

Public Space as an Arena of Social Negotiation: an Adaptive-Contextual Model for the Prambanan Temple Compounds

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ABSTRACT: *Public space in heritage areas is shaped by negotiation among social practices, design requirements, conservation values, and management systems. This study examines the Prambanan Temple Compounds, Indonesia, as a tourism destination, social setting, cultural venue, and managed conservation area. A qualitative phenomenological-interpretive approach was used, drawing on observation, interviews with 51 respondents from seven actor groups, visual documentation, and management documents. Analysis involved phenomenological reduction, identification of significant statements, thematic coding, interpretation of social-practice patterns, and conceptual synthesis. The coding produced 208 theme occurrences across six themes: flexibility, social interaction, facilities, identity, public space, and sustainability. Flexibility and social interaction were most frequent, each identified in 45 respondents (88.2%), followed by facilities (40; 78.4%) and identity (39; 76.5%). The findings indicate that adaptive public space cannot be reduced to adding facilities; it requires capacity to accommodate changing practices while maintaining cultural identity, heritage values, environmental considerations, and management boundaries. The study proposes an adaptive-contextual public space model in which social practice, spatial/design conditions, heritage values, and governance interact, with design functioning as a mediator of negotiation. The model extends heritage public-space understanding toward a socially produced, adaptive, and context-sensitive arena.*

KEYWORDS - *adaptive design, heritage, Prambanan Temple, public space, social practice*

I. Introduction

The Prambanan Temple Compounds constitute one of Indonesia's important cultural heritage landscapes, with historical, archaeological, architectural, religious, and symbolic significance. The compound was inscribed on the UNESCO World Heritage List in 1991 and includes not only the Prambanan temple complex but also the Sewu, Buhrah, and Lumbung temple groups. The resulting landscape contains multiple layers of historical meaning and religious diversity. In contemporary conditions, the area is not experienced only as a conservation object. It is also a tourism destination, a setting for social activities, a site of local economic activity, a venue for cultural performances, and an environment through which visitors encounter heritage.

This multiplicity of functions creates a particular challenge for public-space design. Public space in a heritage setting cannot be understood simply as an open area available for unrestricted use. Its use is conditioned by historical values, conservation regulations, sacred character, zoning, visitor management, and institutional responsibilities. At the same time, the space must accommodate changing patterns of movement, social interaction, tourism, education, cultural events, and everyday use. Public space therefore becomes an arena in which different interests meet and are negotiated.

This condition is consistent with [1] view that space is not a neutral container but is produced through social practices, representations, and lived experience. Changes in the use of public space at Prambanan can consequently be read as part of an ongoing process of spatial production. [2] practice perspective further helps to

explain how repeated activities, dispositions, and relationships shape social life, while [3] emphasises practices as organised configurations of activity. In public-space research, [4] and [5] similarly demonstrate that the social performance of space depends on how spatial conditions support staying, movement, encounter, and participation.

The heritage dimension adds another layer. Heritage is not only a collection of physical artefacts; it also involves meaning, identity, memory, authenticity, and contested interpretations (Harrison, 2013). [7] and [8] show how place is formed through experience, attachment, and meaning. In heritage areas, design interventions therefore need to avoid producing generic spaces that weaken local identity. Instead, design needs to negotiate contemporary requirements with the continuity of place character.

The COVID-19 pandemic further exposed the importance of adaptability in public space. Changes in distancing practices, visitor behaviour, circulation, gathering patterns, and perceptions of comfort demonstrated that public-space arrangements cannot always remain fixed (Honey-Rosés et al., 2020). Yet adaptability in a heritage setting cannot mean unrestricted physical transformation. Changes remain subject to conservation requirements and cultural meanings. The central design problem is therefore not simply how to make space more flexible, but how flexibility can be achieved without eroding the identity and values of the heritage setting.

This study addresses that problem through the following question: how are social practices, spatial/design conditions, heritage values, and governance negotiated in the formation of adaptive public space in the Prambanan Temple Compounds? The study aims to identify the dominant spatial needs expressed by actors, interpret their relationships with social practices and heritage conditions, and formulate a conceptual model for adaptive-contextual public space. The contribution is positioned at the intersection of public-space studies, social practice theory, heritage studies, and participatory design.

The argument developed in this article is that adaptive public space in a heritage landscape should not be treated as a technical product with a fixed physical solution. Rather, it should be understood as a continuously negotiated spatial condition. The novelty lies in connecting empirical evidence from multiple actor groups with a conceptual model that treats design as a mediator among social practice, spatial conditions, heritage values, and governance. Sustainability is consequently interpreted not as an isolated technical attribute but as an outcome of relationships among these dimensions.

II. Literature Review

2.1 Public Space As Socially Produced Space

The concept of public space has moved beyond a purely physical understanding of streets, plazas, parks, and open areas. [10] demonstrate that public space is political and social because access, control, representation, and use are shaped by social relations. [11] similarly argues for a broader understanding of contemporary public space in which physical form, management, activity, and social experience interact. Public space is therefore simultaneously material, social, and institutional.

[1] production-of-space perspective is particularly relevant to heritage settings because it directs attention to the processes through which space is produced and reproduced. Spatial practices involve everyday movement and activity; representations of space involve planning, design, regulation, and professional knowledge; and representational spaces concern lived experience and meaning. In Prambanan, these dimensions intersect. The management system defines zones and permitted activities, designers translate requirements into spatial arrangements, while users experience and reinterpret the resulting environment through everyday practices.

[12] adds a public-sphere perspective by emphasising interaction and communication, although a heritage tourism landscape cannot be equated directly with an ideal public sphere. The value of the concept here is its emphasis on public interaction and the role of space in enabling social encounter. [5] and [4] complement this perspective by showing that public-space quality is strongly related to the ability of people to stay, meet, observe, and participate. These ideas support the interpretation of social interaction as a core function rather than a secondary outcome of public-space design.

2. 2 Social Practice, Participation, And Co-Design

A practice-oriented approach shifts attention from objects to activities and relationships. [2] understands practice as emerging through the relationship between dispositions, social structures, and situations. [3] likewise treats social life as constituted through organised practices. In design research, this perspective supports an understanding of design as an ongoing process rather than only a final physical artefact.

[13] argues that contemporary design increasingly operates in contexts where people participate in creating solutions for social change. [14] describe co-creation as a design landscape in which users and other stakeholders contribute knowledge and experience. In heritage public space, participation is especially relevant because design decisions can affect meanings and cultural practices that cannot be fully captured by technical criteria alone. Participation, however, must operate within institutional and conservation boundaries. The relevant question is therefore not whether all decisions can be transferred to users, but how user experience can inform negotiation among stakeholders.

2. 3 Heritage, Place Identity, And Context

Heritage places contain meanings that are accumulated through history, memory, ritual, representation, and use. [6] emphasises that heritage is a social and political process rather than a static inventory of objects. [7] explains how experience transforms abstract space into meaningful place, while [8] warns against placelessness when local identity is weakened by standardised environments. These concepts are relevant to Prambanan because spatial adaptation must maintain a recognisable relationship with the site's cultural and symbolic character.

[15] similarly argue that interventions in historic areas should respect existing character while supporting contemporary use. UNESCO's Historic Urban Landscape approach [16] reinforces the idea that heritage conservation should be integrated with social, environmental, and spatial processes. For Prambanan, this means that public-space design cannot be separated from heritage management, visitor experience, local activity, and environmental considerations.

2. 4 Adaptability And Sustainability

Adaptability refers here to the capacity of space to accommodate changing patterns of use rather than simply to the ability to transform its physical form. A flexible public space can support different activities, user groups, and temporal conditions while maintaining its basic identity and operational logic. The pandemic made this issue especially visible, as public-space use changed rapidly and exposed the limitations of rigid spatial arrangements (Honey-Rosés et al., 2020).

Sustainability is likewise interpreted in a broad sense. It includes environmental performance and material durability, but also social continuity, cultural meaning, and the capacity of management systems to maintain the space over time. [17] frame sustainability in relation to urban systems, while the [18] places inclusive and sustainable settlements within a broader development agenda. In a heritage setting, sustainability requires balancing change and continuity. The present study therefore treats sustainability as a guiding boundary for adaptation rather than as a separate design feature.

2. 5 Analytical Framework And Research Gap

The literature indicates four dimensions that are often discussed separately: social practice, spatial/design conditions, heritage values, and governance. Public-space studies explain social interaction and use; practice theory explains how activity is reproduced; heritage studies explain identity, authenticity, and continuity; and design and management studies address physical adaptation and institutional control. The research gap addressed by this study is the need to connect these dimensions empirically in a heritage public-space context and to translate their interaction into a contextual design model.

The analytical premise is therefore: social practices generate needs and patterns of use; spatial/design conditions mediate those practices; heritage values establish meanings and limits; and governance regulates how adaptation can occur. The four dimensions interact rather than operate sequentially. This premise becomes the basis for interpreting the interview coding and for constructing the adaptive-contextual public-space model.

III. Research Methods

3.1 Research Approach

The study employed a qualitative phenomenological-interpretive approach. Phenomenology was used as the primary orientation because the research sought to understand how different actors experienced and interpreted public space, adaptation, interaction, identity, facilities, and heritage values. A critical perspective was used in a limited interpretive capacity to examine negotiation among users, managers, regulations, conservation requirements, and design. The two perspectives were therefore not treated as independent methods; phenomenology provided the main research orientation, while critical interpretation supported the analysis of relations and negotiation.

The approach was appropriate because the research question concerns meanings, experiences, and relationships that cannot be adequately represented through physical measurements alone. At the same time, the study translated qualitative statements into measurable thematic frequencies. These frequencies are used descriptively to show the distribution of coded themes, not to claim statistical generalisation.

3.2 Research Site

The research was conducted in the Prambanan Temple Compounds, Central Java, focusing on public spaces around the temple complex, pedestrian routes, open spaces, transition areas, tourism-support areas, and spaces used for social and cultural activities. The site was selected because it combines heritage conservation, tourism, social interaction, cultural performance, and institutional management. The site's zoning and management arrangements create clear boundaries within which public-space adaptation must operate.

3.3 Participants And Object Of Study

The study involved 51 respondents from seven broad groups: academics; designers and practitioners; cultural practitioners; site managers; local residents; visitors; and actors associated with tourism activities. The diversity of respondents was intended to capture different experiences of circulation, facilities, materials, flexibility, sustainability, identity, sacredness, participation, and management.

Table 1. Participant groups and roles

Participant group	Role in the study
Academics	Conceptual and analytical perspectives on public space and heritage
Designers/practitioners	Design experience and spatial implementation perspectives
Cultural practitioners	Cultural meaning, identity, and heritage perspectives
Site managers	Management, regulation, zoning, and operational perspectives
Local residents	Everyday use and local social experience
Visitors	Tourism, movement, comfort, information, and experience
Tourism-related actors	Operational and economic activity perspectives

The object of study was the social practice of public-space design, including patterns of use, social activities, circulation, facilities, interactions among actors, spatial meaning, design adaptation, sustainability, and the relationship between design and heritage conservation.

3.4 Role Of The Industry Partner

PT Venus Mitra Industri (also referred to in the source material as PT Venus Ceramica International) participated as an industry partner. Its role was to provide technical information, material references, and practical input concerning ceramic materials for public-space applications. The partnership was intended to bridge academic findings and implementation requirements, particularly concerning durable and sustainable material options for heritage public space.

The partner's contributions included information on material characteristics and technical performance, references on material innovation and resource efficiency, participation as a technical resource in discussions concerning material selection, implementation advice, and technical review of the conceptual model. Product samples, catalogues, and technical information could be used as analytical material. Importantly, the source material states that the partner did not determine the research findings or conclusions and that scientific independence was maintained. This distinction is retained because it is important for research integrity and transparency.

3.5 Data Collection

Four principal techniques were used: observation, interviews, documentation, and document review. Observation covered spatial layout and circulation, social activity, economic activity, tourism activity, stakeholder relationships, and design elements. Design observations included signage, seating, shading, pedestrian routes, and boundaries between sacred and tourism areas. Outputs included activity mapping, behaviour mapping, photographic documentation, activity-point identification, and identification of facility needs.

Semi-structured interviews focused on user experience, pandemic-related changes, changing interaction patterns, spatial flexibility, circulation, facilities, identity, sustainability, sacred values, the role of designers, and the possibility of participatory design. The interview instrument contained ten areas of enquiry: pandemic impacts; design adaptation; social interaction; social practice; spatial adaptability; design and governance; sustainability; participation; cultural values; and the meaning of public space.

Table 2. Interview focus and data indicators

No.	Interview focus	Main question	Data indicators
1	Pandemic impacts	How did the pandemic affect public-space design approaches in heritage areas such as Prambanan?	Health protocols; behavioural change; changes in space use
2	Design adaptation	Which design aspects experienced the greatest change?	Circulation; flexibility; distance; facilities; materials
3	Social interaction	How should design respond to changing post-pandemic interaction?	Direct/indirect interaction; group activities; restrictions
4	Social practice	How do users' social practices influence public-space design?	Needs; activities; habits; patterns of use
5	Spatial adaptability	Does the current design allow diverse social practices?	Flexibility; adaptation; functional change
6	Design and governance	How do designers negotiate regulation, culture, and user needs?	Regulation; management; design; cultural values
7	Sustainability	How can design strengthen social sustainability without compromising heritage values?	Conservation; materials; environment; social sustainability
8	Participation	Can participatory public-space models be applied at Prambanan?	User involvement; collaboration; co-design
9	Cultural values	How are cultural and sacred values understood in public-space development?	Sacredness; identity; history; religion
10	Meaning of public space	How important is public space in a sacred setting such as Prambanan?	Social interaction; tourism; education; spatial experience

Documentation included photographs of spatial conditions, cultural activities, festivals and economic activities, as well as site maps, masterplans, and public-space layouts. Management documents, cultural-activity information, policies, and conservation-related documents were reviewed to understand the institutional context within which design adaptation takes place.

3. 6 Data Analysis

Analysis followed five stages. First, phenomenological reduction was undertaken by temporarily bracketing prior assumptions about public space. The purpose was to give greater analytical space to respondents' experiences as expressed in interviews and observations. Second, significant statements concerning spatial experience, design, social interaction, management, and heritage were identified as units of meaning. Similar statements were grouped to identify recurring patterns across respondents.

Third, thematic coding was conducted. Statements relating to experience, activity, flexibility, facilities, social interaction, identity, public space, and sustainability were assigned thematic codes. The coding was primarily data-driven at the initial stage and subsequently interpreted through the theoretical framework. Fourth, thematic patterns were interpreted in relation to spatial conditions and the management system. This stage moved beyond counting codes to examine how needs and meanings were connected to the characteristics of heritage space. Fifth, conceptual synthesis translated the empirical patterns into principles and a conceptual model of adaptive-contextual public space.

The coding generated 208 theme occurrences from the 51 respondents. Because multiple-response coding was used, a single respondent could contribute to more than one theme. The percentages therefore represent the proportion of respondents in whose interview the relevant theme was identified; they do not represent mutually exclusive categories and should not be summed to 100%. The frequency results are descriptive indicators of thematic salience within the dataset.

IV. Results

4. 1 Respondent Characteristics And Thematic Distribution

The 51 respondents represented different relationships with the Prambanan landscape. This diversity was important because public-space requirements are not identical across actors. Managers emphasised regulation and operational boundaries; designers considered spatial and material adaptation; cultural actors highlighted meaning and sacredness; local residents reflected everyday experience; visitors described movement, comfort, information, and interaction; and tourism-related actors connected public space with activity and economic use.

Table 3. Thematic distribution across respondents

Theme	Respondents	Percentage
Flexibility	45	88.2%
Social interaction	45	88.2%
Facilities	40	78.4%
Identity	39	76.5%
Public space	25	49.0%
Sustainability	14	27.5%
Total theme occurrences	208	Multiple-response total

The distribution shows that flexibility and social interaction were the two most prominent themes, each occurring in 45 of the 51 interviews. Facilities and identity were also highly prominent. The lower frequency of explicit sustainability coding should not be interpreted as low concern for sustainability. Respondents often discussed conservation, environmental quality, cultural continuity, sacredness, and heritage without using the word sustainability. The frequency therefore measures explicit coding within the adopted coding scheme, not the total importance attributed to sustainability by respondents.

4. 2 Thematic Coding And Empirical Pattern

The 208 coded occurrences indicate that respondents experienced public space as multidimensional. Flexibility often appeared together with social interaction, facilities, and identity. This co-occurrence is important because it suggests that respondents did not conceive adaptation as a purely physical operation. A flexible space is valuable when it supports activities, interaction, comfort, circulation, information, and recognition of place. Similarly,

facilities become meaningful when they support social practices rather than simply increasing the number of physical objects.

The results also show that identity is closely related to adaptation. The relatively high identity frequency indicates that users do not evaluate change only in terms of convenience. They also consider whether changes remain recognisable as belonging to Prambanan. This creates a productive tension between adaptation and continuity: space must change enough to support contemporary use, but not so much that its cultural character becomes diluted.

4.3 Flexibility As A Primary Need

Flexibility appeared in 45 respondents (88.2%) and was one of the strongest themes in the dataset. In the interviews, flexibility referred to the capacity of space to respond to changes in activities, numbers of users, patterns of use, and evolving needs. It was not limited to the physical ability to move or transform an element. It also concerned the capacity of a spatial arrangement to accommodate different uses and conditions.

The finding should not be interpreted as evidence that one specific flexible design intervention is universally required. The 88.2% figure indicates thematic recurrence, while the appropriate form of adaptation remains dependent on spatial character, heritage values, activity patterns, and governance. Flexibility therefore becomes a relational property: a space is adaptive when its configuration, facilities, and management can respond to changing practices without undermining the site's identity and conservation requirements.

This interpretation differs from a purely technical understanding of flexible design. In a heritage landscape, flexibility must operate within limits. A temporary event configuration, movable furniture, adaptable interpretation, shaded resting areas, or differentiated circulation may each be appropriate in some contexts but inappropriate in others. The principle is not maximum change; it is appropriate responsiveness.

4.4 Social Interaction As A Primary Function Of Space

Social interaction also appeared in 45 respondents (88.2%). Respondents associated public space with meeting, gathering, communicating, observing, participating in cultural activities, and experiencing the site with others. This result reinforces the proposition that public space should not be evaluated only through circulation efficiency or visual quality. Its social performance is central to its meaning.

At Prambanan, social interaction takes place under specific heritage conditions. Some activities need to remain distant from sacred areas, while other public activities can occur in more open tourism-support zones. The spatial challenge is therefore to provide opportunities for interaction without treating all parts of the heritage landscape as interchangeable. Design must distinguish between different degrees and forms of publicness.

The result also supports the interpretation of public space as an arena of social negotiation. Users bring different expectations of gathering, privacy, observation, education, worship, tourism, and performance. Management rules establish boundaries, while design can mediate these differences through zoning, seating, circulation, thresholds, signage, and temporal arrangements.

4.5 Facilities As Support For Adaptation

Facilities were identified in 40 respondents (78.4%). Respondents referred to seating, shade, pedestrian infrastructure, signage and information, circulation support, and other elements that influence comfort and usability. The importance of facilities should not be interpreted as a simple demand for more objects. Rather, facilities are valuable when they enable social practices and support the experience of heritage.

A seat, for example, is not merely furniture. Its location influences whether people stay, observe, meet, rest, or obstruct circulation. Similarly, signage is not only an information device; it can shape movement, interpretation, and the relationship between visitors and sensitive areas. Facilities therefore function as mediating elements between social practice and spatial conditions.

This finding supports a design approach in which facility provision is derived from observed practices and site values. The objective is not to standardise public-space components but to select and locate them according to activity patterns, environmental conditions, heritage sensitivities, and management capacity.

4. 6 Identity And Spatial Information

Identity appeared in 39 respondents (76.5%). Respondents connected public-space experience with information, cultural character, place recognition, sacredness, historical meaning, and the need to understand the site. The result suggests that spatial adaptation after the pandemic was not directed solely towards health, comfort, and circulation. Users also required space to remain meaningful and recognisable.

Identity can be supported through spatial character, material expression, landscape relationships, interpretive information, and carefully controlled visual elements. The purpose is not to imitate historical forms indiscriminately but to maintain continuity of meaning. This is consistent with Relph's (1976) concern with placelessness and Tuan's (1977) understanding of place as grounded in experience and meaning.

Information is particularly important because heritage landscapes can contain complex spatial rules. Clear interpretation and wayfinding can help visitors understand why certain areas have different levels of access or activity. In this sense, information becomes part of the negotiation between openness and protection.

4. 7 Public Space As A Socio-Cultural Medium

Public space was explicitly coded in 25 respondents (49.0%). This figure must be interpreted carefully. It does not mean that only 49.0% of respondents considered public space important. Rather, it indicates that public space was explicitly discussed as a shared medium for activity, socialisation, interaction, tourism, education, or spatial experience within the coding process.

The result is important because it shows that public space is not necessarily named directly when users discuss their experiences. Respondents may speak instead about circulation, gathering, comfort, information, or cultural activity. Thematic analysis therefore helps reveal the broader social role of public space beyond explicit terminology.

The public-space function at Prambanan is also distributed across different spatial conditions: forecourts and plazas can support gathering; pedestrian corridors connect activities; green/open areas can support resting and interpretation; and event-transition spaces can accommodate temporary cultural activities. These zones require different levels of flexibility and different relationships to heritage sensitivity.

4. 8 Sustainability And Conservation

Sustainability was explicitly coded in 14 respondents (27.5%). Although this was the lowest frequency among the six themes, it remains conceptually significant because it appeared in relation to conservation, environmental quality, materials, cultural continuity, and long-term management. The frequency should not be treated as a direct measure of respondents' overall concern for sustainability, because many respondents used related concepts rather than the word itself.

The finding becomes more meaningful when read together with identity (76.5%) and flexibility (88.2%). High flexibility indicates a strong demand for adaptation, while identity indicates a strong need to maintain place character. Their relationship creates the central tension of heritage public-space design: change is necessary, but change must remain compatible with continuity.

Sustainability therefore operates as a guiding principle and boundary for adaptation. Public space can become more flexible and socially supportive, but interventions must consider heritage character, cultural values, environmental conditions, material durability, and management capacity. The goal is not to prevent change but to make change compatible with the long-term continuity of the place.

4. 9 Synthesis Of Empirical Findings

The coding of 51 respondents generated 208 theme occurrences across six themes. Flexibility and social interaction were dominant, followed by facilities and identity. The pattern indicates that public-space needs at Prambanan are interconnected. Users need spaces that can adapt, but adaptation is valuable because it enables interaction, comfort, circulation, and other practices. At the same time, adaptation must retain identity and heritage values.

The empirical synthesis therefore identifies five contextual principles: participatory orientation; grounding in local values; orientation towards social interaction; a clear conceptual basis; and adaptability to change. These principles are not independent design checklists. They form an integrated approach in which participation helps reveal practices, local values define contextual meaning, social interaction defines public-space performance, conceptual grounding guides design decisions, and adaptability enables continuity under changing conditions.

V. Discussion

5.1 Flexibility And Social Interaction As Characteristics Of Adaptive Public Space

The simultaneous prominence of flexibility and social interaction is the central empirical finding. Public-space adaptation is not meaningful merely because a space can change configuration. Its value is demonstrated through its capacity to support changing social practices. This interpretation aligns with [1] production-of-space perspective: space is continually produced through use and relations rather than fixed once and for all.

The finding also resonates with [5] and [4], who emphasise the relationship between physical conditions and social life. Yet the heritage context modifies the implication. In an ordinary urban plaza, increasing openness or activity may often be interpreted as positive. At Prambanan, increased activity can conflict with sacredness, conservation, crowd management, or visitor-flow requirements. Adaptive public space must therefore be selective and differentiated.

The contribution is to define flexibility as contextual adaptability rather than unrestricted transformability. This distinction is important for heritage design. The relevant question becomes: adaptable to what, for whom, when, and within which cultural and institutional boundaries? Such questions turn flexibility into a process of negotiation rather than a physical feature.

5.2 Facilities And Identity In The Formation Of Spatial Experience

Facilities and identity were the third and fourth most frequently coded themes. Their proximity in the results suggests that practical usability and cultural meaning should be considered together. Facilities influence how people occupy space, while identity influences whether that occupation is experienced as appropriate and meaningful.

From a place-making perspective, facilities should therefore be designed as part of the site's identity rather than added as generic components. Seating, shading, information, pedestrian elements, and material choices can reinforce or weaken the sense of place. This interpretation extends Relph's (1976) concern with placelessness and Tuan's (1977) emphasis on lived experience. It also supports Carmona's (2015) broader understanding of public space as an interaction between physical, social, and management dimensions.

5.3 Public Space As An Arena Of Social Negotiation In Heritage Areas

The study's central theoretical proposition is that heritage public space is an arena of social negotiation. Multiple actors have legitimate but sometimes competing interests: visitors seek access and experience; local actors seek social and economic opportunities; cultural practitioners seek continuity of meaning; managers must enforce regulations; designers translate requirements into spatial form; and conservation systems protect heritage values.

[1] production-of-space theory helps explain why these interests cannot be separated from spatial form. Space embodies relationships among practice, representation, and lived experience. [10] similarly highlight the political dimensions of public space. The Prambanan case extends these arguments by showing that negotiation occurs within a landscape where heritage values create additional spatial boundaries.

Design consequently operates as a mediator. It can support encounter without forcing all areas to become equally accessible; provide information without visually overwhelming heritage elements; and accommodate events without permanently changing sensitive spatial structures. Design is therefore not neutral, but it can provide mechanisms through which competing requirements become spatially manageable.

5.4 Adaptation And Conservation: Tension Between Change And Continuity

The relationship between flexibility and identity creates a productive tension. Heritage conservation often emphasises continuity, while contemporary public-space needs require change. Treating the two as opposites

creates an unproductive choice between preservation and adaptation. The findings suggest instead that conservation can provide the boundary within which adaptation takes place.

This position is consistent with UNESCO's Historic Urban Landscape approach, which promotes integration of heritage with contemporary urban and social processes (UNESCO, 2011). It also reflects Harrison's (2013) understanding of heritage as a living social process. The practical implication is that conservation should not be interpreted as freezing every public-space condition, but as maintaining the values that make the place significant while allowing appropriate forms of contemporary use.

In Prambanan, adaptation should therefore be assessed through at least four questions: whether it supports relevant social practices; whether it maintains heritage identity and sacred values; whether it is technically and environmentally sustainable; and whether it is compatible with the management system. This provides a more nuanced basis for design decisions than a generic sustainability or flexibility checklist.

5. 5 Theoretical Synthesis: Spatial Design As An Arena Of Social Negotiation

The findings extend the production-of-space perspective by positioning design intervention within a four-way relationship among social practice, spatial/design conditions, heritage values, and governance. Social practice expresses what people do and need. Spatial/design conditions provide the material and environmental means through which those practices occur. Heritage values establish meaning and contextual limits. Governance defines formal and operational boundaries.

These dimensions are mutually influential. Social practices can generate demands for new spatial arrangements; spatial arrangements can encourage or constrain particular practices; heritage values can shape which adaptations are acceptable; and governance can enable, modify, or restrict implementation. The result is not a linear design process but a continuous negotiation.

This synthesis also clarifies the role of participation. Participation is not simply a stage at the beginning of a project. It can operate as an ongoing mechanism for understanding changing practices and evaluating whether spatial adaptations remain appropriate. In this sense, participatory design and heritage governance can be connected through iterative feedback.

5. 6 Research Novelty: The Adaptive-Contextual Public Space Model

The main novelty of the study is the conceptualisation of adaptive-contextual public space as an arena of negotiation among social practice, spatial/design conditions, heritage values, and governance. The model moves beyond an understanding of heritage public space as a physical object to be conserved and beyond an understanding of adaptability as a technical capacity to change form.

The model can be represented as a relational system. Social practice generates changing requirements. Design translates those requirements into spatial possibilities. Heritage values provide identity and limits. Governance regulates implementation and maintenance. The resulting public space is adaptive when these components remain capable of responding to one another while maintaining contextual continuity.

Table 4. Adaptive-contextual public space model

Model component	Core question	Design implication
Social practice	What activities, experiences and interactions need to be supported?	Observe, involve and respond to users and social practices
Spatial/design conditions	How can space mediate changing use?	Provide appropriate flexibility, circulation, facilities and environmental comfort
Heritage values	What must remain meaningful and recognisable?	Maintain identity, sacredness, authenticity and contextual character
Governance	What changes are permissible and manageable?	Align design with zoning, regulations, conservation and maintenance capacity
Adaptive-contextual public space	How can these dimensions remain compatible over time?	Use iterative, differentiated and context-sensitive adaptation

The model is not proposed as a universal formula or an identical design solution for all heritage areas. It is a conceptual framework derived from the Prambanan case and intended for heritage settings with comparable social, cultural, spatial, and institutional characteristics. Application elsewhere requires contextual reading of local practices, values, regulations, and management systems.

The model also provides a practical spatial translation through four broad public-space contexts identified in the research: plaza or forecourt areas; pedestrian corridors; green/open or interpretive garden areas; and transition spaces associated with performances or events. These are not prescriptions for identical physical forms. They indicate that different spatial contexts require different degrees and modes of adaptability. Plazas may prioritise gathering and temporary configuration; pedestrian corridors may prioritise circulation and information; interpretive open areas may combine rest, landscape experience, and education; and event-transition spaces may require temporal flexibility and controlled change.

VI. Conclusion

This study demonstrates that public space in the Prambanan Temple Compounds cannot be understood only as physical infrastructure supporting tourism. It is an arena of social practice in which user experience, cultural values, conservation requirements, management systems, and design interventions meet and are negotiated. The qualitative evidence from 51 respondents produced 208 theme occurrences across six themes, with flexibility and social interaction emerging as the most prominent.

The empirical findings show that respondents' needs include flexibility, improved circulation, supporting facilities, accessibility, information, comfort, environmental sustainability, and the conservation of sacred and cultural values. These needs cannot be addressed simply by adding physical elements. They require an integrated design approach that recognises social practice and management as part of spatial production.

The study identifies five contextual principles for public-space development: participation; grounding in local values; orientation towards social interaction; a clear conceptual basis; and adaptability to change. These principles can inform differentiated approaches to plazas/forecourts, pedestrian corridors, green or interpretive open spaces, and event-transition areas.

The principal theoretical contribution is the adaptive-contextual public space model. It positions social practice, spatial/design conditions, heritage values, and governance as interacting dimensions and positions design as a mediator of negotiation. The model therefore expands the understanding of heritage public space from a form-oriented and conservation-oriented object towards a socially produced, adaptive, and context-sensitive arena.

The study has limitations. Some accounts of pre-pandemic conditions were reconstructed through respondents' experiences and perceptions rather than through longitudinal measurements conducted directly before, during, and after the pandemic. The thematic frequencies are also descriptive and should not be interpreted as statistical estimates of a wider population. Future research should therefore employ longitudinal studies, more systematic behaviour mapping, comparative heritage sites, and post-implementation evaluation of public spaces designed using the proposed framework.

Despite these limitations, the study offers a basis for connecting social practice theory, heritage conservation, public-space design, and governance. Its central proposition is that sustainable adaptation in heritage public space is achieved not by choosing between change and preservation, but by designing and managing the relationships through which change can occur without losing the values that make the place meaningful.

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