

Research Paper

# From Axis to Artifact: Materializing Yogyakarta's Cultural Philosophy in Souvenirs

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#### **Abstract**

Souvenirs play a crucial role in shaping the tourist experience—not merely as mementos, but as a medium for transmitting cultural values and local identity. This study examines the potential of modular, miniature-based design to embody the cultural philosophy represented by the Yogyakarta Cosmological Axis in souvenir artifacts. Employing a qualitative-descriptive approach, the study reveals challenges in representing local culture through souvenirs, which are often dominated by mass-produced items lacking educational value. Data were collected through field observations of the Cosmological Axis of the Yogyakarta area, in-depth interviews with local artisans and cultural experts, and document analysis of relevant cultural heritage materials, ensuring a comprehensive understanding of production practices and cultural narratives. The findings suggest that modular design offers flexibility in both form and production, and using technologies such as QR codes can enrich the storytelling embedded in the souvenirs. This narrative-based approach is essential to ensure that the cultural values embedded in the Yogyakarta Cosmological Axis are conveyed accurately and meaningfully, preventing potential distortion or misrepresentation. Overall, this study highlights the role of souvenirs as agents of cultural preservation and practical educational tools that contribute to sustainable destination branding strategies.

**Keywords:** Cultural souvenirs, cultural heritage preservation, Yogyakarta Cosmological Axis modular design, QR Code.

## **INTRODUCTION**

On September 18, 2023, the Yogyakarta Cosmological Axis was officially recognized by UNESCO as a World Heritage Site, as per Decision 45 COM 8B.39, adopted by the World Heritage Committee on the same date. This recognition highlights the significance of intangible heritage, as embodied in the cultural landscape and local knowledge systems, which are integral to community practices. Despite being recognized as a UNESCO World Heritage Site, the Cosmological Axis of Yogyakarta still faces several significant challenges in developing a robust and comprehensive cultural narrative. One major issue is the minimal representation of the Cosmological Axis in public spaces and popular media. The philosophy underlying this axis is not widely present in forms close to the public, such as murals, street art, MSME products, social media, films, or music.

In contrast, France's "Eiffelomania" phenomenon illustrates how a cultural object can transcend its physical function and become a globally recognized national symbol (Stempniak, 2020). As Richards (2011) notes in Creativity and Tourism: The State of the Art, cities that successfully make culture the backbone of tourism tend to position creativity as a bridge between heritage and the contemporary market. Another challenge is the lack of integration of the philosophical values of the Cosmological Axis into local education curricula and tourism training. Several international studies have shown that integrating cultural values into formal education and tourism training strengthens cultural identity and social values (Stolare et al., 2021; Loulanski &

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## Loulanski, 2011).

Tourism experiences along Yogyakarta's Cosmological Axis are often fragmented, with many visitors unaware that the route from the Golong Gilig Monument to the Palace to Parangtritis forms a spiritually significant line. Without a comprehensive interpretation, its intangible meanings are easily overlooked. Petzet (2017) notes that cultural routes lose significance when not experienced as unified journeys. This is compounded by the Axis's limited recognition compared to global landmarks like Tokyo Tower or Big Ben. Anholt (2007) emphasizes that city governments must actively manage symbols and visual identities to enhance cultural standing and support cultural diplomacy.

This research responds to these gaps by proposing a souvenir design strategy that embodies the Cosmological Axis oversimplification. The Yogyakarta without contributes theoretically by advancing discussions in heritage interpretation and creative tourism through the lens of souvenirs as hybrid cultural media—simultaneously aesthetic objects, narrative devices, and educational tools. Practically, it offers a design framework for creating modular, narrative-rich souvenirs that integrate digital technology (e.g., QR codes), thereby enabling broader cultural transmission, enhancing visitor engagement, and supporting sustainable destination branding. In doing so, the study positions souvenirs not merely as commodities, but as cultural ambassadors (Ma & Sun, 2023; Duan et al., 2023), thereby preserving and communicating the values of the Yogyakarta Cosmological Axis in both local and global contexts.

### LITERATURE REVIEW

Preserving and promoting cultural heritage requires strategies emphasizing representational aspects, economic integration, community engagement, and market appeal. In the context of Yogyakarta's Cosmological Axis—a cultural landscape recognized by UNESCO as a World Heritage Site in 2023—it is crucial to develop a promotional approach that articulates its philosophical values in an accessible and broad-reaching manner through popular cultural media.

The literature shows that various forms of cultural representation, such as miniatures, souvenirs, or other creative works, can serve as symbolic media that bridge the meaning of heritage with market needs and public learning (Duzenli et al., 2019; Taryuniarti, 2019). In many cases, such as Angkor Wat in Cambodia or Kyoto in Japan, integrating cultural narratives into creative products has strengthened national identity while providing economic value (Lin & Tain-Dow, 2014; Richards, 2011). However, this approach requires a conscious understanding that cultural values do not always translate into purely financial terms. As Klamer (1997) and Kaszynska (2020) argue, cultural value often resides in symbolic, emotional, and collective dimensions that escape market-based logic. Jourdain (2018) and Plattner (2000) similarly emphasize that culture carries meanings rooted in shared identity and emotional resonance, which cannot be adequately captured through economic metrics alone.

In this context, souvenirs representing the Yogyakarta Cosmological Axis serve not only as souvenirs but also as visual and material articulations of the cosmological and philosophical values that shape the spatial identity of Yogyakarta. More than mere objects, these souvenirs are a medium for cultural communication, conveying a narrative of harmony between humans, nature, and God. Therefore, souvenir development strategies cannot simply rely on aesthetics or decorative functions; they must incorporate a modular design approach that allows for interactive experiences and personalization by users (Wahyuningsih et al., 2024; Wang & Ahmad, 2020; Duzenli et al., 2019).

However, Jourdain (2018) argues that artisans can enhance the economic value of symbolic craft products by constructing symbolic meaning through unique production techniques and personalized designs. Producers can improve the appeal of their products by highlighting aesthetic,

emotional, and cultural aspects. Producers can enhance product appeal by emphasizing aesthetic, emotional, and cultural dimensions. By embedding narratives and experiential elements into their products, they strengthen the emotional bond between the product and the consumer (Lin & Tain-Dow, 2014). Production diversification also plays a crucial role, offering a smaller, more affordable variety of goods without sacrificing aesthetic value (Jourdain, 2018). Artisans of cultural products must utilize local materials to reduce production costs and refine their creative skills (Dümcke & Gnedovsky, 2013; Sudana et al., 2023).

Developing souvenirs based on Yogyakarta's Cosmological Axis requires a strategy integrating modular design, rich cultural narratives, and inclusive cross-sector collaboration. Such an approach ensures that these cultural products function not merely as marketable commodities, but also as representations of the philosophical values that shape the city's identity. This perspective opens up opportunities for cultural preservation beyond representation—sustainable efforts that remain relevant within the creative economy and heritage-based tourism dynamics.

### **RESEARCH METHOD**

In this study, two FGDs were conducted with 12 participants, each group comprising 6 participants. This number follows widely accepted methodological guidance, which suggests that an effective FGD typically involves 6–10 participants to balance the diversity of views with the manageability of group dynamics (Krueger & Casey, 2009). A smaller group (fewer than 6) may risk limited discussion, while a larger group (more than 10) can become challenging to moderate, reducing opportunities for equal participation. Thus, the size of the groups in this study falls within the recommended range to ensure both depth and breadth of perspectives.

The participants were selected purposively to represent key stakeholders in the Yogyakarta Cosmological Axis. Representatives from the Yogyakarta Palace provided an ontological foundation and a deep understanding of cosmological narratives due to their symbolic and historical authority in shaping Javanese cultural identity. Academics from the Indonesian Institute of Arts (Institut Seni Indonesia or ISI) Yogyakarta and Gadjah Mada University contributed analytical and reflective approaches to the relationship between art, design, culture, and spatial planning, which are crucial in formulating contextual and communicative souvenir forms. The BPKSF, as the technical institution managing the Sumbu Filosofi area, brought institutional and policy perspectives, including the challenges of preserving and developing world heritage areas. Meanwhile, creative industry players from the National Industrial Design Center (Pusat Desain Industri Nasional / PDIN) contributed by sharing their understanding of design strategies, production processes, and market dynamics, and by explaining how to translate cultural narratives into products that are both aesthetically appealing and economically relevant.

The research team used thematic analysis to examine FGD data, identifying and interpreting key patterns of meaning. Following Braun & Clarke (2006), the process involved familiarizing with the data, coding, grouping codes into meaningful themes, and refining these themes into a coherent analytical narrative, providing in-depth insights into participants' experiences and perceptions. The analysis began with a familiarization with the transcripts, followed by the coding of key quotations that emphasized harmony, educational value, and spatial symbols, such as monuments and palaces. The codes were grouped into key themes—souvenirs as guardians of cosmological narratives, visual icons as markers of meaning, and souvenirs as a medium of cultural education—which were then reviewed, refined, and named to reflect participants' experiences. This approach revealed that souvenirs serve as symbolic media, linking space, history, and culture, with thematic analysis bridging the collective experience and meaning preserved in story-filled objects.

#### FINDINGS AND DISCUSSION

In designing and producing culturally based souvenirs, the most fundamental aspect is not merely their physical form or visual appeal, but rather their ability to represent cultural values in a meaningful way. Souvenirs are not neutral objects, but symbolic media that store and convey a place's social, historical, and ideological meanings (Barthes, 1972). Within a semiotic framework, a souvenir comprises a signifier (visual form, design, or material) and a signified (cultural meaning, philosophical values, or collective narratives) that form a complex representation system. However, as Hall (2006) reminds us, attaching meaning to and understanding cultural objects is not as simple as it may seem. The process of artistic communication is a practice of encoding and decoding, in which creators and consumers negotiate meaning that is never entirely deterministic. When cultural values are at risk of erosion, encoding must be carefully managed to ensure the essence of these values is accurately conveyed and not distorted.

Souvenirs should strike a balance between aesthetic appeal and cultural sensitivity, conveying both cosmological narratives and local identity. As Duan et al. (2023) note, their physical and symbolic forms bridge objects and local meanings, making them more than mementos—they become mediums of cultural representation with symbolic, emotional, and ideological significance. Designing a souvenir by selecting key signifiers or elements is a complex process. Viewing a souvenir as a sign system (Barthes, 1972) implies that each visual element contributes to a specific structure of meaning, which communicates a message to the public. Cultural practitioners must consider how philosophical, historical, and cosmological values can be meaningfully translated into physical form when creating visual representations of culture.

For this reason, a modular design approach is relevant. Modular design divides a product into independent functional modules, thereby shortening development cycles, enhancing R&D, and simplifying dismantling, repair, and recycling, which reduces resource waste (Bai et al., 2018). This design allows each important element in the area—such as the Krapyak Stage, the Yogyakarta Palace, and the Golong Gilig Monument—to be represented separately as interconnected modules, forming a linear configuration that fully reflects the Philosophical Axis. Each module represents a physical location and carries a specific symbolic meaning. This approach simplifies the production process, allows flexibility in public education and interaction, while maintaining the integrity of the cosmological narrative of Yogyakarta city visually and conceptually (Duzenli et al., 2019).

Several studies on building and building games have shown positive effects on learning. Building and building games contribute to cognitive development and enhance problem-solving skills. They can also encourage student interaction during play (Taryuniarti, 2019). They can also enhance symbolic thinking skills and encourage creative and imaginative thinking (Wahyuningsih et al., 2024), as well as provide hands-on practical experience (Wang & Ahmad, 2020). Therefore, this modular-based miniature design can encourage user engagement with the cultural product, the Yogyakarta Cosmological Axis miniature.

The Focus Group Discussion (FGD) revealed that selecting the elements included in the Cosmological Axis miniature was not a straightforward process. Participants emphasized the importance of the integrity of the spatial and symbolic narratives that form the axis, according to KMT. Reksamartawijaya, a representative of the Kraton (Palace of) Yogyakarta, the Tugu, Kraton, and Panggung Krapyak must be represented in the miniature as the central symbols of Yogyakarta's cosmological axis. The connecting axis itself should also be visually articulated. Furthermore, the meaning of this symbolic journey is expressed through the depiction of gates and archways along the route from the Monument to the Palace, illustrating a physical alignment and conveying the metaphysical narrative of the human life journey.

However, the discussion also required several other elements essential to the miniature. One crucial aspect highlighted was the palace's main gates on the north and south sides. These gates not

only serve as physical boundaries for the palace but also as markers of rites of passage, rich in symbolic meaning. These gates were also crucial elements to include in the miniature because they served as transit points with structural and symbolic functions within the palace. Similarly, natural landmarks such as the Code and Winongo Rivers, located on the west and east sides of the Philosophical Axis, serve as essential markers of Yogyakarta's Philosophical Axis.

The significance of social and cultural elements in the design process cannot be overstated. Including markets and mosques, as part of a vibrant and dynamic social ecosystem around the Cosmological Axis, is crucial. Markets, as the pulse of traditional economic activity and worldly challenges, and mosques, symbolizing the integration of religious values into daily community life (Suwito, 2016), are not just buildings but also represent the social structures that support the sustainability of the cultural area. Equally important is the placement of vegetation in the miniatures, as it carries different philosophical values depending on its placement within the Yogyakarta Cosmological Axis.

Designers play a crucial role in simplifying these complex cultural and social elements, making them accessible to a broad audience. As Satya Brahmantya (PDIN Representative) emphasized, the art in souvenirs should not serve merely as personal expression; instead, it must appeal to a broad audience. This requires designers to ensure the designs are neat, accessible, and not overly symbolic or complex, so they do not demand extended reflection. The souvenirs should be instantly recognizable as representations of the Palace without omitting essential details. At the same time, designers have to simplify minor details as much as possible to avoid confusing viewers. Achieving this universal appeal is crucial for gaining wide acceptance and appreciation for the souvenir. Nonetheless, Satya Brahmantya (PDIN Representative) supported the addition of distinctive palace ornaments to enhance the authenticity of the miniatures—for example, by incorporating detailed elements into the Palace, monument, or pedestal storage.

Behind the three main elements of the Yogyakarta Philosophical Axis — namely, the Krapyak stage, the Yogyakarta Palace, and the Golong Gilig Monument — lie Javanese philosophical values that must be conveyed through miniatures. The three main philosophies in the Yogyakarta Cosmological Axis that reflect the Javanese outlook on life are: Hamemayu Hayuning Bawana, Sangkan Paraning Dumadi, and Manunggaling Kawula lan Gusti. Huang (2023) demonstrates that souvenirs featuring local symbols and narratives foster emotional connections, thereby enhancing purchase intent and cultural representation. For Yogyakarta Cosmological Axis miniatures, narrative elements ensure the experience conveys deeper cultural meaning, with audiences playing a role in preserving and promoting these values.

In designing the Yogyakarta Cosmological Axis miniature souvenir, the designer faces the key challenge of accurately conveying cultural meaning to the user. As Hall (2006) points out, cultural communication is neither linear nor automatic. In his encoding–decoding model, souvenir makers act as encoders, embedding philosophical and symbolic messages into the product design. Examples include the representation of the Tugu Monument as a symbol of the vertical relationship between humans and God, or the Krapyak Stage as a symbol of the origin of life. However, Hall cautions that the meaning encoded by the creator is not always interpreted identically by the audience. The situation opens up a space for negotiation in the decoding process, empowering the audience to accept the message predominantly (according to the creator's intent), negotiate (combining their understanding with the dominant meaning), or even reject it in opposition.

Given the potential for distortions in understanding, it is crucial to design souvenirs aesthetically and symbolically, and with tools that help guide the decoding process so that it does not stray too far from the original message. This is where technologies like QR codes play a strategic role: they act as additional narrative channels that clarify the encoded meaning. By providing narrative descriptions, philosophical explanations, or cosmological animations accessible directly

from the souvenir, the decoding process can be more controlled and directed. This practical application of technologies reduces the potential for distortions and helps audiences—both local and international—better understand the cultural context.

Designers see QR codes as a practical solution for connecting the physical elements of miniatures with more immersive digital content. This technology enables visitors to view the miniatures physically and gain a deeper understanding of the historical context, philosophy, and narrative behind them through audio-visual media. QR codes have proven to be an effective solution for enhancing educational experiences in the heritage tourism sector. This technology can provide concise and interactive information about cultural or historical objects that have been visited. Solima & Izzo (2018) demonstrated that tourists utilize QR codes because they are easy to access, efficient, and cost-effective, which can enrich their educational narratives. In this context, QR codes on Sumbu Filosofi miniature souvenirs can serve as a medium that bridges philosophical values with the need for more fluid and accessible contemporary narratives. AR technology has been proven to encourage visitor engagement in purchasing souvenir products and provide a new, practical, and easy-to-use experience for various age groups, with no significant differences (Mamee & Chuenchaichon, 2024).

Technology facilitates cultural experiences and engagement for tourists (Dionisio & Carr, 2022). In the context of the Yogyakarta Cosmological Axis miniature, technologies such as QR codes or other digital interactive elements can serve as a bridge, connecting the physical form of the souvenir with a more complex cultural narrative. Through a simple scan, tourists can access a variety of multimedia content—such as short videos, audio narratives, philosophical animations, or visual archives—that enrich their understanding of the symbolic elements in the miniature, such as the Golong Gilig Monument, the Yogyakarta Palace, and the Krapyak Stage. Technology here functions as an extension of meaning, allowing cultural information to be transmitted without burdening the physical visual design of the souvenir. It creates an experience that is personal, dynamic, and adaptive to various learning styles and audience preferences. In this way, designers can package complex philosophical and cosmological values into a narrative form that people from diverse backgrounds can easily access and understand.

In this way, technology is not just a complement but a strategic medium to ensure that souvenirs function as mementos and as entry points into a deeper world of meaning—one that can be recognized, studied, and appreciated by whoever brings it home.

## **CONCLUSIONS**

Souvenirs go beyond decorative objects, serving as mediums of cultural communication that convey narratives, symbols, and ideologies. For Yogyakarta's Sumbu Filosofi, miniatures can link spatial experience, cosmological values, and local identity. Successful design relies on visually appealing forms that consciously encode cultural meanings, with each element functioning as a signifier and open to interpretation. Modular design not only allows key elements—the Golong Gilig Monument, Yogyakarta Palace, and Krapyak Stage—to represent Javanese philosophies while maintaining a cohesive narrative, but also provides flexibility in arrangement, adaptability to different contexts, and opportunities for users to engage creatively with cultural heritage. To preserve communicative power in a fast-paced world, technologies like QR Codes provide interactive access to deeper meanings. This approach makes the miniatures both aesthetic souvenirs and living cultural texts that engage audiences in understanding and experiencing the cosmological wisdom of Javanese society.

#### LIMITATIONS & FURTHER RESEARCH

The study has several limitations. The analysis is primarily conceptual and design-oriented, which may not fully capture the dynamic ways in which tourists and local communities interact with souvenirs in real-life settings. The reliance on symbolic representation risks oversimplifying complex philosophical values, while modularity, although innovative, may face challenges in terms of production costs, market acceptance, and long-term cultural sustainability. Furthermore, integrating digital technology, such as QR Codes, assumes a certain level of technological literacy among users, which may exclude some groups from accessing deeper layers of meaning. These limitations highlight the need for further empirical research involving diverse stakeholders to validate the effectiveness of modular souvenirs as cultural communicators.

Future research could therefore expand by incorporating empirical studies on visitor responses, cross-cultural comparisons, and the integration of additional heritage elements. Exploring digital technologies such as augmented reality (AR) or interactive storytelling could also enrich the communicative value of souvenirs, ensuring that cultural preservation continues to resonate with younger and global audiences.

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