charity, and education. In designing mosques to fulfill these roles, contemporary scholars have outlined three key criteria to ensure sustainable and functional mosque spaces: external spaces, space integration, and open spaces. External spaces, like hallways and terraces, are multifunctional zones that go beyond circulation, serving as extensions of communal activity. Space integration emphasizes the harmony between interior and exterior spaces, ensuring that the mosque is connected to its surrounding landscape. Lastly, open spaces, such as courtyards, play an important role in cooling the mosque naturally while also offering places for reflection and social interaction. These design considerations help align the mosque's physical form with its multifunctional role, as envisioned by the congress and further enhanced by modern design practices [12].

Table 2. Analysis of Mosque Functions based on literature towards relevance in the present day

Source	Function	Current Relevance	Code
Study on the Prophet's Mosque [4]	Consultation	Providing guidance and advice to Muslims in difficulty	v
	Social assistance	Help ease the economic burden by collecting and distributing zakat	v
	Military exercises and equipment preparation	Handled by official military agencies and not relevant for mosque activities.	x
	Treatment of war casualties	The provision of functions for war victims is no longer relevant.	x
	Settlement and trial of disputes	Mediation and dispute resolution on an individual, family, and community scale support the mosque's role as a center of social justice and harmony.	x
	Hall to receiving guests	A place for social interaction and diplomacy activities	v
	Madrasa and Maktab activities	Creating a new generation that excels with scholarly means	v

Study by Sidi Gazalba [4]	State Treasury or Public Treasury	Used to finance the construction or renovation of mosques and support charitable programs, such as zakat distribution	v
	Resolution of disputes and problems	Bringing solutions and protection to community issues through studies with religious leaders or students.	v
	War Tactics Discussion	Training Muslim capabilities in self-preservation, and discussion of war tactics, but this function is not common in the modern context.	x
	Lodging for Travelers	Facilitate mosque visitors who need lodging from long journeys	v
	A place to read the Quran and kasidah activities	Preserve and memorize the scriptures	v
Study on Millennial Era Overview [4]	Commemoration of Islamic holidays together	Organize community events, maintain traditions, and strengthen religious and social ties.	v
	Competition activities such as kasidah rabanah and fajr study for children	Hosting competitions to drive the ambition of the new generation	v
	Activities with an Islamic educational background	Creating a new generation that excels with scholarly means	v
	Discussing social issues and finding solutions for the common good	Discussing social issues and finding solutions for the common good	v
	Health and business institutions	Provide basic health services and support the local economy.	v
	Discuss studying religious issues	Deepen religious understanding and address contemporary issues	v
	Wedding venue	Providing a suitable and sacred place to hold a wedding	v
	Sadaqah and zakat collection	Social welfare and distribution of support to the needy	v
Study by Nayeem Asif, et al. [11]	Religious schools, in the form of madrasa	Creating a new generation that excels with scholarly means	v
	Non-formal learning centers, such as adult literacy programs, women-only study groups, and intellectual discussions	Creating a new generation that excels with scholarly means	v
	Imam training center	Contain scientific development for readiness to lead in religion	v

	General education facilities, such as libraries, classrooms, publications, certifications, and scholarships	Creating a new generation that excels with scholarly means	v
	Wealth distribution and zakat collection	Social welfare and distribution of support to the needy	v
	Provide space for travelers to settle temporarily	Facilitate mosque visitors who need lodging from long journeys	v
	Trading and convenience stores	Facilitate community livelihoods	v
	Rentable space	Facilitate the need for a multifunctional space that is large enough to resemble a hall for various activities	v
	Exhibition space	Contains Islamic arts and culture	v
	Catering facilities	Facilitate the food needs of mosque workers/visitors	v
	Orphanage	Orphanage facility for the orphan	v
	Funeral home	Facilitate the funeral procession and final honors	v
	Judicial services	Legal and divorce services have now been taken over by the local government.	x
	Rehabilitation center	Provide rehabilitation care and support.	v
	Recreational areas, such as play, rest, and garden areas	Presenting facilities that can invite the community to come and recreate around the mosque	v
	Museum	Preserve and exhibit Islamic history	v
	Donation reception center, poverty alleviation program	Social welfare and distributing support to those in need	v
Study by Tarek Galal [17]	Seminars and religious teaching venues	Creating a new generation that excels with scientific means	v
	Court	Legal services	x
	Family homes of prophets/religious leaders	Enable religious leaders to concentrate on serving Muslims/communities in need.	v
	Charity facilities, shelters for the homeless	Provide temporary shelter for those in need	v
	Multifunctional as a hospital/medical clinic	Facilitate health services for the sick	v

	Commercial space, shops under the mosque	Facilitate the livelihood of the Muslim community	v
	Funeral Home	Facilitate the funeral procession and final honors	v
	Wedding ceremony hall	Provide venue facilities to hold weddings	v
	Charity activities	Social welfare and distributing donations to those in need	v
	Service areas, such as the kitchen and administration office	Preparing food for various activities such as community events and mosque management & operations, ensuring activities and programs run well.	v
Study by Adam Bursi [2]	Perfume manufacturing inside the mosque compound	Islam encourages its followers to use fragrances for both ritual and daily activities	v

Category: Education Social Economy Politic Miscellaneous

Table 2 above illustrates a compilation of activities based on several views from research and implementation in reality. The function of the mosque is divided into five different categories outside the worship function as the main function. From the data collection above, the mosque functions that are still relevant have been sorted out and categorized in their muamalah activities along with the quantity of the mentions.

Education:

1. Islamic educational institutions that focus on religious instruction, such as Madrasahs, Quranic education centers, Islamic kindergartens, Islamic boarding schools, and Maktabs. Educational assistance programs such as publications, certification, and scholarships (5)
2. A place for intellectual discussions or women-only learning programs. A place where seminars or general events take place. Center for training imam. A place where seminars or general program activities take place (5)
3. Libraries and places to read literature in the form of religious teachings of the Qur'an or kasidah (3)
4. Museum/exhibition (2)

Social:

1. Social assistance with zakat collection and distribution. Charitable facilities with shelters or donations for the poor. Health organizations with the intention of providing voluntary assistance (8)
2. A place to consult for spiritual guidance and serenity and a place to receive guests (2)
3. Orphanages and religious competitions for children (2)
4. Joint celebration of Islamic holy days (1)
5. Additional service areas such as soup kitchen for guest treats, public bathroom, and mosque official office (1)

Economy:

1. Retail for trade, catering, and medical services (4)
2. Rental space and wedding venues (3)
3. Lodging for travelers (2)
4. Funeral Home (2)

Politic:

1. Settlement of disputes and social problems that do not require legal entities (2)
2. Residence of religious leaders (1)

Miscellaneous:

1. Recreational areas, such as play areas, rest areas, and parks (1)
2. Perfume/Fragrance Manufacturing (1)

The quantity of mention of the function indicates the importance of the space. The more it is mentioned, the greater the level of its occurrence in the mosque. In terms of the function itself, related to current relevance, political activities that can be handled by state legal entities are no longer managed in mosques and are limited. However, if it is social and merely mediating, it can still be done in the mosque. The functions mentioned above are not bound to always exist in every mosque building, but are expected to fulfill the 6 aspects previously mentioned to represent and fulfill the efficiency of the mosque.

3.5 Patterns of Muamalah Program in Mosque Architecture in Accordance with the Essence of the Presence of the Mosque

Based on the functional analysis study of various literature and the contemporary mosque study case from Dr. Tarek Galal, researchers have found that most of the mosque's functions for muamalah needs still hold relevance today and could be implemented within the mosque program which also would reshape the usual form of mosque into a new architectural style of religious building. To determine the refunctionalization of these functions into the contemporary mosque design, it is necessary to consider references and limitations so that these functions can synergize effectively. The researcher utilized Tschumi's design method from his book 'Architecture and Disjunction' to explore how the faded functions of mosques can be revived within a new spatial architectural configuration. Tschumi states, "At a Villette, there is no longer any relationship possible between architecture and program, architecture and meaning. It has been suggested, in discussing La Villette, that architecture must produce a distance between itself and the program it fulfills" [5]. Tschumi also emphasizes that there should be no identification between architecture and program. This distance can produce programmatic expectations in a design or serve as an abstract mediating agent that shapes a new world according to the user's needs.

Tschumi discusses three methods for exploring the potential emergence of programs through events and moments that occur in mosques to meet the needs of the Muslim

community. The first method is Crossprogramming (replacing functions), which involves providing unexpected spatial configurations, such as converting a church into a bowling alley. The second method is Transprogramming (adding functions), which combines two programs without considering their compatibility, such as a planetarium with a rollercoaster. The third method is Disprogramming (causing functions), which combines two programs where the first program contaminates the second, contradictory program, leading to a new spatial configuration emerging from one of the programs [5]. Given the mosque's essence as a flexible multifunctional space, the researcher creates various configuration scenarios through these three methods, incorporating various analyzed functions. This approach serves as a stepping stone for the programmatic references of the mosque, which transforms the form of the projected contemporary mosque when introduced to the new muamalah programs.

Table 3. Scenario of Spatial Configuration of Muamalah Program with Mosque Based on Social Constructivism Assumptions

Muamalah Program	Cross/Trans/Dis-programming	Implementation in Design
Education		
Educational Institution	Educational institutions have been integrated with mosques since the time of the Prophet (peace be upon him). However, they were also separated during the era of Muhammad Ali Pasha, who implemented the European school model. This program aligns well with the disprogramming method, much like corridors used for discussions between students and their sheikhs. A mosque contaminated with various educational opportunities will present many new potentials in its daily activities.	Integrated into the mosque typology using the disprogramming method.
A place for intellectual discussion	Discourse, debate, study of fiqh, and so on are an obligation for Muslims as stated in the hadith narrated by Muslims, "Whoever takes the path to seek knowledge, Allah (glorified and sublime be He) will make the path to heaven easy for him." Due to the high priority, it would be better if this program implemented a disprogramming method where the mosque would be contaminated with various discussion facilities and scientific studies in general.	Integrated into the mosque typology using the disprogramming method.
Library	The library has always been tied to literacy and is one of the main places to explore knowledge, so its existence that helps is quite flexible and can use the disprogramming method that contaminates the mosque or transprogramming that complements the mosque.	Integrated into the mosque typology using the disprogramming method or added a separated/attached building using

		transprogramming method
Museum Exhibition	The context of storing antique and historical items was carried out by the caliph when he succeeded in conquering an area as a symbol of power. In the context of a mosque, this museum can be presented in the context of lifting the spirit of Muslims by recognizing the journey of their ancestors. A suitable method for this program would be transprogramming by presenting a museum with a circulation pattern in the mosque.	Adding a separated/attached/attached building to the mosque using transprogramming method
Social		
Charity distribution facilities (shadaqah, infaq, and zakat)	Mosques with this program can become one of the agents serving the community. This facility can be combined with several pragmatic charitable practices such as rest shelters for those in need and free meals for worshipers who come to the mosque. This can be achieved by utilizing the transprogramming method, the addition of pragmatic programs can be carried out in the mosque environment to demonstrate transparency so that the mosque can prove/display its charity facilities directly to the public.	Adding a separated/attached building to the mosque using transprogramming method
Consultation Place	Islamic knowledge such as fiqh is something that is difficult for layman to understand holistically so when the consultation function becomes a facility in the mosque, local imams or students can become mediators for Muslims who are facing problems or want to learn something. This program can be implemented using the transprogramming method so that mosques can openly offer discussion facilities for the Muslim community.	Adding a separated/attached building using transprogramming method
Orphanage	Protecting and supporting orphans is one of the noble social activities in the Islamic religion. The meeting of the function of an orphanage with a mosque will mean that orphaned children can be easily cared for and have strong relationships with the Muslim community. Transprogramming (adding) can be a solution to bring together the typology of mosques and mutualistic orphanages.	Adding a separated/attached building to the mosque using transprogramming method
Event Space	Organizing events can be a means to strengthen solidarity and enthusiasm in worship and business for the Muslim community. The presence of an event space as a place in the	Adding a separated/attached building to the mosque using

	mosque design can be a catalyst for a growing community. This can be realized using the transprogramming method as a new place that interacts between religious and social.	transprogramming method
Public Service	Services to the public in general could mean the mosque realizing its muamalah function, such as shelter for the poor, as well as public baths, and a place for distributing donated food. These various things can be represented in the mosque using the disprogramming or transprogramming method to trigger the existence of philanthropic programs that can invite the Muslim community to be present in it.	Integrated into the mosque typology using the disprogramming method or added a separated/attached building using transprogramming method
Economy		
Musafir's (Traveler) Lodging	Facilitating Muslims who travel long distances can be one of the mosque's sources of income and also a link between fellow Muslims, this can be presented in the design of the mosque using the transprogramming method which adds a place to rest like a hostel, motel, or hotel at a certain rate.	Adding a separated/attached building to the mosque using transprogramming method
Retail, Culinary, and Medical Services	Various types of services or trading can activate the economic flow of the Muslim community, bringing this program into the mosque design can help various non-physical aspects of the environment including welfare as well as health. This can be achieved by applying the transprogramming method that connects the mosque with the containers for tenants in close proximity.	The mosque is combined with retail as a new function that serves the food necessities for visitors and administrators using the transprogramming method.
Funeral Home	Islam has a strict procession related to the management of the body from the moment of the last breath to the funeral so with the funeral home service, the mosque can provide a means and convenience for the Muslim community in dealing with the procession. Transprogramming can be used as a design method with a note that there needs to be a special room that is directly connected to the place of worship to facilitate the procession of the body.	It is connected to the mosque as a separate building or attached using the transprogramming method.

Rental Room / Wedding Venue	The development and shift of social culture encourage many new social events that require a venue, mosques that can provide services for these events have the potential to be financially independent because mosques are already known to provide this, transprogramming is a method that can be used to integrate the function of the event venue into the mosque design.	It is connected to the mosque as a separate building or attached using the transprogramming method.
Politik		
The Place for Problem Mediation & The Imam House	Conflict is one of the challenges of life that needs to be resolved rather than ignored. Islam has guidelines containing substance about various kinds of polemics that humans face. Of course, not all Muslims can understand it, so there is a place to resolve problems in the mosque, so the mosque can accommodate various kinds of figures to help resolve problems being faced by Muslims or Muslim communities. This place in the Prophet's time was generally carried out at the Prophet's house as a guest, but now the Prophet's position has been carried on by the imam so that it is necessary to adjust the mosque using the transprogramming method, which adds the imam's house program as a mediator in solving problems.	It is connected to the mosque as a separate building or attached using the transprogramming method.
Miscellaneous		
Recreation Area	Recreational spaces can be a solution to encourage the Muslim community to spend time around the mosque. The presence of recreational areas can also promote the value of interest in the form of memory. This can be achieved by utilizing the disprogramming method that merges the mosque with the surrounding environment.	Integrated into the mosque typology using the disprogramming method.
Perfume Manufacturing	The perfume used during the caliphate was reported to have a special manufacturing in the Islamic complex. The presence of perfume manufacturing can be an independent means for mosques to be able to fragrance the surrounding environment and create spaces with a distinctive aroma. This can be applied using disprogramming to ignite the Muslim community's awareness of the benefits of perfume in worship and business.	Integrated into the mosque typology using the disprogramming method.

Table 3 shows that the spatial configuration of the muamalah program using the transprogramming and disprogramming methods in mosque design can be implemented

towards the capabilities of contemporary mosques. The crossprogramming method cannot be done because the worship function is a crucial function that cannot be replaced even though it is multifunctional, due to the interval of worship time that needs to be fulfilled in a day. There is a possibility for the crossprogramming method to be used, which is when it is intended temporarily to shift from the worship function. However, in that temporary time, the worship function will disappear and be replaced by the muamalah function as a whole, such as for event venues/wedding venues, but more than that the crossprogramming method is not recommended in the design.

4 Conclusions and Sugestions

In historical studies, the first mosque, Quba' Mosque, has functioned as a place for worship as well as a community center that supports various social, educational, and economic activities. This multifunctional role indicates the importance of the mosque in the daily life of the Muslim community, reflecting the need to provide a space not only for worship but also for various activities that support the holistic development of the community. The religious function remains the main focus, but the mosque has evolved into an educational center with teaching and learning facilities, also as a social center with charity programs, and even as a place for social problem mediators. The economic role of the mosque, through the provision of retail space and medical services, highlights the importance of the mosque in supporting community well-being.

Through the analysis of spatial functions from various literatures, this research adopts Tschumi's architectural design method to integrate the obtained functions into the contemporary mosque typologies that focus on the worship function. The methods of transprogramming, and disprogramming enable the creation of spatial configurations that support multiple functions without sacrificing the main worship function, while crossprogramming enables the creation of spatial configurations that temporarily sacrifice the worship function. The analysis confirms that effective contemporary mosque design should include six main aspects: worship space, social, educational, economic, political, and miscellaneous functions. By using this design method along with consideration of the 6 criteria that emerged during the 1975 Mecca congress in the selection of spatial functions within the mosque, the mosque's function will be optimized to meet the various needs of the Muslim community, making it a place that is not only for spiritual but also for social and economic purposes. This approach offers an innovative view on how mosques can continue to evolve while ensuring their relevance and effectiveness for the present and future.

As we move forward, the multifunctionality of mosques will likely continue to evolve in response to the changing needs of modern Muslim communities. Urbanization, technological advances, and shifts in social dynamics may prompt the development of new spaces and services within mosques, particularly in densely populated areas where communal facilities are essential. For example, mosques could increasingly integrate digital learning platforms or serve as hubs for social innovation and entrepreneurship. The growth of multi-use Islamic centers suggests that mosques will remain adaptable, offering diverse services like health care, education, and

economic empowerment programs while maintaining its spiritual core. Moreover, the mosque's role in promoting social cohesion and serving as a sanctuary for underrepresented groups may become even more prominent in diverse, multicultural societies. In this way, future mosque designs must be flexible enough to support a wide range of muamalah activities, ensuring they continue to function as central spaces for worship, social interaction, and community welfare in the years to come.

This research is a process of seeking the contemporary mosque's architectural formula as a part of progress to find a muamalah/social function that can be one of the function options to be applied. However, to go to a further stage, there are still many aspects that have not been covered and are yet to be inclined to the context of a particular site or culture, as the discussion of the dimension standard of the program, connectivity of each muamalah program, and how the shape formed based on the muamalah program addition toward the mosque design criteria as the nature of programmatic which define how the architecture fulfills its purpose, still need to be considered. Therefore, in-depth reasoning is needed to find and obtain a mosque function that suits the needs of the environment and the local culture when designing a contemporary mosque.

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