

A mnemonic spatial heritage in the city: the case of Hammam Chiab in Setif

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ABSTRACT

Interpretation of the socio-spatial representations of Setif allows us to understand how the hammam is perceived in the city. The hammam is understood as a socially produced and experienced environment via an examination of its portrayal within the Setifian identity in Algeria. This research examines how the hammam functions as both physical structure and cultural space by analysing how Setif residents interact with, perceive and remember this traditional bathhouse. Through a two-phase methodology, we first conducted a survey with 103 residents of diverse ages and genders, followed by in-depth interviews with ten key participants at distinct locations across the city. This approach, inspired by Kevin Lynch's urban perception studies, allowed us to investigate how the hammam shapes urban identity and preserves cultural memory. Our methodology combines spatial analysis techniques with sensory ethnography to document both the tangible architectural features and the

intangible cultural practices, oral traditions and embodied experiences that make the hammam a significant landmark in residents' mental maps of their city. Drawing on cognitive psychology, it has been established that the hammam is a spatial heritage of identity. It is acknowledged not only for its practical purpose but also for its symbolic significance, which is passed down through generations via the transmission of traditions and customs. It serves as a repository of functions and meanings, as well as a carrier of identity, culture and history. It is considered a 'spatial symbol' and a prominent location within the city's boundaries, which the current paper refers to as a 'mnemonic perceptual spatial reference'.

Keywords

Social space, architecture, traditionalism, city, heritage, memory, identity, symbolic, rituals, space symbol

Introduction

This article draws on several disciplines including architecture, cultural geography, cognitive psychology, history, sociology and anthropology. It specifically examines the connection between the residents of Setif, a town located on the high plateau in eastern Algeria, and the hammam.

In order to comprehend the perception of the hammam by its residents, it is necessary to analyse the socio-spatial representations of the city as seen by its users. It is apprehended as a socially produced and experienced

space. This research focuses on space, water, and women and their bodies. The hammam is a vital component of the modern city, much like the mosque and market were in the medieval city (Adel and Remaoun Benghabrit 2014). It is an area of privilege in the everyday lives of Algerian women. It has consistently held a significant position in the architectural structure of the Arab-Muslim city and continues to do so in the modern Maghrebian metropolis.

The hammam serves multiple functions, acting as a social institution and facilitating religious and spiritual rituals. The geographical history of identity is acknowledged for more than just its practical use. It holds

significance in the realm of human spatial utilisation and our connection with the surrounding universe, whether on a large or small scale.

The hammam is a multi-purpose space, a social institution, and a place for religious and ritual practices. It is a spatial legacy beyond its practical use, and it has a symbolic significance that is passed down through generations to represent identity and cultural traditions. It serves as a repository of functions and meanings, as well as a carrier of identity, culture and history. While symbols represent meaning through culturally agreed signification, mnemonic technologies function specifically as memory storage and retrieval systems. In the case of Hammam Chiab, its symbolic elements (horseshoe arches, sequential rooms, thermal progression) carry cultural meaning through representation, while its mnemonic function operates through the embodied practices and sensory experiences that trigger memory recall and transmission. The hammam thus functions simultaneously as a symbolic structure (representing cultural values and concepts) and as a mnemonic technology (storing and facilitating the retrieval of cultural memory through spatial practices). This distinction explains why certain architectural elements persist even as their practical function becomes obsolete – they serve both symbolic and mnemonic purposes within the community. Hence, we argue that it is considered to be a 'spatial symbol' and a significant location within the city's boundaries, which the current research referred to as a 'mnemonic perceptive spatial reference'.

Similar to sites of remembrance or sentimental places, Hammam Chiab is situated at the point where materials passed down from the past intersect with new, significant structures (Bonnemaïson et al. 2000). What is important is that this ideal is both recognized and actively practiced, allowing the space to fully express its symbolic and cultural significance (Bédard 2002). It serves as a deliberate or unintentional memory device, whether based on reality or mythology, personally encountered or perceived, and established as a site of cultural memory by the Setif community.

Methodology

Oral tradition and interview participants

This study gathered data through a two-phase

methodological approach conducted in Setif in 2009. The research incorporated principles from sensory ethnography (Pink 2015) to understand how the multisensory environment of the hammam contributes to its function as a mnemonic spatial reference. Our approach focused on documenting how the hammam engages multiple senses – temperature transitions, acoustic properties, distinctive scents and tactile experiences. These practices stored in the sensory memory connect embodied experience to cultural knowledge.

In the first phase, we conducted a survey with 103 participants representative of Setif's population, with ages ranging from 18 to 91 years and a balanced gender representation. Then, participants were asked to draw cognitive maps of the city, providing a graphic representation of their spatial understanding and highlighting personally significant locations. These responses were systematically analysed using content analysis to identify recurring themes and spatial references, which were then categorised and organised into frequency tables.

The second phase involved a more focused investigation with a smaller sample. Following the methodological precedent established by Kevin Lynch (1960), who used limited samples (15–30 participants) to determine composite representations of American cities, we selected ten individuals for in-depth interviews conducted at ten distinct locations across Setif. These locations were chosen based on their frequent mention in the first phase.

The oral traditions specifically relating to Hammam Chiab emerged prominently during our interviews with participants from the Langar area, where this historic bathhouse is located. The hammam was consistently referenced as a significant cultural landmark, with participants spontaneously sharing personal experiences, family traditions and cultural knowledge associated with this space. These narratives were recorded, transcribed and analysed alongside our spatial perception data, revealing the hammam's dual significance as both a physical structure and a repository of intangible cultural heritage.

This methodological approach allowed us to identify and understand how physical spaces like Hammam Chiab function as carriers of collective memory and cultural identity within Setif's urban landscape.

Table 1

The oldest hammams in Setif ,according to interviewees (non-exhaustive list)

Designation	Localisation	State
Hamam Chiab	Langar Street	Open
Hamam Douali	City centre (near the amusement park)	Closed by the state
Hamam Benbara	Pierre Street Gaillet (Birgay)	Open
Hamam Bella	Ouled Braham Street	Closed due to family dispute
Hamam Guedj	City centre (near Kerouani High School)	Destroyed
Hamam Sakina	Langar Street	Closed
Hamam Dheyliss	City centre (near Ain el Fouara)	Transformed into a restaurant
Hamam Moussaoui	des Combattants Street	Closed
Hamam Djardi	Tandja Street	Closed due to legal proceedings

Source: Survey of 103 respondents, 2009.

The architecture and spatial organisation of Hamam Chiab

A neo-Moorish façade

The façade, which dates back to the early 20th century, is designed in the neo-Moorish style, a popular architectural movement during the colonial era in Algeria (Figure 1). The focus is on the bipartite vertical entryway.

The main entrance is shown as a rectangular door with a circular aperture, enclosed by a horseshoe arch upheld by two spiral columns and adorned with a border of zellij tiles. A wooden sign positioned over the studded iron entrance displays the designated hours of operation for both men and women. A corbel, also known as a *k'bou*, ascends to the highest point, where it is followed by a series of recurring tiny semicircular recesses. The conclusion of this portion is marked by a little roof adorned with green tiles. The remaining portion of the exterior consists of rectangular grid windows, enclosed by horseshoe-shaped circular arches arranged in pairs and trios. The wood joinery and hammered glass are intentionally concealed, while nevertheless allowing natural light to come in. The little round-headed recesses of crossing rhombuses are located above the entrances. The uppermost level of the building is embellished with small balconies, while the whole construction culminates in a gracefully inclined roof covered in tiles.

The façade functions as a material embodiment of

collective memory, connecting contemporary users to a period of cultural adaptation and preservation. This



Figure 1
Hamam Chiab façade in neo-Moorish style
Source: Author, 2023.



Figure 2
The entrance of Hammam Chiab
Source: Author, 2023.

architectural hybridity mirrors the hammam's social function as a space that both preserves tradition and adapts to changing urban realities. The façade thus becomes a visual narrative of cultural resilience, embodying what post-colonial theorist Homi Bhabha describes as a 'third space' where cultural identities are negotiated and rearticulated (Bhabha 2012).

Within Setif's urban landscape, this distinctive façade serves as a mnemonic spatial marker, instantly recognisable and emotionally resonant for residents. It stands as tangible evidence of the community's determination to maintain cultural continuity across generations despite profound social and political transformations.

Interior space

Hammam Chiab adheres to the conventional arrangement of traditional hammams in the Maghreb region. The rooms are arranged in sequence, beginning with the room next to the entryway that functions as a changing room. The three-room arrangement is a direct continuation of its Roman predecessors. The design of these objects is intended to ensure that the temperature

of the surrounding area gradually rises in tandem with the temperature of the body. The progression through spaces of increasing temperature creates an embodied experience that transforms routine bathing into a meaningful cultural practice deeply embedded in collective memory. The three-room configuration, inherited from Roman baths but adapted through Islamic medical knowledge by al-Razi, demonstrates the cultural synthesis that characterises Maghrebian heritage. This spatial continuity across centuries serves as what French historian Pierre Nora would term a '*lieu de mémoire*' (site of memory) where historical knowledge is preserved not through texts but through spatial practices (Nora 1984). The hammam thus functions as a living archive of medical, architectural and cultural traditions spanning multiple civilisations.

The interior arrangement adheres to the same premise, with a sequence of rooms in a linear configuration. The facility includes a two-level chilly undressing room (Figure 2). The lower level is for undressing, while the upper level serves as a storage area for mattresses where users may rest before getting dressed. This setup encourages interaction and conversation among the users. A temperate intermediary chamber, equipped with showers and hygienic amenities, serves as an airlock between the frigid and scorching temperatures of the primary chamber.

At the end of the arrangement is El Bit Esskhouna (the heated chamber), where the temperature is exceedingly elevated, facilitating perspiration prior to cleansing the body. A vaulted ceiling traps and preserves the heat while allowing diffused light to enter via a limited number of glass panes, providing zenithal lighting. The filtered light from above carries particular symbolic weight in Islamic architecture, often representing divine illumination.

The middle area is designed as a courtyard with a curving arch gallery supported by columns (Figure 3). The dressing room has columns made of period granite, adorned with colorful ceramic tiles at the base and gilded immediately below the arch. The floor is composed of light grey marble. The balustrades are adorned with round-arched diamond-shaped niches, which bear a resemblance to those seen on the outside façade. The wall cladding in the entry area and stairs is made of turquoise-blue earthenware tiles, while the centre section is adorned with dark-brown marble and granite at a height of 1.8 m. The cladding has 20 cm curved terracotta hemp skirting boards at its base, showcasing the lost workmanship of



Figure 3
Dressing room
Source: Author, 2023.



Figure 4
Top view of central patio
Source: Author, 2023.

artisan crafts. The heating system is supplied via tall, narrow windows (with a spandrel height of 0.8 cm) that are evenly distributed over the whole front of the building. These windows allow enough natural light to enter the double-height patio area. A notable feature is the elevated platform (20 cm) in the undressing zone, effectively dividing the clean and soiled sections.

The space is meticulously crafted to cater to the needs and comfort of its users, leaving no detail overlooked. All aspects have been meticulously planned, including the functional elements such as the dark-brown granite shelves for storing clean clothing, the bars installed between the curved arches for hanging towels, and the racks with crossing bars for hanging items such as jackets and bags.

Through this interior spatial organisation, the hammam functions as what our research has identified as a 'mnemonic spatial heritage' – a physical environment that encodes cultural knowledge, facilitates its transmission across generations, and anchors collective identity in embodied practices rather than abstract concepts.

The hammam as a cosmopolitanised realm

The hammam is a place that is both literally and symbolically focused and confined, where history is evident in the architecture, arrangement, and ceremonial customs. Through ceremonial acts, users dedicate and take control of the hammam. The purposeful synthesis of religious and traditional ritual traditions serves as the intellectual basis of the space. The organisation is based on a condensed representation of humanity's perception of the universe in ancient civilisations. Through the ritualistic repeating of the cosmogony, man symbolically alters a place when he occupies it. In the examined scenario, the bulk of ceremonial activities acquire a holy significance only via indicators that are really spatialised. In this process of 'spatialisation' of signals, a kind of appropriation has been analysed that relies on a concealed spatial organisational structure, which is recognised as structural dualities (Bousnina 2008).

The study of hygienic and ceremonial actions in the hammam has uncovered a hidden structure of spatial organisation, as described by Hall (1971), which is regulated by rules of opposition. This system exhibits

oppositions characterised by contrasting meanings that exist simultaneously within the same space. Examples of these oppositions include profane/sacred, light/dark, dry/wet, cold/hot, inside/outside, visible/invisible, pure/impure, clean/dirty, male/female, day/night, closed/open, introversion/extraversion, intimate/public, centrality/periphery and high/low. The structural dualities observed in the hammam (profane/sacred, light/dark, pure/impure) do not merely exist as theoretical constructs but actively shape users' experiences and behaviours. Our interviews revealed how these oppositions create what anthropologist Victor Turner calls 'liminal space' – a threshold state where normal social categories are temporarily suspended. These opposing forces contribute to the process of making a contradictory situation seem normal (Turner 2017).

Bouhdiba acknowledges the presence of a 'dialectic of elements in the hammam' that involves contrasting forces such as heat and cold, femininity and masculinity, cleanliness and dirtiness, hardness and softness, self and others (Bouhdiba 1986, 210). These dialectical elements manifest physically in users' bodily experiences, creating what our research identified as embodied cultural memory – knowledge that is stored and transmitted through sensory experience rather than written text.

This explains why the hammam persists as a cultural reference point despite modernisation; it preserves knowledge in a form that cannot be easily digitised or replaced by modern alternatives. This persistence of the hammam as a cultural heritage aligns with observations across North Africa (Debache 2008). Even in locations where hammams have seen declining practical usage, they remain monuments 'engraved and fixed in the residents' memory' (Debache 2008, 1). The hammam continues to occupy 'a warm place in the heart of the inhabitants' (Debache 2008, 1) precisely because it functions as both tangible and intangible heritage – a physical space that embodies cultural practices, social relations and collective memory that cannot be separated from the building itself. This inseparability of physical structure and cultural meaning demonstrates why the hammam must be understood as a holistic heritage site where architectural features and social practices form an integrated whole. Memories are stored at Hammam Chiab through multiple interconnected mechanisms. First, they are stored through embodied practices – the ritualised movements, cleansing techniques and social interactions that occur in specific spaces. These practices are termed 'bodily

social memory' (Connerton 1989). Second, they are stored through sensory triggers – the distinctive temperatures, scents, sounds and tactile experiences that create strong neurological memory associations. Third, they are stored through narrative practices – the stories, gossip and oral traditions shared within the hammam space that link individual experience to collective memory. Finally, they are stored through spatial sequencing – the progression through different chambers creates a narrative structure that organises memory. These mechanisms operate simultaneously, making the hammam a particularly effective mnemonic spatial technology that preserves cultural knowledge even as written records may be absent or inaccessible to certain community members.

Similarly, Carlier acknowledged the existence of a platform for the interchange of thoughts and concepts. He perceived it as a transitional area between two distinct states, or perhaps two separate realms, mundane and divine. He characterises it as an intermediary zone that moves the body from brightness to obscurity, from the surface of the earth to the realm of the dead, and from the celestial powers to the subterranean energies. (Carlier 2000, 1306)

The concept of duality: femininity/masculinity and interiority/exteriority

The hammam effectively defines guidelines for communal use, while also serving as a gender-inclusive public area. According to Carlier (2000), the hammam serves as a physical space that represents and combines the ways in which men and women both interact and are kept apart.

The hammam's use is structured on a rotational basis, following strictly established and adhered schedules: it is exclusively reserved for women throughout the day, together with children, and for males starting from the Maghreb prayer time. The hammam's gender-based scheduling system embodies a complex cultural negotiation of power, space and identity in Setifian society. Our ethnographic research reveals how this temporal segregation creates temporalised space (Munn 1992). The alternation between male and female presence is denoted by a suspended sign above the *kella* (curtain) that divides the outside from the inside during daylight hours. This sign functions as both a practical indicator and a symbolic boundary, marking the hammam as a 'field of cultural production' where gender identities are formed and contested (Bourdieu 2002).

The contrast between the masculine exterior and the feminine interior originates from established cultural and theological allusions within the Muslim heritage. It reflects deeper cultural patterns that our research found were encoded in spatial memory. This manifests in what we term 'embodied spatial knowledge' or the unconscious understanding of appropriate movement and behaviour that users absorb through repeated practice rather than explicit instruction (Fuchs 2016). The hammam thus serves as a site where abstract cultural norms about gender become concrete spatial practices, perpetuating traditional arrangements while also allowing for subtle negotiations and changes over time.

The merging of social and geographical dimensions is a reality in the context described by Bousnina (2008), particularly with regard to the hammam. The hammam is a place that uniquely serves both genders. However, no other area controls its partition with such exactness. The idea of tight alternation ensures parity between the inclusions and exclusions, but not equality (Carlier 2000, 1306). The dichotomy of genders enforces an inequitable socio-spatial arrangement, wherein the masculine is linked to public space and the feminine is linked to home space (Bourdieu 1998; Sarnelli 2020). The Algerian social hierarchy significantly influences the extent of women's movement inside public areas. Consequently, gender relations maintain the inherent connection between social and geographical segregation (Arzazi 2023).

Historically, women's ability to move about was restricted to certain local areas. Outings were limited, justified and subject to constraints. In the past, mothers would visit the hammam with the approval of their husbands and were usually accompanied by their son or their mother-in-law (Jansen 1988; Souiah 2019). Nowadays, women have the freedom to go out alone or in the company of acquaintances or coworkers, who serve as substitutes for family members and neighbours. Hence, the gap between male and female economic activity is slowly narrowing, and the social change occurring in Algeria regarding women's status is evident but progressing at a measured pace (Guedjali 2022).

Following Algeria's independence in 1962, the introduction of public education resulted in women attaining an elevated social status (Belaroussi and Bouradja 2023). Women transitioned from being uneducated and focused on childbearing as housewives to joining the workforce.

They now enjoy a better socio-economic standing and a wider range of opportunities (Monqid 2017). Consequently, women are now more respected. Interestingly, downtown Setif maintains a strong sense of community, where individuals are familiar with one another. The self is subject to the authority of a collective entity and its principles, as defined by Di Méo (2012). Some elements of the old society remain present in this context, such as the inclination for the feminine gender to remain unnoticed.

In traditional Muslim culture, the invisibility of Muslim women is often framed within patriarchal norms that limit their roles and agency (Karimullah and Aliyah 2023). Men see women as impure objects of want and covetousness, which might potentially threaten their reputation (Douglas 1998). Consequently, women must exercise restraint over their nudity and hide their physical attractiveness in a culture that is deeply patriarchal. In her research on sexuality and gender in Muslim society, Moroccan sociologist Fatima Mernissi, in her book *Beyond the Veil*, examines the distinction between women in Western culture and women in Islam. Mernissi argues that Western culture perpetuates sexual inequity by attributing to women an innate inferiority. In Islam, there is no notion of the inferiority of females: 'On the contrary, the whole system is based on the assumption that women are powerful and dangerous beings' (Mernissi 1987, 9). The hammam thus serves as a cultural mechanism that both acknowledges female power and contains it within specific temporal and spatial boundaries, creating a controlled liminality that allows for female autonomy without fundamentally challenging broader gender hierarchies.

Spatial organisation and introversion

Hammam Chiab, like other hammams, is a secluded environment that is isolated from the external world. The threshold delineates the boundary between the private and public spheres. Privacy is safeguarded by the use of an architectural mechanism that functions as a defensive filter. The person gains access to the interior by passing through a succession of spatial sequences: the neighbourhood, the street, the threshold, the *kella* (curtain), the bench room (where you wait to be picked up), the chicane entrance, the undressing room, the cold room (frigidarium/*el bit el barda*), the warm room (caldarium/*el bit eskhouana*), (the boiler/*el borma*). Upon entering these chambers, the temperature and moisture levels rise, eventually enveloping you in a steam bath.

The same succession of chambers may be seen in the depictions of authors like Aksit, as he portrays the Turkish bath (Aksit 2011). The hammam is divided into four parts. The entryway, often known as the dry part, has a spacious table. Women convene and engage in conversation around this table. In addition, they engage in activities like drying their hair, consuming food and beverages, and tending to their offspring. This location also hosts activities such as waxing. The wet portion has three distinct segments constructed from marble, which women enter while draped in towels to ensure modesty. Within the frigid area, ladies may proceed after the preliminary arrangements to engage in activities such as hair dyeing or the application of various lotions or natural remedies to their bodies. These actions are not tolerated by the individuals in the main section due to the unpleasant odours or the unappealing visual appearance. During the 'tepid' phase, the washers cleanse women with soap. 'Finally, one reaches the hot part which is hottest at the center where a heated marble platform is placed' (Aksit 2011, 277–293). This aligns with Krim Fadela's account of the Roman baths constructed under the rule of Emperor Marius Felix Augustus. These baths comprised various chambers, including an area for changing clothes (Apodyterium), a cold swimming pool (Natatio), a warm water bath (Tepidarium), a hot water basin (Caldarium) and an unheated hall (Frigidarium) (Krim 2007).

The morphology of the hamman is completely shut off from the external environment. It symbolises the retreat into the inside. The interior symbolically depicts the womb. Exiting the hammam is equivalent to a rebirth, a rejuvenation of the senses. The intense warmth of the steam chamber completes the process. It exerts its influence on the body, altering it and providing relief. It results in the overshadowing of time and the state of forgetting oneself. The act of bathing has a calming effect on the mind and liberates the spirit by controlling the physical body (Carlier 2000, 1305).

The act of withdrawal, often referred to as 'kitman' in Muslim tradition, signifies the retreat into one's own self. Specifically, it has been compared to a maternal womb due to its characteristics of containment, heat and humidity (Bouhdiba, 1964). Bouhdiba compares the hammam to a maternal womb: 'Each plunge into the hammam bath is a plunge back into childhood, evocations of the past, aspirations, desires; everything mingles in these cold and hot vapors' (Bouhdiba 1975, 210). Conceptually, the

area may be seen as a matrix, and 'the hammam has a significant sexual significance' (Bouhdiba, 1964). Arguably, it resembles an environment similar to that of a uterine environment. The hammam is a location that is seen as comforting and has been idealised as a source of womb-like feelings. It is considered a place for mothers and is symbolically associated with concepts of identity. The symbolic association with the womb, as noted by Bouhdiba (1975), repeatedly emerged in our field research. Female participants, in particular, described the hammam experience as 'returning to origins' and 'being reborn', confirming the cultural understanding of this space as a site of cyclical renewal and transformation.

The hammam's immersive layout, and moist and warm ambiance, create a certain sensuality (Khodja 2010). The sensory experience of the hammam – its heat, moisture, darkness and acoustic properties – creates a state-dependent memory, where specific environmental conditions facilitate access to earlier memories and associations. This explains why many participants described vivid childhood recollections triggered by the hammam environment, supporting Bouhdiba's observation that 'going to the hammam is a going back into one's childhood' (Bouhdiba 1975). Conclusively, the hammam engages all senses; the progression of temperatures, the echoing acoustics, the distinctive scents, and the tactile experience of water and marble created a sensory memory that connects embodied experience to cultural knowledge (Pink 2015).

Bouhdiba argues that this location is the source of shared imaginings and that its S-shaped geography is a component of a mythical plan. The S shape illustrates the hammam's inherent introverted structure. The path followed inside the graph may be described as a closed sphere but with a circular motion. Furthermore, it is excessively praised in terms of both psychological and topographical aspects. Its labyrinthine shape is significant (Bouhdiba 1986, 210). The S-shaped labyrinthine path creates an embodied metaphor for the spatial arrangement that physically manifests the cultural concept of introspection and return to origins.

Tattooed memory and the staging of body techniques

Westerners and Easterners coexist in the same physical environment inside modern households. The bathroom is a secluded and personal space dedicated to the daily ritual

of bodily purification. However, in present-day Maghrebian civilisations, this area is only used for certain functions like daily cleanliness and ablutions performed five times a day for prayer. The hammam is an irreplaceable feature of the urban space, serving not just for personal hygiene but also for several other purposes.

Typically, individuals visit the place on a weekly basis. In modern times, children are taught the practice of washing and cleaning from a young age, and this becomes a habitual behaviour via conditioning. Initially, this behaviour is influenced by external factors, as described by Elias and Kamnitzer (1973, 218). In the studied community, children, particularly girls, are introduced to the ritual of the hammam from a very young age. They mimic the facial expressions of their mothers and replicate motions that have been passed down through generations. Regardless of the time or place, all of these 'imposed' rituals have a significant societal impact. Whether we are referring to the toilet in a household or the public bathhouse in a community, every person instinctively replicates the customs, information and convictions of the social environment they have been exposed to. The Arab-Muslim man's identity is moulded from birth within a social and cultural framework determined by his group affiliation, leaving him with little autonomy in shaping his own lifestyle. According to Abdulkebir Khatibi, this phenomenon might be referred to as '*tattooed memory*'. Essentially, the author observes that a person's cultural influences, acquired via social conditioning from a young age, are evident in their daily language and conduct (Khatibi 1971).

According to Elias and Kamnitzer, the concept of bodily hygiene is influenced by social conditioning, which they refer to as external constraints.

The need to clean one's body and keep it in a state of cleanliness does not derive primarily from hygienic or, as we say today, rational motivations: it is not based on the idea that dirt might present a danger to health; in reality, the need to wash arises with the transformation of human relations: the motivation is, therefore, social in essence, obeying above all external constraints. (Elias and Kamnitzer 1973, 234)

In a similar vein, for Mauss: 'The child, the adult, imitates acts that have succeeded and that he has seen succeed by people he trusts and who have authority over him. The act is externally imposed, originating from a

higher authority, whether it is just biological or pertains to one's physical being. The person acquires the sequence of movements that make up his own actions from those done by others before or beside him' (Mauss 1936, 8).

The location serves as a site for rejuvenation, where adherence to sanitary measures results in a kind of rebirth, specifically in terms of social purification as defined by the British anthropologist Mary Douglas. This entails the elimination of accumulated pollution or dirt, in order to restore a condition of pristine purity (Douglas 1998). The area may be represented symbolically as a matrix, which is a feminine location characterised by being highly eroticised and sexually prized: 'The hammam is a sexually overestimated place. It may be seen as a uterine environment. It is so psychically and oneirically – as I think I have shown – but it is so also physically and topographically. Its labyrinthine form is highly significant' (Bouhdiba 1986, 210).

Alternatively, the practices of the hammam and the ritual processes they imitate, such as the first hammam for young girls, the nuptial hammam, the hammam for infants, the 40-day hammam and the post-menstrual purification hammam, can be viewed as techniques of the body, according to Mauss's definition. These practices encompass various gestures, attitudes and behaviours. In his work on psycho-sociological taxonomy, Mauss defined them as 'the ways in which men, society by society, in a traditional way, know how to use their bodies' (1936, 5). Referring to his reasoning for dividing traditional acts into techniques and rites, he considered all these modes of acting as such. In fact, everything is based on tradition, which ensures the continuity of technique through transmission. He defines technique as 'an effective traditional act similar to the magical, religious and symbolic act' (Mauss 1936, 9).

Khatibi discusses the practice of cultural tattooing and how it is influenced by social conditioning. Mauss, on the other hand, ties these bodily practices to an individual's upbringing and the community of which they are a part. Undoubtedly, each community has its own habits, which he interprets as a concept of the communal aspect of 'habi-tus'. These 'habi-tudes' are not contingent upon the person but, rather, fluctuate according to societal norms and upbringing (Mauss 1971, 17). Evidence unequivocally shows that the community plays a significant role in the preservation of traditional practices in environments that no longer adhere to modern technological and

sanitary norms, but persist in transmitting knowledge and behaviour. The hammam is often associated with the physical body and closely tied to the cultural understanding of the body. In Islamic civilisation, religious practice has a growing impact on the norms for bodily care and specific behavioural requirements for women (Dumreicher and Kolb 2014, 11–30).

The hammam not only rejuvenates the body but also serves religious purposes. These primarily concern ablutions and purifications (Jones 2012, 123) on the eve of Friday prayers, after sexual intimacy and menstruation: 'A place for the clean body, the hammam is also a place for the pure body, laid bare to be cleansed and in order to be purified' (Carlier 2000, 1314). In this respect, 'a distinction must be made between *tahara*, a "magico-religious" purification, and *nadhafa*, which refers to simple bodily hygiene' (Bouhdiba 1973, 124).

The hammam in Maghrebian cultural tradition

A social regulator

Islam is a comprehensive religion that provides guidance for both individual and family conduct. It promotes the unity of families and the cohesion of society. This is evident in the design of dwellings and certain urban architectural features, among other factors. Aside from religion, tradition also has a significant influence on the spatial organisation of Arab culture, namely in establishing the link between household and non-domestic spaces. It induces the sexualisation of spaces and governs codes of behaviour in relation to different spaces (Pinson 1992). The society of Setif is no different in this regard; tradition and religion are the dominant factors in shaping its spatial arrangements.

Hammams, like other significant locations in the city such as Moorish cafés, fountains, public gardens and mausoleums, are culturally significant and purposefully designed spaces. They serve as carriers of communal memory and are integral to the authentic cultural history of the city. They serve as locations for intergenerational interaction. They initiate a variety of social activities, including weddings, financial transactions (such as the selling of gold, goods, textiles, etc.), soliciting assistance for people in need, and sometimes even practising fortune-telling or other types of witchcraft for ladies struggling

with love, infertility or illness. The area is enigmatic, secluded, introspective and confidential, where the fates of individuals are determined and altered.

Hammam Chiab is a significant establishment in the city. It is located in the Langar area, which is a historical neighbourhood near the historic city centre. Within a culture that enforces gender-based spatial regulations, the hammam continues to serve as a vital hub of social interaction, particularly for women. It functions as a social regulator and is established as a social space where intimate connections with people are practised, and which functions as an enforcer of emotions and behaviours in the shared environment we inhabit. The organised space is a social environment where we engage in close physical contact with people in our interactions. A place is distinguished by its language, lifestyle, myths and rituals, and culture, which together foster a feeling of belonging and serve as a foundation for identification (Honoré 1996).

Our ethnographic research reveals how Hammam Chiab operates as a vital social environment where community is formed and maintained through ritualised interaction. This social function is particularly significant for women, who historically had fewer public spaces available to them in traditional Setifian society. The hammam's role in disrupting daily routine, as noted by Zannad, creates a socially sanctioned space to ultimately reinforce broader social cohesion (1984). Our interviews with female users across three generations revealed how the hammam provides a unique environment in which to temporarily escape domestic constraints while ultimately reinforcing their social integration.

Women in the community are known to have strong associations with specific hammams. The level of social recognition someone receives is directly correlated to the prestige of the location they are associated with. The correlation between social recognition and hammam prestige highlights how this space functions within broader status systems. Hammam Chiab's reputation as an establishment of distinction makes it what French sociologist Pierre Bourdieu would term a site for 'cultural capital' accumulation (Bourdieu 2018). This explains why families maintain multigenerational loyalty to specific hammams despite modernisation and alternatives.

Further, establishments such as the Hammam Chiab have seen many generations of women from

Setif transmitting the heritage of the location and its historical significance from mothers to daughters. This intergenerational transmission exemplifies the intangible heritage of the hammam and makes it a crucial site of cultural continuity amid social change, preserving traditional forms of social connection that might otherwise be lost by modernisation.

Through these multiple social functions, Hammam Chiab operates as what our research terms a 'cultural anchor' – a spatial reference point that stabilises community identity while adapting to changing circumstances, demonstrating the remarkable resilience of traditional social institutions when they fulfil deep-seated cultural needs (Mahira et al. 2023).

The hammam as a socio-cultural model

The hammam's function as a socio-cultural model reveals its role as what anthropologist Clifford Geertz would call a 'cultural text' – a living embodiment of collective values and meanings that can be read and interpreted by community members (Geertz 2017). Our ethnographic research demonstrates how Hammam Chiab serves as a 'performative heritage site' where cultural identity is not merely preserved but actively enacted through ritualised behaviours and spatial practices.

The community's recognition of the hammam as a site requiring preservation and transmission highlights its status as a culturally significant practice and a place that communities consciously recognise as worthy of protection. Our interviews with local cultural authorities and hammam users revealed a shared understanding of this space as what we term a 'living archive', where cultural memory is stored not in documents but in embodied experiences and spatial associations.

The hammam's presence in everyday routines and common consciousness demonstrates its function as a structure that organises collective remembering through shared spatial references (Halbwachs 2009). This explains why the hammam persists as a significant cultural landmark even as its practical functions could be replaced by modern alternatives; it serves as what our research identifies as a 'mnemonic device' that triggers and structures cultural memory through sensory and spatial experiences. Our field observations revealed how the hammam's spatial organisation reflects a 'narrative

architecture' where movement through space becomes a form of storytelling, preserving cultural narratives through embodied experience rather than written text.

Further, through these multiple symbolic functions, Hammam Chiab exemplifies a cultural anchor that stabilises community identity while adapting to changing circumstances. The hammam serves as both a repository and a transmitter of cultural knowledge, allowing traditional practices to persist within a changing social landscape. Its continued significance despite modernisation demonstrates how spaces imbued with cultural meaning can bridge historical traditions and contemporary life, providing continuity that strengthens community cohesion while accommodating necessary social evolution.

Results and discussions

The data analysis revealed that interviewees consistently reference the same locations when describing the city of Setif. As they develop their understanding of their surroundings, they recognise fundamental spatial features of the environment, acknowledging significant locations, including Hammam Chiab. Our study demonstrates that individuals frequently employ spatial references in their portrayal of the city, many originating from the colonial period (Yoshimura et al. 2020).

The hammam's emergence as a 'mnemonic perceptual spatial reference' in our interviews reflects its profound significance beyond mere architectural presence. Analysis of responses from participants revealed that Hammam Chiab functions not merely as a physical structure but as what Nora (1984) terms a '*lieu de mémoire*' – a site where collective memory is crystallised. This symbolic dimension manifests through the hammam's persistent presence in cognitive maps and verbal descriptions of the city, where it serves as an orientation point both geographically and culturally.

The symbolic significance of Hammam Chiab emerges clearly in our data through three distinct dimensions. First, participants consistently associated the hammam with intergenerational knowledge transmission where cultural practices are embodied and preserved. Second, the hammam appears in narratives as a liminal space that mediates between opposing states (hot/cold, clean/unclean, sacred/profane), embodying what Turner

(2017) identifies as symbolic dualities that organise cultural understanding. Third, the hammam functions in participants' cognitive mapping as an 'embodied mnemonic device': a space that triggers bodily memories and cultural associations that structure one's experience of the broader urban landscape.

This symbolic function explains the hammam's resilience as an urban reference point despite modernisation. While modern bathrooms have replaced its practical necessity, Hammam Chiab retains its cultural prominence precisely because it serves as a repository for embodied cultural memory – knowledge stored and transmitted through sensory experience rather than written text.

The gender-based differences in spatial references are particularly revealing. Our data shows that women predominantly identify the hammam as a significant urban landmark, while men more frequently reference cafés, mosques and public streets. This gendered pattern of spatial referencing reflects Bourdieu's concept of an 'inequitable socio-spatial arrangement' wherein masculine identity is associated with public space and feminine identity with more enclosed environments (1998). However, our analysis reveals that rather than indicating simple restriction, this pattern demonstrates how the hammam has historically provided women with a crucial 'third space' (Bhabha 2012) for social connection and cultural practice beyond the domestic sphere.

The mnemonic function of the hammam transcends personal memory to collective memory (Halbwachs 2009). Multiple participants across age groups identified Hammam Chiab as a site that connects contemporary Setif to its pre-colonial past, providing cultural continuity despite historical disruptions. This mnemonic dimension is particularly pronounced in the Langar sector, where the hammam serves as what we term a 'spatial anchor' for community identity, connecting residents to both place and heritage.

The hammam's role as a spatial symbol becomes evident in how interviewees incorporate it into their cognitive mapping of the city. Even participants who rarely or never visit the hammam included it in their mental maps, indicating its function as a landmark. However, unlike purely visual landmarks, the hammam's significance derives equally from its associated cultural

practices, sensory experiences and social functions.

This analysis demonstrates that Hammam Chiab functions simultaneously as a physical structure and a symbolic repository of cultural meaning. Its 'mnemonic perceptual spatial reference' quality emerges precisely from this integration of tangible form and intangible significance, creating a culturally encoded space that both preserves and transmits collective memory and identity through embodied experience.

The region's cultural legacy is embodied through landmarks including the Ain el Fouara fountain, the Barral Garden, the Theater Square, the El Attik mosque and, notably, Hammam Chiab. This spatial entity is characterised by a collective identity suitable for a social group with diverse spatial and temporal perspectives, highlighting how spatial entities are continuously shaped by socio-historical contexts (Mirošević and Vukosav 2010).

Through this analytical framework, we can understand the hammam as a spatial symbol that transcends its physical boundaries to function as a cultural reference point within Setif's collective consciousness. Its significance derives not merely from its architectural features but from its status as what Bouhdiba (1975) describes as a 'matrix' of cultural experience: it is a space where embodied knowledge and collective memory converge to maintain cultural continuity amid social change.

Conclusion

This study has extensively explored the complex connection between the hammam and the urban environment, revealing its crucial role in shaping how the city is visually and mentally perceived. The findings elucidate the way in which the hammam goes beyond its practical function as a bathhouse, becoming a representation of cultural identity and legacy within the urban landscape of Setif, Algeria.

The persistence of Hammam Chiab within modern Setif, despite the proliferation of private bathrooms and contemporary alternatives, demonstrates its significance beyond utilitarian purposes. Our research revealed that this endurance stems from the hammam's effectiveness as a mnemonic technology – a spatial mechanism through which cultural memory is stored, retrieved and transmitted across generations. Through multiple interconnected

mechanisms – embodied practices, sensory triggers, narrative traditions and spatial sequencing – the hammam preserves and communicates cultural knowledge in ways that modern alternatives cannot replicate.

The hammam's symbolic significance manifests in three distinct dimensions identified in our study: as a site of intergenerational knowledge transmission, as a liminal space mediating between opposing states (hot/cold, pure/impure, sacred/profane), and as an embodied mnemonic device that structures urban experience. These dimensions explain why Hammam Chiab consistently emerged in our participants' cognitive mapping as a 'mnemonic perceptual spatial reference': a landmark that orients both physical navigation and cultural understanding of the city.

Gender dynamics are particularly illuminating in understanding the hammam's cultural function. While modern feminist discourse might interpret gender-segregated spaces as restrictive, our analysis reveals a more nuanced reality where women actively appropriate the hammam as a third space – neither domestic nor formal public space, but a vital social realm with its own rules and possibilities. This challenges simplistic binary interpretations of gendered spaces in Islamic contexts and highlights how women negotiate agency within traditional frameworks.

Methodologically, this study demonstrates the value of integrating sensory ethnography with spatial analysis to understand heritage spaces. The multisensory

environment of the hammam – its temperature gradients, acoustic properties, distinctive scents and tactile experiences – form a 'sensory memory' that connects embodied experience to cultural knowledge. This sensory dimension helps to explain why the hammam persists as a significant cultural landmark even as its practical functions could be replaced by modern alternatives.

Ultimately, the hammam in Setif represents more than just a physical building. It serves as a significant socio-spatial landmark that embodies the city's rich history, cultural heritage and the complex interplay of gender dynamics. The study emphasises the significance of identifying these areas in urban planning and cultural conservation, underscoring their function in preserving the ongoing collective memory and identity amid contemporary urban changes. In order to ensure a connection to Setif's culturally significant history while also planning for its future development, it is essential to comprehend and safeguard the socio-spatial importance of the hammam.

In conclusion, Hammam Chiab exemplifies the concept of a 'mnemonic spatial heritage'. It encodes cultural knowledge, facilitates its transmission across generations, and anchors collective identity in embodied practices rather than abstract concepts. This understanding offers a more nuanced approach to heritage conservation that recognises the inseparability of tangible structure and intangible practice, providing valuable insights for preserving cultural continuity amid rapid urban transformation. 🏠

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