# Swahili Architecture: A Heritage of the East Coast of Africa

Noura Ahmed Sadik<sup>1</sup>, Hassan Siraj<sup>2</sup>, Khalid El Harrouni<sup>3</sup>, Abderrazak Es-Sdiqui<sup>4</sup>

<sup>1</sup>Graduate Architect of Ecole Nationale d'Architecture de Rabat, Morocco / Kenya <u>luluasam20@gmail.com</u>

<sup>2</sup>Architect, teacher, Ecole Nationale d'Architecture de Rabat, Morocco
<sup>3</sup>Full professor, Ecole Nationale d'Architecture de Rabat, Morocco
<sup>4</sup>Architect, teacher, Ecole Nationale d'Architecture de Rabat, Morocco

## Abstract

Swahili architecture, which developed along the Swahili Coast in East Africa, represents a remarkable amalgamation of African, Arab, and South Asian influences. The region's cultural exchanges gave birth to the distinctive Swahili Culture while thriving trade cities like Mombasa, Mogadishu, and Zanzibar attracted merchants from India, Persia, and China. This cultural convergence also played a pivotal role in the emergence of the Swahili language, which became the widely spoken language across East Africa and the official language of Kenya and Tanzania. However, the impact of Swahili culture extends beyond language; it is also evident in the architectural heritage of the entire Swahili coast. This architectural style holds immense cultural significance and is cherished as a valuable urban asset. Certain sites, including Lamu in Kenya, Kilwa, and Stone Town in Zanzibar, have been granted UNESCO World Heritage status. The enduring allure of Swahili architecture continues to inspire contemporary building designs, celebrating and preserving the rich history and adaptability of Swahili culture to its environment.

Keywords: East African coast, Kenya, Swahili architecture, heritage, culture

## Résumé

L'architecture swahilie, qui s'est développée le long de la côte swahilie en Afrique de l'Est, représente une remarquable fusion d'influences africaines, arabes et sud-asiatiques. Les échanges culturels de la région ont donné naissance à la culture swahilie distinctive, tandis que des villes commerçantes prospères telles que Mombasa, Mogadishu et Zanzibar attiraient des commerçants d'Inde, de Perse et de Chine. Cette convergence culturelle a également joué un rôle essentiel dans l'émergence de la langue swahilie, devenue la langue la plus parlée en Afrique de l'Est et la langue officielle du Kenya et de la Tanzanie. Cependant, l'impact de la culture swahilie va au-delà de la langue; il est également visible dans le patrimoine architectural de toute la côte swahilie. Ce style architectural revêt une immense importance culturelle et est chéri comme un précieux atout urbain. Certains sites, dont Lamu au Kenya, Kilwa et Stone Town à Zanzibar, ont été classés au patrimoine mondial de l'UNESCO. L'attrait durable de l'architecture swahilie continue d'inspirer des conceptions de construction contemporaines, célébrant et préservant la riche histoire et l'adaptabilité de la culture swahilie à son environnement.

Mots-clés : Côte de l'Afrique de l'Est, Kenya, architecture swahilie, patrimoine, culture

#### **1-Introduction**

The Swahili Coast<sup>1|2|3|4|5</sup> on the shores of East Africa was a region where the locals and Arabs mixed to create a unique identity between the 8th and 12<sup>th</sup> centuries called Swahili Culture. The coast blossomed into a number of important, independent, trading cities including the cities of Mombasa in Kenya, Mogadishu in Somalia, and Zanzibar in Tanzania; which in turn attracted more traders from India, Persia, and China. With the interaction between the locals and Arabs emerged the language Swahili commonly known as Kiswahili, which became the lingua franca of East Africa and the national language of Kenya and Tanzania. Kiswahili is composed of many Arabic terms and other foreign loan words including the word Swahili; which is derived from the Arabic word Sahil (ساحل الله والحر) for coasts, which means 'people of the coast'. However, the language is not the only Swahili legacy. Its influence extends to the architecture of the entire geographical area of the Swahili coast. Many examples of Swahili architecture can be found in the urban centers of Mombasa, Lamu, and Malindi in Kenya; or Songo Mnara, Kilwa Kisiwani, and Zanzibar in Tanzania, although its influence extends from Mozambique in the south to Somalia in the north.<sup>1/2|3|4|5</sup>

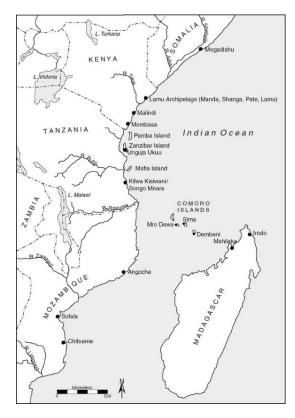


Figure 1; Swahili Coast Map (Source: Matthew Pawlowicz<sup>1</sup>)

<sup>&</sup>lt;sup>1</sup>Article on "The Pervasive Influence of Swahili Architecture" by Matthew Maganga published on ArchDaily on the18<sup>th</sup> of July 2021, on https://www.archdaily.com/964963/the-pervasive-influence-of-swahili-architecture

<sup>&</sup>lt;sup>2</sup>Article on "How the Swahili language took hold across Africa, and beyond" by Daniel A. Gross published on The World in Words on the 22<sup>nd</sup> of November 2016, on https://admin.theworld.org/node/155891

<sup>&</sup>lt;sup>3</sup>Article on "Swahili Coast" by Mark Cartwright published on World History Encyclopaedia on the 1<sup>st</sup> of April 2019, on https://www.worldhistory.org/Swahili\_Coast/

<sup>&</sup>lt;sup>4</sup>Article on "Swahili gaining popularity globally" by Vivian Lisanza published on Africa Renewal UN digital magazine on the 9<sup>th</sup> of December 2021, on https://www.un.org/africarenewal/magazine/december-2021/swahili-gaining-popularity-globally

<sup>&</sup>lt;sup>5</sup>Article on "Architecture in the world: Swahili influence in Africa" published by Amusement Logic on the 6<sup>th</sup> of October 2021, on https://amusementlogic.com/general-news/architecture-in-the-world-swahili-influence-in-africa/#

## 2- Features of Swahili architecture

Like the language, Swahili architecture<sup>1|6</sup> is a representation of the cultural blending of elements from mainland Africa with those from the Arabian Peninsula and South Asia. Islam plays an important role in the planning of Swahili towns. Organized into quarters divided by walls, mosques were the most elaborate and permanent structures representing the center of each quarter, from which the characteristic narrow main streets run from the north, south, east, and west. The physical presence of the city mosque symbolizes unity and gave character to the city. The areas surrounding central congregational mosques were open spaces for various cultural activities, another defining element of Swahili Architecture.



Image 1; Riyadha Mosque in Lamu, Kenya<sup>6</sup>

Streets in Swahili towns are significantly small and narrow and are divided into two- commercial and residential streets. These streets are characteristic urban features of stone towns in Zanzibar, Lamu Old Town, and Mombasa Old Town.



Images 2&3; Narrow streets in Swahili towns (Sources: [Left – Stone Town, Zanzibar, Tanzania]<sup>6</sup> [Right - Swahili Dreams Apartments, Lamu, Kenya]<sup>7</sup>

<sup>&</sup>lt;sup>6</sup>Article on "An overview of Swahili Architecture" by Jahanavi Arora published on Rethinking The Future on the 16<sup>th</sup> of September 2021, on https://www.re-thinkingthefuture.com/2021/09/16/a5236-an-overview-of-swahili-architecture/ <sup>7</sup>https://www.archdaily.com/931660/swahili-dreams-apartments-urko-sanchez-architects

The earliest houses around the 6th century AD at Swahili Coast were earth and thatch structures. Building materials consisted of mangrove rafters used to create a Makuti<sup>8</sup> roofing and walls made out of old coral stone and earth. Later houses and other structures were made of coral stone, which became a defining element of Swahili Architecture. The stone houses were a symbol of stability and a representation of the seat of trade.<sup>1/6</sup>



Image 4; Traditional Swahili House found along the Kenyan Coast (Source: Bo Sorensen derived from <u>https://bosorensen.com/swahili-house/</u>)

Features of Swahili architecture<sup>1|5|6</sup> include the following.

## 2.1- Use of limestone

Widespread use of limestone (sw. *chokaa*) found locally, is what gives the white-coloured exterior walls of buildings on the Swahili Coast their distinguishing appearance. The coral-stone is built into masonry walls with a mortar of lime, sand, and red earth, which protects the interior from the coastal heat.



Images 5&6; [Left – Limestone used for construction] [Right - Embedding of coral stones]<sup>7</sup>

<sup>&</sup>lt;sup>8</sup>Makuti is a Swahili word referring to the leaves of palm trees



Image 7; House in Lamu showing the blending of both African and Arab building styles (Source: https://www.eastafricasafaristours.com/swahili-architecture-safari-in-kenya/)

### 2.1- Use of arches

Use of different types of arches. As seen in the photos below, different types of arches are seen in Swahili architecture including round arches, keyhole arches and four centered arches.



Image 8; Keyhole arches in Swahili architecture (Source: Alberto Heras)<sup>1</sup> And

Image 9; Four-centered arches in Swahili architecture (Source: <u>https://www.eastafricasafaristours.com/swahili-architecture-safari-in-kenya/</u>)

## 2.3- Highly ornamented doorways

The extensively detailed ornamentation of doorways is one major feature of Swahili architecture. Doorways consist of arched lintels which carry carved Arabic Inscriptions like quotes from Qur'an. The detailed ornamentation of the doorways is a major element that expresses Swahili Architecture. The ornately carved doors crafted by craftspeople from the Swahili coast seek influence from the Middle East and Indian subcontinent. These doors have different patterns as seen below:

## 2.3.1- Zanzibari door

This door draws its inspiration from Indo-Persian ornamentation. While some of the style motifs may exhibit Roman and Gothic influences, they still retain the distinct characteristics of Indo-Islamic design. This particular form of design is prevalent in Zanzibar and later gained widespread popularity in Mombasa. With a few exceptions, most Zanzibari-style patterns follow a free-flowing concept, incorporating realistic plant motifs like vine leaves, grapes, maple leaves, cloves, pineapples, and other similar elements of ornamentation. At times, the pattern might combine vine, sunflower, and maple abstracts, intertwined with rosettes, leaves, branches, and fruits, all seemingly growing from a vase. This blending of motifs creates a unique and captivating design, reflecting the cultural and artistic influences that have shaped this style of door.



Images 10&11; Zanzibari doors (Source: <u>https://web.facebook.com/p/Swahili-Creative-Carved-Doors-100064133227448/?\_rdc=1&\_rdr</u>)

## 2.3.2- Omani door

The significant influence that Omani Arabs had on the Swahili architecture in the East African littoral is evident in the widespread adoption of Omani-style doors. These doors made their appearance in East Africa soon after the Mazrui Arabs took control of the region from the Portuguese. The design of this door includes a solid square frame with a square crown, double shutters, and a center post attached to one of the shutters. Similar to the original gates found in Muscat and Sur, the Omani gates in East Africa also open inwardly and feature heavily studded shutters, serving both decorative purposes and as a deterrent to unwelcome visitors. Omani doors in this style commonly showcase motifs like rosettes, chains, dragons, curves, lotus flowers, ropes, and palmate designs. These elements add to the distinct and richly ornate appearance of the doors, reflecting the strong Omani cultural influence on the architecture of the region.



Images 12&13; Omani doors (Source: https://web.facebook.com/p/Swahili-Creative-Carved-Doors-100064133227448/?\_rdc=1&\_rdr)

#### 2.3.3- Bajuni door

This door comes in various versions but shares common features, including a sturdy main frame that is primarily adorned with moulding profiles rather than carvings. It also consists of a square crown and an outer frame with two shutters. Interestingly, the shutters lack metal or copper hinges; instead, they are attached to the sill and upper frame using a peg. In earlier iterations of this style, the doors had two leaf shutters without a centre post, although some variants had crowns that slightly extended outward, resembling ears of the door. These doors boast distinctive patterns and ornamental elements, such as stars, shark teeth, sun motifs, and rosettes. What sets this door apart is its original indigenous design; it doesn't appear to have borrowed concepts from doors influenced by Arabs, Persians, Indians, or European settlers. This type of door was prevalent in Siu, Lamu Archipelago, although half of the town now lies in ruins. (Images 14, 15).

## 2.3.4- Gujarati door

This door exhibits Indian influences and possesses unique characteristics rarely found in other Swahili doors. It stands out with its beautifully moulded square frame, intricately carved rectangular crown, and ornate protruding corbels, known as "*tola*" in India. The crown and "*tola*" are adorned with foliage patterns. Unlike many other doors, this particular one is exclusively designed for commercial use. The decorative elements in this style typically depict natural and lively scenes. Depending on the variant, the pattern may also feature rosettes, sunflowers, and an abstract representation of a pineapple. The carving is skilfully executed in high relief and occasionally includes pierced details. (Images 16, 17).



Images 14&15; Bajuni doors (Source: https://web.facebook.com/p/Swahili-Creative-Carved-Doors-100064133227448/?\_rdc=1&\_rdr)



Images 16&17; Gujarati doors (Source: https://web.facebook.com/p/Swahili-Creative-Carved-Doors-100064133227448/?\_rdc=1&\_rdr)

#### 2.4- Wooden shutter windows

In a traditional Swahili house, you will commonly find wooden shutter windows (sw. *madirisha ya mbao*) which serve a dual function. The upper half of these windows can be opened to let in natural daylight, while the lower half can be closed, allowing for ventilation and offering privacy from passersby. The design effectively shields the inhabitants from the direct glare of outside observers. These windows typically feature rectangular frames, and in some cases, they may have either straight lintels or arched lintels, as illustrated in the photos below. This architectural style not only caters to practical needs but also showcases the cultural and aesthetic elements of Swahili house design. (Images 18, 19).



Images 18&19; Wooden shutter windows (Sources: [Left - Zanzibar, Tanzania]<sup>1</sup> [Right – Mombasa Old Town]<sup>6</sup>)

## 2.5- Mangrove beams

The use of locally sourced mangrove beams (sw. *boriti*) to support the roofs and ceilings exemplifies a defining characteristic of Swahili Architecture. These beams can be observed in every ceiling of a Swahili house, showcasing their integral role in the construction of such homes. The practice of using *boriti* beams not only demonstrates the resourcefulness of the Swahili people in making the most of their natural surroundings but also reflects their sustainable approach to architecture. These sturdy and durable mangrove beams provide robust support for the roofs, ensuring the structural integrity of the house over time. Additionally, the presence of *boriti* beams adds a distinctive aesthetic appeal to Swahili houses, giving them a unique charm that reflects the local culture and heritage. This harmonious blend of practicality and cultural expression is a testament to the ingenuity and adaptability of Swahili Architecture, making it truly remarkable and characteristic of the region.



Images 20&21; Mangrove beams in Swahili homes (Sources: [Left - Swahili Beach Resort, Kwale, Kenya]<sup>5</sup> [Right – Traditional Swahili House, Shela Village, Lamu]<sup>6</sup>)

## 2.6- Ornate extending balconies

Ornate extending balconies (sw. *roshani*), are another prevalent and captivating feature of Swahili architecture. These balconies can be found in many houses, and they were especially dominant in Lamu Town, Mombasa, and other Swahili towns. Supported by intricately carved wooden brackets, the balconies boast exquisite carvings and motifs, adding a touch of artistic elegance to the buildings. Besides their aesthetic appeal, these balconies serve a functional purpose in line with Islamic culture.

They create shade for the streets and entrances below, providing relief from the sun's heat and adding to the comfort of the inhabitants.



Images 22&23; Ornate extending balconies in Old Town, Mombasa, Kenya



Images 24&25; Ornate extending balconies in Stone Town, Zanzibar, Tanzanie<sup>1/6</sup>

## 2.7- Concrete benches

Concrete benches (sw. *baraza*), are a prominent feature in Swahili architecture. These benches are attached to the main building façade and serve as gathering places where people can sit, meet, converse, and even take a moment to rest. You can find *barazas* built in front of houses or in open public spaces, making them an integral part of the social fabric in Swahili communities. The *baraza* is not only a practical element for seating but also holds cultural significance in Swahili society. It fosters a sense of community and provides a welcoming spot for interactions among neighbors, friends, and family. The design and placement of these concrete benches encourage social engagement and contribute to the vibrant and communal atmosphere of Swahili towns. The *baraza* represents the harmonious fusion of functionality and social culture in Swahili architecture, reflecting the people's values of hospitality, community, and inclusivity. (Images 26, 27, 28).

# 2.8- Central courtyard

Internally, Swahili houses were thoughtfully designed with a self-contained central courtyard at their core. This courtyard acts as the focal point of the house, where daytime activities and family gatherings take place. Unlike the public areas of the house, the courtyard is not visible to outsiders, ensuring a sense of seclusion and privacy for the residents. Besides that, the courtyard serves multiple practical purposes. Firstly, it helps to naturally cool down the internal structure of the house, providing a refreshing oasis from the heat of the surrounding environment. By allowing air to circulate freely

through the open space, the courtyard contributes to a comfortable and pleasant living environment, especially during hot weather. Secondly, the courtyard plays a crucial role in maintaining the privacy of the household. Since it is not accessible to the public eye, it offers a secure and intimate space for the family members, shielding them from the outside world. This design consideration aligns with cultural values, emphasizing the importance of personal and familial privacy in Swahili society. (Images 29, 30).



Image 26; Baraza in Lamu, Kenya (Source: https://www.flickr.com/photos/zug55/with/51369675348/)



Images 27&28; Typical Swahili baraza (Sources: [Left –Old Town, Mombasa, Kenya] [Right – Stone Town, Zanzibar, Tanzania] derived from https://www.alamy.com/stock-photo/baraza.html?sortBy=relevant)



Images 29&30; Internal central courtyards found in houses in Lamu Island, Kenya<sup>1/6</sup>

## 2.9- Decoratively carved niches

One of the most captivating decorative elements of traditional Swahili houses is the elaborately carved niches (sw. *vidaka*), along with surrounding decorative plasterwork found in the rearmost galleries. These intricate carvings add a remarkable sense of perspective, beauty, and depth to the interiors of the house, making them visually stunning and culturally significant. The *vidaka* niches served both a functional and aesthetic purpose. They were used for storage and display of cherished items, such as Chinese and European porcelain, as well as other precious ornaments and decorations. This display of prized objects not only added to the visual allure of the interior spaces but also showcased the homeowners' taste and cultural connections with various trading partners and distant lands. The surrounding decorative plasterwork further enhanced the charm of the niches, creating an opulent and sophisticated ambiance within the house. The combination of skillfully crafted niches and the intricate plasterwork showcased the artistry and craftsmanship that were integral to Swahili architecture. Overall, the presence of elaborately carved niches and decorative plasterwork in the rearmost galleries of traditional Swahili houses represents an exquisite blend of functionality, artistic expression, and cultural exchange, adding to the uniqueness and allure of these remarkable houses.



Images 31&32; Decorative carved niches in Lamu houses<sup>69</sup>

# **3-** Conclusion

In conclusion, Swahili Architecture stands as a remarkable testament to the harmonization of African and Arab cultures. Its influence is widespread along the Swahili coast, showcasing how the Swahili culture adeptly adapted to its environment and context. This architectural style continues to thrive, evident from the UNESCO recognition of towns like Lamu in Kenya, Kilwa and Stone Town in Zanzibar as World Heritage Sites. These sites not only represent valuable cultural and urban assets but also serve as major tourist attractions due to their scenic beauty.

The enduring popularity of Swahili architecture is reflected in the growing trend of hotels and resorts embracing this traditional style. Its unique blend of cultural exchange and adaptation to local climatic conditions makes it an excellent source of inspiration for contemporary building practices. Through the preservation of old structures and the construction of new ones in the Swahili style, the essence of the Swahili culture can be effectively portrayed.

<sup>&</sup>lt;sup>9</sup>https://www.lamuholiday.com/swahili-culture/swahili-culture.html

Swahili Architecture embodies a rich history of cultural fusion, resourcefulness, and adaptability, making it a treasure worth cherishing and learning from. Its timeless allure continues to captivate and inspire both locals and visitors alike, ensuring that the legacy of this architectural marvel endures for generations to come.

## References

Arora, J. (2021) *An overview of Swahili Architecture*. Available at: <u>https://www.re-thinkingthefuture.com/2021/09/16/a5236-an-overview-of-swahili-architecture/</u> (Accessed: 5 June 2023).

Cartwright, M. (2019) *Swahili Coast*. Available at: <u>https://www.worldhistory.org/Swahili\_Coast/</u> (Accessed: 5 June 2023).

Deogun, I. S., Rodrigues, L., Guzman, G. (2013) *Learning from the Swahili Architecture in Mombasa/Kenya*, Department of Architecture and Built Environment, University of Nottingham, Nottingham, UK.

Gross, D. A. (2016) *How the Swahili language took hold across Africa, and beyond*. Available at: <u>https://admin.theworld.org/node/155891</u> (Accessed: 5 June 2023).

Lisanza, V. (2021) *Swahili gaining popularity globally*. Available at: <u>https://www.un.org/africarenewal/magazine/december-2021/swahili-gaining-popularity-globally</u> (Accessed: 5 June 2023).

Maganga, M. (2021) *The Pervasive Influence of Swahili Architecture*. Available at: <u>https://www.archdaily.com/964963/the-pervasive-influence-of-swahili-architecture</u> (Accessed: 5 June 2023).