

Investigation of influential factors in Mali's prototype mosques: A case study of the Djenné Great Mosque

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Abstract

Abstract The Great Mosque of Djenné in Mali is the largest mud-brick (adobe) building in the world and one of the most notable examples of Sudano-Sahelian architecture. Beyond Djenné, its architectural impact has shaped mosque architecture throughout Mali and the larger West African region. Using the Great Mosque of Djenné as a case study, this paper explores the major elements determining the architectural form of Mali's prototype mosques. The study uses a qualitative case-study methodology, integrating comparative stylistic analysis, architectural analysis, and literature-based assessment of material, cultural, and climatic variables. To find commonalities and differences, comparisons are made with a few regional architectural traditions, such as Moroccan, Tokolar, Plain, and Neo-Sudanese styles. The results show that the Djenné Great Mosque's architectural shape is the outcome of a dynamic interaction between the surrounding environment, locally accessible materials, and deeply ingrained religious and cultural customs. The study comes to the conclusion that the mosque's enduring form and its function as a model influencing mosque construction throughout the Sahelian region are due to this integrated interplay of elements.

Nomenclature and units

Banco: Mud bricks mixed with rice husk and organic materials

Toron: Palm-wood beams projecting from walls

Hypostyle: Interior supported by columns

Qibla: Direction of Mecca

Banco: Mud bricks mixed with rice husk and organic materials

1.0. INTRODUCTION

1.1. The Purpose/Research Method

One of the most surviving examples of Sudano-Sahelian building traditions in West Africa is found in the construction of mosques in Mali. Among these, the Great Mosque of Djenné is notable as a model whose architectural style has been extensively imitated in the communities that surround Djenné and throughout the Sahelian region. These mosques, which are mostly made of locally sourced earth materials, reflect cultural, religious, and social ideals that have developed over centuries while also responding to natural conditions.

The Djenné mosque form has been widely adopted, but there hasn't been much scholarly focus on methodically identifying and evaluating the particular elements that have influenced its architectural features and helped it become a model mosque in Mali. The shape and symbolism of the mosque are frequently described in existing research, but the combined effects of climate, material availability, and cultural practices on its architectural development are not adequately explored.

Using the Great Mosque of Djenné as a case study, this study aims to explore the major elements determining the architectural form of Mali's prototype mosques. In particular, the study looks at how the mosque's shape and construction methods are influenced by the surrounding environment, locally accessible building materials, and sociocultural and religious customs.

The study uses an architectural case-study analysis-based qualitative research technique. This method entails a comparative study of specific mosque types and architectural styles in Mali and the larger West African region, as well as a thorough evaluation of the Djenné Great Mosque's spatial arrangement, building materials, and formal features. The results are contextualized using pertinent secondary sources, such as academic literature and recorded architectural documents.

1.2. Geographical Context of Mali

Mali is a landlocked nation in West Africa that shares borders with Guinea and Côte d'Ivoire to the south, Burkina Faso to the southeast, Mauritania and Senegal to the west, and Algeria to the north and northwest. It is one of the biggest nations in the region, with a land area of over 1,240,192 km². The country is divided into three main climatic zones: the more humid Sudanian zone in the south, the semi-arid Sahelian zone in the center, and the Saharan zone in the north. Mali's geographical features include isolated plateaus that are between 200 and 500 meters above sea level, flat to gently rolling plains in the north, and savannah landscapes in the south. The two main river systems in the nation are the Niger and Senegal Rivers, which are essential for

irrigation, transportation, agriculture, and the growth of settlements (Wikipedia, 2025).

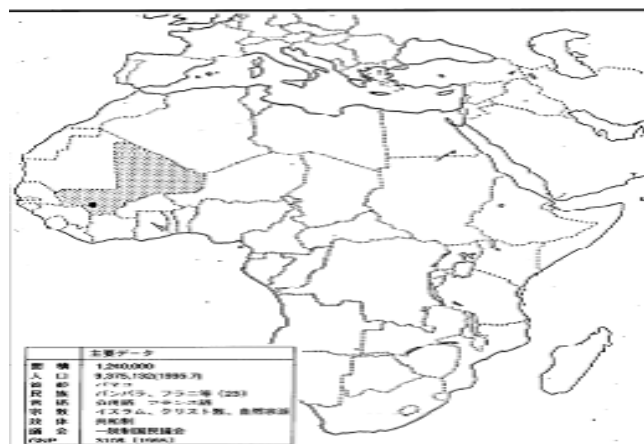


Figure. 1 Map of Africa

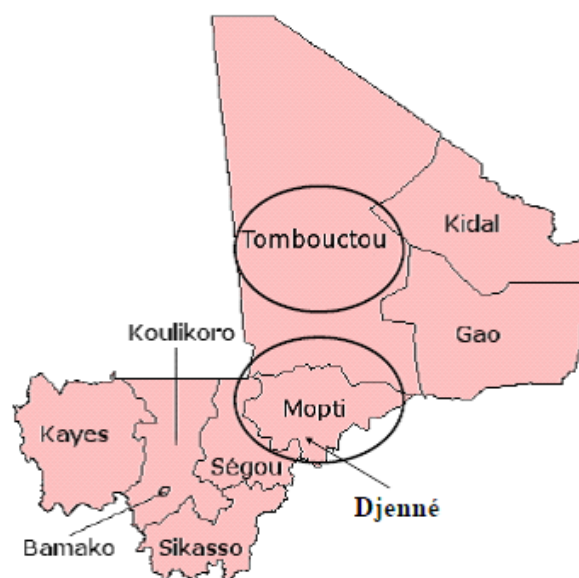


Figure. 2 Map of Mali

1.3. Climatic Context of Mali

Mali is situated in the Sahelian sub-tropical zone of West Africa, between latitudes 10° and 25° N. The southern region has a relatively humid tropical climate, while the northern region is characterized by arid Saharan conditions. The average annual temperature ranges between 27°C and 30°C, with seasonal and regional variations; summer temperatures in the northern regions can reach 35°C, while winter temperatures can drop to roughly 12–15°C in the southern region, and seasonal rainfall patterns have historically influenced building techniques, material choices, and architectural responses in earthen construction (African development bank, 2025).

2.0. Climatic Factors Affecting the Design of The Djenné Great Mosque

Mali has a variety of climates, from savannah climates in the middle and southern areas to arid desert and semi-desert zones in the north. Temperatures stay warm for the majority of the year, and annual rainfall is typically minimal, frequently falling below 900 mm. Intense sun radiation, high heat, seasonal rains, dust-laden winds, and fluctuating humidity levels are some of the major environmental problems posed by these conditions. These difficulties have had a significant impact on Mali's traditional architectural styles and building methods.

The use of large earthen walls with significant thermal mass is one of the main architectural responses to intense heat and solar radiation. These walls control interior temperatures by absorbing heat during the day and releasing it gradually at night. The Djenné Great Mosque, whose enormous banco (mud-brick) walls offer thermal stability and inside comfort despite high outside temperatures, is a prime example of this climatic technique.

Other climate elements influencing building design in Mali include wind, dust, sandstorms, insects, and parasites. Compact building shapes, few external openings, and the use of shaded courtyards to produce controlled microclimates are examples of traditional architectural solutions. The Djenné Great Mosque's enclosed courtyard portions and sparse windows minimize dust intrusion and offer shaded rooms for congregational usage.

Sloped roofs and effective rainwater drainage systems are frequently used in areas with increased rainfall and humidity, especially in southern Mali, to avoid water buildup and material deterioration. Even though Djenné is located in the Niger River's floodplain, the mosque's design adapts well to seasonal rainfall thanks to raised foundations and thoughtfully sculpted surfaces that speed up runoff and shield the earthen structure from extended moisture exposure.

Another important factor in climate adaptation is natural ventilation. Buildings are frequently oriented to take full use of prevailing winds for cooling. The Djenné Great Mosque's elevated interior areas and roof openings encourage air circulation, which lowers heat accumulation while preserving users' thermal comfort.

All things considered, the Djenné Great Mosque's architectural design exhibits a cogent climate response in which environmental issues directly influence the choice of materials, spatial arrangement, and building methods. The mosque's longevity and its use as a model for mosque building throughout Mali and the larger Sahelian region can be attributed to these climate-responsive tactics (Marchand, 2015).

3.0. Architecture of Mali

3.1. House Styles in Mali

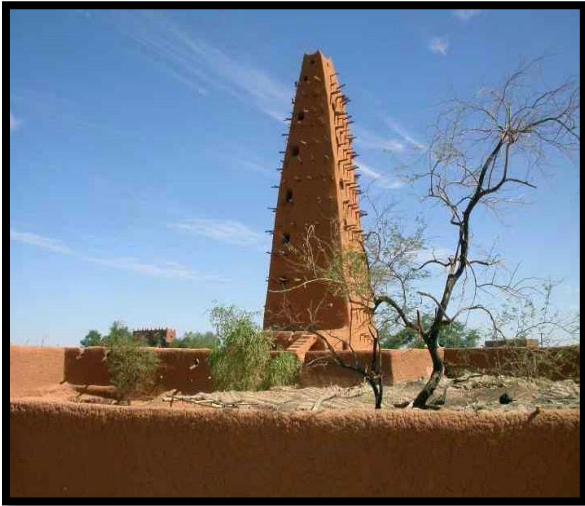
Since more than 60% of Mali's population lives in its towns, most of them are categorized as rural villages. Mali's housing has been influenced more by the Sudanese design than any other, because

to its court yard arrangement. It originated in historic places like Timbuktu and Djenne, and French colonial architecture also had an influence. Urbanization changes how space is used in addition to providing modern comforts. A range of materials are used to build structures, such as mud bricks, cement bricks, and concrete blocks (Encyclopaedia.com, 2026).

3.1.1. Sudanese Style

Sudanese architecture is one common architectural type in the Sahel. The popularity of this design peaked during the 16th and 17th centuries AD, when the Mali and Songhay Empires controlled over most of West Africa. The most notable examples of this architectural style are the University of Timbuktu buildings, Sankore Mosque, and the Great Mosque of Djenne. Under Mansa Musa's leadership, the Mali Empire overran Timbuktu in 1324 AD and began building universities, mosques, and other significant buildings in both Timbuktu and Gao. When Mansa Musa returned from his famous Haj, he brought with him the Grand Architect Abu Ishaq es Saheli from Egypt to construct palaces and mosques throughout the realm. One of Sankore's first major mosques, the Dijnguerber Mosque, was constructed and built in 1327 AD by Abu Ishaq (Diakité & Wang, 2021). The placement of peered shapes in the corners of the parapet wall, the painting of the parapet walls, the pilaster's extension from the facade, and a wood toron that protrudes the buttress wall surface by around 60 cm are characteristics that set Sudanese styles apart. Sudanese architecture is beautiful because it combines centuries-old Islamic design elements with pre-Islamic indigenous architecture from West Africa, which is mostly made up of earth and tend buildings, to create amazing, captivating architecture that has won praise and recognition on a global scale. Sudanese fashion has an enigmatic, lovely, and spiritual appeal due to the flawless integration of the two forms. However, it's fascinating to see that the Sudanese architectural style is regarded as sustainable and organic, and that Western nations are trying to emulate it for their own structures, (Diakité & Wang, 2021).

Based on regional divisions, the Sudanese style can be further broken down into smaller sub-styles. The Hausa Fulani of northern Nigeria, Niger, the Gur and Manden tribes of Burkina Faso, and the other ethnolinguistic groups of Mali comprise the Malian styles (Everything Explained Today, 2025). See the plates below.



Plate, 5. Mosque Minatare in Niger



Plate, 8 Mosque in Burkina Faso

3.1.2. Moroccan, Tokolar, And Plain Housing Styles and Their Influence on The Djenné Great Mosque

In Mali, several historical eras and socioeconomic classes are reflected in the Moroccan, Tokolar, and Plain building styles. Façade ornamentation and their relationship to spatial structure are the main areas where they diverge. Despite being residential structures, a number of design elements, including the use of courtyards, wall massing, and climate-responsive elements, are similar to those seen in the Djenné Great Mosque.

The two-story Moroccan-style homes are usually seen in urban areas and are frequently owned by well-known families. Horizontal pilasters, decorative elements above doors, and thoughtfully designed ventilation apertures are what define them. The Djenné Great Mosque's imposing façade, which uses buttresses and pilasters to arrange visual rhythm while offering structural support, reflects these features' attention to façade articulation and structural hierarchy.

Two floors, projecting pilasters, and ornamental features above the main door are other features of Tokolar-style homes. The modest ventilation openings and the canopy over the entryway are distinctive features. The Djenné Great Mosque, whose interior spaces and roof shapes are meant to maximize circulation and regulate temperature in a hot Sahelian climate, is similar to the Tokolar emphasis on climate adaptation through courtyards and roof openings.

Plain-style homes value form and function simplicity over adornment, and they are frequently arranged around interior courtyards. Although they don't have ornamental façades, their layout around a central courtyard is similar to the mosque's interior courtyard, which offers a comfortable and communal gathering area.

The second half of the 20th century saw the emergence of this style. The "Moroccan" dwelling type is shown in Plate 11, Plate 9. The "Moroccan" styles have a special position in the old urban fabric. They represent the majestic houses.



Plate, 6. Tubali: Hausa Architecture (Nigeria)



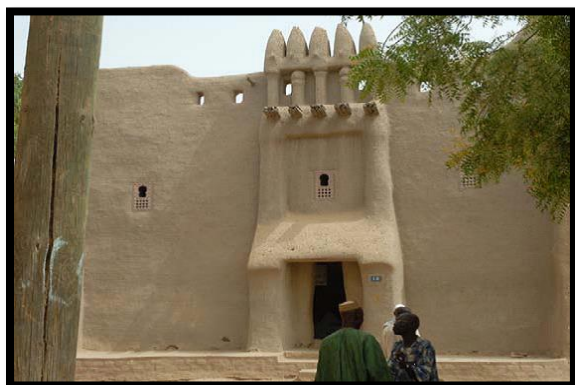
Plate, 7. A mosque in Ivory Coast

In conclusion, although though these building types are mostly domestic, they share architectural concepts with the Djenné Great Mosque, especially with regard to climate-responsive design, space organization, and façade treatment. Examining these home typologies reveals how Mali's prototype mosque architecture was influenced by wider cultural and environmental factors.



Plate 10: A form of "Tocular" home.

What distinguishes it is the combination of the pilasters and ornamental details above the main door (potige). The canopy (gum hu) over the main entryway and the small openings are the primary distinctions between the Moroccan and Tocolar elevations.



Plate, 11. It combines the aforementioned elements, and its use of courtyards—which is common in hot climates—is comparable to the architecture of the Djenne mosque.

3.1.3 Bozo Architecture: Cultural and Environmental Influences

The Bozo people, a riverine fishing community in Mali, have developed unique architectural forms that directly reflect their cultural identity and environmental context. Their traditional houses are often rounded and canoe-shaped, closely resembling the boats that are essential to their way of life. This design is not just aesthetically pleasing; it is a manifestation of the Bozo's intimate relationship with the river, which serves as the primary source of transportation, sustenance, and social organization. By mirroring the form of canoes, the architecture both functionally and symbolically aligns with the Bozo way of life.

The Bozo's architectural decisions are also influenced by environmental considerations. These homes are vulnerable to excessive humidity and seasonal flooding due to their proximity to the Niger River. Bozo homes' rounded shapes and raised foundations reduce structural damage during floods by facilitating water runoff. Additionally, by using locally accessible materials like mud, wood, and reeds, the buildings are made to be both easily repairable and sustainable, demonstrating their adaption to the local environment.

Additionally, the Bozo's canoe-inspired shape offers practical benefits. During seasonal storms along the riverbanks, the curved walls' improved aerodynamics and decreased wind resistance are especially crucial. The arrangement of interior areas to support social contact, family life, and fishing equipment storage shows how social and professional needs are integrated into architectural form.

In conclusion, the Bozo homes show how culture, environment, and material availability are directly related. Their distinctive shapes show how Mali's architectural expression is shaped by cultural identity as river-dependent fishermen as well as natural and climatic limitations. Typical Bozo house layouts and interior wall decorations are shown on Plates 12a and 12b, which further highlight the interaction of functional, environmental, and cultural elements in their construction (Kone & Coulibaly, 2022).



Plate12, a. Bozo House in the shape of a canoe.



Plate12, b .Some Arts work of Bozo People in the house interior walls



Plate, 13.Neo-Sudanese architecture style in Ségou-Somono

3.1.4 Neo-Sudanese Architecture: Colonial Adaptation and Local Influence

During the French colonial era, traditional Sudanese construction customs and European practical requirements were mixed to create Neo-Sudanese architecture. In order to create a hybrid style that balanced beauty, functionality, and environmental adaptability, the French administration integrated local materials, climatic considerations, and vernacular design ideas into administrative and residential structures.

The elevated base, which is typically one meter above ground level, is one characteristic that sets this architecture apart. Although this may resemble European architectural techniques, it also offers a useful reaction to seasonal rains, shielding the earthen walls from water damage, a tactic that is strongly impacted by regional climate conditions.

Pilasters, which have both structural and decorative functions, dominate facades. They buttress the walls structurally, increasing longevity and enabling the use of regional mud-brick and plaster materials. The Djenné Great Mosque and other traditional Sudanese mosques have a vertical emphasis that is echoed by the pilasters, which express the building's visual rhythm.

In conclusion, Neo-Sudanese architecture shows how colonial works adapted and expanded local architectural ideas by purposefully combining cultural, climatic, and material elements. For clarity and coherence, this analytical method—which links form to function, climate, and materials—should be applied consistently to all earlier portions of the text. (5) See plate 13.

4.0 Integrated Analysis of Housing Styles of Mali

This section explains how environmental, cultural, and historical variables affected domestic architecture in Mali by synthesizing their shared principles and distinctive traits rather than just describing different dwelling designs. The basic parallels between the house traditions of the Sudanese, Moroccan, Tokolar, and Plain, Neo-Sudanese, and Bozo people can be explained by the fact that they all developed within the same Sudano-Sahelian climate zone.

Both material availability and climatic reactivity are shown in the extensive use of banco (mud combined with rice husk and organic binders) in these forms. Thermal mass from thick earthen walls helps to maintain cooler interior temperatures and moderate intense afternoon heat. In a similar vein, the majority of dwelling types consistently use inside courtyards, indicating a common environmental strategy for social interaction, ventilation, and shade in hot savannah temperatures. These characteristics reflect essential vernacular principles of Sudano-Sahelian architecture rather from being stylistic coincidences.

Despite these commonalities, the styles' variations highlight significant historical and social influences. For instance, in Tokolar homes, the canopy over the main entryway functions as a symbol of social hierarchy and rank in addition to providing climate protection. The Plain style, on the other hand, purposefully reduces façade adornment in order to emphasize functionality and modesty above aesthetic expression. The elevated foundation of the Neo-Sudanese style, which was established during the French colonial era, is a characteristic linked to colonial building techniques meant to shield structures from moisture while symbolically establishing administrative control.

The design and scale of the Bozo home style set it apart from the others the most. Its canoe-like forms and closeness to riverbanks reveal a way of life strongly associated with fishing and other water-based occupations. Its architectural form is largely determined by cultural identity rather than urban or religious tradition, even if it shares the courtyard concept and parapet features.

When combined, these dwelling styles make it abundantly evident that Malian domestic architecture is a cohesive architectural system influenced by climate, materials, social structure, and historical change rather than a collection of discrete forms. Most

significantly, these ideas are immediately applicable to the Great Mosque of Djenné, which uses the same formal vocabulary, climatic techniques, and material logic. Many residential forms get their space organization, building methods, and symbolic expression from the mosque, which serves as their architectural model. Therefore, it is possible to think of Malian dwelling types as domestic variations of the architectural concepts refined in the Great Mosque of Djenné.

5.0 Mali Mosques Architecture

In West Sudan, or modern-day Mali, Islam has profoundly shaped architectural forms, influencing the construction of mosques, palaces, and tombs. As discussed in Section 5.0, the Sudanese architectural style—characterized by mud-brick construction, wooden torons, and tapering towers—forms the foundation for Mali's mosque architecture. This continuity demonstrates how housing styles informed religious structures, creating a regional architectural identity.

The Great Mosque of Djenné exemplifies this adaptation, representing a prototype that combines multiple factors unique to its context. Unlike earlier sections that merely describe general features, this section analyzes the interplay of environmental, social, and political influences that shaped Mali's mosques.

Several key factors influenced mosque design and construction in Mali:

1. **Variations in climate** – The region's hot, dry climate necessitated thick mud walls for insulation and the incorporation of wooden torons, which provide structural support and allow for annual replastering, an essential maintenance ritual that strengthens community involvement.
2. **Material accessibility** – Locally available mud and palm wood dictated construction techniques. Limited access to stone or fired bricks ensured that builders adapted the Sudanese style to local resources.
3. **Technical expertise** – Skilled masons and craftsmen, often trained in local building traditions, shaped the mosque's verticality and ornamentation. Their knowledge ensured structural stability despite using perishable materials.
4. **Urban versus rural context** – Urban mosques, such as the Great Mosque of Djenné, were larger, state-sponsored projects that emphasized monumental scale, whereas rural mosques were simpler and community-built, reflecting local needs and capacities.
5. **Mode of establishment** – Mosques sponsored by the state or wealthy patrons often set architectural precedents and served as prototypes for other religious buildings. In contrast, smaller mosques built by migrating groups or Marabouts prioritized functionality and adaptability over grandeur.
6. **Degree of local acceptance of Islam** – Communities embracing Islam fully invested in monumental mosques, while regions with partial acceptance produced more modest structures, revealing the correlation between religious integration and architectural ambition.

By examining these factors, it becomes evident that the Great Mosque of Djenné is not merely a product of North African influence but a deliberate synthesis of local materials, climate considerations, social organization, and religious practice. This mosque thus serves as a benchmark for understanding Mali's Islamic architectural heritage.

6.0 A Study Area Djenne Great Mosque

6.1 Brief Historical Background of The Great Mosque of Djenné

Djenne, one of the earliest documented urban settlements in sub-Saharan West Africa, was established in the third century BC and had developed into a major urban center by about 850 AD. Its strategic location near the confluence of the Niger and Bani rivers provided fertile agricultural land and supported trade, population growth, and permanent settlement. These environmental conditions not only sustained urban life but also influenced the use of locally available building materials, particularly earth and timber, which later became central to the town's architectural identity.

Islam was introduced to Djenne in the 13th century when King Konkonboro became the first ruler to convert to the faith and established the town's first mosque. Historical accounts indicate that this mosque was created by converting part of the king's palace into a religious building. This transformation reflects an early cultural adaptation of Islam, in which existing local structures and construction methods were retained rather than replaced, foreshadowing the continued use of indigenous materials and building techniques in mosque architecture.

The evolution of the mosque was closely linked to changing political and religious conditions. A second mosque was constructed during the 19th century, although historical records provide inconsistent dates and limited architectural details. During this period, Sekou Amadou, founder of the Masina Empire, asserted religious and political authority over Djenne and temporarily closed the mosque following a dispute with local Islamic scholars. This intervention demonstrates how political power and religious ideology influenced the function, maintenance, and transformation of religious architecture.

The present Great Mosque of Djenné was constructed in 1907 through a collaborative effort between the French colonial administration and the local community, under the supervision of Ismailia Toare, the Chief Mason of Djenné (7). Despite colonial involvement, the mosque retained traditional construction materials and techniques, responding to local climatic conditions and cultural practices. The continued reliance on mud construction and communal participation in maintenance reflects the enduring relationship between environment, material availability, and religious life. This historical background provides the foundation for analysing how the mosque's architectural features directly respond to climate, materials, and cultural context.

6.2 Architectural Description of Djenne Great Mosque

Ismaila Traore, the Chief Mason of Djenne, designed and oversaw the mosque's construction, which began in 1906 and was put into service in 1907. The mosque is shaped like a parallelogram, and the ground plan is raised almost three meters above ground level. The walls are composed of mud bricks, which are a mixture of literate, rice husk, animal dung, and other organic binding materials. Six grand staircases lead to a sizable terrace that encircles all four facades of the mosque. The construction was completed by laborers from Djenne and throughout the region. One of the fundamentals of Islamic art is that the mosque's eastern elevation is symmetrical in geometry, with two toms surrounded by low rectilinear walls (see plates 14, a, & b).



Plate,14,a. www.Islamicarchcorner.blogspot.com



Fig.14.b.8 Plant motifs in Islamic art - Victoria and Albert Museum (Source: Capital, Spain, Museum no. A.55-1925)

We learn about irregular architectural feature organization from closer studies. For instance, there is a variance in the arrangement of small, square windows and the projected toron from the tower surfaces, as well as an alternate ordered succession of four and five fence-buttresses along the elevation length. The mosque's slight irregularities may have been purposefully created to attain symmetrical balance while attempting to accommodate the site's mathematical shape.

The torons, which protrude from the walls and towers, provide structural reinforcement while serving as permanent scaffolding for the annual plastering ritual, reflecting both climate adaptation and communal maintenance practices. The hypostyle prayer hall is supported by 90 wooden pillars, demonstrating the use of locally available timber and traditional building techniques to achieve large interior spans. Clerestory windows along the north façade allow natural light and ventilation, mitigating the effects of the hot, arid climate. The courtyard, located on the western side of the mosque complex, is surrounded on three sides by narrow halls that organize the women's prayer space in accordance with cultural and religious norms. The south façade, by contrast, is simpler and less ornamented, reflecting socio-economic differences within the urban fabric of Djenne. These features collectively illustrate how the mosque's form and function are shaped by local climate, materials, cultural practices, and social organization (Figures 15a and 15b).



Plate.15.a.North facade



Plate.15.b. South Facade



Plate, 16. Postcard of the ruins of the former Djenné Mosque.
Photographer Edmond Fortier, circa 1906,



Plate.17. Postcard of the reconstructed Djenné Mosque
published after World
War Photographic reproduction courtesy of the Rijksmuseum
voor Volkenkunde, Leiden

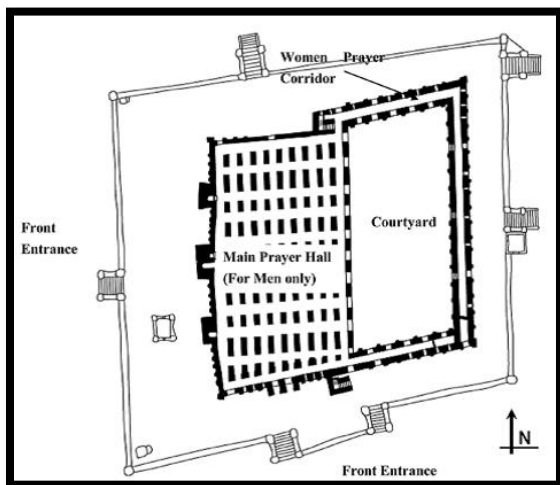


Fig.18.a. Source: Trace based on Pierre MAAS ET Geert
MOMMERSTEEG
[DJENNE Chef D'Oeuvre Architectural] KIT Publications,
1992



Plate 18.b. Interior of the Mosque
Source: Oussouby SACKO (2011.02)

6.3 Comparative Analysis and Regional Influence

The Great Mosque of Djenné clearly embodies the core principles of the Sudanese style, establishing itself as a definitive prototype for mosque architecture in Mali and across West Africa. Its architectural language, with features such as protruding torons, pilasters, parapet ornamentation, and symmetrical facades, has shaped numerous regional mosques, reflecting both functional efficiency and aesthetic continuity.

Plates 19a provide concrete evidence of this influence. Plate 22a shows a mosque with prominent torons and mud walls, reflecting Djenné's structural and aesthetic principles. Plate 22b highlights parapet ornamentation and symmetry, echoing the organization of Djenné's façade. Plate 22c illustrates pilasters adapted for structural support and visual rhythm, while Plate 22d demonstrates the use of torons as scaffolding for maintenance, combining practical and symbolic functions. Plate 22e shows a courtyard and spatial arrangement inspired by Djenné, supporting climatic comfort and social use. Plate 22f highlights communal participation in mosque upkeep, mirroring Djenné's annual replastering ritual and reinforcing cultural continuity.

This analysis shows that the mosque's distinctive features like torons, parapets, pilasters, symmetry, and the courtyard system are not merely decorative. They are functional responses to climate, locally available materials, and community practices. The annual communal maintenance ritual in particular ensures the mosque's longevity while reinforcing its symbolic and social significance. Together, these factors confirm that the Great Mosque of Djenné serves as a regional prototype, influencing both the form and cultural practices of subsequent mosques in the area.

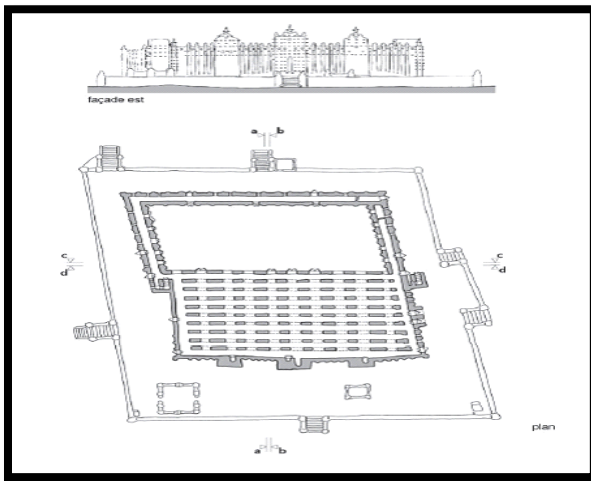
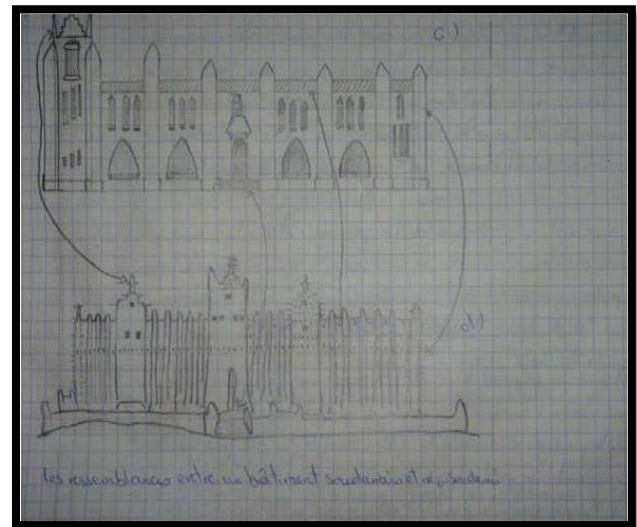


Fig.19.a. Sudanese Style of Djenne



Plate, 21 comparison of Sudanese style and Neo-Sudanese Styles

In summary, Djenne mosque design style has, great influence in residential design of Mali, its concept has been reflected in the Islamic architecture of the entire West Africa, see pictures of prototype of it. See the plate below.22, a, b, c & d

Plate22, a. Reconstruction of a Djenné-style monumental arch in plywood sheeting on a main road in Bamako. Photo: Source: T. H. J. Marchand

Plate, 22, b Aerial view of the restored Great Mosque of Mopti in late 2006. Photo: AKDN, Bamako



Plate, 22, c. The Friday mosque at Bobo Dioulasso, Upper Volta

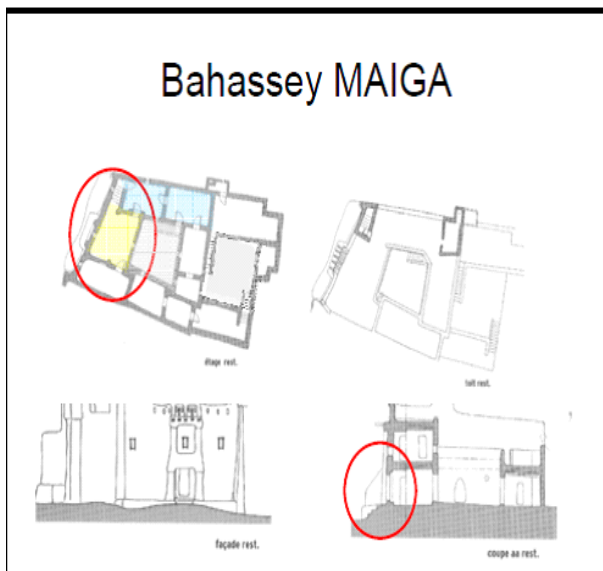


Plate 19.b. Plan and Facade of Tokolar style

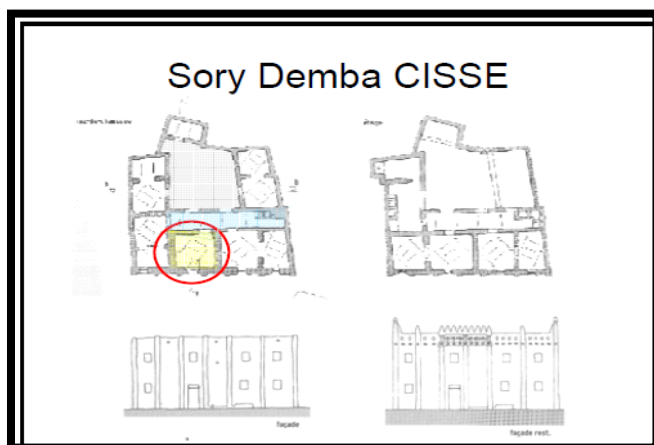


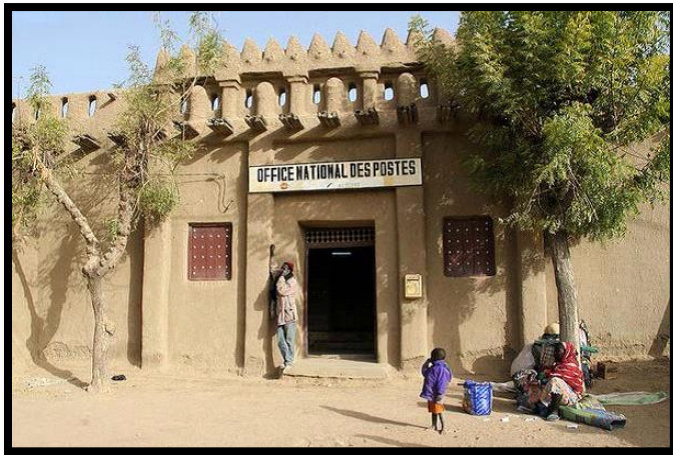
Plate .20, Plan and Facade of Moroccan style



Plate, 22, d. Djenné post office (photograph by Martha de Jong-Lantink)



Plat, 22, f: Larabanga Mosque, Ghana



Plate, 22, d.: Djenné post office (photograph by Martha de Jong-Lantink)



Plate, 22, e: Neo-Sudanese Style of office building at Segou, Mali

Some of the first mosque's features were restored, according to French journalist Felix Dubois, who visited the town in 1895 AD. These included buttressed walls that were shorn up and extended to their current height, some towers that were renovated, and possibly two more towers added. The eastern roof and the large wooden pillars that surrounded the entrance were kept from the first mosque, but they are thought to be native to West Sudan (Mali). These pillars honor the lives of well-known marabouts (Islamic teachers), and they would also memorize ancestors in some pre-Islamic homes. Pre-Islamic history may be the source of the mud building of the Djenne mosque, the ceramic gutters, and the ostrich egg (see plate 23).

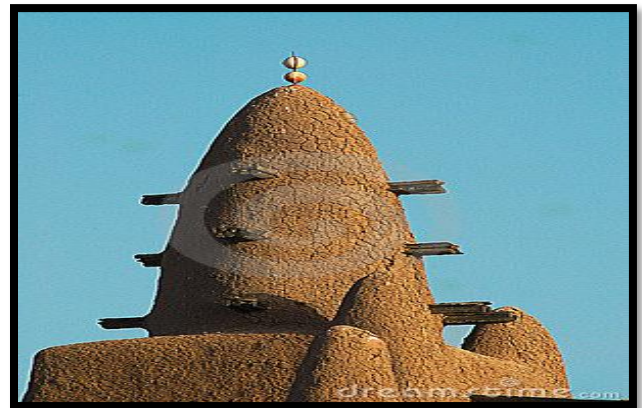


Plate 23, Ostrich Plate, egg, symbolizes fertility

It is distinctively Islamic today because of its face of Qibla, minarets, fenced court yard, small horseshoe window in the blind east elevation, and electronic megaphone for summoning prayers.



Plate 24, f: Great Mosque of Djenné



Plate 25, c. Mud dome of Yaama mosque

Because the whole community still participates in the mosque's building and upkeep and views it as the center of their town, the Folke Bormou-designed Great Mosque of Yaama is a type of mosque that emerged from the cultural synthesis of Djenné. The fact that this mosque has an earth dome is intriguing (archnet.org, 2025), Refer to Figure 25a, b, and c.



Plate 25, a. Picture of Great Mosque of Yaama, in Niger Republic

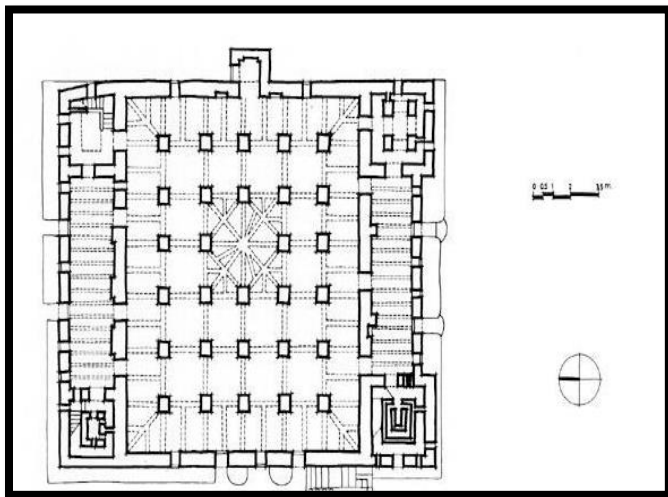


Plate 25, b. Plan of Yaama mosque, Niger.

Adobe Town, a Thomas Waratman-directed documentary, claims that Djenné is a town made completely of mud. In addition to being the most vital building material in Africa, earth is also a key component of ancestor worship. In order to avoid the clay drying up due to the rising temperatures, the renovation work must be finished by nine in the morning. The smallest person is responsible for mixing banco with water to make the paste pliable. Banco is the name of the traditional building material composed of clay, rice bundles, and cow dung. Armed with faith in God and gri-gri, or magic angels, the volunteers scale high heights like spiders, believing that they will be protected from mishaps. The girls are in charge of continuing to provide water, the mosque is regarded as the town's lifeblood and is lavishly and selflessly maintained, and the work on the House of God is a collective endeavor. In conclusion, the community's restoration and upkeep of the Great Mosque of Djenné has allowed it to endure over the years because, to them, it is the essence of their city and they take it upon themselves to restore it as evidence of their continued existence at this time.

7.0 Conclusion

The Great Mosque of Djenné stands as a remarkable embodiment of Sudanese-style architecture, illustrating how building form, material choice, and climate-responsive design can integrate seamlessly with cultural and community practices. Its distinctive architectural features including torons, pilasters, parapets, courtyards, and hypostyle interiors not only serve functional and aesthetic purposes but also reflect the ingenuity of vernacular construction techniques developed over centuries. The mosque has profoundly influenced regional architecture, shaping both religious and residential structures across Mali and the wider West African region, demonstrating the enduring relevance of local materials, communal maintenance practices, and spatial organization. Beyond its historical and cultural significance, the Great Mosque of Djenné offers valuable lessons for contemporary architecture, showing how traditional knowledge can guide sustainable, context-sensitive design and inspire resilient, community-centered approaches to building for the future.

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