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Aran Journal for Language and Humanities

<https://doi.org/10.24271/ARN.025-01-01-SC-31>

Documenting Change: The Architectural Heritage of Mocha and Loheia (Yemen)

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Article Info		Abstract:
Received	April 2025	<p>In the 1990s, a Mission of the Orientale University of Naples carried out some surveys along the Yemeni Red Sea coast. Among the others, the port cities of Mocha and Loheia, located to the south and to the north, respectively, were visited. Mocha, renowned as a major trading port since the 17th century and the namesake of the famous coffee blend "mokha," began to experience structural decline in the early 19th century. In contrast, Loheia, although lacking formal fortifications, was recognized by traveler C. Niebuhr in 1762 as the most significant port in Arabia Felix.</p> <p>The Mission documented several buildings in both Mocha and Loheia through photographs and drawings. By leveraging these visual materials and the collected bibliography, this intervention provides valuable insights into the development and transformations of the two cities. It examines modifications made to buildings over time, attempts at reuse that altered their original appearance, restorations, and the introduction of new construction materials. Additionally, the study highlights the uniqueness of earlier building techniques, showcasing a diverse array of construction materials, including bricks, stone, white coral, and madreporas.</p> <p>This work provides an important contribution that not only deepens our knowledge of Mocha and Loheia, but also extends our information about a culturally rich region that has encountered and continues to confront significant challenges.</p>
Accepted	May 2025	
Published:	August 2025	
Keywords		
Yemen; Mocha; Loheia; late-Ottoman period		
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Introduction

This study aims to provide an analysis of the urban and architectural characteristics of two historically significant port cities in Yemen: Mocha and Loheia. Both cities played a crucial role in the complex Red Sea trade and their buildings are part of the extensive Red Sea Style circuit. By examining their architectural heritage through the invaluable documentation collected in the 1990s by the then Istituto Universitario Orientale (IUO) Mission on the coastal Tehama, this research seeks to emphasize the influence of the surrounding natural environment and socio-political factors on their urban morphology.

The IUO Mission on the coastal Tehama (Yemen)

In the 1990s, the IUO Mission carried out significant surveys in the Yemenite region of Tehama, especially focusing on the three important Red Sea port cities of Hodeida, Loheia and Mocha, in order to study their distinctive urban and architectural features.

The project, titled “*Urban-architectural survey of the Ottoman city of Hudayda in the context of the coastal area (Red Sea) of the Tihama (Yemen)*”, highlighted the significance of analyzing the city within its broader regional framework, as well as understanding the influence of historical trade routes on its architectural evolution. A primary objective of the project was the systematic documentation of Hodeida’s urban morphology, with a particular emphasis on the late Ottoman architectural heritage. This endeavor also encompassed comparative studies with the wider Red Sea coastal region, which included the northern port of Loheia and Mocha to the south, the latter being historically renowned for its coffee trade.

The methodological approach employed in the project encompassed detailed surveys of the buildings positioned in the former *intra-mænia* city of Hodeida, resulting in comprehensive plans, elevations, sections, and axonometric projections. The mission carried out two campaigns, in 1997 and 1999, respectively¹. A meticulous documentation was collected on the building materials and decorative patterns found, including wood, stucco and brick ornaments in the facades design. Moreover, all inscriptions discovered on the building facades and interiors were recorded.

A series of contingencies prevented further campaigns in the following years. Later on, the well-known war events that shook Yemen from 2011 until the more recent Red Sea crisis precluded the return of the Mission to Yemen. In 2022, Maria Vittoria Fontana, with the support of a diverse team, resumed the project dedicated to disseminating the accumulated research².

Mocha

The History of Mocha: A Key Port City in Trade

Mocha (also spelled Moka or al-Mukhā) is situated in the southern Tehama, to the east of an open roadstead, and is bordered to the north and south by a peninsula and a sand strip, both of which extend westward into the sea. This town was historically significant as a port city which served as a pivotal node within the intricate

¹ In the first official mission report, published in the *Annali dell'Orientale* (1998), M. Vittoria Fontana, who was the director of the Mission, synthesized the historical-urban development of the city through Western literary sources and introduced the building facades of the *intra-mænia* city. Of the latter Eugenio Galdieri produced a preliminary map and presented the main features of its urban layout. Roberta Giunta read the inscriptions found on some buildings and Lucia Caterina reported on a few fragments of Chinese porcelain collected from the Mocha shoreline.

² The work is currently in progress and is expected to be published by the end of the year. The author of this article focused on the chapters dedicated to Mocha and Loheia.

network of Red Sea commerce. According to local tradition, it would have been founded by Shaykh 'Alī ibn 'Umar al-Shādhilī in the first 15th century.

Primarily renowned as the principal maritime outlet for the esteemed coffee arabica, Mocha's name became synonymous with this highly sought-after product, thereby solidifying its position within global trade networks (Cornwall, 1720, p. 41). Although the precise origins of the name "Mocha" remain open to academic scrutiny, its emergence as a vital commercial hub is generally traced to the 15th century, coinciding with the rising international demand for coffee beans in various markets (Crichton, 1852, p. 462).

Mocha experienced its apogee of economic and political influence during the 17th and 18th centuries, serving as a key entrepôt in the extensive trade networks connecting India, the Red Sea region, the Indian Ocean and the broader Mediterranean sphere. Exchange of goods, especially textiles, spices, pharmaceuticals, and manufactured items, was facilitated in exchange for locally sourced goods like coffee, myrrh, and frankincense (Cornwall, 1720, p. 53). In order to benefit from this lucrative commerce, various European trading organizations, including English, Dutch, and French East India Companies, established in Mocha permanent trading posts or "factories" (Playfair, 1859, p. 21).

Throughout its history, Mocha's political environment was characterized by shifting allegiances and power dynamics among competing entities, encompassing, over time, the Imams of Sanaa, Turkish Ottoman administrators, and regional tribal sheikhs (Elwood, 1830, I, p. 344; Salt, 1809, p. 126). This shifting geopolitical context often impacted the stability of trade and commerce, with periods of relative economic prosperity alternating with episodes of conflict, elevated taxes, and external military actions. A significant example of these circumstances can be found in Elwood (1830, I, p. 68), who described a French naval bombardment, triggered by a dispute over the local governor's debts, which caused substantial damage, including a shell striking the main mosque.

Over the course of the 19th and 20th centuries, Mocha's significance as a leading international trading hub steadily diminished. The rise of Aden, following its establishment as a British protectorate in 1839, exerted a substantial impact on prevailing trade routes, consequently diminishing Mocha's economic vitality. Furthermore, internal conflicts, external military actions, and naval bombardments exerted a profoundly deleterious effect on the structural integrity and general condition of the city's built environment (Sherer, 1824, p. 363). Confronting these challenges, the vestiges of Mocha's former grandeur remain evident as Henri Lambert observed (Simonin, 1862, p. 66): "Moka, aujourd'hui en ruines, a été autrefois une ville de grande importance".

Mocha: Urban Morphology and Spatial Characteristics from Historical Accounts

Mocha, as described in various historical accounts, emerged as a fortified urban center with a complex and vibrant landscape, marked by a high density of multi-story buildings made from brick, stone, and coral, usually finished with a white plaster coating. Revett (1905, p. 355) referred to the city as a "playne" setting comprising approximately 6,000 houses, representing a dwelling type commonly recognized throughout the Red Sea region. The towering minarets and numerous mosques were mentioned, in particular that of Shaykh Shādhilī: "An elegant mosque was raised upon the tomb of Schech Schādeli, which stands without the walls of the present city" (Niebuhr, 1792, II, p. 399).

Notably, documentation indicates that stone was a key component in architectural designs, especially for buildings facing the sea, as evidenced by the observations of Niebuhr (1792, II, p. 397) and Parsons (1808, p. 269). Brick was another prevalent material, also observed in the 1980s by Bouagga: "briques cuites de terre rouge" (1988, p. 185), underscoring local craftsmanship and building traditions. Additionally, mud bricks were usually employed in the construction of modest dwellings, as noted by Valentia (1811, II, 329), indicating a diversity of architectural practices within the urban setting.

Parsons (1808, p. 268) further emphasized the town's visual appeal from maritime perspectives, observing that the "white and cheerful" buildings presented a striking aesthetic. The urban layout of Mocha incorporated a comprehensive network of fortifications, featuring defensive towers and imposing gateways strategically designed to protect against both maritime and terrestrial incursions (Parsons, 1808, p. 268). This fortified environment was further enriched by local resources in construction, notably coral. Sherer and Head corroborated this by noting that houses were "generally built of coral stone, and, in part, of sun-baked brick, whitewashed" (Sherer, 1824, p. 22). Head further specified that "some [buildings were] built of coral rock; others of brick, baked in the sun" (1833, p. 5). Von Heughlin stated that the buildings "ein sehr solides Lava-Fundament haben" (1860, p. 355), emphasizing the durability of the structures.

The prevalence of whitewashed plaster coatings as a finishing material was significant in creating a uniform aesthetic across various buildings. Parsons (1808, p. 269) supported this notion, while Playfair noted that "brick [was] plastered with lime" (1859, p. 22). Additionally, de Grandpré (1801, II, p. 228) remarked on the employment of "chaux de coquilles et de corail", linking shell and coral to the plastering process, thereby enhancing the visual appeal and integrity of the buildings.

Observations on the building exteriors varied: Jacob Peeters (c. 1686, p. 33) described Mocha as "une ville située à la Mer Rouge bien bâtie & provuée des Maisons très magnifiques". In 1712-16, Alexander Hamilton (1995, I, p. 43) emphasized the aesthetic appeal by stating "The buildings are lofty and make a much better appearance without than within". De Grandpré (1801, pp. 227-228) also noted the crenellations, while Bouagga (1988, p. 185) remarked on the city's "à étages multiples" buildings.

This vibrant urban environment supported a diverse populace, encompassing various ethnic and occupational groups, including Arab merchants, Somali laborers, Jewish artisans, and Indian mercantile communities (Cornwall, 1720, p. 53; Niebuhr, 1792, II, p. 400; Sherer, 1824, p. 23). The spatial organization reflected this diversity, featuring distinct zones dedicated to trade (a *sūq*, or marketplace), accommodations for merchants and pilgrims, and residential areas. The architecture of wealthy inhabitants was distinguished by incorporating sophisticated design elements, such as *musharabiyya* and intricately carved woodwork, which fulfilled both aesthetic and functional roles in regulating light and ventilation (Sherer, 1824, p. 22). Wooden windows and *roshans* featuring elaborate carvings were also noted by Elwood (1830, I, p. 347) and Crichton (1852, p. 466).

However, not all evaluations of Mocha's architectural character were favorable, as evidenced by de Grandpré: "Leur architecture est grossière et sans principes" (de Grandpré 1801, II, p. 227). This critique highlights the variability in perceptions of architectural quality and underscores the subjective nature of architectural assessment during this period.

The documentation collected by the IUO Mission in Mocha

The IUO Mission undertook survey activities in Mocha with the primary aim of documenting and evaluating the extant architectural heritage. However, the team confronted a significantly compromised reality, as the city was in a state of considerable disrepair. A comprehensive documentation of the existing buildings was gathered, revealing varying degrees of decay, ultimately leading to the identification of eighteen main buildings in the former *intra-* and *extra-mœnia* city: sixteen and two, respectively.

The most significant buildings that provide an analysis of structural, architectural, and decorative features include:

- Mocha Building A (fig. 1): This building, previously identified by Um (2009, p. 109) as *bayt al-Akhḍarī*, stood to the north-west of the al-Shādhilī mosque–tomb complex.

-Mocha Building C: By 1999, it served as the *Idāra mudīriyya al-Mukhā* (Mocha District Administrative Office). Some photos taken by Hermann Burchardt in 1909 reveal its earlier use as the Italian Consular Agency. Notably, this is one of only two buildings (along with Building A) identified by the IUO Mission that retained inscriptions.

-Mocha Building E (fig. 2): It was in a state of almost complete ruin but retained vestiges of its stuccoed interiors, offering valuable insights into past decorative practices and craftsmanship.

-Mocha Building J (fig. 3): Characterized by a considerable extension, this building featured a notable enclosure and highly organized interiors, which may indicate a residential and commercial function.

-Mocha Building H: Locally identified as the former governor's residence, or *hakūma*, it was parallel to the coastline, thereby holding significant importance in the city's maritime and administrative history.

The architectural analysis of Mocha buildings reveals an interaction between various building materials, highlighting both aesthetic preferences and the environmental challenges these buildings faced. The thorough documentation collected provides critical insights into the primary materials employed in the city, which encompassed both stone and fired red clay bricks. Renowned for their strength and thermal efficiency, the fired bricks were integral to construction and were covered with a layer of plaster that served as both a protective barrier and a decorative treatment, likely made from crushed madreporae and corals.

Most of the buildings had roughly squared dark grey stone plinths, which fulfilled several critical functions: providing a stable foundation and offering effective protection against moisture and humidity, essential factors given the region's climatic conditions and the seepage of brackish water from the subsoil. In some buildings, such as Building A, the stone plinths were enhanced and protruding, effectively counteracting the erosive forces of the wind.

The structures generally comprised one or two story above ground level, with the upper floors facilitating access to roof terraces, occasionally via small porticoes. The interiors frequently exhibited opulent stucco decorations, which predominantly featured geometric motifs embellishing the entire walls and enhanced architectural elements such as arches and niches. Although there has been some ornamental deterioration over time, the interior decorative patterns continue to signify a rich historical artistic tradition.

Loheia

The historical development of Loheia

Loheia is a coastal settlement located along the Yemeni Red Sea, historically recognized by various names, including Luhaiya, Loheie, Loheja, and Luheya. Its historical significance is documented in different sources, notably in the 15th-century writings of Ahmad b. Mājīd al-Najdī (1971), who referenced the town as a prominent coastal site in proximity to al-Sharja. By the early 16th century, historical records indicate that Loheia developed into a moderately sized village boasting a functional harbor, suggesting its role as a coastal trading center.

The strategic and developmental path of Loheia has been greatly impacted by its geographical setting. It occupies a sandy terrain that separates the Red Sea from the adjacent mountain ranges. The settlement is positioned on the southwestern side of a peninsula, at the northern extremity of a narrow and shallow bay that extends seaward through a small boat channel. Navigating this bay presented various challenges due to the presence of sand and coral banks (Moresby, Elwon, 1841, p. 23; Bury, 1915, p. 26), factors that may account for the limited capabilities of Loheia's harbor, as noted by Niebuhr (1792, I, p. 253).

Throughout its history, Loheia has functioned as a pivotal trading center in the region, and during the late 18th century, it was recognized as the most significant port in Arabia Felix (Hansen 1964, p. 207). However, by 1829, Major Charles Franklin Head observed that "Mocha has become the mart for a trade that more

properly belongs to Loheia, from its vicinity to the mountains where the coffee grows" (Head, 1833, p. 7). Coffee exports formed a fundamental component of the local economy, alongside the quarrying and trading of mineral salt (Head, 1833, p. 7). The population of Loheia included Hindoo merchants enriching its cosmopolitan atmosphere.

While such diversity fostered opportunities for trade and cultural exchange, the region was not exempt from social instability and political upheaval, leading to displacement and emigration among its inhabitants. Head noted that "At the time of my visit, a great part of the inhabitants had fled with their property to the Island of Camaran, in consequence of some marauding incursion of the Bedouins" (Head, 1833, p. 7), thereby underscoring the vulnerabilities faced by the city's population.

Loheia: Urban Morphology and Spatial Characteristics from Historical Accounts

Descriptions of the defenses of Loheia exhibit substantial variability within historical records, suggesting a complex and evolving understanding of its fortifications. Both Carsten Niebuhr during his stay in Loheia by the late 1762 and Major Charles Franklin Head in 1829 reported that Loheia was unwallled. Niebuhr specifically noted, "Loheia, although without walls, is not entirely defenseless. Twelve towers, guarded by soldiers, stand at equal intervals around it" (Niebuhr, 1792, I, p. 254; see also Head, 1833, p. 7). Contradictions arose from the observations made in 1831 by explorers Robert Moresby and Thomas Elwon, who asserted that Loheia was "surrounded by a wall with several forts and towers adjacent" (Moresby, Elwon, 1841, p. 23). These conflicting descriptions challenge contemporary perceptions of the town's defenses and imply a potential evolution or alteration of its fortifications over time. Likely, walls did not encompass the entirety of the town but enclosed specific areas, such as the bustling bazaar and some dwellings. Indeed, Head documented that the "bazaar and cattle markets are enclosed within a well-constructed wall, flanked by towers" (Head, 1833, p. 7), while Combes and Tamisier recorded a "rempart en brique" that enclosed "la moitié de ses maisons," indicating a more intricate and segmented defensive structure (Combes, Tamisier, 1838, p. 44).

Niebuhr's illustration, titled "Kriegsübungen der Araber in Yemen – Exercices militaires des Arabes d'Yemen" (Niebuhr, 1772, Tab. XVI), may depict these partial fortifications, thereby reflecting the town's defensive architecture during that period.

As the most Tehama cities, Loheia presented an urban landscape including both masonry houses and traditional huts, each reflective of the socioeconomic conditions and cultural practices of its inhabitants. A detailed description of the huts was provided by Niebuhr who referred to these structures as constituting the "greater part" of the residential architecture, noting that they were constructed in a manner common among the Arab population. Specifically, Niebuhr described the huts as having walls made of mud mixed with dung, with roofs thatched using a type of grass prevalent in the region. He observed the interior of these huts where a range of beds made of straw were found and added that, despite their simplicity, these accommodations allowed for a reasonable degree of comfort, enabling individuals to either sit or lie down comfortably. Furthermore, Niebuhr remarked on the lack of division within these huts, which were generally compact and rarely featured openings; the entrance was typically a simple straw mat (Niebuhr, 1792, I, p. 255).

He also mentioned masonry houses (Niebuhr 1792, I, p. 255; see also Combes, Tamisier, 1835, I, p. 44). However, in 1831, Moresby and Elwon noted that "Loheia town is built of coral and has some large houses" (Moresby, Elwon, 1841, p. 23). Furthermore, Niebuhr described the process of lime preparation in the vicinity, which involved the calcination of coral obtained from the sea, exposed to the elements without the use of a furnace. Intriguingly, he noted that even in larger masses of coral, oblong shells were often found,

sometimes containing living organisms, reflecting the rich marine biodiversity of the region (Niebuhr, 1792, I, p. 256).

Moreover, Combes and Tamsier observed that the dwellings “les unes en pierre, d’autres en chaume, et plusieurs sont toutes accouplées indistinctement, sans que ce pêle-mêle produise un effet désagréable” (Combes, Tamsier, 1838, I, p. 44).

By 1917, the architectural landscape of Loheia shifted considerably, with only a few masonry houses remaining. Most of the town’s estimated 5,000 inhabitants were reported to reside in mud-brick huts, signifying a regression toward simpler construction methods (*Western Arabia*, 1946, p. 546). While literature does not provide extensive details on masonry houses, Combes and Tamsier praised their aesthetics in 1835, noting that within the center city there was a building featuring musharabiyya work, reminiscent of Alexandrian style. They remarked on the variety and originality present in Loheia, suggesting a distinct cultural identity that contributed to the belief that paradise was located in Yemen (Combes, Tamsier, 1838, I, p. 44).

Niebuhr also offered commendations for the interiors of masonry houses, illustrating his own lodging experience: “The house assigned us for a lodging was built in the Eastern fashion, with a square court in the middle. There was not one well-furnished room in it; yet it consisted of several distinct apartments, into which the entrance was through an open gallery, which extended all around it. This lodging was far from being elegant, in comparison with the splendid inns in Europe; but in Arabia, it was both elegant and commodious” (Niebuhr, 1792, I, p. 251).

The Documentation Collected by the IUO Mission in Loheia

The built environment of Loheia, as documented by the IUO Mission in the 1990s, reveals a historically significant structurally compromised urban landscape. Despite the limited temporal scope of the investigations, these efforts successfully identified a corpus of 59 buildings or their discernible remnants. Their predominantly uninhabited condition starkly signifies the town’s decline, especially in the aftermath of the upheavals wrought by World War I (Forbes, 1923).

Despite the pervasive deterioration, the existing architectural components offer invaluable insights into the urban fabric of Loheia and the distinctive characteristics of individual buildings. The visible damage was significantly more pronounced than that observed in Mocha, as indicated by the loss of structural integrity, degradation of decorative surfaces, and the partial or complete collapse of entire sections of buildings.

The documented buildings present a more complex architectural narrative compared to those documented in Mocha. This complexity includes adjacent structures enclosed by a unique low enclosure featuring a dividing wall between two courtyards and distinguished by two distinct portals, as well as individual buildings, some of which extend over two stories.

Among the most noteworthy structures that provide meaningful insights are the following:

Loheia Buildings 14 (fig. 4) and 50 (fig. 5): They exemplify significant instances of residential architecture in Loheia and, despite their state of partial ruin, display a more intricate layout, comprising multiple housing units, with each building consisting of up to three distinct sections. Both structures are substantial in size and are acknowledged as important merchants’ houses. Building 14 was identified as *bayt ‘Abd al-‘Udūd* (Bonnenfant, Gentileau, 1994), whereas Building 50 distinguishes itself within Loheia’s architectural landscape due to its unique design incorporating two small domes within one of its units. A comparative analysis of a Steffen’s photograph from the 1970s (Steffen, 1979, pl. 26c), when juxtaposed with more recent images from the IUO Mission, underscores the progressive deterioration of the building. The presence of the domes suggests a sophisticated architectural design.

Loheia Buildings 33 and 56 (fig. 6): These adjoining buildings are notable for their shared portico and distinctive enclosure, which exemplify a particular approach to urban planning and the promotion of social interaction. This enclosure, characterized by a dividing wall and two separate portals, reflects a sophisticated spatial organization that may delineate public and private spheres or bifurcate functions within the complex. The portico of Loheia Building 33, divided into two halves, suggests the creation of a multi-functional space that could have served various purposes, including providing shade, facilitating trade, or fostering communal gatherings.

Loheia Building 27 (fig. 7): It is particularly noteworthy as it exemplifies a fortified architectural feature, distinguished by rounded enclosures with small openings resembling a local fortified wall with an inherently defensive nature. The latter could be a relevant example of the 'fortifications' described in Head's account. In the 1990s, there were 25 other buildings exhibiting traces of surrounding walls.

In Loheia, stone emerges as the primary construction material due to the region's proximity to mountains, which facilitated the extraction of this raw resource. The stones were coated with a whitewashed plaster composed primarily of lime derived from madrepores.

The construction techniques exhibit considerable variation, predominantly involving unworked stones. Certain layers consist of thin, irregular stone slabs, supplemented by the occasional incorporation of wooden beams of varying lengths. Conversely, the use of shaped stones is relatively uncommon. In addition, signs of reconstruction and expansion were evident, as indicated by sections of some buildings made of cement blocks bonded with cement mortar. Stone was employed not only for structural walls but also for pillars, which were subsequently plastered.

A distinct feature is the use of white coral, specifically the calcareous skeletons of dead coral, as a building material.

Trilobed arches, serving as markers of a cultural heritage, were particularly prominent in Loheia's architectural landscape, with significant examples found in Buildings 6 and 13. Their presence highlights regional architectural styles that were absent in neighboring cities such as Hodeida and Mocha, while being characteristic of other Red Sea Style towns. This feature can be traced back to an ancient lineage extending through the Ottoman period and is distinguished by notable examples of Mamluk architecture.

As observed in Mocha, the interiors of Loheia buildings were plastered and adorned with elaborate stucco decorations. Ceilings generally incorporated wooden coverings, which usually included painted embellishments. A noteworthy example is the coffered ceiling of Building 17, which features intricate geometric patterns in a diverse array of colors.

Conclusion and perspectives

The comparative analysis of Mocha and Loheia elucidates both the shared historical significance and the distinctive architectural identities of these two pivotal port cities in Yemen. Mocha, renowned for its status as a major maritime outlet for the coffee trade, exemplifies a city that thrived through its robust integration into expansive trade networks. Its architectural landscape, characterized by multi-story buildings and intricate decorative elements, reflects a rich cultural mosaic that evolved over time. In contrast, Loheia presents a unique narrative, defined by its strategic geographical positioning and the diverse materials employed in its construction. The architectural remnants of Loheia not only showcase influences of local craftsmanship but also highlight the adaptations undertaken in response to environmental challenges and social dynamics.

The data collected by the IUO Mission document the varied building practices and urban planning strategies that emerged within the differing economic and cultural contexts of each city. This is especially noteworthy considering the subsequent limitations to exhaustive surveys at these locations over the years. The

documentation provides a valuable basis for further analysis of the different architectural solutions, providing comparison with similar examples from the same period in the surrounding area. Consequently, while this work is a preliminary exploration, it shed light on key architectural factors of both cities and lays the groundwork for future studies. Such endeavors could deepen our understanding of their architectural evolution and cultural significance in the broader context of Red Sea trade and heritage.

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Fig. 1 Left: Mocha Building A. Left: it was close to al-Shādhilī mosque–tomb complex, photo by E. Galdieri (© IUO Mission to Hodeida, 1997). Right: Mocha Building A, rear view, late 1950s (after Gerlach [1960]: illustration on p. [92], below).



Fig. 2 Mocha Building E, views of its interior, photo by E. Galdieri (© IUO Mission to Hodeida, 1997).



Fig. 3 Mocha Building J, the south-east corner of the enclosure, photo by E. Galdieri (© IUO Mission to Hodeida, 1999).



Fig. 4 Loheia Building 14 photo by M.V. Fontana (© IUO Mission to Hodeida, 1997).



Fig. 5 Loheia Building 50. Left: in the 1970s (after Steffen 1979: pl. 26c). Right: in the 1990s, photo by E. Galdieri (© IUO Mission to Hodeida, 1999).



Fig. 6. Adjoining Loheia Buildings 33 and 56, photo by E. Galdieri (© IUO Mission to Hodeida, 1997).



Fig. 7 Loheia Building 27, the round enclosure, photo by M.V. Fontana (© IUO Mission to Hodeida, 1997).