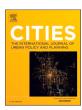


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Informality in architectural heritage: A conceptual framework for inclusive conservation practice

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ABSTRACT

The role of informality in architectural heritage conservation has remained underexplored despite its increasing significance in urban governance and community-led preservation. This study develops a conceptual framework to define and analyse informality within the context of tangible cultural heritage. Drawing on interdisciplinary insights from architecture, urban planning, and anthropology, the paper addresses the lack of theoretical clarity and empirical grounding in existing conservation literature. Using a systematic literature review of 24 peer-reviewed articles published between 2000 and 2025, the research identifies key attributes, such as adaptability, non-regulation, political negotiation, and community agency. It maps these across four dimensions: informal actors, practices, spaces, and governance. The findings underscore that the informal practices, often excluded from formal frameworks, play a crucial role in sustaining architectural heritage, especially in regions with limited institutional capacity. These practices include grassroots-led maintenance, vernacular adaptation, and public participation in decision-making. The study proposes an inclusive, bottom-up model integrating informal actors and practices with formal conservation policies. It advocates for institutional recognition of community contributions, development of capacity-building initiatives, and flexible policy design to accommodate informal dynamics. The proposed framework aims to support more sustainable, inclusive, and locally grounded approaches to heritage conservation, particularly relevant in urban areas of the Global South.

1. Introduction

The concept of informality in conserving tangible¹ cultural heritage has gained increasing attention among scholars, practitioners, and policymakers. Over the past few decades, the approach to preserving and protecting this heritage has shifted toward more holistic, sustainable, integrated methods (Li et al., 2024). The traditional style focused on reconstructing and restoring the site using authentic material under strict institutional control. In contrast, modern practices prioritise community involvement, environmental sustainability, eco-friendly materials, and integration of global standards with local conservation traditions. These modern methods emphasise a more inclusive approach to heritage conservation, which increasingly fosters the engagement of grassroots organisations, local communities, and non-institutional bodies that have evolved in recent decades (Oviedo & Puschkarsky, 2017). As a dominant approach, Smith (2006) argues the limitation of

the Authorised Heritage Discourse (AHD) that marginalises the community-driven approach and devalues the socio-cultural importance to the local community.

Informality, in general terms, points to a system or process that develops outside the regulatory framework (De Soto, 1989; Lehmann, 2023; Sinha & Kanbur, 2012), whereas some scholars have defined informality as non-formal (Polese, 2023) and non-legal activity (De Soto, 1989). Devlin (2018) refers to informality as a conceptual centre, where ideas of planning and urban system orbit. In terms of heritage, the word informal manifests the spaces, practices, or knowledge that hold heritage value, even though they are not officially recognised or institutionally acknowledged (Chen, 2022). Despite the growing importance of informal practices, the formal conservation approach guided by structured rules, government oversight, and professional expertise remained dominant (Polese, 2023). This study constructs a conceptual framework to articulate the meaning of informality within architectural

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¹ Tangible heritage encompasses all material remains, such as archaeological sites, historic monuments, artefacts, and objects, that hold importance for a community, a country, or humanity as a whole. Hassan, F. (2020). Tangible heritage in archaeology. In *Encyclopedia of global archaeology* (pp. 7213-7215). Springer, New York. doi: 10.1007/978-1-4419-0465-2

heritage conservation, examining its attributes and dimensions to promote more inclusive practices across different fields.

Informal practice in heritage conservation presents opportunities and challenges (Guha-Khasnobis et al., 2006). Involving communities, local stakeholders, and the wider public in heritage preservation helps to cultivate a collective sense of cultural identity and shared values. This approach enhances the adaptive capacity of grassroots communities, empowering them to prioritise the credibility and sustainability of heritage sites (Chen, 2022). These collaborative initiatives can play a vital role in ensuring the enduring protection of cultural resources and embedding them into the community's socio-cultural life (Guha-Khasnobis et al., 2006). Additionally, the lack of integration between informal practices and established policy frameworks further exacerbates these issues, hindering a cohesive approach to heritage preservation.

Social anthropologist Keith Hart first introduced the term 'Informal Sector' while discussing the rural-urban migrants in Accra, Ghana, in 1960 (Hart, 1973). Existing literature highlights non-governmental actors who produce "unauthorised heritage discourses" to achieve broader and more diverse heritage interpretation and practices, and also manifest the inclusion of the "third space of heritage hybridity" (Fauveaud & Esposito, 2021). Scholars also recommended involving the community in managing the heritage informally (Ahmed, 2019). Loayza (2016) depicts informality as informal trade or informal worker, whereas Maloney (2004) identifies it as productive activities, social networks, housing, and labour market & employment; But, in architectural heritage, the concepts remain underexplored. International organisations, like UNESCO, ICOMOS, and ICCROM, advocate for the engagement of local communities and grassroots organisations within formal conservation frameworks, whereas many countries have yet to incorporate informal dynamics.

This study addresses this gap by systematically reviewing literature from 2000 to 2025 across architecture, anthropology, and urban planning. It identifies key attributes and dimensions of informality in architectural heritage conservation and proposes a conceptual framework for understanding and integrating informal practices. The paper is structured into four parts to analyse and synthesise the notion of informality. The first part critically explores the term "informality" across multiple disciplines to define it in the context of architectural heritage conservation. The second part investigates the key attributes of informal practice. The third part maps the dimensions of informality. The fourth section develops a conceptual framework that integrates and synthesises the ideas from the attributes and dimensions to informal practices.

2. Methods and materials

The study employs a systematic literature review approach, enabling a thorough examination and synthesis of informality in architectural heritage conservation across various disciplines. This methodology allows for identifying and analysing literature published between 2000 and 2025, providing valuable insights from informality, such as definition, attributes, dimensions and challenges from various disciplinary perspectives. Academic literatures are adopted for analysing and synthesising the research outcome.

2.1. Publication collection process

A comprehensive literature search was conducted using two databases: Google Scholar and Web of Science (WOS). The initial search aimed to gather interdisciplinary literature on the broader concept of informality and informal practices. The topic search (TS) string used was: ('informality' or 'informal practice' or 'informal sector') AND ('urban planning' or 'architecture' or 'anthropology'), yielding 2644 publications across multiple disciplines. A second, more focused search was conducted to explore informal conservation practices specifically within the context of built heritage. This search aimed to identify the type of informality or informal practice in heritage conservation to conceptualise. The topic search (TS) string includes ('informality' or 'informal practice' or 'informal actor' or 'community participation' or 'participatory approach') AND ('cultural heritage' or 'built heritage' or 'architectural heritage') AND ('conservation' or 'restoration' or 'protection'), which resulted in 763 publications. A total of 3407 review publications between 2000 and 2025 were retrieved for initial screening (See Fig. 1). Ultimately, 24 papers (See Appendix A) were selected to achieve the research aim and objectives. The PCO (Population–Context–Outcome) framework was adopted to guide the search strategy development, inclusion criteria and exclusion. The framework aligns with- 1) Population: Actors involved in the process: communities, individuals, artisans, residents, and grassroots organisations. 2) Context: Heritage Conservation. 3) Outcome: Definition, attributes and conceptual model.

The scope of this study was deliberately confined to peer-reviewed journal articles written in English to ensure a focused and methodologically rigorous analysis aligned with the research objectives. Given the cultural heritage's multidisciplinary and branching nature, several thematic areas were excluded to avoid conceptual diffusion and ensure analytical clarity. Specifically, this study did not consider intangible cultural heritage, natural heritage, or heritage management frameworks related to tourism, investment, or development. Additionally, issues on climate change, environmental degradation, and broader sustainability concerns were beyond the scope of this research. These limitations were established to provide a concentrated exploration of tangible immovable cultural heritage within the defined parameters of architectural and urban contexts. Therefore, the study also confined itself to the disciplines, like architecture, urban planning and anthropology, and the reasons are depicted in Table 1:

The study adopted a qualitative systematic literature review (SLR) following the PRISMA guidelines 2020 (Fig. 1) to develop a conceptual

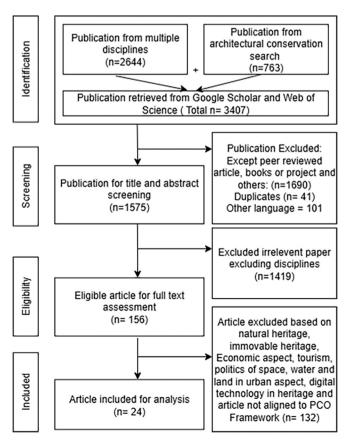


Fig. 1. Publication selection process (by authors).

Table 1Reasons for choosing multiple disciplines.

Discipline	Focus	Factors
Urban planning	Informal governance, regulatory framework and policy	Informal initiatives in urban space, including heritage buildings, and urban redevelopment plans.
Architecture	Informal interventions in terms of physical fabric and built form.	Vernacular restoration technique, spatial transformation by informal bodies
Anthropology	Social practice, local power and dynamics, informal actor	Local involvement repurposing built form.

framework and to enable a structured synthesis of the existing literature on informality in built heritage conservation. The literature searching criteria involve 1) Title, Abstract, and Keywords, and 2) Theme in the analysis.

2.2. Data analysis

To address the research question, the study utilises thematic analysis (Zhang et al., 2024), allowing for the identification and exploration of recurrent themes, patterns, and concepts within the selected literature (Mihas, 2023). Initially, literature content was analysed using a semantic approach, with primary codes developed to generate the main themes. Secondary codes were then applied to refine these themes and identify sub-themes. The research questions and objectives were categorised into multiple themes: 1) the meaning and origin of informality, 2) attributes of informality, 3) informal dimension in architectural heritage conservation, and 4) conceptual framework.

3. Theoretical background

The concept of informality has evolved considerably over the decades, influenced by various disciplinary perspectives and sociopolitical contexts. Due to the lack of consistency from one study to another in the theoretical and empirical research, a limited approach is found (Guha-Khasnobis et al., 2006). Kanbur (2009) argues that individual studies consistently apply a tight definition, whereas the literature is a mess.

The concept of informality originated in Keith Hart's seminal work in 1970 (published in 1973), in which he introduced the term "informal sector" to describe economic activities and actors operating outside the formal labour market structures (Gerxhani, 2004; Hart, 1973). This perspective gained institutional recognition through the International Labour Organisation's (ILO) 1972 report, highlighting that informal activities typically function without compliance with state regulations, taxation policies, or labour protections. The conceptualisation was later formalised in the ILO's 1993 International Conference of Labour Statisticians, which provided a standardised definition focused on identifying informal enterprises and distinguishing them from formal economic structures (Gerxhani, 2004).

During the 1980s, scholars began to reconceptualise informality not just as a category of economic activity but as a dynamic process interacting with formal structures (Lehmann, 2023) and also shifted to spatial and regulatory contexts. Heintz (2012) noted that the term's conceptual roots extend to the early 1970s, but informal aspects of organisational functioning were acknowledged as early as the 1950s and 60s. During the latter half of the twentieth century, urban planners began incorporating the notion of informality, particularly as democratic governance advanced in the 1970s. This period saw the introduction of terms like "bairros clandestinos" to describe informal settlements, especially within the context of Latin American cities (Abbott, 2002). By the late 1990s and early 2000s, the narrative shifted toward understanding informality as a coexisting or parallel system, rather than a deviant or deficient counterpart to formal systems (Polese,

2023). The ILO's Regional Employment Program for Latin America and the Caribbean further emphasised the absence of regulation as a core feature of informal work (Roberts, 1993).

Maloney (2004) also highlighted how informality influences labour market structures and employment trends. In contrast, Hernando De Soto (1986 in his work *The Other Path*, contended that informality would diminish over time as formal regulations became more effectively implemented. The United Nations describes informality as a phenomenon that defies clichés. In an interview, Mexican Architect Jose Castillo highlights South America's social, cultural, and historical condition of informality. Recent Latin American studies interpret informality as a form of resistance. Peixoto (2009) characterises this phenomenon as a "reconquest of the urban" (p. 246), aligning it with the understanding of informality as a practice rooted in subaltern experiences (Roy, 2009).

In architecture, informality is often associated with self-built housing, vernacular adaptation, incremental construction, community-led development, and informal heritage preservation. British architect John Turner (1988) introduced "self-help Theory," which champions residents' freedom in choosing their community, budgeting resources, and shaping their built environment. Informality in this context signifies agency, adaptation, and resilience in the face of formal planning exclusion (Silva, 2020). On the contrary, Di Raimo et al. (2020) suggested considering informality in spatial practice as an opportunity that integrate modern citizen-led solutions in socio-economic and climatic contexts. Russo (2018) examined informality based on the socio-cultural aspects of the Cuban labour market, focusing on local practices and attitudes toward work. In anthropology, informality is understood as a social and cultural process originating from local practices, community interaction and understanding, and everyday negotiations.

From three disciplinary expressions of informality, the idea can be understood as a form of resistance, a means of negotiation, marginality, self-help practice, adaptation and resilience, citizen-led solutions, and as a dual process that integrates both formality and informality. These insights recommend incorporating informal practice with formal mechanisms, both in socio-cultural and spatial contexts. Literature across three disciplines traces the evolution of informality yet reveals a notable gap regarding its application and understanding within the architectural heritage conservation context. Around 24 selected papers have been adopted for thematic synthesis to understand and manifest informality, its practice in this context.

4. Results

4.1. Informality in architectural heritage conservation

In recent years, the discourse around informality has gradually entered the field of heritage conservation, although the term remains less prominent compared to its use in urban studies or economics (Pendlebury, 2013). Traditionally associated with the absence of formal planning or structure (Guha-Khasnobis et al., 2006), in the heritage context, the term "informal" has come to denote non-institutional, community-driven approaches to conservation. Looking at the database, e.g. Google Scholar and Web of Science, shows a significant interest in informal practice in architectural heritage conservation, between 2000 and 2025. Fig. 2 shows the growing interest in informality in architectural heritage conservation over the years, though this flow is not linear, starting from 2001. In 2024, the number of publications and citations reached a notable peak. The blue line indicates the citation flow starting from 2001 to 2025, with a significant drop in 2004, 2010, 2016 and 2025. The purple line indicates the number of publications published over the years, with no publication in 2002, 2003 and 2004, with a slight fluctuation in different years and top in 2024. The figure shows the gap in comparison to the manifestation of informality in other disciplines.

Fig. 3 depicts a network visualisation of the co-occurrence of keywords in the architectural heritage conservation field. The nodes

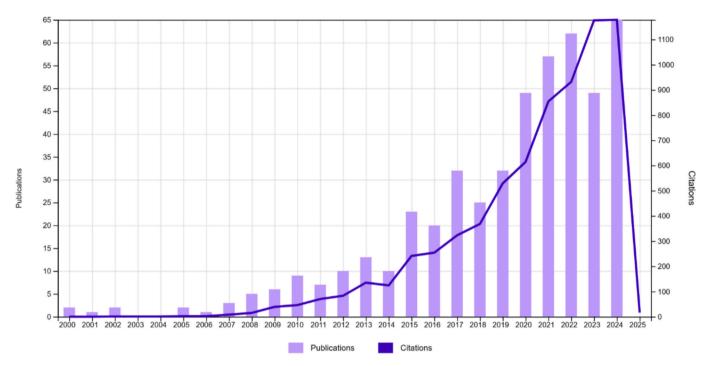


Fig. 2. Time cited and publication trend from 2000 to 2025.

symbolise the keywords like management, conservation, community and heritage, and the linking bridges or lines are a depiction of the connection between the keywords in terms of publication. The colour-coded clusters identify the main thematic areas, including concerns surrounding the environment (blue), community engagement (green),

heritage management (red), and cultural landscapes (purple). This discussion shows that there is a linkage of several concepts in heritage conservation, and the need to employ more inclusive, participatory, and sustainable processes is increasingly becoming more emphasised.

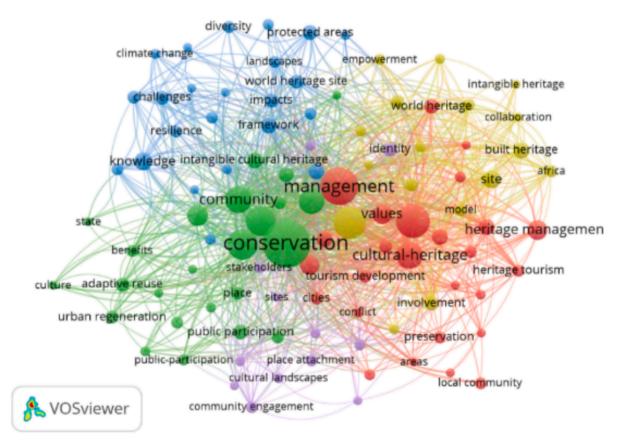


Fig. 3. Keywords visualisation (derived from web of science).

4.2. Defining informality in architectural heritage conservation

Although informality is rarely used in conservation literature, it has begun to emerge in heritage studies, defining and framed it as informal heritage (Barrère, 2016; Chen, 2022). Some contemporary discourse in many disciplines has started to ask questions that have impacted the study of heritage conservation and its practices (Pendlebury, 2013).

The term "informal" characterises actions taken casually or without formal planning. The definition of informality is "lacking structure" and recognises it as an unorganised sector (Guha-Khasnobis et al., 2006). However, despite some current literature using the word informal to differ from formal heritage, a relatively small body of literature is concerned with the phrase informal while discussing heritage conservation issues. In heritage, "informal" refers to a laid-back, amiable, or informal manner or style. Chen (2022) characterises informal heritage as urban spaces with heritage value but outside official recognition as architectural or urban heritage sites. Barrère (2016) views informal heritage as a process rooted in local customs, practices, and everyday routines, operating without official delimitation, legal status, or public management. Moreover, this adaptation of informality in heritage conservation reveals a shift toward recognising grassroots, community-driven knowledge systems. Informal conservation includes practices such as traditional rituals, vernacular architectural maintenance, oral histories, and the tacit expertise of local artisans, all of which function without formal institutional guidance or support (de Rijke, 2012) (Table 2).

4.3. Attributes and characteristics of informality

Reviewing the literature from various disciplines, such as architecture, urban planning, and anthropology, the attributes and characteristics of informality lie in adaptation and flexibility, citizen participation, politically constructed systems, negotiations of power, ambiguous legality, temporal appropriation, dual use, and noncompliance with formal regulation (Fig. 4). Each theme is individually dominant, but the overlapping feature questions the application of these attributes and characteristics in a heritage context. Some scholars also argue for the distinct presence of the meaning and attribute of informality based on culture and geographical location. In his examination of socio-economic and cultural contexts across the global North and South, Devlin (2018) investigates the characteristics and prevalence of

Table 2Definition of informality in various disciplines and architectural heritage.

Planning & Anthropology

1. Refers to informality as a different rationality of urban space-making, rather than the absence of place, conventional urban governance systems overlook that (Lehmann, 2023).

Informality in Architecture, Urban

- 2. It's a mode of governance and spatial practice that lacks a planning system and is used by both the elite and the marginalised people (Moatasim, 2019).
- 3. This is a negotiated process shaped by the institutional practices, bureaucratic discretion and residentstate interaction (Connolly & Wigle, 2017).
- 4. The idea comes with a system of flexibility, negotiation, guided by interest and political construct (Beier, 2021).

Defining Architectural Heritage Conservation

- 1. Refers to the management and recognition of spaces that possess heritage value but lack official designation as urban or architectural heritage sites (Chen, 2022).

 2. Refers to vernacular adaptation, which means to user-led transformation of the historical buildings or sites (Plevoets & Sowinska-Heim, 2018).

 3. Refers to an informal heritage management system that involves the local community and develops a sense of community ownership among them (
- 4. Refers to the engagement of diverse stakeholders, including informal community groups, local building committees, and informal master builders who collaborate to make collective decisions regarding the restoration activities (Ahmed, 2017). 5. Refers to community engagement beyond technical intervention for effective preservation (Cardak, 2025).

Ahmed, 2019)

Negotiation among diverse actor groups Community-Led Heritage Residents Heritage defined by Informal actors drive

Planning

Fig. 4. Understanding governance approach from state-led to community-led (by authors).

local initiatives

informality predominantly in the global South. He observes that informal spatial practices have received limited scholarly and professional attention in the global North.

4.3.1. Adaptability and flexibility

state policies

In Urban planning, informality is indicated as flexible to integrate community groups in the planning process. Moretti (2019)'s investigation of southern Europe offers an example of an informal process with the appropriate solutions to unresolved spatial issues that formal systems cannot manage. In contrast, in Northern Europe, informality is broadly associated with formal and informal barriers. This suggests a degree of flexibility inherent in informal processes, allowing them to adapt where rigid formal systems might fail (Moretti, 2019). In architectural heritage, the idea of flexibility is not explicitly found in the review papers, but they discuss aspects of informal heritage management that imply adaptability and responsiveness, particularly in the context of vernacular preservation and community-driven efforts (Arnold & Lafreniere, 2017). This idea of adaptation is significant in terms of post-industrial buildings, which increase the capacity of their reuse. Due to the spatial quality of the industrial buildings, it inspires vernacular preservation by having the flexibility in form and functioning.

4.3.2. Temporal appropriation (TA)

Temporary appropriation is an understudied topic in understanding informality in different cultures, especially in heritage spaces. Lara-Hernandez et al. (2020) emphasise the importance of temporary appropriation within the built environment, whereas they explain TA in terms of public settings and a community-driven approach. Outside the formal initiatives, community initiatives can incorporate their activities by installing markets or stalls with traditional goods and hosting temporary festivals in front of the heritage buildings. Temporary appropriation illustrates how informal actors establish flexible and dynamic engagements with heritage spaces, diverging from the static and predetermined interpretations promoted by formal institutions (Devlin, 2018).

4.3.3. Ineffective regulations

Jimmy and Lombard (2024) investigate the intricate relationship between informality, compliance, and regulatory enforcement, noting that its characteristics can vary according to regional contexts. Much of the urban studies literature interprets informality as indicative of limited state capacity or institutional shortcomings. While some nations succeed in developing effective institutions, others continue to face

challenges in managing them. Hilbrandt et al. (2017) argue that employing informality as a framework for analysing and comparing governance requires critically assessing the state-related assumptions that inform the concept. Informality in some countries refers to unofficial recognition and conservation modes in architectural heritage. It suggests a reformed regulatory framework for architectural sites, e.g., Hong Kong, China, Japan, and so on (Chen, 2022). Research finds the necessity of a revised formulation of the conservation manual so that public consultation is incorporated, and specific sites sympathetic to their character to undergo any sort of changes. It demonstrates the current existence of informal practice, where integrating the formal approach will broaden the effectiveness (Dasgupta & Garg, 2021). To follow the process, a non-governmental organisation can play a crucial role, embedding itself with the formal authorities, facilitating the heritage conservation and management system. Even ignorance of unofficial recognition in conservation can create a 'soulless' in heritage (Ahmed, 2019).

4.3.4. Politically constructed system and negotiation of power

The interpretation and implementation of laws and state regulations concerning informality vary widely, with regulatory frameworks often forming a central part of ongoing negotiations across different countries. Formal legal systems do not merely impose restrictions on local state actors; they also provide municipalities with a degree of flexibility in certain domains (Hilbrandt et al., 2017). The notion of "conflicting rationalities" illustrates the complex and dynamic relationship between the state and society, in which diverse actor groups, such as planning authorities, social, economic, and political entities, are engaged in continuous negotiation and contestation (Jimmy & Lombard, 2024). In architectural conservation, heritage is identified as a product of state policies, instead of a status, which generalises the politics in heritage conservation (Fauveaud & Esposito, 2021). Çardak (2025) proposed a triangle governance approach for effective heritage preservation. The study emphasised community-driven approaches and also reinforced the development of understanding between residents and local political leaders to ensure proper authority and legitimacy. For that, the owner's power and the public official's skill play a significant role in negotiating among various stakeholders.

4.3.5. Community-led agency

Community-led agency refers to informal actors like residents, shopkeepers, caretakers, local artisans and so on.

4.4. Dimensions of informality in architectural heritage conservation

The literature from multiple disciplines synthesises information and thematises the idea in architectural heritage conservation into four sections, e.g. Informal Actors, Informal Practices, Space, Governance and Decision-making.

4.4.1. Informal actors

The spider diagram (Fig. 5) illustrates the process to integrate the informal stakeholders, and connecting them with the spider net, so that collectively they can contribute as a collaborator, consultant, representative, trainer, or guide while linking with the formal entity.

Fig. 5 illustrates that in architectural heritage, individuals, public, community and NGOs can collaborate as informal actors outside of the institutional framework. Private sectors and NGOs can initiate awareness programs and integrate the individual, community and public in the action and implementation stage. Therefore, individuals can make a small investment and collaborate with the community's help. NGOs and influential public can arrange an event for consultation and training to teach the public about architectural heritage and its value. Moreover, a community group can facilitate the whole process, sharing their knowledge and labour, representing their action by supporting the remaining three informal actors.

4.4.2. Public participation

Public involvement has become fundamental to cultural heritage conservation (Clark, 2001). As a field of study, it involves the exchange of knowledge, the allocation of power, and the incorporation of community experiences, all expressed through material culture (Apaydin,

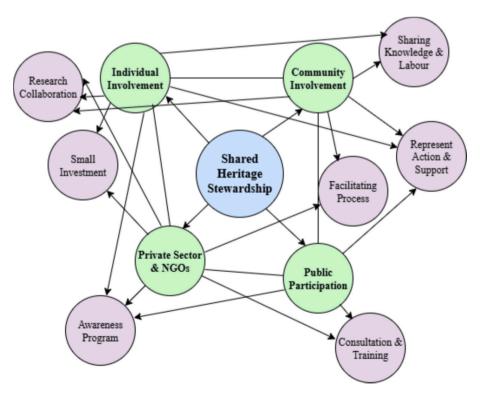


Fig. 5. Spider diagram of connecting informal bodies with their activities (by authors).

2018). From the 1970s onward, countries like Canada and the United States have incorporated public involvement into key areas of environmental legislation. Public engagement is facilitated through communication and consultation processes, beginning with informing stakeholders about key facts, followed by dialogue, reflection, and incorporating feedback. This approach aligns with stakeholder theory, which provides a framework for understanding and implementing public involvement strategies (Chow & Leiringer, 2016).

Barrett (2011), a distinguished scholar in Museum studies defines the public as a collective body encompassing audiences, communities, and specific non-visitor interest groups within the museum context. Conversely, Cath Neal (2015) views public participation as a government tool shaped by policies and institutional frameworks. Public participation in heritage conservation requires a more open and democratic process to engage the public effectively. This approach also involves leveraging local knowledge of traditional cultural practices and techniques (Larkham, 2002). Foucault's Power Theory provides a framework for understanding public participation in formal conservation processes and addresses challenges, approaches, and barriers. Arnstein (1969) identified "power" as a critical factor shaping public involvement. Both Foucault and Habermas emphasised the empowerment of civil society and democracy (Flyvbjerg, 1998).

4.4.3. Community involvement in heritage conservation

Community-driven initiatives have a long history in urban landscapes, and have evolved across different periods. It has become an important factor in bringing the public closer to the building (Ferrando Ortiz & Viñals Blasco, 2023; Suprapti et al., 2022). Museum Studies Scholar Jennifer Barrett (2011) identifies the community as a new audience or a culture producer in a museum context. In the 21st century, the concept found its way into heritage literature (Waterton & Smith, 2010).

Communities are instrumental in both recognising and safeguarding heritage, as well as passing it on to future generations. Chitty (2017) underscores the importance of conserving historic architecture, advocating for the protection of valued landmarks while maintaining community access to essential resources. Contemporary discussions around informality increasingly emphasise participatory models of community involvement. In West Africa, engagement at both the local and national levels is pivotal for the preservation of cultural heritage, encompassing communal assets, practices, and traditional management systems (Odiaua, 2022). In Tanzania, a community-based strategy has been adopted through the empowerment of antiquity authorities, employment of custodians, research activities, and the implementation of project-oriented conservation measures to support local heritage (Chami, 2018). China also exemplifies effective community participation in heritage conservation (Fan, 2014; Kostka & Mol, 2017). Liu (2017) advocates for grassroots, participatory approach in Melaka, Malaysia, emphasising the necessity of community engagement. Similarly, in Nepal, the Newari community is actively involved in cleaning and maintaining religious and communal sites, particularly during significant seasonal changes (Tiwari, 2015). Table 3 presents the role of the community people in conserving and protecting architectural heritage.

Table 3Role of the community.

Informa Raising Engagi Monito Bridgin Promot	the community ation sharing y awareness and a sense of belongingness ng in minor works ring and protecting ng with the formal entity ing tourism al ambassador

4.4.4. Individual involvement

Individual participation is essential for heritage preservation. Arnstein (1969) influential framework, *The Ladder of Citizen Participation*, introduced the notion of "citizen participation," highlighting the importance of shifting power dynamics from governmental authorities to individual members of society. Tokey et al. (2020) highlighted the importance of local citizens' involvement in regeneration processes while Bhaduri and Kumar (2011) identified grassroots initiatives as individual efforts outside formal institutions to address local issues. In Asian countries like China and India, personal and community-led grassroots initiatives have been prioritised (Sheikh \$\P\$ & Bhaduri, 2021).

This prompts an inquiry into the factors that drive individuals to engage in conservation efforts. Ajzen (1991) Theory of Planned Behaviour suggests that personal attitudes, perceived behavioural control, and prevailing social norms influence individual decision-making. Furthermore, Self-Determination Theory (Deci & Ryan, 2012) highlights the significance of motivation and autonomy in encouraging participation within social settings.

Individual involvement in conservation relies on economic support, resource availability, flexibility, and accessibility to contribute effectively to heritage preservation. By harnessing personal interest in preserving culture and identity (Munasinghe, 2005), and maintaining authenticity, individuals from local, national, or international contexts can play pivotal roles. These include knowledge sharing, skill dissemination, community training, funding for restoration and maintenance, raising awareness, and promoting cultural evolution actions that inherently require a participatory approach beyond formal regulations. Fig. 6 illustrates the motivating elements that influence an individual's decision to contribute to informal conservation dynamics.

4.4.5. Community-based organisation

Community-based organisations play a critical role in conservation initiatives. When empowered, these organisations are motivated to educate their members, raise awareness, engage communities in conservation and maintenance activities, provide financial support for preserving heritage, and uphold the authenticity and value of cultural heritage. For instance, the Bhaktapur Development Project (1973) employed local craftsmen from traditional societies, such as masons and carpenters, fostering local expertise in conservation efforts. Similarly, the Patan Conservation and Development Programme emphasised neighbourhood heritage, addressing community needs, particularly those of marginalised groups, often associated with "lesser heritage." This program adopted participatory methods to ensure active local involvement, implemented cost-sharing mechanisms, and collaborated with user committees to promote sustainability and economic empowerment through cultural heritage tourism (Tiwari, 2015). Research by Della Lucia and Trunfio (2018) on hybridisation of cultural heritage underscores the importance of bottom-up stakeholder involvement. They advocate for activating the private sector to support cultural revitalisation, enhancing the community's power, status, and reputation within conservation initiatives.

4.5. Practices

Several literatures present informal practices for architectural conservation, where informal intervention refers to structural and material protection and maintenance, rehabilitation through adaptation, restoration and reconstruction. The most important question lies in integrating informal bodies into this process of conservation without the interference of the formal body or regulations. The review papers reveal the practices that are driven by everyday necessity, sense of belongingness, cultural norms and others, and they increase when the institutional supports are not frequent.

The common scenario for informal initiatives includes routine maintenance work and minor repair activities by the informal actors, like shopkeepers, residents, artisans or informal authority without rules.

Interest and Cultural Resources Socio-Political Commitment Values Accessibilty Motivation Support Dedication to long-term Easy access to A strong desire to Appreciating and Support from community conservation goals necessary engage in preserving cultural and govenment conservation tools heritage conservation efforts structures Active Monetary Belongingness **Empowerment Participation** Privilege Feeling connected to Feeling capable and a conservation Engaging in hands-on Having financial influencial in conservation activities community resources to support conservation

Fig. 6. Elements motivating to participate in conservation.

They fix the broken wall, do cleaning, and repair walls and roofs that enhance the longevity of the building.

Even Informal initiatives by individuals, local communities, or the public can contribute to reusing (Plevoets & Sowinska-Heim, 2018) heritage sites or buildings for practical purposes, such as transforming old or traditional structures into restaurants, guest houses, or shops to ensure long-term sustainability. However, recreating a site or building often requires more financial investment than simple refurbishment, and informal bodies can be directly involved in both the planning and execution processes. By incorporating traditional knowledge and skills during the work, the community can adopt a holistic and sustainable approach to conservation and adaptation. Recently, the Hong Kong government has developed policies and frameworks to transform heritage buildings into museums, restaurants, galleries, hubs, and hotels, creating social, economic, and environmental benefits for the community (Hou & Wu, 2020). Adaptive reuse supports communities and governments by minimising the social, economic, and environmental costs linked to urban development and expansion (Love, 2011). This practice develops adaptability, embeddedness and continuity.

Fig. 7 shows the informal architectural conservation cycle process, which includes five interrelated stages: identifying needs, initiating action, executing tasks, adapting and reusing, and integrating knowledge. The review process is cyclic and touches upon such concepts as sustainability, community-initiated activity, and adaptive reuse as key aspects of a non-institutional preservation of the architectural heritage.



Fig. 7. Cycle of informal architectural conservation.

4.5.1. Spaces

conservation

As depicted in Fig. 8 in the context of architectural heritage conservation, spatial factors are crucial in shaping the nature and execution of informal activities. Literatures explore space in terms of architectural heritage as a temporary appropriation, which includes religious places, vernacular buildings or abandoned buildings that are resorted to enhance the heritage value of the site. These places, sometimes, have the day-to-day life significance, fulfil the communal necessity, such as a business hub, a gathering place, or a place of learning and recreation, that can be classified into social, commercial and religious places.

4.5.2. Governance and decision making

Engaging the community and public in decision-making is problematic and hazardous. Initially, institutions could identify the public and communities as the main stakeholders, segregating them into different levels of owners, artists, and conservators (Marcal, 2019). As prominent heritage stakeholders, community members inherently value their cultural identity, history, and heritage and feel a deep sense of ownership. This collaborative approach enables more informed and effective initiatives that align with the community's needs and aspirations.

Scholars emphasise the need for involving communities and the public in decision-making to promote sustainable and inclusive conservation (Chirikure et al., 2010; Kapelouzou, 2012; Michalski, 2018). Reports from the Getty Conservation Institute and ICCROM advocate sharing decision-making processes with conservators, professionals, and stakeholders, including local communities (Kapelouzou, 2012). Singh and Tiwari (2023) highlight that in Hazrat Nizamuddin Basti, India, limited communication, resources, and expertise lead to mistrust and discourage community participation in conservation decisions.

Public involvement in conservation planning has become more common globally in recent years. Bryman (2016) defines public engagement as processes that enable public input in decision-making. Imon (2016) notes that power dynamics, limited institutional resources, and weak connections hinder effective participation.

4.6. Challenges to integrate formal and informal conservation practice

4.6.1. Regulatory challenge

As shown in Fig. 9, Conflicting regulations present a significant barrier to integrating formal and informal approaches. The case study from Amsterdam illustrates how inconsistent regulatory frameworks for

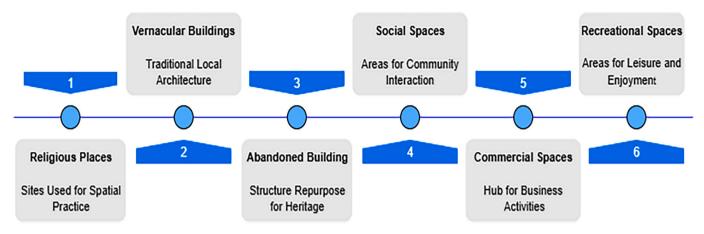


Fig. 8. The role of space in conservation.



Fig. 9. Challenge matrix for integrating formal and informal conservation practice.

adaptive reuse can impede effective conservation (Pintossi et al., 2021). Though there are guidelines, sometimes the law may not be properly implemented and executed. The gap between policy and practice hinders the integration of formal and informal conservation approaches, making it challenging to develop and execute an effective, integrated approach.

4.6.2. Stakeholder engagement

Due to the lack of time and resources, civic engagement is a significant barrier to ensuring a holistic approach to the lack of sufficient representatives. In Amsterdam, only educated people could join in the heritage activities, which consequently ensured low engagement for the stakeholders (Pintossi et al., 2021). Therefore, diversity is also required to incorporate informal practice. Sometimes, conflict happens among the stakeholders, e.g., government authority, investors, community, and users (Pintossi et al., 2021).

4.6.3. Valuing heritage

Lack of valuing the informal practice is one of the barriers to an integrated approach. Informal heritage has a particular heritage value, but sometimes, it is not officially recognised (Chen, 2022). The idea of heritage is evolving, and formal practice also needs to keep pace with the concept.

4.6.4. Power conflict

Tensions between professionals and community members can complicate collaborative conservation efforts (Chen, 2022). Offering incentives or shared recognition may help address these challenges. Unclear authority between community groups and heritage bodies highlights the complexity of stakeholder integration. Our framework

aims to bridge this gap by promoting collaboration between informal and formal actors.

5. Conceptual framework of informality in architectural heritage conservation

Across disciplines such as architecture, urban planning, and anthropology, informality remains insufficiently defined within architectural heritage conservation. While existing studies frequently describe informality regarding the absence of regulation or formal oversight, very few have examined its specific attributes, dimensions, or implications in architectural heritage conservation. This paper contributes to addressing that gap by synthesising evidence across disciplines to conceptualise informality concerning architectural heritage.

As illustrated in Fig. 10, these attributes are organised into four key dimensions: informal actors, informal practices, informal spaces, and informal governance. Together, these dimensions offer a conceptual framework that repositions informality as a central, rather than peripheral, element in developing inclusive, bottom-up approaches to architectural heritage conservation. This framework supports a more nuanced and context-sensitive understanding of how heritage is actively produced, negotiated, and sustained outside formal institutional structures.

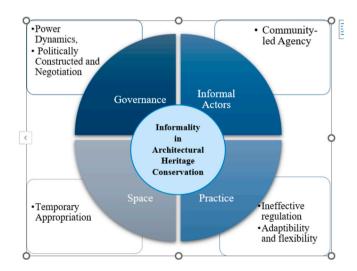


Fig. 10. Conceptual framework for informality in architectural heritage conservation.

6. Discussion

This study proposes a conceptual framework for understanding informality in architectural heritage conservation by synthesising attributes and dimensions derived from multidisciplinary perspectives. While the concept of "informality" is well-established in urban planning, anthropology, and architecture, often referring to activities that occur outside regulatory systems, its application within heritage conservation has been limited and largely undefined (Guha-Khasnobis et al., 2006; Sinha & Kanbur, 2012).

The research draws attention to the foundational insights and extends the discourse by identifying key attributes of informality for architectural heritage conservation. The attributes formulate informal dynamics including non-regulation, community-led agency, temporary appropriation, adaptability and flexibility, political construction, negotiation, which group them into four interconnected dimensions: informal actors, practices, spaces, and governance.

Informal actions outside of the regulatory institutions led by informal actors, including individuals, communities (shopkeepers, residents, passersby, artisans), and the wider public, play pivotal roles in safeguarding heritage. These informal actors contribute beyond the boundary of the informal heritage mechanism and subsidise it significantly to the preservation, adaptation, and transmission of both tangible and immovable cultural heritages. From assessment and planning to intervention and evaluation, this informal contribution spans the full spectrum of heritage and demonstrates the need to integrate it within a participatory conservation framework.

The analysis further reveals that informal and formal practices in heritage conservation are reciprocal. Government initiatives must include unorganised and non-structured individuals and organisations to ensure a sustainable and eco-friendly approach to heritage conservation. People's participation, coupled with the empowerment to engage in planning, decision-making, execution, and maintenance, will save time, energy, and money for both the public and government. This involvement fosters a sense of belonging, place, trust, pride, and an effective bridge between the government and the people in preserving a country's history, culture, and identity. This approach promotes a more inclusive, cost-effective, and socially embedded model of conservation (Chirikure et al., 2010; Waterton & Smith, 2010).

Furthermore, engaging the private organisations or NGOs, community-based organisations, and individuals can contribute beyond manual preservation, offering financial support, raising awareness, and

facilitating knowledge-sharing initiatives. Their roles extend from grassroots maintenance to political advocacy and collaborative governance. The framework presented in this study aligns with recent scholarship that emphasises an adaptive, community-driven, eco-friendly and inclusive model for architectural heritage conservation (Devlin, 2018).

To conclude, the paper recommends recognising and institutionalising informal actors through capacity-building, financial incentives, and recognition mechanisms. An effective integration (Fig. 11) strategy may include training and education, rewards, privileges for participatory planning, and social validation of informal contributions. These steps are critical to building sustainable heritage futures that are both inclusive and locally anchored.

7. Conclusion

This study addresses a critical gap in the field of heritage conservation by developing a conceptual framework for understanding informality through multidisciplinary insights from architecture, urban planning, and anthropology. The analysis confirms that informality in heritage conservation remains under-theorised, with no unified definition or clear set of attributes guiding its application. By synthesising diverse disciplinary perspectives and drawing on examples from varied socio-economic contexts, the study identifies key dimensions and attributes of informality, such as community-led agency, adaptability, non-regulation, and temporary appropriation that contribute meaningfully to heritage conservation practices.

The results highlight the critical role that informal actors and practices play in advancing both sustainable and inclusive conservation, particularly in environments where formal systems are lacking or ineffective. Although international frameworks such as those from UNESCO and ICOMOS increasingly promote community engagement, informal methods are still inconsistently acknowledged or applied, especially across the Global South. This study calls for the development of contextually tailored guidelines responsive to local economic conditions, to facilitate effective implementation and create accountability structures that connect international standards with the realities experienced by local communities.

Although this research focuses primarily on architectural heritage, it opens avenues for future inquiry into natural and intangible heritage, including vernacular traditions, indigenous practices, and adaptive reuse. Expanding this framework to include NGOs, individual actors, and informal community networks will further enrich the discourse.

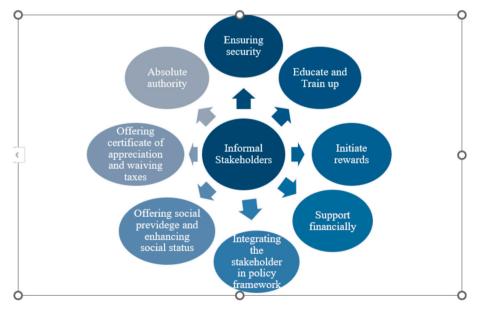


Fig. 11. The way to integrate informal stakeholders in the conservation practice.

Ultimately, this study argues for a bottom-up, participatory approach integrating informal stakeholders into formal conservation processes. Governments, international organisations, and heritage professionals must recognise the contributions of informal actors, not as peripheral participants, but as essential custodians of cultural heritage. A truly sustainable conservation model must be inclusive, adaptive, and grounded in shared responsibility.

CRediT authorship contribution statement

Roaksana Firdaus Nigar: Software, Funding acquisition, Writing – review & editing, Visualization, Resources, Conceptualization, Investigation, Formal analysis, Writing – original draft, Methodology, Data curation. **Gehan Selim:** Methodology, Supervision, Writing – review & editing, Conceptualization.

Ethical approval

Not applicable.

Appendix A

Table 4Summary of Analysed Articles in the Systematic Review.

Funding

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Declaration of competing interest

The authors reported no potential conflict of interest.

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Author	Title	
Beier (2021)	From Visible Informality to Splintered Informalities: reflections on the production of "formality"	
Jimmy and Lombard (2024)	Entangled Rationalities: Planning Responses to Informal Housing Practices Within Middle-Income Neighbourhoods in Nairobi City, Kenya	
Lara-Hernandez et al. (2020)	Temporary Appropriation and Urban Informality	
Roy (2005)	Urban Informality: Toward an Epistemology of Planning	
Plevoets and Sowinska-Heim	Community Initiatives as a Catalyst for Regeneration of Heritage Sites: Vernacular Transformation and its Influence on the Formal Adap	
(2018)	Reuse Practice	
Fauveaud and Esposito (2021)	Beyond official heritage agendas: The third space of conservation practices in Phnom Penh, Cambodia	
Arnstein (1969)	A Ladder of Citizen Participation	
Chen (2022)	Comparison of Unofficial Recognition and Conservation Approaches to Informal Architectural Heritages: Cases from Hong Kong, China and Iwate Prefecture, Japan	
Ahmed (2019)	Craftsman, Informal Heritage Management and Social Capital in Conserving Chini-tikri Work of Kasaituli Mosque, Old Dhaka, Bangladesh	
Moretti (2019)	The Formal, the Semi-Formal and the Informal: The Case of Dortmund	
Connolly and Wigle (2017)	(Re)Constructing Informality and "Doing Regularisation" in the Conservation Zone of Mexico City	
Pendlebury (2013)	Conservation Values, the Authorised Heritage Discourse and the Conservation-Planning Assemblage	
Ahmed (2017)	Community, Heritage and Social Capital: Informal Heritage Management in Old Dhaka	
Devlin (2018)	Asking 'Third World question' of First World informality: Using Southern Theory to Parse Needs from Desires in an Analysis of Informal Urbanism of the Global North	
Ferrando Ortiz and Viñals Blasco (2023)	Community Participation in the Restoration of Heritage Buildings	
Tiwari (2015)	Community Participation in Heritage Affairs	
Çardak (2025)	Community Engagement and Heritage Awareness for the Sustainable Management of Rural and Coastal Archaeological Heritage Sites	
Sinha and Kanbur (2012)	Introduction-Concepts, Facts and Models	
Barrère (2016)	Cultural heritages: From official to informal	
Della Lucia and Trunfio (2018)	The Role of the Private Actor in Cultural Regeneration: Hybridizing Cultural Heritage with Creativity in the City	
Sheikh and Bhaduri (2021)	Policy Space for Informal Sector Grassroots Innovations: Towards a 'Bottom-up' Narrative	
Chirikure et al. (2010)	Unfulfilled Promises? Heritage Management and Community Participation at some of Africa's Cultural Heritage	
Moatasim (2019)	Entitled Urbanism: Elite informality and the reimagining of a planned modern city	
Pintossi et al. (2021)	Identifying Challenges and Solutions in Cultural Heritage Adaptive Reuse through the Historic Urban Landscape Approach in Amsterdam	

Data availability

All data used in this study are from publicly available literature and databases.

References

Abbott, J. (2002). An analysis of informal settlement upgrading and critique of existing methodological approaches. *Habitat International*, 26(3), 303–315. https://doi.org/ 10.1016/S0197-3975(01)00049-2 Ahmed, I. (2017). Community, heritage and social capital: informal heritage management in Old Dhaka. Open House International, 42(1), 65–72. https://doi.org/ 10.1108/OHI-01-2017-B0010

Ahmed, I. (2019). Craftsman, informal heritage management and social capital in conserving chini-tikri work of Kosaituli mosque, Old Dhaka, Bangladesh. *Journal of Cultural Heritage Management and Sustainable Development*, 9(3), 334–351.

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Apaydin, V. (2018). Critical community engagement in heritage studies. In C. Smith (Ed.), *Encyclopedia of Global Archaeology* (2nd ed., pp. 1–13). Cham: Springer. https://doi.org/10.1007/978-3-319-51726-1_3348-1.

Arnold, J. D. M., & Lafreniere, D. (2017). The persistence of time vernacular preservation of the postindustrial landscape. *Change over Time-an International Journal of*

- Conservation and the Built Environment, 7(1), 114–133. https://doi.org/10.1353/
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216–224. https://doi.org/10.1080/01944366908977225
- Barrère, C. (2016). Cultural heritages: From official to informal. City, Culture and Society, 7(2), 87–94. https://doi.org/10.1016/j.ccs.2015.11.004
- Barrett, J. (2011). Museums and the public sphere. Chichester: John Wiley & Sons.
- Beier, R. (2021). From visible informality to splintered informalities: reflections on the production of 'formality' in a Moroccan housing programme. *International Journal of Urban and Regional Research*, 45(6), 930–947. https://doi.org/10.1111/1468-2427.13001
- Bhaduri, S., & Kumar, H. (2011). Extrinsic and intrinsic motivations to innovate: tracing the motivation of 'grassroot' innovators in India. Mind & Society, 10, 27–55. https:// doi.org/10.1007/s11299-010-0081-2
- Bryman, A. (2016). Social research methods. Oxford university press.
- Çardak, F. S. (2025). Community engagement and heritage awareness for the sustainable management of rural and coastal archaeological heritage sites: The case of Magarsus (Karatas, Turkey). Sustainability, 17(12), Article 5302.
- Chami, M. F. (2018). Community involvement and sustainable tourism development in heritage management: Amboni Limestone Caves, Tanzania. African Journal of Hospitality, Tourism and Leisure, 7(2), 1–13.
- Chen, F. (2022). Comparison of unofficial recognition and conservation approaches to informal architectural heritage: cases from Hong Kong, China and Iwate Prefecture, Japan. Journal of Asian Architecture and Building Engineering, 21(4), 1364–1380.
- Chirikure, S., Manyanga, M., Ndoro, W., & Pwiti, G. (2010). Unfulfilled promises? Heritage management and community participation at some of Africa's cultural heritage sites. *International Journal of Heritage Studies*, 16(1–2), 30–44.
- Chitty, G. (2017). Heritage, conservation and communities: Engagement, participation and capacity building. Routledge. https://books.google.co.uk/books?id=nY90jwEACAAJ.
- Chow, V. W., & Leiringer, R. (2016). Rethinking the link between public engagement and project success. In , 2. Environmental, opportunities, and, challenges, constructing, commitment, and, acknowledging, human, experiences (p. 549).
- Clark, K. (2001). From regulation to participation: Cultural heritage, sustainable development and citizenship. In , 113. Forward planning: The functions of cultural heritage in a changing Europe (p. 117).
- Connolly, P., & Wigle, J. (2017). (Re) constructing informality and "doing regularization" in the conservation zone of Mexico City. *Planning Theory & Practice*, 18(2), 183–201.
- Dasgupta, S., & Garg, P. (2021). The urban development and heritage conundrum: the challenges of heritage conservation in the hill-station of Darjeeling. *Journal of Urban Design*, 26(2), 184–208.
- de Rijke, K. (2012). The symbolic politics of belonging and community in peri-urban environmental disputes: The Traveston Crossing Dam in Queensland, Australia [Article]. *Oceania*, 82(3), 278–293. https://doi.org/10.1002/j.1834-4461.2012. tb00134.x
- De Soto, H. (1989). The other path. New York: Harper & Row.
- Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In , 1(20). Handbook of theories of social psychology (pp. 416–436).
- Della Lucia, M., & Trunfio, M. (2018). The role of the private actor in cultural regeneration: Hybridizing cultural heritage with creativity in the city [Article]. *Cities*, 82, 35–44. https://doi.org/10.1016/j.cities.2018.05.003
- Devlin, R. T. (2018). Asking 'Third World questions' of First World informality: Using Southern theory to parse needs from desires in an analysis of informal urbanism of the global North. *Planning Theory*, *17*(4), 568–587.
- Di Raimo, A., Lehmann, S., & Melis, A. (2020). Informality through sustainability: Urban informality now. Routledge.
- Fan, L. (2014). International influence and local response: Understanding community involvement in urban heritage conservation in China. *International Journal of Heritage Studies*, 20(6), 651–662.
- Fauveaud, G., & Esposito, A. (2021). Beyond official heritage agendas: The third space of conservation practices in Phnom Penh, Cambodia [Article]. *Urban Studies*, 58(12), 2473–2489. Article 0042098020951325 https://doi.org/10.1177/0042098020951 325.
- Ferrando Ortiz, A., & Viñals Blasco, M. J. (2023). Community participation in the restoration of heritage buildings. EGE Revista de Expresión Gráfica en la Edificación, 18, 80–94.
- Flyvbjerg, B. (1998). Habermas and Foucault: Thinkers for civil society? British Journal of Sociology, 210–233.
- Gerxhani, K. (2004). The informal sector in developed and less developed countries: A literature survey. Public Choice, 120(3), 267–300.
- Guha-Khasnobis, B., Kanbur, R., & Ostrom, E. (2006). Beyond formality and informality. Hart, K. (1973). Informal income opportunities and urban employment in Ghana. The Journal of Modern African Studies, 11(1), 61–89.
- Hassan, F. (2020). Tangible heritage in archaeology. In Encyclopedia of global archaeology (pp. 7213–7215). New York, NY: Springer. https://doi.org/10.1007/978-1-4419-
- Heintz, J. (2012). Informality, inclusiveness, and economic growth: an overview of key issues. Amherst: Univ Massachusetts.
- Hilbrandt, H., Alves, S. N., & Tuvikene, T. (2017). Writing across contexts: Urban informality and the state in Tallinn, Bafatá and Berlin. *International Journal of Urban* and Regional Research, 41(6), 946–961.
- Hou, H., & Wu, H. (2020). A case study of facilities management for heritage building revitalisation. Facilities (Bradford, West Yorkshire, England), 38(3/4), 201–217. https://doi.org/10.1108/F-02-2019-0020
- Imon, S. S. (2016). Public participation and sustainable urban conservation. In Context: Built, living and.

- Jimmy, E. N., & Lombard, M. (2024). Entangled rationalities: Planning responses to informal housing practices within middle-income neighbourhoods in Nairobi City, Kenya. Planning Theory & Practice, 25(3), 299–320.
- Kanbur, R. (2009). Conceptualising informality: Regulation and enforcement.
- Kapelouzou, I. (2012). The inherent sharing of conservation decisions. Studies in Conservation, 57(3), 172–182.
- Kostka, G., & Mol, A. P. (2017). Implementation and participation in China's local environmental politics: Challenges and innovations. In *Local Environmental Politics in China* (pp. 1–14). Routledge.
- Lara-Hernandez, J. A., Coulter, C. M., & Melis, A. (2020). Temporary appropriation and urban informality: Exploring the subtle distinction. *Cities*, 99, Article 102626. https://doi.org/10.1016/j.cities.2020.102626
- Larkham, P. (2002). Conservation and the City. Routledge.
- Lehmann, S. (2023). The unplanned city: public space and the spatial character of urban informality. *Emerald Open Research*, 1(5). https://doi.org/10.1108/EOR-05-2023-0007
- Li, S., Aoki, N., Wang, R., & Xu, S. (2024). Development of cultural heritage conservation planning in China. *Planning Perspectives*, 39(4), 925–943. https://doi.org/10.1080/ 02665433.2024.2343081
- Liu, O. P. (2017). Community involvement for sustainable world heritage sites: The Melaka case. Kajian Malaysia: Journal of Malaysian Studies, 35.
- Loayza, N. V. (2016). Informality in the process of development and growth. The World Economy, 39(12), 1856–1916.
- Love, P. A. B. P. E. (2011). To cite this document: Peter A. Bullen Peter ED Love, (2011), "Adaptive reuse of heritage buildings", Structural Survey, Vol. 29 Iss 5 pp. 411-421. Structural Survey, 29(5), 411-421.
- Maloney, W. F. (2004). Informality Revisited. World Development, 32(7), 1159–1178. https://doi.org/10.1016/j.worlddev.2004.01.008
- Marcal, H. (2019). Public engagement towards sustainable heritage preservation. Protection of Cultural Heritage, 8, 185–210.
- Michalski, S. (2018). Sharing conservation decisions: Tools, tactics, and ideas. In Sharing conservation decisions current issues and future strategies, ICCROM, Rome. [Online] Available at www.iccrom.org/sites/default/files/2018-05/sharing_conservati on decisions 2018 web.pdf [Accessed November 18th 2018].
- Mihas, P. (2023). Qualitative research methods: approaches to qualitative data analysis. In R. J. Tierney, F. Rizvi, & K. Ercikan (Eds.), *International Encyclopedia of Education* (4th ed., pp. 302–313). Elsevier. https://doi.org/10.1016/B978-0-12-818630-5.11029-2.
- Moatasim, F. (2019). Entitled urbanism: Elite informality and the reimagining of a planned modern city. *Urban Studies*, 56(5), 1009–1025.
- Moretti, K. (2019). In I. Pardo, G. B. Prato, & J. Rosbrook-Thompson (Eds.), The Formal, the semi formal and the informal: The case of Dortmund1 (p. 165).
- Munasinghe, H. (2005). The politics of the past: constructing a national identity through heritage conservation. *International Journal of Heritage Studies*, 11(3), 251–260.
- Neal, C. (2015). Heritage and participation. In *The Palgrave handbook of contemporary heritage research* (pp. 346–365). Springer.
- Odiaua, I. (2022). Heritage Conservation in West Africa. Oxford University Press.
- Oviedo, G., & Puschkarsky, T. (2017). World Heritage and rights-based approaches to nature conservation. In *Cultural Heritage Rights* (pp. 125–136). Routledge.
- Peixoto, N. B. (2009). Latin American megacities: The new urban formlessness. In City/ Art: the urban scene in Latin America (pp. 233–250).
- Pendlebury, J. (2013). Conservation values, the authorised heritage discourse and the conservation-planning assemblage. *International Journal of Heritage Studies*, 19(7), 709–727.
- Pintossi, N., Ikiz Kaya, D., & Pereira Roders, A. (2021). Identifying challenges and solutions in cultural heritage adaptive reuse through the Historic Urban Landscape Approach in Amsterdam. Sustainability, 13(10), Article 5547. https://www.mdpi. com/2071-1050/13/10/5547.
- Plevoets, B., & Sowinska-Heim, J. (2018). Community initiatives as a catalyst for regeneration of heritage sites: Vernacular transformation and its influence on the formal adaptive reuse practice [Article]. Cities, 78, 128–139. https://doi.org/ 10.1016/j.cities.2018.02.007
- Polese, A. (2023). What is informality? (Mapping) "the art of bypassing the state" in Eurasian spaces - and beyond. Eurasian Geography and Economics, 64(3), 322–364. https://doi.org/10.1080/15387216.2021.1992791
- Roberts, B. R. (1993). Definitions of informality. In Work without protections: Case studies of the informal sector in developing countries (p. 101). https://books.google.com/books?hl=en&lr=&id=O3zrMycp6DgC&oi=fnd&pg=PA101&dq=definitions+of+informality&ots=7nx17edJge&sig=EYomEj9MZXskXpCKKnsQDljndv8.
- Roy, A. (2005). Urban informality: Toward an epistemology of planning. *Journal of the American Planning Association*, 71(2), 147–158.
- Roy, M. (2009). Planning for sustainable urbanisation in fast growing cities: Mitigation and adaptation issues addressed in Dhaka, Bangladesh. Habitat International, 33(3), 276–286. https://doi.org/10.1016/j.habitatint.2008.10.022
- Russo, C. (2018). Informality in contemporary Cuban labor market An anthropological perspective. *Interdisciplinary Political Studies*, 4(2), 51–78.
- Sheikh P, F. A., & Bhaduri, S. (2021). Policy space for informal sector grassroots innovations: towards a 'bottom-up' narrative. *International Development Planning Review*, 43(1), 115–137. https://doi.org/10.3828/idpr.2019.34
- Silva, P. (2020). Not so much about informality: Emergent challenges for urban planning and design education. Sustainability, 12(20), Article 8450. https://doi.org/10.3390/ su12208450
- Singh, N. K., & Tiwari, A. (2023). Community engagement and heritage management: A case study of the Hazrat Nizamuddin Basti. *International Journal for Multidisciplinary Research (IJFMR)*, 5(5). https://www.researchgate.net/profile/Niraj-Singh-30/publication/377306806_Community_Engagement_and_Heritage_Management_A_Case

- _Study_of_the_Hazrat_Nizamuddin_Basti/links/659fade1bc30165e6e32e99f/Comm unity-Engagement-and-Heritage-Management-A-Case-Study-of-the-Hazrat-Nizam uddin-Basti ndf
- Sinha, A., & Kanbur, R. (2012). Introduction: Informality—Concepts, facts and models. Margin: The Journal of Applied Economic Research, 6(2), 91–102. https://doi.org/ 10.1177/097380101200600201
- Smith, L. (2006). Uses of heritage. Routledge. https://doi.org/10.1007/978-3-030-30018-0_1937.pdf
- Suprapti, A., Sejati, A. W., Pandelaki, E. E., & Sardjono, A. B. (2022). Archiving traditional houses through digital social mapping: an innovation approach for living heritage conservation in Java. *Journal of Architecture and Urbanism*, 46(1), 33–47.
- Tiwari, S. R. (2015). Community participation in heritage affairs. *Revisiting Kathmandu Safeguarding Living Urban Heritage*, 189–197. https://books.google.com/books? hl=en&ir=&id=VQRgCgAAQBAJ&oi=fnd&pg=PA189&dq=community+participation+in+heritage+affairs&ots=T7aRmJONc_&sig=-oW-eGC94JgTcvdxmceBlhYhbXU.
- Tokey, A. I., Shioma, S. A., Muniruzzaman, M., Munir, D. H., Akther, M. S., & Islam, I. (2020). Redevelopment of a dense area: A participatory planning approach for regeneration in Old Dhaka, Bangladesh. *Journal of Regional and City Planning*, 31(3), 217–236. https://doi.org/10.5614/jpwk.2020.31.3.1
- Turner, J. H. (1988). A theory of social interaction. Stanford University Press. https://books.google.com/books?hl=en&lr=&id=a1H91KqOs-kC&oi=fnd&pg=PA3&dq=a+theory+of+social+interaction&ots=Ej2RlnfPRB&sig=Pwm-jMUZwv8MkPbjnjTM_V7tNYk.
- Waterton, E., & Smith, L. (2010). The recognition and misrecognition of community heritage. *International Journal of Heritage Studies*, 16(1–2), 4–15. https://doi.org/ 10.1080/13527250903441671

Zhang, Y., Ikiz Kaya, D., van Wesemael, P., & Colenbrander, B. J. (2024). Youth participation in cultural heritage management: a conceptual framework. *International Journal of Heritage Studies*, 30(1), 56–80. https://doi.org/10.1080/ 13527258.2023.2275261

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