

Vernacular Traditions, Culture, Rituals & Architecture: The Symbiotic Relationship between the Built Environment and the Social Practices in the Old Pol City of Ahmedabad, India

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Abstract

Ahmedabad is a UNESCO World Heritage city, located in Gujarat. On the eastern side of the Sabarmati River of the city, there are mills of the textile owners depicting architecture enriched by culture and traditions. The merchants, workers and mill owners had set up markets and their houses along the narrow lanes of the city. Known as Pol houses, they are long linear houses and havelis which have internal courtyards responding to the hot and humid climate. These courtyards are where the residents of the Pol houses spend the days. In this densely organised settlement pattern, people reside among the shops: shop owners have their shops on the ground floor and their residences above. There are unique vernacular traditions, culture, rituals in this community. In this context, this paper examines the symbiotic relationship and the inter-dependency between the built-environment and life in the Pol City, in order to understand the tangible and intangible aspects of their culture.

The research employs a literature survey and on-site observations. It observes how the activities change daily according to the seasons, the festivals and the celebrations. It is based on how the built spaces and the hierarchy of its separations determine the functions of the spaces from the internal spaces to the spillover and transitional spaces in the streets and the chowks.

A symbiotic relationship is where multiple species share a common habitat. Such a relationship is inclusive of the simultaneous activities of different nature in synchronization and harmony. Similarly, in the Ahmedabad Pol city, the residents of various religions share a common habitat with the sensitively built Pol houses and their functional play. The paper concludes that local community and activities are dependent directly upon the built environment which shapes the social practices and the traditions.

Keywords: Heritage, Pol Houses, Courtyards, Opla, Livelihood, Climate, Community, Ahmadabad, India.

Introduction

Indian architecture has come a long way and non-colonial Indian architecture has had a long and colourful history. The Medieval period has witnessed several traditional residential building typologies come into existence. Pol houses in Gujarat are unique designs that are based on incremental changes and adaptation to climate, locally available materials, and the needs of the society.

In fact, the Pol houses of Ahmedabad, Gujarat are an example of vernacular architecture that ameliorate the relationship between physical environment and sociability. These houses are more than 300-400 years old and show the socio-cultural history of the rich heritage, its contextual application in the principles of construction and its climatic responsiveness. It portrays in detail about, passive climatic techniques with architectural, physical and visual comforts, practical planning and its social sustainability integration. They have provisions of courtyards which provide thermal comfort, natural lighting, and privacy along with space for daily needs, which are required even in today's context. However, they are undergoing drastic change today.

The liberalization of the Indian Economy in the year 1990 and globalization has drastically changed the structure of people's social life. It is for this reason that people make additions to the existing Pol houses to suit the contemporary needs of the occupants. Moreover, the ancient Pol houses have become more conspicuous after UNESCO declared the walled city of Ahmedabad as a World Heritage City in 2017.

The Pol houses are built of natural local products such as lime, lumber and bricks but are also ensured to be environmentally friendly as well as earthquake-proof. The use of wooden columns, brick walls and use of rainwater harvesting is a modern system in the use of natural resources. According to Gangwar and Kaur (2020), practices of the prehistoric ages like water harvesting and common area management systems need to be practiced more in the present-day urban settings and there is much to be learnt from the Pol houses.

The Pol communities are facing severe threats from two fronts. On the one hand, there is modernization. On the other hand, there are demographic pressures. Moreover, these structures have been left open due to the proliferation of new metropolitan neighborhoods. Thus, the structures have become a target for abandonment and destruction by people. Gangwar and Kaur (2020) show that there is a need to implement and develop adaptive reuse and conservation that accommodates modern needs in relation to architectural and social fabric of historic buildings. Applying the produced historical concepts to modern urban design could create a more viable long-term plans for revitalizing these areas. In this context, this paper documents the built forms and as part of a related study program. It examines how vernacular architectural elements, such as internal courtyards, narrow lanes, otlas, and chowks create conditions for collective living, ritual practice, and informal social engagement. The paper looks into these various tangible and intangible aspects of the Pol city with an aim to understand and examine the practices, changing functions and space making amongst the community in their local setting.

In so doing, the paper aims to explore the deeply intertwined and symbiotic relationship between the built environment and the living traditions of the old Pol city of Ahmedabad. It thus intends to add to the discussion that intangible heritage can be sustained by concrete environments. It argues that maintaining this balance is essential in order to continue the existence of the community and sustain its identity. Its objectives are as follows.

1. To understand the various layers pertaining to the tangible and intangible, and how they come together to form the spaces of Pols since Pols are a living heritage with people preserving the traditional culture and building skills.
2. To ascertain how the forms, structures, and the spatial qualities of these historic houses shape, support, and evolve with the everyday rhythms, seasonal changes, and community festivities that define life in the Pol community.
3. To comprehend the ways in which the spatial hierarchy inside and outside the houses influences the definition of functional and symbolic meanings of the areas

of the house distinguished as private, semi-private and the places that are open to the public.

4. To identify the ways in which transitional spaces bring domestic life into the communal action which would show how architecture reacts and adapts to human activities, behaviour, climate and cultural memory.

Theoretical Framework

The study is framed on an interdisciplinary approach that engages vernacular architecture, spatial anthropology, and socio-cultural theory to comprehend the reciprocal construction of social identity and built form in historic Pol settlements of Ahmedabad. Instead of treating built heritage as static artefacts of the past, this paper adopts the position that the vernacular built-environment is an evolving socio-spatial form, a product of constant negotiation via cultural practice, collective memory and environmental adaptation.

Vernacular architecture is the key concept of the inquiry. According to Oliver (1997), vernacular architecture can be identified as a product of traditional knowledge systems shaped by local climate, social organization, and resources, that reflects a spatial response to physical and cultural context of a community. Within this framework, the *Pols* are not just architectural types but are socially embedded landscapes built in an iterative community-based process. The built environment of the Pols, which incorporates such unique architecture as *otlas* (elevated platforms), *chowks* (interior courtyards) and threshold transitions, display the characteristics of what Rapoport (1969) calls non-verbal communication through spatial expression of beliefs, family structures and environmental rationality.

Shils (1981) considers tradition as an adaptive process of cultural transmission rather than a passive heritage. Traditions in the Pols are experienced in seasonal festivals, ritual performance and spatial practices, including the collective appropriation of courtyards and facades in festival times. These are rituals that strengthen social integration and persistence and turn the physical spaces into temporal phases of group identity. The use of space by the community as seen in the multifunctional usage of courtyards or celebratory events in communal zones show what Lawrence (1987) has defined as the socio-spatial embeddedness of the domestic architecture.

Symbiosis of the built and the lived is echoed in the Pols of Ahmedabad analyzed by Kagal (1986), where spatial patterns create a harmonious overlap of the private life and the life of the community. Architecture does not merely house activities, it organizes social relations and encodes cultural meaning. Tabitha (2024), says that such spaces as *chowks* and *otlas* exist as socio-symbolic spaces, i.e., they are both functional and mnemonic spaces that form identity, interaction and memory.

Bringing together these views, the theoretical framework places the Pols of Ahmedabad as a living vernacular system, with architecture being in constant dialogue with community practices. This study therefore looks at built form not only as a support on which culture exists but actually as a co-creator of culture. With the perspective of an architectural anthropology and socio-spatial theory, the study makes its input to the discussion of heritage as a living and adaptive and participatory process.

Literature Review

The research of vernacular cultures and their complex relationships with the man-made environments has fascinated scholars of architecture and cultural studies for quite some time. For example, Rudofsky (1964) recognizes the work of indigenous people and lays great stress that vernacular architecture is not a form of design strategy and forethought on people, but rather what is borne out of the local experiences of the people. Similarly, Rapoport (1969) shows that a house is not merely a shelter but a cultural expression, shaped by climate, social rituals, traditions and economies. These fundamental views demonstrate that built forms evolve symbiotically, developing in relation to traditions and everyday practice.

Oliver (1997) provides a significant tool in interpreting vernacular architecture which can be applied particularly in the Indian context in terms of its ability to accommodate the rituals, the environment and collective memories. His work highlights the philosophy that traditional architecture should not be considered obsolete but be appreciated as developing systems and harnessed within cultural reasoning. To add to this Menon (2005) mentions that heritage-sensitive planning is the key to ensure cultural continuity in Indian cities particularly in the historical centres such as the walled city of Ahmedabad.

Focusing more locally, one of the first scholarly glimpses into the Pol houses of Ahmedabad is that of Kagal (1986). He refers to the Pol houses as intricate urban fabrics where the social structure, responsiveness to the climate, and the sense of community intersect. Most recently, Gangwar and Kaur (2020) have examined how courtyards, sharing of walls, and narrow lanes in Pols, not only increase thermal comfort but also social cohesion. They show that common architectural features like the use of *otlas* (raised platforms) both control the environment and serve as social-cultural spaces for gathering. The built environment is considered to be a facilitator of everyday social practices. The division of spaces on the basis of gender, e.g. the use of *chowks* (courtyards) by women to complete household tasks or celebrate a festival, is indicative of the correspondence between spatial planning and cultural patterns. In a similar vein, Shivani (2024) outlines the usage of built elements, such as *chabutras*, which not only fulfill ecological functions but also form a communal interface, promoting relations between species and people: one of the neglected aspects of vernacular architecture.

A number of studies highlight the adaptive resilience of these structures. For example, Rawal et al. (2018) demonstrate that the thermal comfort measures in Pol houses such as the optimization of the street orientation to shade and the inward-facing plans can offer lessons for sustainable urban housing. Pancholi (2021) builds on this idea by evaluating the way earthquake resilience is ingrained in the traditional construction systems, such as lime mortar and timber framing. However, even with this wealth of information, Eadara, (2022) notes that in the current adaptations, there is a desire to forego these hidden wisdoms in order to adopt modern aesthetics or materials.

Although current literature draws attention to the spatial, thermal, and communal intelligence of Pol houses, only few discuss the intangible rituals and performances that take place in them. The contribution of seasonal festivals in the conversion of the public space into the performance arena is yet to be examined fully. Similarly, there is limited exploration into how everyday negotiations—like street interactions, communal cooking, or shared maintenance—shape and are shaped by architectural configurations.

The findings from similar researchers on the relationship between the built environment and social practices in the old Pol city of Ahmedabad reveal how the spatial organisation of the built environment supports socio-cultural resilience. Gangwar (2020) presents the Pols as arrangements of dwelling houses with concentrated neighbourhood characteristics including walled premises, pathways, and small composite central spaces; chowks cohesively engaging with climatization and societal integration through photo sequences as a means of analysis in order to evaluate how communal arrangements improve the flow, comfort, and interactions. Nevertheless, he recognizes a lack of knowledge on how current requirements can be incorporated into historic formats environmentally.

Shivani (2024) points out that Pols have several specific architectural designs or structures, such as chabutras or bird feeders, and otlas or semi-private terraces, and wooden façades with carvings which are in line with socio-environmental harmony. Symbolic and practical dimensions of the elements identified are established by ethnographic approaches to advance community well-being. Although useful in contextual analysis, she does not compile an exhaustive list of innovations in contemporary urban planning to be integrated into the pol fabric. In fact, Shivani (2024) points out the conservation difficulties; she reveals the use of sustainable materials such as lime mortar and wood. Surveys and architectural evaluations are used together to show that pols are capable of withstanding movements which cause earthquakes. However, she mentions modernization and neglect two key threats. In analyzing

the preservation strategies however, Shivani suggests retrofitting, while there is still a need to study more about adaptive reuse policies.

Previous research has illustrated the interaction between the constructed environment and their practices and its amenity-centered approach to understand how the Pols mediate between public and private realms. The exterior of a house is communal, marked by an *otla*, where people make social contacts, but the inside of the house is strictly private and enclosed. In the hierarchy of Pols that range from the courtyards to the groups of houses, Bhatt, (2006) points out that this spatial arrangement mirrors the castes and occupations of the dwellers of a city. It does so through field surveys where morphological changes are seen despite culture bearing the brunt of pressures that come with urbanization. However, the role of traditional spatial forms in world politics is only discussed at the historical level, without revealing the applicable approaches to the modern-day incorporation of historical spatial forms into today's leadership.

Thus, while literature provides a strong foundation for understanding Pol architecture as a socio-environmental system, there remains a gap in critically connecting rituals, culture, and performances with the tangible layouts of the built environment. This study aims to address this gap by focusing not only on architectural typologies but also on the rhythms of lived traditions and how they continuously sculpt and are sculpted by the spaces of the old Pol city.

Research Methodology

This research employs a literature survey and understanding as per personal on-site experiences and observations in the form of notes and sketches of the Ahmedabad Pol city as research methodologies. This refers to the documentation of conversations and interactions taking place at various Pols of the Old City of Ahmedabad for self-reflection. These site visits were spread over a longer period of time and for monthly visits around the year. The people of the old city were helpful in providing the data to analyse the spaces, functions and uses. The paper shows these observations as per different parameters categorised to understand how the different parameters cater to the interdependent relationship of the built environment with the living.

In the analysis of the necessity for community participation in conservation, the authors employ archival research techniques and interviewing stakeholders, and therefore discusses the gap left by prior research. From 2017 to 2023, the researchers visited the households for two weeks at a time, every six months. It observes how the activities change daily according to the seasons, the festivals and the celebrations in a number of places employed as case studies.

Findings

The Pol Houses and their Architecture and Context

Literature describes the traditional dwellings with respect to historical background, typology, its configuration, and socio-environmental networks. Describing the historical and urban context, these ancient houses belonged to medieval architecture but have been obscured by the social, economic and environmental conditions. These are the residential buildings situated in the compact structure of the inhabited fabric of the walled city consisting of narrow streets and alleys, gated pols, and other features of high urban density. Each Pol typically contains 45-60 houses which are laid out in such a way as to allow for security concerns and interaction with others.

The World Heritage Site status granted to the walled city of Ahmedabad in 2017 confirmed the importance of these monuments in the Indian cultural and architectural landscape (Gangwar, 2020). The spatial and environmental considerations of these houses; the courtyards or chowks, verandahs or *otla*, and rainwater collections and storage systems, all distinguish a Pol house and is indeed an emblem of sustainable architecture. They enhance the ability for natural lighting, natural ventilation, and control of internal temperature, which is necessary in the hot and dry climate of Ahmedabad. Indoor and outdoor thermal comfort are enhanced by shared walls as well as the narrow streets which will eliminate heat, as well as ensure that one is assured of being under a cover. The house layout courtyards are flexible spaces for social use

of housing as well as environmental use such as ventilation and water storage. Narrating about the cultural and social factors; the spatial organization of the Pol houses is a result of sociologically functional spaces, mirroring the social organization and collectivism. Social togetherness is promoted by organizing religiosity, fun and entertainment activities and functions in the public or semi-public spaces that include indoor, outdoors and roof top spaces including courtyards and otlas.

It is also found that the vertical arrangement of the rooms from verandah to inner chambers emphasizes the cult of privacy and hospitality being cherished in the Gujarati culture. This social life includes both commercial and residential activities which are interdependent and caters to the symbiotic relationship of the Pols. These dwelling houses also outline the various stories of Sustainability and Resilience in its core existence till today. In fact, observations show that the architecture of the Pols is not merely a backdrop to life; it is a living participant in the cultural and social rituals of its people.

Chougula (2024) describes Pol houses having extraordinary architectural features, symbolizing the spirit of community living. He has examined it with respect to the planning principles of the Pol houses, their purpose, and the sociological paradigms encoded in the design. He explains it as a Pol cluster which is “independent” and is separate from the other clusters. In fact, it is often marked off by gates to provide a more secure environment for facilities and people.

Traditionally, planning of a Pol cluster comprises narrow winding lanes that leads to an open space or a chowk; a common place for the people. It is not just haphazard, but it is highly planned with regard to climate, social contact ratio, and predictors of defense. A single Pol house is a two or three staged building whose exterior shows a relatively simple construction with pictures created on wooden panels. Figure 1 presents a typical example of a gated Pol cluster, delineating the boundaries of a specific Pol community. The ground floor is occupied by market spaces, while the upper levels house residential units, often featuring balconies that visually and socially engage with the street below.



Fig. 1: Gated Pol clusters demarcating the specific pol societies.

Source: Image_Gate view of Pol house Ahmedabad (Prajapati S.) / Graphics: Author, 2024



Source: Image_Muhurat Pol/An entrance to a pol (Kirana bhat. Online) /Kamaanvali Pol, Gaurav Gangwar (2020)

The structures appear joined side-by-side and some sections are fitted together, merging at certain junctures to improve thermal performance. Indeed, they also lessen the need for construction materials. Businesses or Places of Workshop are normally located in the ground floor while the upper floors are dedicated for living purposes. Internal planning of an individual Pol house can be both formal in terms of use, but at the same time, there can be provision for a highly flexible layout that will suit the various needs of the users.

The Otla / Verandah, a raised platform at the entrance way has more than one function. it is at once a passageway between the public arena of the street and the domestic space of the house. This space is usually utilized for parlor conversations, entertaining and also, minor community gatherings that help create a great community spirit. Here, the Otla symbolizes the strength and the social interconnectedness of the Pol houses and 'togetherness' amongst the dwellers. The focus area of the Pol house is the chowk or the courtyard of the house which acts as the nucleus of the house. This open space is all the more important for both light and ventilation as the structure is packed into tightly nucleated urban fabric of old Ahmedabad.

Figure 2 captures the threshold space, or otla, of traditional houses—an integral part of the social life of the neighbourhood. This elevated platform hosts a range of everyday activities, from vegetable vendors setting up shop, to children playing, and women engaged in domestic chores like sieving pulses.

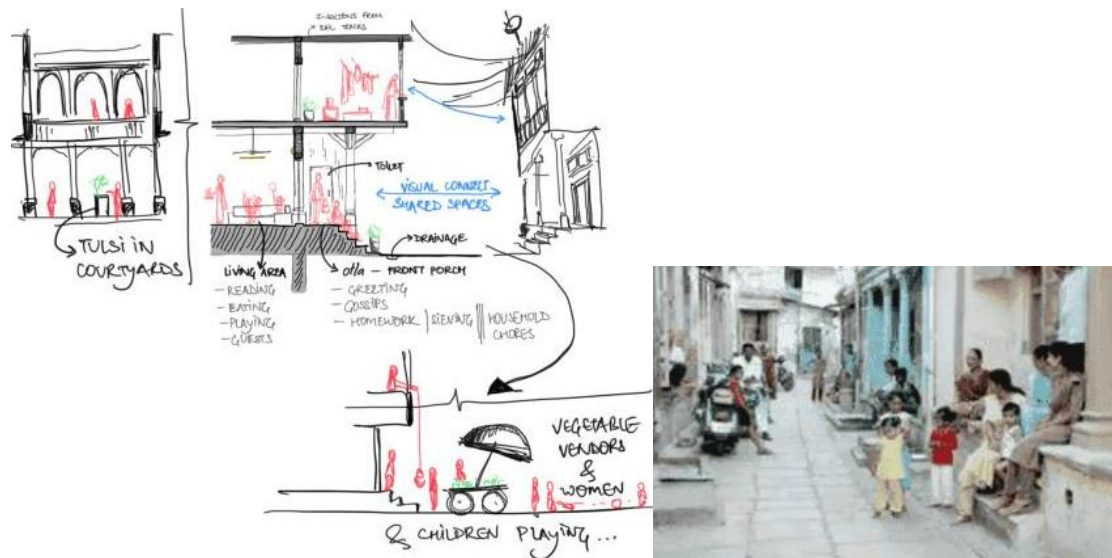


Fig. 2: The threshold 'otla' of traditional houses and various activities.
Graphics: Author, 2024; Source: Image: Antony (Online).

Natural air movement within a courtyard helps in controlling the internal temperatures and thus provide reliable weather conditions inside the courtyard residences. It also performs diverse uses such as a washing and drying area, playing or even praying ground among others. The chowk drafting is typical of the local architectural context of northern India; the large open areas reflect the major values of the composition, which is focused on the improvement of the well-being of the inhabitants.

The *Chabutra* or the bird feeder is another feature inherent in Pol clusters. Figure 3 illustrates the chabutra situated at the heart of the chowk, serving as a communal focal point where residents gather—be it for public announcements, informal meetings among elders, or simply as a marker that defines the identity of the neighbourhood.

Although the term 'cluster' is used here in connection with Pol clusters, it is noteworthy that clusters represent the most obvious type of community settlement. These slender, purpose-built features are located in the central zones of the Pols and feed and house the birds. Chabutras were traditionally built as an act of benevolence and together with constitutions of Nature.

Today, they remain important not only from the standpoint of an environment but also from cultural sightseeing.



Fig. 3: Chabutara at the Centre of the Chowk.

Source: Image-Saatvika, 2021/ Graphics: Author, 2024

Chabutras are evidence of the sustainable principles of the area and the importance of the remaining state. Incorporation of the principles of bio-diversity was also part of the planning of the Pol houses. In fact, they are not merely buildings of residence but appropriately express the socio-cultural aspirations of the people of Ahmedabad. The physical layout of these houses produces high density because the units are closely clustered enabling people living in them to interact closely. People together enjoy various festivals like night-long cultural events, making them lively in the chowks, which makes them more reliant on people. From this aspect of Pol living, one learns of the culture of collectivism dominant in India as opposed to the culture of individualism dominant in the developed countries.

The construction of Pol houses also has an environmental dimension in its architectural design. Narrow streets and houses located in close proximity to one another provide areas of shade and this makes the streets themselves cooler in the summer. They are open spaces that provide natural ventilation which is greatly required due to the heat and aridity of Ahmedabad. Furthermore, to the extent that construction materials were locally sourced, this is an early indication of sustainable architectural practices.

The research lays emphasis on the adaptation and preservation where concerns are to retain the cultural profile of Ahmedabad by retaining the Pol houses and their specific architectural values. From the creation of the perfect Pol clusters to the flexible uses of the Otlā and the necessary courtyards to the Chabutras, every aspect of a house in Pol has a specific function. They are a historical and educational account of how previous generations of architects and builders have provided solutions for sustainable housing that are still relevant today. As we progress in the world of modern architecture, the basic tenets put to practice in the Pol houses of Ahmedabad surprise and have a continuously inspiring effect.

Built Environment and Social Practices in the Old Pol City

The Pols are a community friendly and climate driven vernacular architecture of Ahmedabad. The typology of Pols are long linear houses with shared walls of longer length and shorter walls as facades to the narrow streets called 'galis'. These streets are mutually shaded by heritage structures on both sides and also act as spillover spaces for residential functions and commercial occupations. These Pol houses situated in a hot and humid climate are two / three storey high to mutually shade the lanes and keep it cool during hot summers. The typology has a brick and wood construction with intricately carved jalis, brackets and entablatures. Courtyards are a significant part of these havelis which provide the required ventilation. Many people have their workplaces right below their houses, while some prefer to prepare textiles and products in private courtyards/public chowks. Local spaces, being known for changing markets across day and night, and different seasons, display changing human and occupational patterns in the Pol city. The same streets become a shared stage for celebrations and rituals of multiple faiths, each adding a unique rhythm to the everyday urban fabric.

During Navratri, the nine-day festival fills the area with vibrant energy—boosting local trade, drawing crowds to textile shops, and transforming the night into a lively marketplace. Not far from here, the Sidi Saiyyed Mosque, situated just opposite the historic House of MG, serves as a spiritual anchor where the faithful gather for Namaz. This mosque is a key stop on the heritage walks of Ahmedabad, drawing visitors to marvel at the famous Sidi Saiyyed ni Jali—the intricately carved stone lattice windows (INTACH, 2010; Patel, 2017).

The Figure 4 highlights this intersection where layers of commerce, faith, and heritage meet. On one side of the street stands the House of MG, a former mansion turned heritage hotel, once owned by a prominent textile family. Directly across is the Sidi Saiyyed Mosque, built in 1573, which represents the pinnacle of late-Gujarati architectural expression before Mughal influences took hold. Its famed Tree of Life jali has transcended architecture to become a symbol of the city itself (Mehta, 2015).



Fig. 4: The transition of functions and activities across the street

(a) The House of MG (b) Sidi Saiyyed ni Jali

Source: Image_(a) <https://houseofmg.com/> (b) Misra L (April 2023) / Graphics: Author

The threshold of the Pol houses is called ‘otla’ for they are the semi-private spaces on an elevated plinth in front of the house for outdoor family activities, conversations and interactions with the neighbourhood. The heritage walks conducted in these streets are a source of income and value to the old markets and Pols of the city. The culture of the old city is as the eyes of the street and on the street.

Aspects of the Symbiotic Relationship

The symbiotic relationship between the built environment and the people can be assessed through multiple layers overlapped at an urban scale. They include climate, the functionality of spaces, the festivals, changing livelihoods and the spatial organisation of spaces inside Pol houses, and the network of vividly intersecting streets and nodes. These spontaneous interactions and intersections at various junctions and corners form the hearts of Pol, the chowks. These chowks are the life of the community who share stories and gossip there, along with those working on their sewing machines or making some products to sell.

Gender and Occupation

Pol has local businesses set up in the form of community involvement activities where households collectively work at a common place which would be their internal courtyards, on otlā outside their houses or in the main chowk area on a raised plinth near a chabutra. These collectives cater to the working-class population where even women play a significant role in weaving craft or packing food for further distribution. Pol systems are about a wholesale business and even to sell in parts. The trade and business is set in the roots of every household. Men work at their own shops while few even go to the western side of the city for better job opportunities. There is a distinction in how the gender spaces are segregated in the form of internal spaces and external spaces where women are mostly seen inside the houses and men outside the houses. This depends upon the time of the day when the measure is taken. Children and women go outside in the evenings on otlās, buying vegetables, preparing for food. Kids play.

The Figure 5 illustrates the chowk and its surrounding context of linear buildings and narrow streets. The image also captures activities on the otlā, including one in front of a deserted house that continues to serve as a shaded resting spot.

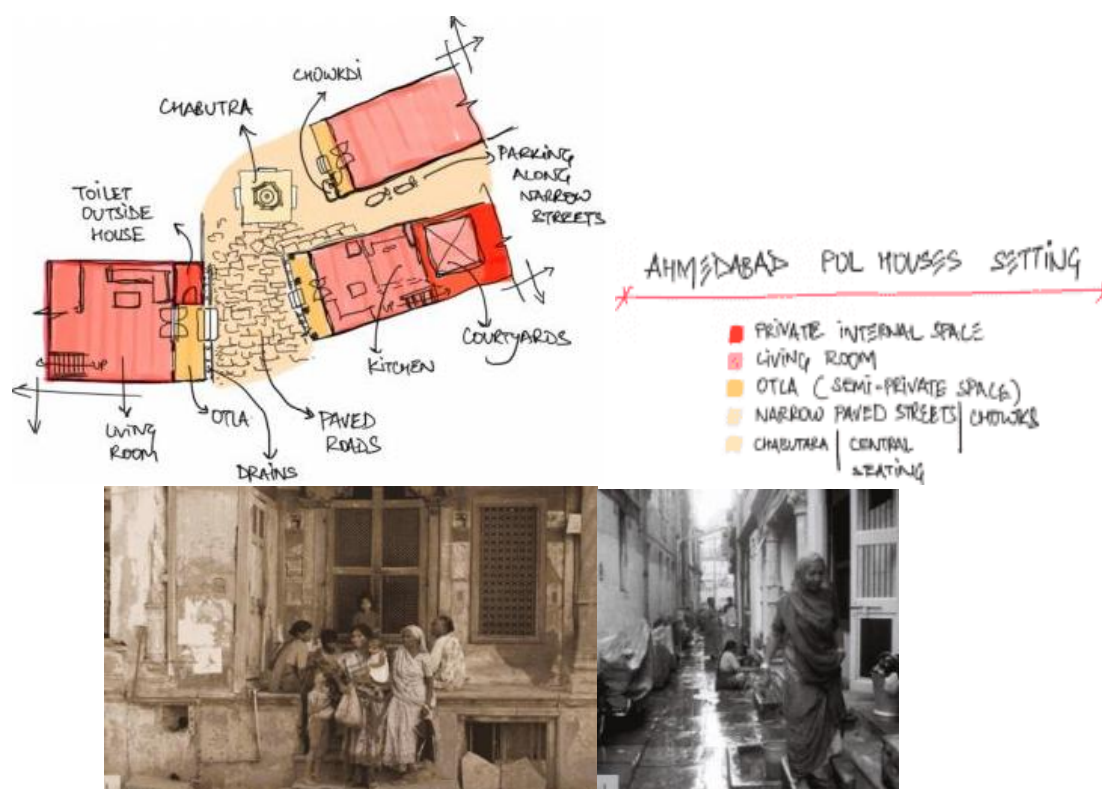


Fig. 5: The Chowk and its context of linear buildings and narrow streets
Source: Image - Antony (Online). Graphics: Author, 2024

Age and Activities and Time

Throughout the day, the streets of the Pols in the Walled City of Ahmedabad remain animated with the presence of women engaging in a range of everyday domestic and social activities. It is common to observe them washing clothes, chopping vegetables, sewing, or conversing with the neighbours—activities that blur the line between the private and public realms of the home and the street. As the day progresses, the character of the street space evolves. In the evenings, children gradually take over, transforming these spaces into informal playgrounds. Later in the evening, men of the household begin to gather in public squares (chowks), using these communal spaces to unwind, converse, and share news. These spaces also host a variety of activities: bird feeders—chabutras—often placed at the corners or centers

of chowks, attract both birds and people; vendors selling tea and snacks contribute further to the liveliness of these areas (Mistry, 2018).

Elderly men, in particular, are prominent figures in the chowks during both morning and evening hours. In the morning, they are often seen reading newspapers or accompanying children to schools. By evening, they return to these spaces, serving not only as social anchors but also as informal observers—what Jane Jacobs famously termed the “eyes on the street.” Elderly women, on the other hand, often congregate at temples during morning and evening hours, engaging in spiritual practices, community conversations, and, at times, weaving fabrics—a practice rooted in local tradition and craftsmanship (Desai, 2012; Patel, 2017). Children’s daily lives reveal a deeply embedded sense of place and belonging. Mornings begin with small groups walking to nearby schools, usually accompanied by peers from within their Pol or the adjacent houses. After school, they complete homework under the supervision of their mothers, often inside the houses but occasionally spilling out onto the *otla*, the raised threshold that functions as a semi-public space. With the sun’s intensity fading by evening, children gather in their local chowks, running along narrow lanes, or assembling around the *chabutra* to play quieter, stationary games that require less movement. These interactions transform the street into a vibrant, child-friendly public realm (Bhatt, 2006; Mathur, 2014).

Evening time in the Pols is particularly dynamic, marked by the convergence people of all age groups. Men return from work, women engage in informal conversations on the *otla*, and children play in front of the houses, creating a mosaic of overlapping activities. This recurring pattern of spatial sharing reflects a well-practiced routine—seemingly chaotic yet deeply ordered by the rhythms of community life. Figure 6 captures this layered vibrancy within the chowks, where social interactions across generations are facilitated by the architectural layout, allowing visual connectivity from houses and *otlas* to the shared public spaces. These patterns are not only indicators of strong social cohesion but also reflect the resilience and sustainability of cultural practices that have evolved over centuries (INTACH, 2010; Joshi, 2016).



Fig. 6: (a) Activities in the bustling chowks of Pols and (b) Chabutra

Source: Image-TNN, 2016/ Graphics: Author, 2024/ Image-IndiaTourism, 2021

Hierarchy of Spaces and Functions

The spatial organisation within the Pol houses, as well as their immediate context, reflects a clearly defined hierarchy of privacy. This hierarchy is articulated through a gradient ranging from public (open) spaces to semi-private (semi-open) and private (closed) spaces. Each typology plays a distinct role in shaping daily life and patterns of use. The level of accessibility, degree of visibility, functional needs, spatial proportions, and cultural aesthetics all influence the type of activities that occur within these zones (Desai, 2012; Bhatt, 2006). Public spaces such as the street and chowk encourage open social interactions, whereas the *otla* functions as a threshold—both spatially and socially—between the exterior public realm and the private interior of the house. Semi-private spaces such as inner courtyards provide light, ventilation, and a secure setting for family-centered activities. In contrast, the most private areas, such as bedrooms and terraces on the upper floors, are reserved for personal or familial use. This layered arrangement not only supports the functional dynamics of domestic life but also reinforces cultural norms around privacy, gendered space, and hospitality (Patel, 2017).

Figure 7 illustrates this hierarchy of spatial privacy, showcasing the gradual transition from the *otla* at the street interface to the courtyard, and further inward and upward to the upper storeys and rooftop terraces of the *Pol* house.

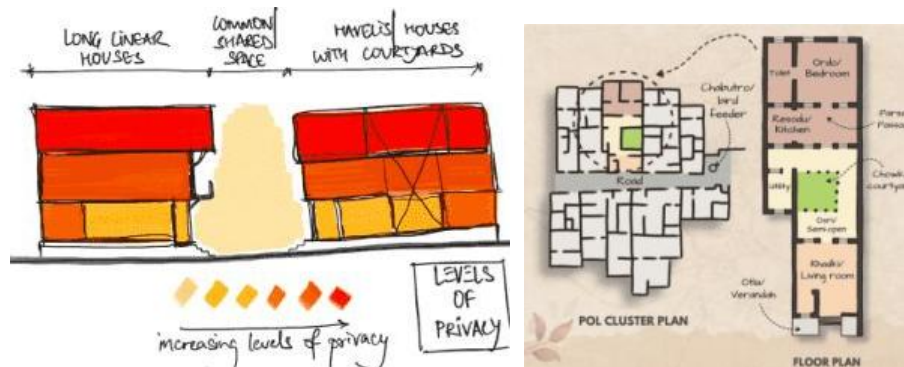


Fig. 7: Hierarchy of levels of Privacy and its transition

Graphics: Author, 2024/ Source: Pic_Plan of a *Pol* house by Chougula Shivani, 2024

Although *pol* houses refer to residential buildings, they signify much more than mere dwelling structures in Ahmedabad in the context of socio-cultural fabric. These houses are intimately clustered and hence the occupants enjoy high and receptive opportunities for social interchanges thus implying a robust, well-knit community. Public celebration of the festivals and other cultural events create a shared feeling among the dwellers and are held at *chowks*. This aspect of living in the *Pols* puts into practice the collective culture prevailing in India which entails the welfare of the community as opposed to that of the individual (Shivani, 2024). Figure 8 illustrates the compact arrangement of residential houses in the *Pols*, where the intersection of narrow streets naturally gives rise to interactive nodes and shared open spaces. These spatial configurations facilitate informal social encounters and provide larger communal areas where residents can gather for collective events and celebrations.

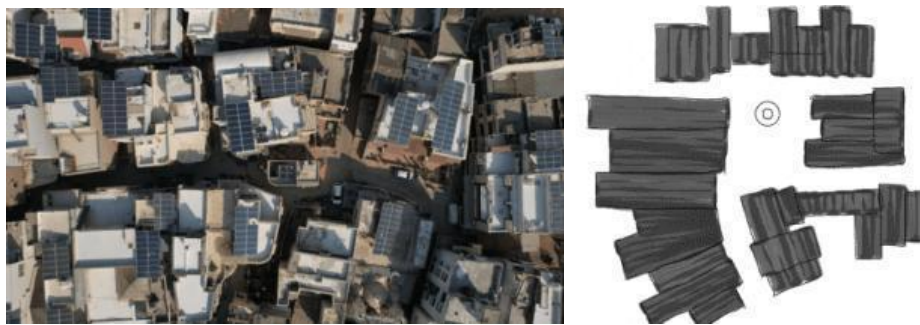


Fig. 8: The closely spaced residential houses and intersection of streets.

Source: Pic_Eadara, V. (2022) / Graphics: Author, 2024

The traditional *Pol* house functions as a self-sufficient habitat, designed to address fundamental needs such as water, sanitation, and thermal comfort within a compact spatial framework. Central to this efficiency is the internal courtyard, which not only facilitates ventilation and daylighting but also acts as a social and climatic core. As Saatvika (2021) observes, these houses are not merely utilitarian dwellings but embody religious symbolism and cultural identity, often expressed through intricate wood carvings and canonical spatial hierarchies. This synthesis of function and meaning elevates the house to a holistic module of living. Figure 9 illustrates this self-contained nature—showing house units equipped with underground water tanks and nearby electricity poles, while their inherent thermal design reduces dependence on mechanical cooling, underscoring the climatic responsiveness of the built form.



Fig. 9: Self-sufficient house units with private underground water tanks and electricity poles nearby;
Graphics: Author, 2024/ Source: Pic_Knocksense, Harkunvar Shethani Ni Pol

In the residence, lower floors have more rooms open to interaction with outsiders where small businesses would be running in the courtyard connected to the living area and spilling over to the otla. Kitchen, being on the lower floor, still remains a private space for the women. The spaces on the upper floor are private in the nature of sleeping, studying and personal spaces. Terraces in case of flat roofs, prove to be meeting points with the adjacent neighbours, but also hold a significant role in terms of community space at times of festivals like Makar Sankranti when kites are flown in the sky by each and every Pol house. Figure 10 and Figure 11 captures the celebration of Makar Sankranti within the Pol houses of Ahmedabad, where local communities gather on terraces to engage in the traditional activity of kite flying. These elevated spaces, typically used for private or domestic purposes, become vibrant social arenas during the festival. In many cases, terraces are temporarily rented out, reflecting an adaptive seasonal livelihood practice that reinforces both community interaction and economic flexibility within the vernacular urban fabric.



Fig. 10: Makar Sankranti in Pol houses where the local community flies kites on terraces.
Source: Pic_Gujarat Samachar (online)



Fig. 11: Narrow alleyways and rooftop spaces
Graphics: Author, 2024

Otla, an elevated plinth outside the house, serves as a transitional space, where often the women of the house are found gossiping or sieving pulses and grains for their annual storage. Sometimes, elderly of the house can be seen reading newspapers outside on otla soaking up some morning light.

The entrance space is the pre-eminent transitional area, which is worth considering in any extensive cultural analysis of the house. An otla is a transitional open or semi enclosed space, an intrinsic element of the dwelling in the Indian context. It should be viewed in the plural. On the one hand, it seems to be an architectural response to the issue of how to link the dwelling to the street. On the other, it is brimmed with social significance standing for hospitality, prosperity and power. It is also a passive form of control situated in the in-between which operates, on a daily basis, to influence people's actions.

Light and Shadow

Spaces have a distinction in terms of light and shadow which determines the activities and its qualities and quantities. Figure 12 highlights how variations in light and shadow across different spaces and streets influence both the nature and intensity of the activities. Areas with higher light exposure tend to attract more pedestrian movement, thereby enhancing passive surveillance and contributing to a greater sense of safety through the presence of “eyes on the street.” In contrast, the narrow streets and projecting upper floors characteristic of Pol architecture create shaded public realms, offering thermal comfort while shaping the spatial experience and patterns of use.



Fig. 12: Spaces and streets with varying light intensities.
Graphics: Author, 2024 / Source: Pic _Pol (housing), 2012

The presence of light plays a crucial role in shaping perceptions of safety and patterns of spatial use within the Pols. Well-lit areas—whether naturally illuminated during the day or glowing under artificial lighting in the evening—tend to feel more secure and socially inviting. These areas tend to be informal meeting places as people meet, talk, walk, or sit in small groups. On the contrary, there are narrow, dark alleys, which create a feeling of seclusion, which is characterized by silence, and voices can be heard through the warmly illuminated windows. The light/dark contrast impacts not only the visibility but directly determines the level of activities of the people and the level of safety of a space. Traditionally, the social fabric of the Pols was strongly anchored on the collective vigilance among the dwellers. Children and youth would assume the responsibility of looking after the street traffic during playtime and women were very active during social exchange and other afternoon activities due to the absence of the men who were most of the time at work. Today, the Pol communities still exist and the traditional and cultural festivals are still celebrated by the people. Such celebrations improve the social life and strengthen the cultural diversity that characterizes the Pol way of life (Gangwar et al., 2020).

Noise and Silence

Sound is a great spatial variable that determines the way people hear and interact with their environment. The pols often contain urban spaces that can be identified by their acoustic nature, with loud noise, and music dominated areas to quieter and low-key areas. When there is a festival, a wedding or a community party, then there are some areas that are full of sound where more people are going to gather. Soundscapes are dominated by activities like singing, dancing, conversing, and playful movement and make a collective energy and temporary changing of the environment. The level and the type of noise tend to depend upon the age group and social background. As an example, a group of passing college students can add to the increased soundscape by laughing and talking loudly, and older groups would rather resort to quieter, less active dialogues.

On a different note, areas associated with silence have a tendency of controlling behavior, making people talk in low tones, walk in a soft manner, and adjust themselves to the acoustics of the place. This acoustical interaction shows a hidden social discipline in common cityscape. Usage in loud and quiet areas implies a kind of reverence toward the nature of the area, with noise levels being imagined by the community as opposed to being dictated by rules. Soundscape, thus, emerges as a significant component of sensory and social identity of the Pol (Patel, 2017).

Festivals and Seasons

The Pols are small residential enclaves that form the most densely populated quarters of the historic textile city of Ahmedabad formed under the influence of centuries of socio-political evolution. The direct result of the history of successive invasions in Gujarat is the presence of such clusters in which the architectural response is that of gated entry to ensure security and protection to the community (Kagal, 1986). In the spatial density of the Pols, a considerate system of semi-public open spaces, including chowks, otlas and internal courtyards, provide the necessary breathing space of the social and religious life and is organically responsive to the demands of the resident population. Seasons and festivals are essential in altering the usage and the meaning of such spaces. Everyday lives are replaced with shared festivities. The chowk is the centre of dynamic communal life. Such daily interaction with the space and the society can be well depicted in the Figure 13. It shows a festive event in the chowk where people come out of their houses, while others become a part of the festivities, standing on their balconies and terraces, visually validating the spatial interconnectedness that defines life in the Pol.

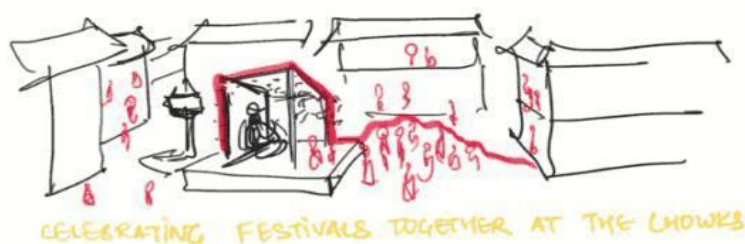


Fig. 13: Celebrating festivals together at the chowks surrounded by people.
Graphics: Author, 2024

Major festivals such as Holi, Eid, Ganesh Chaturthi, Navratri, Diwali, and Uttarayan are celebrated with tremendous enthusiasm and community participation. These celebrations not only activate public spaces but also impact the local economy and livelihood patterns. Ground-floor residential shops adapt to the festive calendar, extending their displays to sell seasonal goods. During Holi, for instance, vendors offer coloured powders that spill over into the streets, turning them into vibrant canvases. In Diwali, the streets are filled with stalls selling diyas (oil lamps), sweets, and firecrackers, creating an atmosphere of light and festivity.

Children form associations with specific corners or shopfronts, where they burst crackers and share sweets with familiar neighbours. Uttarayan, the festival of kites, is perhaps the most spatially transformative. The activity begins on the ground floor with kite purchases and continues upward as families occupy their terraces to fly kites. During this festival, the entire vertical structure of the Pol—from the shopfront to the roof—becomes active. Kitchens, courtyards, and rooftops are filled with family members preparing and sharing traditional meals, strengthening communal bonds across generations.

Socialization in Spaces

Emphasizing on privacy, the feeling of encapsulation adds to the prominence of the pol houses traditionally found in Ahmedabad. Cosmic-square philosophy of the Mandala is applied in the relative positions and the positioning of the different spaces in the house in relation to the cohesive open-to-sky court central node. Concepts of open to sky courtyards of Pol houses are a direct inclination of the socio-cultural values of contemporary era and society. Spatial organisation of the house is quite indicative of social relationships that exist between man and women, elder and young people in the family, and most of all the social structure.

The spaces in and around a traditional pol house are thoughtfully designed to facilitate social interactions, both within the family and with the community. The layout establishes a hierarchy of spaces that dictates the nature of socialisation—who interacts with whom, when, where, and how. The level of privacy in these spaces directly influences the formality of conversations and the setting for these interactions. For instance, the more intimate interior spaces are reserved for family members and close acquaintances, indicating a deeper level of trust and familiarity. In contrast, the *otla* serves as a semi-public space for more casual or spontaneous meetings. This space allows for interaction with those who may not be familiar or who visit temporarily, creating a welcoming yet defined boundary.

The Figure 14 illustrates the courtyards within Pol houses, showcasing the nuanced gradation of enclosure as one moves from fully internal private spaces to semi-open transitional zones and eventually to more public external areas. This spatial stratification is an architectural reaction to climatic as well as social requirements, providing privacy, ventilation, and possibilities of contacts at various levels of family life.

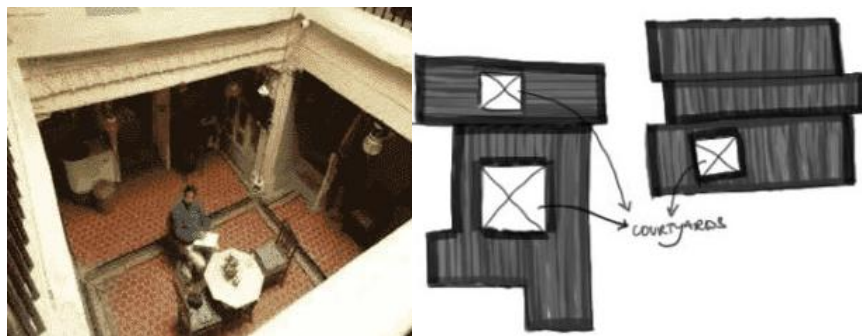


Fig. 14: Courtyards in Pol houses and varying senses of enclosure.

Source: Pic_DhvaniR2, 2020 / Graphics: Author, 2024

The primary dissimilarity between the rural and urban *khadki* is the growth of houses in the urban setting. The rural houses are divided into three parts (*otla*, *parsal* and *ordo*) but the urban houses are divided into six parts. Two parts are in the front and two out of six are geared towards strangers who visit the house for business purposes. Residents have three parts at the back. The internal courtyard is considered to be a buffer between the front and the back to enhance privacy (Gangwar et al., 2020). Figure 15 reveals the internal space arrangement of the residential Pol houses where separate areas are designated to the residents and strangers. Courtyards have been used as the buffer areas, between the family sector and the more open parts that are accessible by guests or visitors. Such spatial segregation helps to enforce cultural rules of privacy, hospitality and social hierarchy in traditional domestic architecture.

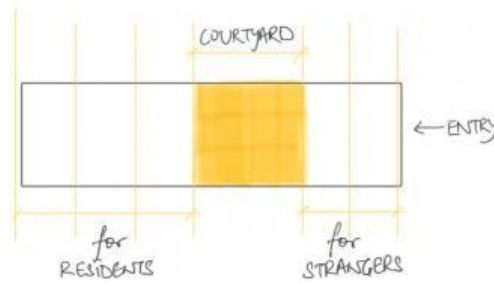


Fig. 15: Divisions of residential Pol houses / Graphics: Author, 2024

This design leads to a symbiosis between the built environment and the social aspect of life and formation of inter sectional points where daily interactions take place. The arrangement of such areas encourages a more free but organised way of socialising, a balance between an open space and the necessity of a space of our own. Through this, the pol house expresses the cultural value of its community, a flexible environment that can fit different degrees of social interactions. The Figure 16 shows the relationship of entrances and otlas with the changing widths of the streets to form informal intersections and social nodes.

These spatial thresholds not only mark transitions between public and private realms but also reflect perceived ownership and influence the nature and intensity of activities—ranging from casual conversations and resting spots to small-scale vending or children's play—based on the scale and openness of the adjoining street.

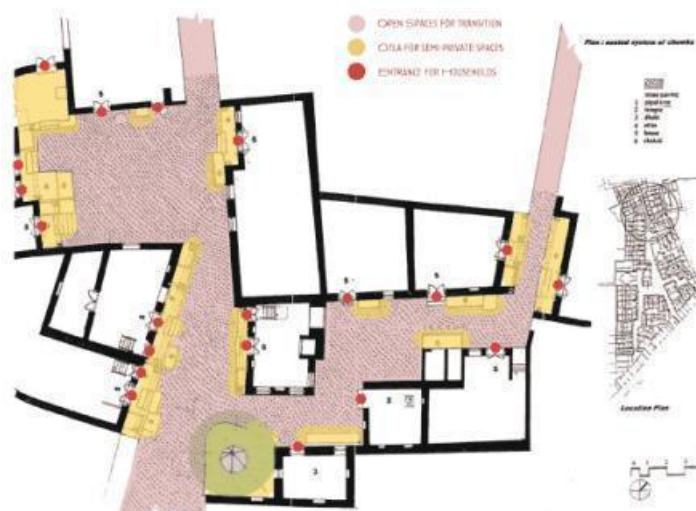


Fig. 16: Entrances and Otlas forming intersections and meeting points as per varying street widths.

Source: Baradi, K., 2019 / Graphics: Author, 2024

In the traditional layout of Pol houses, residential structures typically face the street unless a private compound or gated entryway exists. Openings such as windows and doors are strategically positioned to enable effective cross-ventilation through the rooms, responding to the region's climatic needs. Spatial sequences in these houses show the gradual transition from the private to public zones: internal rooms open into more commonly used spaces via doorways and occasional windows, followed by corridors that leads these spaces to the entrance. This progression is inter-mediated by a set of transitional spaces that facilitates movement and privacy adjustment. The Puja rooms are often some of the deepest rooms in the house and are kept fully enclosed which demonstrates its sacred, private function. Wall niches are often part of the thick masonry walls used as storage. The overhead storage is often placed just below the ceilings demonstrating the efficient use of vertical spaces in restricted floor plans. While the

bigger and more open spaces can support community and active functions, smaller and cozy spaces are usually meant to perform detail-oriented tasks or individual household work.

The Pols have the arrangement of rooms in a linear structure, starting with semi-public rooms, like living rooms and chowks or *otlas*, to transitional corridors that lead to private bedrooms in the back. The linear progression is broken with open-to-sky spaces, which provide light and ventilation into the otherwise confined plans. Toilets and kitchens tend to be at the front of the house, the toilet blocks being frequently adjacent to or close to the *otla*, an outcome of subsequent retro-fitting to changing sanitation demands. Furthermore, the roofs are designed with a pronounced slope to facilitate efficient rainwater drainage. These sloping forms often project over internal courtyards and open-to-sky spaces, serving multiple climatic functions. By enabling the circulation of air and allowing heat to escape, they contribute significantly to thermal comfort while also regulating indoor humidity levels. Additionally, these overhangs act as protective elements, shielding transitional and semi-open areas from direct exposure to rainfall, thus maintaining the usability and longevity of these intermediary spaces throughout seasonal changes.

In the pols of Ahmedabad, the ever-changing rituals and performances tied to each festival deeply influence the daily routines and way of life of the community. These activities are inseparably connected with the built environment, and such spaces as the *otla* and the *courtyards* play a central role of the transition zones. The areas are not only places of interaction of people but places where thoughts and traditions are shared and passed down through generations.

The pol houses are constructed in a manner that they have several layers which separate and also consolidate the spaces. Such aspects as hierarchy of space, light, sound and even the nature of activity determine a lot in defining how these areas are used. To give some examples, the *otla* is a communal meeting place where one can engage in a casual conversation, make some small market transactions, whereas the inner courtyards are more intimate gathering places to congregate in family and ritualistic activities.

The spaces of pols are informed by the diversification of the narratives like the spatial organisations, rituals, festivals, livelihoods, transition and movement, gatherings and social interactions. The changes though may not be visibly seen, they indirectly transform the spaces in the forms of temporary structures, altered routes, instalments of idols and additions of some installations to a space to turn it into a place.

These stratified spaces help dictate the beats of everyday life, from household chores to commercial activities that pour out into the lanes of the Pols. The change of these spaces is even more noticeable during the festivals when they change to accommodate different cultural activities. This play of spaces in the Pols of Ahmedabad reflects a unique balance between traditions, communities, and the urban fabric, illustrating how architecture and daily life are intertwined.

Discussion

The findings of this paper reaffirm and complement the previous studies that have observed the reciprocal influence between built form and social life in the Pol neighborhoods of Ahmedabad. Just like the study by Lambe and Dongre (2016), who state that the spatial organization of traditional dwellings has high social relevance, this paper establishes that the courtyard, *otla*, and the shaded streets do not only comprise architectural elements, but rather, social tools that organize everyday life. The overlaying of the public and the private activities in Pols, which correspond with the identified multifunctionality of *otlas* and balconies in the course of this study, is also mentioned by Gangwar and Kaur (2020). Although the previous literature, such as the one by Rawal et al. (2018) were concerned with thermal comfort and sustainability characteristics of the built form, this paper shows how the aforementioned spatial characteristics are ritualistic and performative all year round.

Interestingly, this study differs slightly from Pancholi (2021), whose work foregrounds resilience and post-earthquake rebuilding; in contrast, this paper underscores the cultural endurance of these spaces through festivals and daily rituals. These differences may arise from

the temporal scope and focus of each study. In fact, this paper focuses more on everyday lived experiences and seasonal use rather than structural resilience. Overall, the findings strengthen the understanding that built form in the Pols not only reflects cultural patterns but also actively enables and perpetuates them, reinforcing the significance of architectural continuity in sustaining intangible heritage.

Conclusions

This study concludes that the built environment of the Pol houses in Ahmedabad plays a central role in shaping and supporting vernacular traditions, rituals, and everyday social practices. Through a close reading of spatial hierarchies, transitional elements like otlas and courtyards, and communal features such as chowks and narrow shaded streets, it becomes evident that the architecture itself is not passive but actively participates in enabling seasonal and cultural expressions of life. In fact, the configuration of domestic spaces fosters multifunctional use, encouraging both private rituals and public interactions. This architecture-society relationship supports a lived continuity between tradition and adaptation. The built form not only accommodates but also preserves the rhythm of communal life-from informal conversations to structured festive performances-creating a deeply rooted, symbiotic relationship between people and place. In line with the focus of this study, it can be concluded that these interdependencies between architecture and culture offer valuable insights into sustaining intangible heritage through tangible spatial systems.

Strengths and Limitations of the Study

One of the strengths of this study lies in its focus on the integration of intangible practices, such as rituals, festivals, and daily routines with spatial analysis, giving a holistic understanding of vernacular heritage. The qualitative approach, drawn from observational and secondary sources, helped interpret the human-environment dynamic in a nuanced manner. However, the research is limited by its reliance on literature and visual analysis rather than ethnographic or field interviews. The absence of direct accounts or data from residents means certain conclusions remain interpretive rather than evidential. Future studies may benefit from participatory research and long-term observation to strengthen the link between spatial usage and cultural activities with lived experience.

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