

The *ḥammām* as a Cultural Heritage: Comparative Perspectives on Architectural Terminology and Cultural Practices in the Mediterranean and Central Asian Contexts of Tlemcen and Bukhara

Le *ḥammām* comme patrimoine culturel : perspectives comparatives sur la terminologie architecturale et les pratiques culturelles dans les contextes méditerranéen et d'Asie centrale de Tlemcen et de Boukhara

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Abstract:

This article examines the *ḥammām* as both an architectural institution and a space of cultural memory through a comparative study of bathhouses in Tlemcen (Algeria) and Bukhara (Uzbekistan). While previous research has primarily focused on construction techniques, hydraulic systems, urban integration, and typological classifications, less attention has been paid to how architectural terminology, spatial experience, and cultural practices interact in the production and transmission of collective memory. The central problem guiding this research is how the architectural terms related to the bathhouse reflect distinct conceptions of space. and how this terminology contributes to the preservation of cultural memory within Islamic societies?

The study adopts a qualitative interdisciplinary methodology combining architectural history, phenomenology, lexical analysis, and ethnographic inquiry. The research corpus comprises historical descriptions, endowment documents, architectural surveys, archeological studies, historical dictionaries, dialect vocabularies, ethnographic descriptions, and scholarly works on Islamic bathhouses in the Mediterranean and Central Asian regions. The ethnographic dimension of the study draws on oral testimonies and vernacular narratives related to bathing practices, popular beliefs, ritual traditions and collective memory associated with the traditional bathhouse.

The comparative analysis reveals that, despite geographical distance and regional variations, the bathhouses of Tlemcen and Bukhara share a common spatial logic structured around a progressive

sequence of transitional spaces linking cold, warm, and hot spaces. Movement through these spaces creates a gradual transformation of bodily and sensory experience, while architectural elements such as domes, filtered light, water basins, and intermediary thresholds contribute to a symbolic process of purification as a fluid and dynamic environment in which circulation, visibility, and ritual practices are as important as architecture itself.

Beyond its physical organization, the ḥammām emerges as a significant space of cultural memory. Ritual practices, oral narratives, popular beliefs, life-cycle ceremonies, and vernacular language preserve and transmit collective memory across generations. In both Tlemcen and Bukhara, the bathhouses operate as a liminal space mediating multiple oppositions, including purity and impurity, private and collective life, everyday practice and sacred symbolism. The study argues that architectural vocabulary constitutes an integral component of intangible cultural heritage because it encodes local understandings of space, social relations, and embodied experience. By integrating spatial analysis with linguistic anthropology and memory studies, this research highlights the importance of preserving not only historic bathhouse structures but also the linguistic and cultural traditions through which their meanings continue to be interpreted, transmitted, and remembered.

Keywords: intangible cultural heritage, spatial epistemology, vernacular language, comparative study.

Résumé :

Cet article examine le ḥammām à la fois comme institution architecturale et comme espace de mémoire culturelle à travers une étude comparative des bains traditionnels de Tlemcen (Algérie) et de Boukhara (Ouzbékistan). Alors que les recherches antérieures se sont principalement concentrées sur les techniques de construction, les systèmes hydrauliques, l'intégration urbaine et les classifications typologiques, peu d'études se sont intéressées aux interactions entre terminologie architecturale, expérience spatiale et pratiques culturelles dans les processus de production et de transmission de la mémoire collective. La problématique centrale de cette recherche porte sur la manière dont les termes architecturaux liés au ḥammām traduisent des conceptions particulières de l'espace, ainsi que sur le rôle de cette terminologie dans la préservation de la mémoire culturelle au sein des sociétés islamiques.

L'étude adopte une méthodologie qualitative et interdisciplinaire combinant histoire de l'architecture, phénoménologie, analyse lexicale et enquête ethnographique. Le corpus de recherche comprend des descriptions historiques, des actes de waqf, des relevés architecturaux, des études archéologiques, des dictionnaires historiques, des vocabulaires dialectaux, et des descriptions ethnographiques, ainsi que des travaux scientifiques consacrés aux bains islamiques dans les régions méditerranéennes et centre-asiatique. La dimension ethnographique s'appuie également sur des témoignages oraux et des récits vernaculaires relatifs aux pratiques balnéaires, aux croyances populaires, aux traditions rituelles et à la mémoire collective associées au bain traditionnel.

L'analyse comparative révèle que ; malgré la distance géographique et les variations régionales, les bains de Tlemcen et de Boukhara partagent une logique spatiale commune fondée sur une progression graduelle d'espaces transitionnels reliant les zones froide, tièdes, et chaudes. La circulation à travers ces espaces produit une transformation progressive de l'expérience corporelle et sensorielle, tandis que des éléments architecturaux tels que les coupes, la lumière filtrée, les bassins d'eau et les seuils intermédiaires participent à un processus symbolique de purification. Le ḥammām

apparaît ainsi comme un environnement fluide et dynamique dans lequel la circulation, la visibilité et les pratiques rituelle jouent un rôle aussi important que la forme architecturale elle-même.

Au-delà de son organisation matérielle, le *ḥammām* se révèle être un espace majeur de mémoire culturelle. Les pratiques rituelles, les récits oraux, les croyances populaires, les cérémonies liées aux cycles de vie et la langue vernaculaire contribuent à préserver et à transmettre la mémoire collective à travers des générations. À Tlemcen comme à Boukhara, le bain fonctionne comme un espace liminal médiatisant plusieurs oppositions : pureté et impureté, sphère privée et vie collective, pratique quotidienne et symbolisme sacré. L'étude soutient que le vocabulaire architectural constitue une composante essentielle du patrimoine culturel immatériel dans la mesure où il encode des représentations locales de l'espace, des relations sociales et de l'expérience corporelle. En intégrant l'analyse spatiale et l'anthropologie linguistique, cette recherche souligne l'importance de préserver non seulement les structures historiques des bains publics, mais également les traditions linguistiques et culturelles à travers lesquelles leurs significations continuent d'être interprétées, transmises, et mémorisées.

Mots-clés : patrimoine culturel immatériel ; terminologie vernaculaire ; épistémologie de l'espace ; étude comparative.

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Introduction:

The *ḥammām* is one of the most characteristic institutions of Islamic urban culture. Besides its hygienic purpose, it was a social, ritual and architectural space, embedded in the religious and civic life of Islamic cities. Present across the Mediterranean, the Mashriq, and Central Asia, bathhouses occupied an important position within urban life and reflected broader conceptions of purity, sociability, and spatial organization.

Medieval urban baths were vital urban establishments in the medieval medinas of the Mediterranean, Mashriq, and Central Asia regions. were located close to the mosques, markets, potters' workshops, tanneries, and residential areas of many medieval cities, reflecting their dual religious and social function (ABOUKHATER, 2014: 68); (AL-HARITHY, 2016: 9) (PETEET, 2024: 36), and they were established as waqf institutions (RAYMOND, 1994: 12).

Present scholarship has primarily examined Islamic bathhouses from historical, architectural, archeological, social infrastructure (AFSAR, 2003: 644) (SARMENTO & KAZEMI, 2014: 138–156) and technical perspectives (DAWKES & DOW, 2021: 87–110) (KRAKOUCH & et.All, 2020: 188-194). Previous studies have focused on typology, urban integration, construction techniques, hydraulic systems, ornamentation (BAITANAYEV & et.all, 2023: 114-130) (KHUDAIKULOVA, 2025: 68-74), environmental performance and conservation issues. (CARLIER, 2000: 1303-1333) (BOUILLOT, 2008: 122-135) (BOURAOU, 2008: 80-92) (SIBLEY & JACKSON, 2012: 155-170) (OREHOUNIG & MAHDAVI, 2011: 2442-2448).

Although previous studies have highlighted the typological characteristics of Islam bathhouses, limited attention has been paid to their phenomenological and symbolic dimensions as spaces of transition, perception, and cultural meaning (SIBLEY, 2008: 10-16) (VRIES, 1998: 220-226) (VILAN & ROUJON, 2024: 352-355).

This study is based on a multidisciplinary theoretical framework that combines phenomenology, cultural memory studies, and linguistic anthropology. Inspired by the works of Bachelard (1957), Norberg-Schulz (1980), Nora (1984), and Assmann (1992), it examines the *ḥammām* as a lived space, a social institution, and a site of cultural memory. The theoretical foundations of this approach are developed in the following section.

The central question guiding this study is: how does the architectural terminology of the *ḥammām* in Tlemcen and Bukhara reflect distinct spatial philosophies, and how does this terminology contribute to the preservation of cultural memory? More specifically, the study investigates how vernacular designations of bathhouse spaces encode perceptions of privacy, transition, purification, and social interaction.

1. The hammam: Space, Memory, and Cultural Meaning

From a phenomenological perspective, the *ḥammām* is a space of mediated oppositions. Its spatial sequence organizes movement between cold and heat, visibility and enclosure, while its fundamental elements -water and fire- symbolize complementary forces of purification and transformation. As Geert Jan van Gelder suggests, the bathhouse exists “between heaven and hell” and combine more opposites, paradoxes and oxymora than any other space in literary imagination, where pleasure and pain, well-being and discomfort, coexist within a carefully orchestrated experience sensory (VAN GELDER, 2008: 9).

The phenomenological dimension of space is inspired by Gaston Bachelard (1957), who argued that inhabited spaces are not neutral containers but repositories of imagination, memory, and lived experience. Bachelard, in “*The Poetics of Space*”, demonstrated how intimate spaces become charged with symbolic meaning through everyday practices and emotional attachment (BACHELARD, 2012: 58-73). This is especially true of the terminology of the hammam, where spatial units are defined not only in terms of their physical properties but also in terms of the experiences and social meanings with which they are imbued.

Christian Norberg-Schulz (1980) offers a complementary approach with his concept of *genius loci*, which emphasizes the spirit of place and the relationship between architectural form and human dwelling. For Norberg-Schulz, architecture provides a tangible expression of cultural values, allowing individuals to orient themselves within meaningful settings (NORBERG-SCHULZ, 1980: 58-170). The hammam can thus be read as a site where architectural order, sensory experience, and cultural identity intersect.

The social production of space is further illuminated by the anthropological work of Pierre Bourdieu (1970) on “the Kabyle house”. Bourdieu demonstrated that domestic spaces embody social classifications and cultural oppositions, such as public and private, masculine and feminine, and pure and impure (BOURDIEU, 1970: 739-758). His analysis suggests that architectural spaces operate as material expressions of social structures. Applied to the hammam, this perspective highlights how spatial divisions, circulation patterns, and gendered practices reflect broader cultural systems and social norms. As Jan Assmann (1992) notes, cultural memory is stored in material forms, rituals, institutions, and symbolic practices that enable societies to transmit collective identities between generations (ASSMANN, 2011: 15).

This concept may be further developed through Pierre Nora’s (1984) notion of “sites of memory”. He argues that memory becomes crystallized in specific places, objects, and practices that

acquire symbolic significance for a community (NORA, 1984: 163). The hammam preserves layers of collective experience embedded in architecture, terminology, oral traditions, rituals of purification, and social practices. Through its enduring presence in the urban fabric of Tlemcen and Bukhara, the bathhouse serves as a repository of communal memory and cultural continuity.

2. Methodology

This paper adopts a qualitative interdisciplinary approach combining architectural history, lexical analysis and ethnographic inquiry to study the spatial organization, terminology and cultural practices of the traditional bathhouse of Tlemcen (Algeria) and Bukhara (Uzbekistan).

2.1. Architectural-Historical Analysis

The architectural part of the study is based on the examination of historical and contemporary sources on the development of hammam architecture in the regions of the Mediterranean and Central Asia. The corpus includes travel narratives, waqf documents, architectural surveys, and academic articles on Islamic bathhouses. Particular attention was devoted to the spatial organization of the hammams, the circulation patterns, thermal sequences, service areas, and relationships with the surrounding urban fabric.

For the baths of Tlemcen, the analysis is based on architectural and historical studies of the local bathhouses, including Hammam *al-Sabbaghin* and other present examples. The corpus for Bukhara consists of historical descriptions, waqf documents, archaeological studies and modern architectural documentation of medieval and early modern bathhouses. Comparative architectural analysis was applied to identify similarities and differences in spatial structure, terminology and functional organization.

2.2. Lexical and Terminological Analysis

The lexical component examines the terminology used to designate bathhouse spaces and practices. The corpus consists of dialect vocabularies, architectural glossaries, historical dictionaries, and ethnographical descriptions. Particular attention is given to the Arabic lexical *bayt* in Tlemcen and the Persian suffix *-khāna* in Bukhara. A qualitative semantic analysis was conducted to explore how linguistic categories reflect distinct conceptions of architectural space and social experience.

2.3. Ethnographic Component

The ethnographic material consists of a semi-structured interview conducted in February 2024 with a female informant 72 years old a female informant from of the village of El Eubed (Tlemcen), a regular user of the traditional bath. The interview, conducted in the Tlemcen Arabic dialect and lasted approximately 75 minutes. It focused on traditional bathing practices, local beliefs, oral traditions, and collective memory associated with the hammam. The interview was audio recorded with consent, manually transcribed, translated into English¹, and subjected to thematic qualitative analysis. The oral narrative was then confronted with historical, ethnographic and anthropological sources in order to situate its symbolic meaning within the wider cultural traditions of the Maghreb.

2.4. Limitations

¹ . The interview was conducted originally in the Tlemcen Arabic dialect and translated into English with the assistance of ChatGPT (OpenAI). The translation was subsequently reviewed and edited by the authors and by a professor of English to ensure accuracy and preservation of the original meaning.

The study is based on documented terminology rather than a large contemporary linguistic corpus and focuses exclusively on the case studies of Tlemcen and Bukhara. The ethnographic evidence is interpretative rather than statistically representative. Nevertheless, the interdisciplinary approach provides a useful framework for examining the relationship between architecture, language, and cultural memory.

3. Mediterranean Hammām Typology (Tlemcen Context)

3.1. Historical Presence and Urban Integration

The Public bathhouses constituted an essential component of Tlemcen's urban fabric. Lexically, the Arabic word *ḥammām*, derived from the root “*ḥamm*,” “hot water” (DAHINA, 1984: 492), (BOUWECHMA, 2014: 150), and refers to the practice of bathing in heated water and reflects the close association between bodily purification and Islamic conceptions of personal cleanliness like bathing and *wuḍū'* (ablution) (BOUHDEIBA, 2001: 35). Therefore, bathhouses were often built near mosques, markets, potters' workshops, tanneries, communal ovens, and residential areas and were used for health, religious, and social purposes.

Historical sources attest to the abundance and importance of bathhouses in medieval Tlemcen. Among the best known examples are *Ḥammām al-ʿĀliyya*, which stands next to *Bab al-Jadid*, praised by the Andalusian author Abu ʿAbdullah al-ʿAbdārī for its beauty and cleanliness (al-ʿAbdārī, 1968: 11) while Leo Africanus, the fifteenth-century scholar and traveler, mentioned that Tlemcen's bathhouses had less water than those in Fez (Al-Wazzan, wasf ifriqiya 1983: 20). Other bathhouses included *Ḥammām al-Sabbāghīn* (dyers' bath) associated with local scholarly and religious figures as Sufi shaykh Aḥmad ibn al-Ḥasan al-Ghumārī often visited the *ḥammām* and preferred it to other *ḥammāms* in the city (MARÇAIS & MARÇAIS, 1903: 162), and *Ḥammām Sidi Boumediene*, located in the neighborhood of al-ʿUbbād close to the mausoleum of the celebrated Sufi scholar Sidi Boumediene. Documentary evidence from endowment *waqf* deeds also confirms the integration of bathhouses into larger religious and educational complex, understanding their economic and institutional importance. (MARÇAIS, 1950: 52).

3.2. The Structure and Spaces

3.2.1. The Cold Space (*Frigidarium*): Entrance and Social Preparation Area

The first spatial unit of the Tlemcen bathhouse is the cold room, locally known as *bīt al-bārid*, *bīt al-bārda*, or *al-barānī* (SEFFADJ, 2009: 157-170), rest rooms, changing room, and vestibule (SELKA & all., 2019: 49-59) (MARÇAIS & MARÇAIS, 1903: 163), corresponding to the Roman *frigidarium* or *cella frigidaria* (RACINET, 1888: 239). Located at the entrance, it functions as a transitional area where bathers prepare for the bathing process by changing clothes before going into the warmer parts of the bath (CHEDRI MAAMAR, 2024: 222-209). Beyond this practical function, the space also facilitates social interaction and informal exchanges among users (BOUWECHMA, 2014: 143-166).

3.2.2. The Warm Space (*Tepidarium*): Transitional and Resting Area

The intermediate room, corresponding to the Roman *tepidarium* (RACINET, 1888: 240), is known in Tlemcen by several vernacular names, including *Bīt al-wastānī*, *Bīt al-Wastiyan* and *Bīt al-dāfia* (LAEIBI, 2007: 173) (GUENAOU, 2022: 436-467) (SEFFADJ, 2009: 157-170). Situated between cold and hot rooms, it functions as a transitional space that allows for gradual thermal

adaptation before entering the hot room, thus ensuring body confort and regulating the bathing process (BOUILLOT, 2008: 122-135).

From an architectural standpoint, the room is frequently organised around a central area, decorated with stucco ornamentation and, in some cases, with a basin or fountain (SEFFADJ, 2009: 157-170) (SELKA & all., 2019: 49-59) (BLAIR & BLOOM, 1996: 127). Fixed banhes (*al-dakkāna*, pl. *dakkānāt*)² placed around along the walls provide spaces for rest and social interaction (MOUSSAOUI, 2025: 266-298). Sanitary annexes, also known as *Bīt errāha*, *Bīt al-mā'*, *Shīshma* or *al manīf* add to the functional complexity of the bathhouse (GUENAOU, 2022: 436–467).

From terminologically speaking, the different names given to this room highlight its intermediate nature. These terms define a place through its location and sensory qualities, reflecting a spatial vocabulary rooted in bodily experience and gradual transition. Thus, the warm room represents a threshold between the states of inside and outside, reinforcing the symbolic logic that structures the bathhouse sequence.

3.2.3. The Hot Room (*Caldarium*) and Its Architectural and Functional Components

The third and final part of a ḥammām is the hot room. It is also known as *bīt al-skḥūn* or *al-skḥūna* (SEFFADJ, 2009: 157-170) and the Roman caldarium (MARÇAIS & MARÇAIS, 1903: 165). This place is a thermal centre of the bath, where bathing, sweating, washing, and ritual purification take place. Al-Wasta, which means "the hottest section of the heated room," is usually called by European scholars the steam or sweating room (GUENAOU, 2022: 436–467).

The hot room contains two principal containers of water, locally called *Bormat al-Skhūn* (hot water basin) and *Sahrīj al-Bārid* (cold water basin), which are mixed depending on individual needs during bathing (BENGHABRIT REMAOUN & ADEL, 2014: 59-82). People usually collect the water in a small wooden tub, which they call *al-qobb*³ (BOUWECHMA, 2014: 143-166). The furnace, called *al-Furnāq*, located in a service area behind heated rooms, is responsible for both water heating and thermal regulation (BOUILLOT, 2008: 122-135) (MARÇAIS & MARÇAIS, 1903: 168). The same fire that heated the bath was also used to cook food for weddings and big community events. The term *al-ṭayyāba*⁴, which means "the woman who scrubs and massages the bodies of women", comes from this practice (CARLIER, 2000: 1303-1333). The presence of auxiliary spaces like *Bīt al-Bnāt* "the girls' room" *Bīt al-'Arāyisāt* further reveals concerns for privacy, modesty, and gendered practices in the bathing area (BENGHABRIT REMAOUN & ADEL, 2014: 59-82) (BOUHDEIBA, 2001: 238). The hot room was equipped with a traditional self-closing door mechanism called *al-*

². The term *al-dikkāna* (الدِّكَّانَةُ) refers to raised bench or platform used for sitting. Derived from the triliteral Arabic root *d-k-n* (دَكَنَ), it designates a feature commonly found in traditional architecture, including the ḥammām, where bathers rest during the bathing process. It may also denote a slightly elevated flat surface, sometimes described as a *mistaba* (مِسْطَبَةٌ). (Rizq, 2000: 109).

³. *Qubb* (قُبَّة) derives from the Arabic triliteral root q-b-b (ق ب ب) and from the verb *qabba* (قَبَّ), which signifies to gather or draw the edges of an object together so that they form a rounded or domed structure. <https://www.almaany.com/ar/dict/ar-ar>

⁴. The bathhouse attendants were differentiated by gender and function: female attendants were called *ṭayyāba*, while male attendants were known as *dallāk* or *kayyās* in the local dialect of Tlemen. Similar to the Roman *Tractatores*, they specialized in massage and body scrubbing typically using a tool /scrubber known as the *kāsa* or *mḥakka* and *strigiles* for Romans (GUENAOU, 2022: 436–467) (Racinet, Le costume historique, 1888: 240).

thaqāla or *al-Rūmmāna* which means "the pomegranate" to preserve heat and steam, illustrating the functional efficiency of traditional ḥammām (BOUILLOT, 2008: 122-135).

From a terminological approach, expressions such as *bīt al-skhūn*, *Bormat al-Skhūn*, and *Sahrīj al-Bārid* illustrate a vocabulary structured around thermal experience and bodily practice. As in cold and warm rooms, the recurrent use of *bayt*, emphasizes a relational conception of space rooted in lived experience, reinforcing the cultural and mnemonic dimensions of bathhouses architecture.

4. Central Asian Ḥammām Typology (Bukhara Context)

4.1. Historical Presence of Ḥammām in the Urban Fabric of Bukhara

Travel accounts provide valuable evidence of the importance of bathhouses throughout the Islamic world. During his journeys in the fourteenth century, Ibn Battuta visited both Tlemcen later Central Asian cities such as Bukhara and Samarkand, noting the persistence of urban institutions and cultural traditions despite the disruptions caused by the Mongol invasions (Ibn Battuta, 2004: 118).

Among the most famous bathhouse of Central Asia was the bath ordered to be built by the Timurid ruler Ulugh Bek (1394–1449) in Samarkand. Its reputation is reflected in the Babunama, where of Zahirud-Din Muhammad Babur described the establishment, known as “Mirza’s Bath”, as exceptionally refined structure distinguished by its architectural quality and stone decoration. He remarked that no comparable bathhouse existed elsewhere in Khurasan and Samarkand. (Babur, 2002: 58)

The importance of bathhouses in Central Asian urban culture is documented in both literary and historical sources. The 11th-century Qabus Nama describes the bathhouse as one of the most beneficial institutions created by human society and provides practical guidance on bathing practices (Ibn Iskandar, 1951: 78). Likewise, Narshakhi’s (899–959) History of Bukhara *Tārīkh-i Bukhārā* attests to the existence of public baths associated with the city’s rulers as Karakhanid, indicating the long standing integration of bathing facilities into urban life.

Much later, in the 19th century, Sir Alexander Burnes (1805-1841), a British explorer and diplomat who visited Bukhara (whose daring 1832–1833 journey through Central Asia), in his 1834 bestseller, described Bukhara’s baths as spacious domed structures composed of interconnected heated rooms maintained at different temperatures, emphasizing both their architectural sophistication and their social importance (BURNES, 1834: 288-289). His observations were later enhanced by Parfenov–Fenin Plan, 1910”, which recorded eighteen bathhouses distributed throughout the city. (GLAUDINOV & all, 2004: 85).

4.2. The structure and Space of the Bukhara Bathhouse

Waqf (endowment)⁵ records from the 16th and 17th centuries provide valuable information about organization of bathhouses in Bukhara. These sources described a coherent spatial system composed of functionally differentiated spaces, including changing room *jamakhane*, hot room (*garmkhane*), a warm room (*shir-garmkhane*), a cold room *Khunukkhane* (*khunuk-khaneh*), furnaces *gulkhan*, water facilities and services area associated with fuel storage *ja-yi khas* and waste disposal *mitrakh ramad*. Bathing practices were closely associated with specialized equipment and personal. Cleansing was commonly achieved through steaming, exfoliation, and massage using a scrubbing

tool known as *khaltacha*, while attendants *Khaltadors* performed therapeutic and hygienic services (DJURAEVA, 1998: 93).

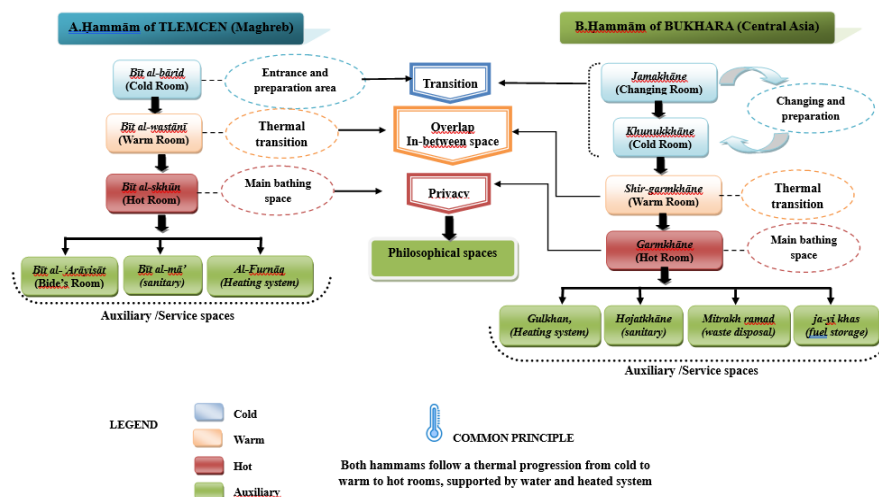
The recurrent use of Persian suffix-*khāna* in terms such as *garmkhane*, *shir-garmkhane*, and *jamakhane* reflects a classificatory logic that identifies places by their specific functions, providing an important contrast with the empirical terminology observed in the bathhouse of Tlemcen.

5. Results of the Comparative Analysis

One of the most significant aspects of hammam architecture is the transformation of physical space into symbolic experience. It can be understood as a fluid and dynamic architectural environment whose meaning emerges through movement and sensory experience. The comparative analysis demonstrates that both Mediterranean and Central Asia bathhouses follows a common spatial grammar based on a gradual progression from entrance, intermediate, and heated spaces, domed ceilings with filtered light, water features (Fountains/basins), and transitional thresholds to represent purification, transformation from the profane to the sacred/private realm, water as a symbol of renewal, and communal harmony, each region adapts these motifs based on local climate, social structure, religious practices and historical layering. (SAKIR, 2025: 107-117) (FIRDEVIS & ISMAILOGLU, 2022: 232–244) (KOLB & DUMREIHER, 2008: 17-28) (CASTAGLIA, 2008: 307–322).

The notion of transitional space plays an important role in the philosophical interpretation of bathhouse architecture. Transitional space act as thresholds the mediate between two distinct spatial conditions: the exterior and interior, the cold and the heated, the public and the semi-private (GHASEMI, 2018: 41-63) (ERGIN, 2011: 55). Architectural theorists such as Christian Norberg - Schulz have described such thresholds as essential elements in the phenomenology of architecture, since they mark the passage between different experiential realms (NORBERG-SCHULZ, 1980: 106). The findings reveal that traditional Islamic bathhouses are shaped by spatial sequences, circulation patterns, and controlled visibility rather than by functional rooms alone. This supports the interpretation of the *ḥammām* as a fluid and dynamic space, where movement, transition, and ritual practices structure the user's experience.

Figure 1: Comparative spatial sequence of Tlemcen and Bukhara's bathhouses



Source: Author's elaboration based on Marçais & Marçais (1903), Seffadj (2008), Bouillot (2008), Guenaou (2022), khudaikulova (2025) and (Djuraeva, 1998).

6. Myth, Belief, Sacred Narratives, rituals and popular culture in the Ḥammām (Tlemcen and Bukhara)

The hot room, besides its architectural and hygienic functions, occupies a central place in Tlemcen's symbolic and imaginary geography, at least in what is related to popular culture. Indeed, in popular beliefs, baths especially their heated rooms; are strongly associated with the diabolical presence of *jinn*, who, in the local tradition, are supposed to inhabit dark, damp and narrow places such as caves, and are even said to be found in the hot rooms of Moorish baths (BEL, 1908: 222). According to local lore, when the *ḥammām* is deserted, strange sounds are occasionally heard in the hall of steam, like wooden buckets clanging, and this fact is ascribed, by popular imagination, to the invisible labor of spirits (BEL, 1908: 123).

A few legends evoked in Tlemcen will illustrate this close relationship between the *ḥammām* and the realm of myth. The most mentioned and told are related to the *Ḥammām al Sabāghīne* around which a large number of stories have developed. Some people claim they could spot an innocent snake appearing at the water of the slab, others say they saw a holy figure make ablutions in a corner of the bath before mysteriously disappearing⁶. In another story, a visitor who was alone in the hot room said they heard a loud musical *fanfare* coming from far away. It got louder and louder until it suddenly stopped, leaving them terrified (FARDEHEB, 1949).

These kinds of stories help public bathhouses get the reputation of being "blessed baths" (*Hammām al-Baraka*)⁷, which are thought to have spiritual power and healing properties. In Tlemcen's oral history, these baths are often linked to local saints called *al-Ṣolāḥ* or *al-Ṣālīḥīn* whose presence is thought to keep visitors or bathers safe and healthy (BENGHABRIT REMAOUN & ADEL, 2014: 59-82)

In local oral culture, there were many stories, myths, and legends about the *ḥammām* for a long time. One of the most common beliefs is that there are mysterious beings called "men with goat's legs"⁸. This is based on the widespread belief that *jinn* live in bathhouse, especially in the hot and humid areas. People in Tlemcen often tell the story of the *ḥammām of Sidi Boumediene*, which is located in the historic village of *al-ʿubbād*. According to local oral traditions, *al-Mʿalima ou Moulet al-ḥammām* would check the place out before letting women in, if the conditions were considered

⁶. A famous story says that a woman stole a necklace of gold coins from the hammam, and after that, the bathhouse mysteriously lost its heat. Following a dream in which a snake revealed the cause, the stolen object was returned, but it had changed into a snake, and the bath's warmth was restored. Local traditions says that this snake is the spiritual from Sidi Bel-Hassen, who was thought to protect the hammam.

⁷. It is hard to translate the word *al-baraka* into French or English because it means a subtle, invisible force or blessing that is thought to come from saints, holy objects, or places and bring wealth, health and spiritual power. (DOUTTÉ, 1909: 439); (SAÂDIA, 2013: 153–164).

⁸. A comparable anecdote demonstrating the function of bathhouse attendant is found in classical Arabic literature. In one part of *Al-Hariri's Maqamat*, the narrator tells the story of going into a hammam and getting into a fight with two attendants responsible for washing and massaging his body. The fight gets worse until the bathhouse owner steps in to settle it. He said: "Let us suppose that this head does not exist and that we have not seen this goat" "وَهَبْ أَنَّ هَذَا الرَّأْسَ لَيْسَ، وَلَمْ تَرَ هَذَا النَّيْسَ" (AL-Hamadhānī, 2005: 199) (CARUS, 1901: 405-477).

unsuitable for bathing, the women were advised to return home. The unexpected cooling of the hot water, despite the continuous operation of the furnace, was interpreted as a sign of a supernatural occurrence⁹.

Another story about the same *ḥammām* says that the building would fall down and be destroyed if seven sisters ever took a bath together. In addition to these legendary narratives, a widely circulated story recounts a curious phenomenon said to occur annually: swarms of ants would invade the hot room where bathing takes place. Witnesses saw the ants walk right over the hot water basin without stopping. According to local belief, the infestation would not go away until a goat was sacrificed in front of the hot water basin as part of a ritual¹⁰. After that, the bathhouse would be closed for a short time. People said that the ants would completely disappear after this ritual¹¹.

The cultural significance of the *ḥammām* in Maghrebi society extends beyond myth and belief systems to encompass a rich corpus of oral poetry and popular songs, which reflect everyday practices and social interactions within the bathhouse. In the region of Tlemcen, *al-Hawft*¹² poetic traditions provide valuable insight into the lived experience of the *ḥammām* and the rituals associated with it.

Such poem illustrates the intimate and service-oriented dynamics between bathers and attendants, particularly within the warm and hot rooms:

فُول لِي وَفَتَّاش حَمَامِكْ	بَاش نَجِي نَدِيكْ
نَزْفِدْلِكْ الرِّزْمَةَ ¹³	وَنَزِيدُ طَوَاسِيكْ ¹⁴
نَدْخُلُ الْبَيْتَ السُّخُونْ	وَنُحْكُ لَكَ رَجْلِيكْ
وَمَا تَحْلَفِي عَلَيَّا	غَيْرَ وَصِيفَ بَيْنُ يَدِيكْ

English translation¹⁵

Tell me when you go to the *ḥammām* fair,

⁹. Oral narrative (local legend concerning a protective spirit associated with the hammam), Informant, female, 72 years old, resident of El Eubed (Tlemcen), personal interview conducted in the Tlemcen dialect, February 2024; duration: approximately 1 hour 15 minutes.

¹⁰. The term "sacrifice" refers specifically to ritual slaughter performed within defined religious contexts differs from the term *dhabīḥa* or *odhiya* "offering", vows *al-nadhr*, birth and the circumcision rites *al-'aqīqa*, the sacrifice of 'id *al-Adha* (BONTE, 1999: 239-261) (HAMES, 1998: 5-25). In some local contexts, particularly around sacred sites, sacrificial practices are also to popular beliefs concerning jinn, and are performed to seek protection, blessings, or good fortune (DOUTTÉ, 1909: 477-486).

¹¹. Oral narrative (local legend about spirits in the *Hammām*), Informant: female, 72, regular *Hammām* user, Tlemcen, interview conducted in February 2024.

¹². The anonymity of *Al-Hawft* poetry reflects its oral and predominantly feminine transmission within Tlemcen society. Local traditions often explain this absence authorship through the figure of "*Rūḥ al-Gharīb*" (the Spirit of the Stranger), regarded as symbolic source of poetic inspiration (MARÇAIS, 1902: 205-241) (YELLES CHAOUCH, 1990: 125-267) (HACHLAF, 2006: 14-15).

¹³. The term *al-Rizma* الرِّزْمَةُ designates a bundle of personal effects gathered into a single package. in the context of the *ḥammām*, it refers specifically to the clothing and bathing items brought by bathers.

¹⁴. *Ṭās* (طاس) noun Plural: *tāsāt* (طاسات) *Tassāt al-Hammām*: is a small vessel or bowl, usually made of copper or similar metal, used for drinking or pouring liquids. Its purpose is to bring water from the *Qubb*, a wooden basin, and to pour it over the body parts to be washed or rinsed.

¹⁵. The translation of the Arabic poetic line cited in this article was assisted by ChatGPT (OpenAI). The resulting translation was subsequently reviewed, revised, and validated by the authors to ensure linguistic accuracy, stylistic appropriateness, and fidelity to the original text.

So I may come and meet you there.
I'll carry your bundle, wrapped up tight,
And bring the bowls for bathing bright.
Into the warm room I will go,
And gently wash your feet below.
Do not swear vows or speak so grand,
I'm but a servant at your command.

This love poem portrays a servant expressing devotion to woman through acts of service associated with the *ḥammām*. Beyond its romantic dimension, the poem reflects the ritualized practices that accompanied bathing, including personal belongings, preparing water, and assisting with bodily care.

In Persian mystical literature, the *gulkhan* (furnace room) appears as a place of both physical and spiritual transformation. As expressed in this verse: "I settled in the *gulkhan*, until I recovered; I brightened the mirror of my spirit by the ashes from the *gulkhan*". The space was also linked to the dervishes, whose presence there reflected ideals of asceticism, poverty and spiritual retreat (MOOSAVI, 2018: 92–111).

In Bukhara, as in Tlemcen, the *ḥammām* is a place where people can do social rituals and express their culture, especially within women's practices. The women's bathhouse Kunjak in Bukhara played a significant role in social rituals and cultural traditions, especially in women's spaces. The pre-wedding bathing ceremony called *ḥammāmbaron* which constituted a traditional and solemn pre-wedding bathing ceremony for brides (SUKHAREVA, 1966: 64). This practice involved a formal bathing procedure carried out on the morning prior to the wedding ceremony. This ritual represents an ancient Central Asian women's practice in the bathhouse, intended for bodily cleansing, relaxation, and the preparation of a young bride for significant life transitions, such as marriage. The procedure encompassed multiple stages, including warming, exfoliation (*kese*)¹⁶, massage, body wrapping, and the consumption of tea, all of which symbolized the woman's transition to a new social and familial status.

In Tlemcen, the *ḥammām* forms an integral part of several family and life-cycle rituals associated with birth, marriage and pilgrimage. These include *al-sāba* السَّابِعُ (the seventh day after a baby is born), *yūm al-tishlāl* يَوْمُ التَّشْلَالِ¹⁷ (the bride's last bath, which marks the end of her single life) (BEL, 1908: 217), *al-taghnīs* التَّغْنِيسُ or *al-khmistāsh* الْخَمِيسْتَاشْ¹⁸ (the bride's first bath after fifteenth day of the marriage), *rās al-arbaʿin* (the fortieth day after childbirth), and *al-sharq* الشَّرْقُ (the return from pilgrimage to the holy sites of Islam; namely the *ʿomra* and the *hajj* (Guenauou, 2018: 147-171).

A comparable symbolic dimension can be observed in Bukhara. In the women's bathhouse *Kunjak*, candles are lit as acts of gratitude, supplication, and blessing, particularly for health, fertility,

¹⁶. Peeling *Kese* is a traditional and ancient hammam exfoliation method that continues to be practiced today.

¹⁷ On the eve of the wedding, the bride goes to the hammam accompanied by her friends, at the expense of the groom's father.

¹⁸. For the first time since the wedding, the bride returns to the hammam, inviting female relatives and friends of all ages. The groom covers all the expenses of this visit and offers cake and coffee to all the guests. After the bath the group returns home for a large feast as on the wedding night. (BEL, 1908, p. 219),

and family well-being. In Algeria, this practice is associated with pilgrimage to the holy sites which called (*Ziyarāt*)¹⁹.

The myths, rituals, oral traditions, and poetic expressions related to the ḥammām demonstrate that bathhouses are not simply architectural facilities but culturally constructed spaces where collective memory is embodied, performed, and transmitted. The longevity of the stories about saints, supernatural protection, healing practices, fertility rituals, and transitional ceremonies indicates that the importance of the ḥammām cannot be described only in terms of its materiality. Rather, the bathhouse is a symbolic space in which, through ritual performance and oral transmission, social values, religious sensibilities, gender roles, and communal identities are constantly reproduced.



From the perspective of cultural memory, these practices transform the ḥammām into “sites of memory” in Nora’s sense: a space where memories are not simply preserved but actively re-enacted through recurring gestures, narratives, and ceremonies (Nora, 1984). The bathhouse thus operates as an interface between

the tangible and intangible dimensions of heritage, linking architectural structures to systems of belief and social practice. The recurring association of specific spaces with purification, protection, fertility, healing, and life-cycle transitions illustrates how architectural environments acquire symbolic meanings that exceed their functional purposes.

Moreover, the comparative evidence from Tlemcen and Bukhara suggests that, despite regional differences, the ḥammām fulfills analogous cultural functions across the Islamic world. In both contexts, the bathhouse serves as a threshold space mediating multiple oppositions: purity and impurity, private and collective life, everyday experience and sacred symbolism, the individual body and the social body. Such liminal qualities explain the remarkable capacity of the ḥammām to accumulate narratives, rituals, and memories over time. Language plays a crucial role in this process, not merely by naming spaces and practices but by providing the conceptual categories through which communities interpret and transmit their experience of the built environment. Consequently, the architectural vocabulary of the ḥammām should be understood as part of a broader cultural system in which spatial organization, ritual practice, and collective memory are mutually constitutive. The endurance of these linguistic and cultural frameworks demonstrates that the preservation of the ḥammām depends not only on safeguarding its physical fabric but also on maintaining the symbolic and discursive traditions through which its meanings continue to be produced and remembered.

Figure 2: Candles in the Bukhara women's bath Hammom Kunjak

¹⁹. Similar devotional practices are found at saints’ shrines In Algeria, where visitors seek blessing through acts as: entering barefoot, candle lightning, walking around the shrine, kissing the sarcophagus, and offerings to the shrine caretaker the *muqaddīm*, a monetary gift (*Ziyarā*).

Source: Ziyoda Ramazonova (2025), City baths of Bukhara; Gazeta.Uz

<https://www.gazeta.uz/ru/2025/04/30/bath/#male>

7. Terminological and Conceptual Framework of Space: *Bayt*, *Khāna*, and *-arium*

Table n° 1 : Comparative Terminology of Hammām Spaces in Tlemcen and Bukhara



Functional category	Tlemcen Dialect	Persian-Tajik	Equivalent Roman	Function/Description
Cold Room	bīt al-bārid	Khunukkhane	<i>Frigidarium</i>	Entry and cooling space; transition from exterior; preparation
Warm Room	Bīt al-wastānī	shir-garmkhane	<i>Tepidarium</i>	Intermediate zone, thermal adaptation, rest, social interaction
Hot Room	bīt al-skhūn	Garmkhane	<i>Caldarium</i>	Main bathing space; washing, massage
The brides' room	Bīt al-‘Arāyisāt	/	/	Often used as a private sanitary/ toilet area
Sanitary annex	bīt al-mā’ Bayt al-Rāḥa	Hojatkhane	<i>Latrinae</i>	Hygiene, reflecting spatial boundaries between purity and impurity
Changing room	Integrate in bīt al-bārid	Jamakhane	<i>Apodyterium</i>	Undressing, rest, preparation before bathing
Heating System	Al-Furnāq	Gulkhan	<i>hypocaustum</i>	Furnace producing hot air and heating water
Hot-water bassin	Bormat al-Skhūn	Khazane	<i>Alveus/ piscina calida</i>	Source of hot water; central element in the heated room
Cold-water basin	Sahrīj al-Bārid	Khazane	<i>piscina frigida</i>	Provides cold water for temperature regulation

Female bath attendant	Al-ṭayyāba	/	/	Assists women: washing scrubbing items, and cooking
Male bath attendant	dallāk or kayyās	Khaltador	<i>Balneator</i>	Performs massage and exfoliations for men
Massage/scrubbing tool	kāsa or mḥakka	Khaltacha	<i>Strigiles</i>	Used by attendants for body exfoliation

Source: the authors

Discussion

The Arabic term *bayt*, derived from the semitic root b-ā-t بَات which means “a dwelling or shelter associated with the nomadic tent” (Ibn Manẓūr, 2003). It has since grown to mean everything from the whole house to a single room (Lane, 1867, p. 279); (Wehr, 1976, p. 84). In architectural contexts, especially in Tlemcen, *bīt* denotes spaces characterized by their function and social utilization rather than rigid structural confines, exemplified by terms such as *bīt al-skḥūn* (hot room) or *bīt al-mā’* (toilet), integrated within practices of privacy, ritual, and corporal experience. (Revault, Golvin, & Amahan, 1985: 117), (RAYMOND, 1994: 09).

As a core lexical unit, its meaning is shaped by the words that come before and after it, which makes its meaning flexible and dependent on the situation. Although often translated as “room” *qā’a* "قاعة" جمع قاعات, In its formal sense, means a large hall or a spacious chamber that can hold a lot of people. This is a very different architectural idea from the more personal, functionally and symbolically charged meaning of *bayt*. This comparison is not exact because *bayt* has more personal, socially and symbolically charged meaning of space. More generally, the word describes a relational and experiential understanding of space, including the cultural and philosophical aspects that the linguistic community uses to think about places where people live (MOUSSAOUI, 2025: 266-298).

However, the Persian term *khāna* ²⁰ خَان (which can also be spelled *khaneh*) comes from an indo-iranian root that means “house” (RIZQ, 2000: 91), a house, dwelling, habitation; a tent or pavilion; a receptacle; a drawer, partition, compartment; department; (STEINGASS, 1963: 444). It is a common suffix used to make compound nouns that describe functionally specialized space, as opposed to “*bayt*”. The Persian word *khāna*, which can be seen in Central Asian ḥammāms in Bukhara (e.g., *garmkhāna*, *jamakhāna*, *Khunukkhāne*), shows a systematic and hierarchical spatial taxonomy in which each architectural unit is clearly defined by its function (BLAIR & BLOOM, 1996: 285); (MICHELL, 1995: 260-261). Thus, *khāna* is a way of thinking about space that is organized and serves different purposes, which is very similar to how architects plan and how types of building are clearly defined.

By contrast, the Latin suffix -arium denotes a technical and standardized spatial unit, as in *caldarium*, *tepidarium*, and *frigidarium*. Rooted in Roman bath architecture. As noted by Fikret Yegül, Roman bath architecture represents a rationalized and technologically sophisticated

²⁰. A term of Persian origin referring to a furnished house or in *caravansary*, equipped to provide food, drink, and lodging, and frequented by travelers—such as merchants, pilgrims, and wayfarers—for temporary residence in exchange for a fixed fee.

environment, in which spatial units are defined by precise functional and environmental parameters (YEGÜL, 1992: 05).

The comparative terminology suggests differing conceptualizations of architectural space. In the Tlemcen corpus, the recurrent use of *bayt* emphasizes the room as a functional and socially embedded unit, whereas in the Bukhara terminology, the Persian suffix *-khāna* appears to designate specialized spaces according to their specific function. Although the present study does not aim to provide a quantitative lexical analysis, the observed terminological patterns indicate distinct modes of spatial categorization that merit further investigation.

Conclusion

This study reveals that it is reductive to consider the ḥammām in exclusively functional or architectural terms. Instead, the ḥammām must be understood as a cultural system, where space, language, and practice are tightly interwoven. The comparison with Bukhara has demonstrated a fundamental duality: while the two traditions share a common grammar of space in the form of the classical tripartite thermal sequence, their concepts of space as such diverge profoundly.

This study has demonstrated that vernacular terminology cannot be regarded as merely descriptive of spatial structures, but constitutes an integral part of spatial meaning. The opposition between *bayt* and *khāna* has shown how two radically distinct epistemologies underlie spatial practices: a relational one, based on experience and practice, and a classificatory one, based on clearly defined functions. The ḥammām emerges as much as a linguistic construct as an architectural one.

The ḥammām, furthermore, emerges as a site of cultural memory. Through embodied practices, gestures, interactions, and mythologies, the ḥammām constitutes an archive of lived experiences where collective identities are performed. This aspect is particularly relevant in relation to contemporary transformations, where not only the spatial constructs but also the practices and cultures associated with them are being lost and erased.

By combining architectural, linguistic, and anthropological modes of inquiry, this research has revealed how a truly cultural understanding of ḥammām requires much more than an analysis of their form or function. This study may serve as an example for a more comprehensive methodological approach to Islamic architectural studies. It could be fruitful to expand the comparative scope of this study to other regions of the Islamic world, in order to further map out the local specificities as well as the transregional continuities.

Specific questions such as the role of gender, sensory experiences, and the question of heritage politics would further enrich our understanding of the ḥammām as a dynamic institution. Ultimately, the ḥammām emerges as a lively interface between architecture and culture, where the materiality of space and the immateriality of language intertwine closely in the enduring transformation of collective memory.

Statement on the Use of Artificial Intelligence (AI)

The authors declare that ChatGPT (OpenAI) was used as an assistive tool for the translation of interview material originally conducted in the Tlemcen Arabic dialect into English, as well as for linguistic reformulation and language editing of selected passages of the manuscript. All AI-assisted outputs were reviewed, verified, and revised by the authors. The translated material was subsequently reviewed by a professor specializing in the English language. The authors assume full responsibility for the content, interpretation, and conclusions of the study.

Bibliography

a) Printed Sources

1. AL-‘ABDARI, A. al-Fāsī, M. (ed.) (1968). *Al-Rihla al-Maghribiyya*. Rabat.
2. BABUR, W. Thackston, (tran.)(ed.). (1996). *The Baburnama: Memoirs of Babur, prince and emperor*. New York: Oxford University Press.
3. AL-HAMADHĀNĪ. Baydoun, M. A, (ed.).(2005). *maqāmāt of Badi‘ al-Zamān al-Hamadhānī*. Beirut :Dar al-Kutub al-‘Ilmiyya.
4. BATTUTA, I. Rev. S. Lee, (tran.). (2004). *The travels of Ibn Battuta in the Near East, Asia and Africa, 1325–1354*. New York: Dover Publications.
5. IBN ISKANDAR, R. Levy (trans). (1951). *Qābūs nāma*. London: Cresset Press.
6. NARSHAKHĪ, R. N. Frye (trans). (1954). *The history of Bukhara*. Cambridge: Mediaeval Academy of America.
7. AL-WAZZAN, A.-H. Hajji, M. & al-Akhdar, M., (trans.) (1983). *Description of Africa*. Beirut: Dar al-Gharb al-Islami.

c) Studies (Books and Articles)

8. Aboukhater, R. (2014). Traditional hammams in the urban fabric of Muslim cities of the Mediterranean. *Insaniyat*, 63–64, 67–96. <https://doi.org/10.4000/insaniyat.14693>
9. Aboukhater, R. (2008). Analysis of spatial structure and social significance of a sample of hammams in Mediterranean cities. *Archnet-IJAR: International Journal of Architectural Research*, 2(3), 109–121.
10. Asanova, G., & Dow, M. (2001). The Šarrāfān Baths in Bukhara. *Iran*(39), 187–205. doi: <https://doi.org/10.2307/4300604>.
11. Assmann, J. (2011). *Cultural Memory and Early Civilization* (éd. 1). New York: Cambridge University Press.
12. Bachelard, G. (2012). *La poétique de l'espace* (éd. 11). Paris: Presses universitaires de France.
13. Baitanaev, B., Ergeshbayev, A., & Shayakhmetov, A. (2023). Hammam from Khankurgan. *The Volga River Region Archaeology*, 2(44), 114–130. <https://doi.org/10.24852/pa2023.2.44.114.130>
14. Bel, A. (1908). La population musulmane de Tlemcen. *Ethnographic and Sociological Studies Journal*, 200–417.
15. Benghabrit Remaoun, N., & Adel, K. (2014). Hammam: Practices and rituals today. *Insaniyat*, 63–64, 59–82. <https://doi.org/10.4000/insaniyat.14582>
16. Blair, S., & Bloom, J. (1996). *The art and architecture of Islam 1250–1800*. Yale University Press.
17. Bonte, P. (1999). Symboliques et rituels de la protection: Le sacrifice tčargĭba dans la société maure. In A.-M. B. P. Bonte (Ed.), *Sacrifices en Islam* (pp. 239–261). CNRS Éditions. <https://doi.org/10.4000/books.editions-cnrs.1911>
18. Bouhdeiba, A. w. (2001). *Islam and sexuality* (éd. 2). (H. Al-Ouri, Trad.) Beirut: Riad El-Rayyes Books S.R.A.I.
19. Bouillot, J. (2008). The physical and climactic dimensions of the Mediterranean hammams. *Archnet-IJAR*, 2(3), 122–135.

20. Bourdieu, P. (1970). *La maison kabyle ou le monde renversé*. Boston : De Gruyter Mouton. doi: <https://doi.org/10.1515/9783111698281-002>
21. Bouraoui, I. (2008). The architecture of the public baths of Tunisia: A typological analysis. *Archnet-IJAR*, 2(3), 80–92.
22. Bouwechma, A. (2014). The public bath of Tlemcen. *Insaniyat*, 63–64, 143–166. <https://doi.org/10.4000/insaniyat.14723>
23. Calier, O. (2000). The social stakes of the body: The Maghrebi hammam (19th–20th century). *Annales. Histoire, Sciences Sociales*, 55(6), 1303–1333.
24. Carus, P. (1901). The fairy tale element in the bible. *The Monist*, 11(3), 405–447. <http://www.jstor.org/stable/27899250>
25. Castiglia, R.B.F., Bevilacqua, M.G. The Turkish Baths in Elbasan: Architecture, Geometry and Wellbeing. *Nexus Netw J* 10, 307–322 (2008). <https://doi.org/10.1007/s00004-007-0072-8>
26. Chedri Maamar, r. (2024). Hammams (baths) and their symbolism in the Algerian society during the Ottoman era. 209-222, (2)6, مجلة التاريخ المتوسطي. <https://asjp.cerist.dz/en/article/260601>
27. Dahīna. A. (1984). The Economic and Social Life of the Zayyanid State. Dans *In Algeria in History* (p. 492). Algiers: National Book Foundation.
28. Djuraeva, G. A. (1998). Medieval baths and other water structures of Bukhara (based on written sources). *Social Sciences in Uzbekistan*, (4–5), 93–99.
29. Dawkes, G., & Dow, M. (2021). The urban bathhouse in the Islamic Far East: Evidence from Kazakhstan. *Journal of Islamic Archaeology*, 8(1), 87–110. <https://doi.org/10.1558/jia.19289>
30. Doutté, E. (1909). *Magie et religion dans l'Afrique du Nord*. Typographie Adolphe Jourdan.
31. Filali, A. (2012). *Tilmisan fī al-‘ahd al-Zayyānī* (Tlemcen during the Zayyanid period) (éd. 1). Algiers: National Institution for Printing Arts Publications(ENAG), Mufam Publishing and Distribution.
32. Firdevs, K., & İsmailoğlu, S. (2022). Spatial Analysis of Ottoman Hammams in Erzurum. *Periodica Polytechnica Architecture*, 53(3), 232–244. doi:<https://doi.org/10.3311/PPar.20556>
33. Ergin, N. (2011). *Bathing culture of Anatolian civilizations : architecture, history, and imagination*. PARIS: Peeters.
34. Ghasemi, M. , Hatam, G. A. and Tehrani, F. (2018). A Survey of the Persian Historic Bathhouses from the Safavid to the Qajar Period (With an Emphasis on Decorations and Architectural Features). *Iranian Journal of Archaeological Studies*, 8(1), 41-63. doi: [10.22111/ijas.2018.5124](https://doi.org/10.22111/ijas.2018.5124).
35. Glaudinov, B., Abdullaev, K., & others. (2004). *Bukhara: The eastern dome of Islam*. Edition Axel Menges.
36. Guenaou, M. (2022). Contribution to vocabulary specific to the Moorish bath in Tlemcen. *Journal of Ethnography and Folklore*, 8(2), 436–467.
37. Guenaou, M. (2018). The Hammam and the Culture of Purification in the Women of the Medina and its Hawz: The Case of Family Festive Rituals in Tlemcen and Ain el Hûts.

- STVDIVM. Revista de Humanidades, 24, 147-171, [DOI 10.26754/ojs_studium/stud.2018243949](https://doi.org/10.26754/ojs_studium/stud.2018243949)
38. Hachlaf, M. (2006). *El haoufi: Women's songs of Algeria*. Alpha Editions.
39. Hamès, C. (1998). The sacrifice of animal from the point of view of canonical Islamic texts. *Archives de Sciences Sociales des Religions*, 101, 5–25.
40. Al-Harithy, H. (2016). Conservation of Hammam Al-Ward: Architectural heritage and urban memory in Tripoli. *Journal of Islamic Architecture*, 4(2), 1-12.
[doi:https://doi.org/10.18860/jia.v4i2.3485](https://doi.org/10.18860/jia.v4i2.3485)
41. Khudaikulova, F. (2025). Archaeological Study Confirms Location of Bozori Sanduq Hammam in Samarkand. *American Journal of Engineering, Mechanics and Architecture*, 3(9), 68-74. <https://grnjournal.us/index.php/AJEMA/article/view/8350>
42. Krarouch, M., Ruesch, F., Hamdi, H., Outzourhit, A., & Haller, M. (2020). Dynamic simulation of a heating system for hammams. *Applied Thermal Engineering*, 180.
<https://doi.org/10.1016/j.applthermaleng.2020.115839>
43. Laeibi, C. (2007). *Masculine architecture*. Riyad al-Rayes.
44. Marçais, W., & Marçais, G. (1903). *Les monuments arabes de Tlemcen*. Fontemoing.
45. Marçais, G. (1950). Tlemcen, Collection: Les villes d'art célèbres. Paris, France: H. Laurens.
46. Marçais, W. (1902). The Arabic Dialect Spoken in Tlemcen grammar text and glossary. Paris: Ernest Leroux.
47. Michell, G. (1995). *Architecture of the Islamic World - Its History and Social Meaning*. London: Thames & Hudson.
48. Mona M, R.-S., & Alaa El-Din Fouad, R. (2020). An Insight into an Egyptian Intangible Cultural Heritage Tradition: The Hammām. *International Journal of Heritage and Museum Studies*, 2(1), 51-67. [doi: 10.21608/ijhms.2020.188742](https://doi.org/10.21608/ijhms.2020.188742)
49. Moussaoui, Y. L. (2025). The architectural philosophy of space in traditional houses of Tlemcen. *Jamaliyat Journal*, 12(1), 266–298.
50. Moosavi, M. (2018). Bathhouses as sites of protest: Rebellious bodies in the arts of early modern Iran. *Metacritic Journal for Comparative Studies and Theory*, 4(2), 92–111.
<https://doi.org/10.24193/mjst.2018.6.06>
51. Norberg-Schulz, C. (1980). *Genius Loci: Towards a Phenomenology of Architecture*. New York : Rizzoli International Publications.
52. Nora, P. (1984). *Les lieux de mémoire*. Paris: Guallimard.
53. Orehounig, K., & Mahdavi, A. (2011). Energy performance of traditional bath buildings. *Energy and Buildings*, 43(9), 2442–2448.
54. Peteet, J. (2024). *The hammam through time and space*. Syracuse University Press.
55. Peteet, J. (2024). Genealogy I: Neolithic to Byzantium. Dans *In The Hammam through Time and Space* (pp. 35–76). Syracuse University Press.
[doi:https://doi.org/10.2307/jj.7994663.7](https://doi.org/10.2307/jj.7994663.7)
56. Racinet, A. (1888). *Le costume historique* (Vol. 3). paris: Firmin-Didot et Cie (Paris).
<http://catalogue.bnf.fr/ark:/12148/cb311697392>

57. Raymond, A. (1994). Islamic city, Arab city. *British Journal of Middle Eastern Studies*, 21(1).
58. Richard, F. (2023). Central Asia (The Shibaniid Century in Central Asia: Power, Legitimacy and the Arts of the Book under the Shibaniid Khans, 906-1007/1500-1599. Rome: Istituto per l'Oriente C. A. Nallino.
59. Saâdia, R. (2013). La baraka et la niyya . in Surnaturel et société Centre Jacques-Berque. <https://doi.org/10.4000/books.cjb.487>
60. Sarmiento, J., & Kazemi, Z. (2014). Hammams and the contemporary city. *International Journal of Heritage Studies*, 20(2), 138–156.
61. Sakir, T. (2025). The relationship between size and structure in Ottoman hammams: An analysis of Chifte and Daut Pasha hammams. *Journal of Balkan Architecture*, 1(2), 107-117. <https://doi.org/10.69648/RMCA3723>
62. Seffadj, N. C. (2009). Medieval and Ottoman hammams of Algeria. *Archnet-IJAR*, 3(1), 157–170.
63. Selka, C., Ouissi, M., Bouet, O., & Selka Oussadit, I. (2019). Comparative study of medieval baths. *ITU A|Z Journal*, 16(3), 49–59.
64. Sibley, M. (2008). Traditional public baths in the Mediterranean. *Archnet-IJAR*, 2, 10–16.
65. Sibley, M., & Jackson, I. (2012). The architecture of Islamic public baths. *Journal of Architectural and Planning Research*, 16(2), 155–170.
66. Sukhareva, O. (1966). *Bukhara: 19th–early 20th century*. Moscow.
67. VAN GELDER, G. J. (2008). THE “ḤAMMĀM”: A SPACE BETWEEN HEAVEN AND HELL. *Quaderni Di Studi Arabi*, 3, 9–24. <http://www.jstor.org/stable/25803044>.
68. Vilan, L., & Roujon, Y. (2024). Hammams. In *Villes et architectures de Palestine* (pp. 352–355). Presses de l'Ifpo.
69. Vries, B. de. (1998). The Islamic baths of Palestine. *American Journal of Archaeology*, 102(1), 220–226.
70. Yegül, F. (1992). *Baths and bathing in classical antiquity*. MIT Press.
71. Yelles Chaouch, M. (1990). *Hawfi: Women's poetry and oral tradition in the Maghreb*. OPU.

d) Press (Newspapers)

72. Fardeheb, D. (1949, November 20). The hammams of Tlemcen are among the most beautiful in the world. *Alger Républicain*.
73. Ramazonova, Z. (2024). Gazeta.uz. City baths of Bukhara. Consulté le 2 17, 2026, sur <https://www.gazeta.uz/ru/2025/04/30/bath/#male>

e) Research Tools (Dictionaries & Encyclopaedias)

74. Afsar, K. A. (2003, December 15). ḤAMMĀM-EL WAKĪL. *Encyclopaedia Iranica*, 11. <https://www.iranicaonline.org/articles/ammam-e-wakil/>
75. Ibn Manzūr. (2003). *Lisān al-‘Arab*. Beirut: Dar Sadir
76. Lane, E. W. (1867). *An Arabic-English lexicon*. London.
77. Rizq, A. (2000). Mu‘jam al-muṣṭalahāt fī funūn al-‘imārah al-Islāmiyyah [Dictionary of terms in Islamic architectural arts] (éd. 1). Cairo: Madbouli library. Madbouli.

78. Steingass, F. (1963). *A Comprehensive Persian English Dictionary* (éd. 5). London: Routledge and Kegan Paul Limited.
79. Wehr, H. (1976). *A Dictionary of Modern Written Arabic* (éd. 3). (M. Cower, Éd.) Wiesbaden: Spoken Language Services.