

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Cultural Tradition as a Local Context for Sustainable of Urban Identity in Gianyar City Case Study

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ABSTRACT

This study explores the role of cultural traditions in maintaining identity for the city's sustainability by looking at the relationship between cultural traditions, conservation, and urban design. Local culture, customs, and traditions are recognized as forming the character of space that gives identity. So cultural sustainability becomes a higher emphasis in sustainable development activities. Tradition can be understood and even creates a sense of place for local communities towards their environment in globalization if the principle of cultural essence is not threatened. Gianyar City, Bali, was chosen as a case study representing other cities with possibly similar characteristics. This area has the potential to fulfill a sustainable urban revitalization initiative. The study shows three urban form determinants, the dominant characteristics that project the attributes of fixedness and permanence: (1) Desa Adat, (2) pempatan agung (catuspatha), and (3) spatial division based on direction orientation (mandala and luan teben). It proves that tradition can bridge the change and development of community culture by ensuring that the basic beliefs of a group can be expressed and maintained in a residential environment.

Keywords: Conservation, cultural significance, cultural tradition, local context, urban identity

ARTICLE INFO

Article history:
Received: 05 August 2021
Accepted: 07 September 2022
Published: 17 March 2023

DOI: https://doi.org/10.47836/pjssh.31.1.15

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INTRODUCTION

Globalization has placed urban conservation as an important factor in urban planning and is necessary for sustainable development (Appendino, 2017; Staniforth, 2000); on the other hand, creating unavoidable contradictions between traditional and modern representations (Bandarin & van

ISSN: 0128-7702 e-ISSN: 2231-8534 Oers, 2012; Siregar, 2018). Recognition of the importance of historical and cultural representation as heritage makes it more modern, globalized, and more commercial than ever and creates actions that seem like copy-paste (Veldpaus, 2015). Likewise, in urban planning, standardization in the planning process creates uniformity in urban design documents (Samadhi, 2001). It shows that globalization puts pressure on historic cities.

Various policies on a regional scale were created as an effective control mechanism for globalization, but the lack of adaptability to the unique qualities of heritage sites makes any action taken inadequate for heritage preservation (Hmood, 2019). Urban conservation has a very broad scope, not limited to individual structures, but includes the city and the region as a whole so that the goals of sustainability and conservation often lead to conflicts (Bandarin & van Oers, 2012). At this point, along with the rapid globalization with changes in the physical, socio-cultural, and political-economic environments, questions arise about preserving local architecture, which is intended to build identity. Furthermore, heritage preservation is challenged to balance social and cultural issues with environmental and economic issues (Keitsch, 2019), ensuring historical cities' sustainability. Urban heritage is important to maintain, especially when socio-cultural values are also highly valued (Avrami, 2011; Osman, 2018) and have long been recognized as shaping the character of space that builds urban identity (Hauge, 2007; Norberg-Schulz, 1971; Trancik, 1986).

This study aims to demonstrate the role of cultural traditions in bridging heritage conservation with urban planning for sustainability. In this regard, this study investigates the relationship between cultural traditions, urban planning, and heritage protection through the example of the city of Gianyar, Bali. The area has the potential to meet social, cultural, historical, and economic needs based on the concept of sustainable urban conservation. Surveys and investigations reveal that the region's rich socio-cultural background and history can attract investment. Global penetration through tourism investment is recognized as the most obvious trigger of socio-cultural change and utilization of natural and human resources (I. N. Wijaya, 2004). For this reason, it is necessary to understand what is important as a form of spatial form, which can later be used as a city design strategy that can reflect identity. The concept of identity examines how our local environment, including cultural traditions as local wisdom, can affect our lives (Hauge, 2007). Historic city space is needed to form a local identity as an impressive area with traditional and social values that become a magnet for economic and creative activities. The research framework is shown in Figure 1.

METHOD

This study uses a pluralistic approach for qualitative research to explore diversity and complexity (Frost et al., 2010). There

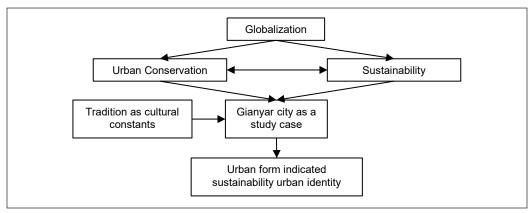


Figure 1. The research framework

are many types of pluralism, ranging from using various methods, data sources, theories, or researchers. This study refers to a pluralistic meta-study approach that provides links in various fields and diverse research disciplines (Nicola et al., 2014). It is a form of research that involves analyzing theories, methods, and qualitative research findings and synthesizing them into a new phenomenon (Paterson et al., 2001). Meta-study analysis is a study of research findings that involves critical examination and reinterpretation of the analysis and findings presented by the research, further identification of similarities and differences as interpreted in the research, which is then synthesized as a new interpretation. The study was conducted by identifying and searching relevant electronic databases: Web of Science, Science Direct, Scopus, and Google Scholar, using search terms such as "tradition," "cultural tradition," "urban conservation," "sustainability," "urban design," and "cultural significance." Each term is used twice, initially in the form of the term itself, then paired to reduce the number

and find conformity with the research context. In total, 73 relevant articles were identified as a result of the initial search, which was then used to extract values and current operative conceptions.

RESULT

Urban Conservation and Sustainability

Human civilization develops and maintains sustainability through integration with the surrounding environment and relies on natural preservation. Over time, the process of evolution and the ability of humans to adapt to their environment form unique characteristics that distinguish one place from another as an "identity." Preserving identity requires a deep understanding of how the urban factory starts its new life, with a sense of continuity from the past to the present (Salman, 2018). It is the essence of "sustainability."

The debate on sustainability began in 1987 when cultural considerations had long been neglected in sustainable development goals (Fithian & Powell, 2009). In its development, the formation of a sustainable city as a renewable resource, economic attractiveness, a motive for social unity, and an element of identity and creativity is highly dependent on cultural heritage (Ragheb et al., 2022). It is evident in the recommendation of the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2011) on historic city sites, which states that "the principle of sustainable development is to provide for the preservation of existing resources, active protection of the city's heritage, and its sustainable management as a sine qua non condition of development" (p.1). The role of cultural heritage is undeniable, so sustainability and conservation of cultural heritage complement each other. It is further emphasized in the sustainability paradigm (UNESCO, 2015), which states that sustainability is not only the integration of environmental, social, and economic issues and improving the quality of life but places culture as an important asset that has a broad meaning (Maaker & Pottgiesser, 2020).

In sustainability, conservation and urban transformation are recognized as a process that comes together. Conservation aims to provide maximum cultural meaning to future generations (Staniforth, 2000). Of course, this does not rule out changes to historical objects, but these objects still have an interpretation of the relationship between objects, values, and intergenerational value processes (Viñas, 2005). Interpretation can preserve the basic relationship with the past of a place by preserving and offering resources for present and future generations

to identify the historical point of view where they live or work (Loulanski, 2006)

Conservation is managing change by preserving heritage values while recognizing opportunities to express or strengthen these values for present and future generations to balance and integrate conservation and development (English Heritage, 2008; Telebian, 2005). This concept is considered the main reference in placing the boundaries of urban development in historical urban areas, which refers to the sustainability of the meaning of cultural heritage (Jokilehto, 2006). Each property can secure, maintain, and pass on its cultural meaning over time and is a key element in urban heritage conservation (Nezhad et al., 2016). Achieving an integrated harmony between conservation and sustainable urban development requires alignment, especially with socio-cultural considerations prioritized over economic and environmental issues.

Socio-Cultural Sustainability as Cultural Significance

Urbanization resulted in the increasing diversity of urban communities and changes in the built environment and associated memories (Kamei et al., 2021). On this side, heritage contributes to the sustainability of a society or social system to achieve prosperity by concentrating on cultural characteristics and social interactions (Elshater, 2015). As a result, conservation is becoming a significant part of urban planning and management. This contribution certainly highlights the ability to last long by adapting to local conditions (Avrami, 2011; Hocine

et al., 2017) so that cultural sustainability becomes a more important emphasis in sustainable development activities (Gamil & Abdul-Aziz, 2018).

Culture can refer to "the beliefs and practices of the people who are part of the urban factory" (Little & McGivern, 2014, p. 79). Protecting tangible and intangible cultural heritage is an important mechanism for transmitting cultural values and meanings (Viñas, 2005). It becomes a very important means of ensuring cultural sustainability, considering that something is said to be an "inheritance" because of the meaning attached to people, things, places, activities, and narratives, which are understood as "identity" (Fredheim & Khalaf, 2016; Malpas, 2006). Various perspectives on cultural meaning are influenced by international conventions, known as "global common sense" (Smith, 2006, p. 21), by identifying a heritage based on universal values. In this case, universal values have no locality, and there is no room to consider various forms of local wisdom, thus leading to the generalization of conservation policies across cultural pluralities (Fredheim & Khalaf, 2016).

Meliono (2011) shows the importance of local wisdom in the axiological aspect of knowledge, which consists of ethics, emotion, and spirituality. In the context of Indonesia, the locality is introduced in archipelago architecture (Pangarsa, 2006), which expresses local wisdom through its symbolism, such as building design (Riany et al., 2014; Setiprayanti & Prijotomo, 2010) and urban design (Pitana, 2002; Suryanto et al., 2015). Through this, several aspects,

such as social norms, nature preservation, and worship of God, are encoded in architectural works. By preserving the original meaning of traditional architecture, people can maintain knowledge about the harmony between humans, nature, and God (Herawati, 2012).

Both perspectives of cultural meaning reflect the complexity of contemporary cultural processes. Certain fundamental concepts of sustainability can assist in the sustainable maintenance of cultural heritage, including preserving cultural resources for present and future generations while supporting cultural diversity and changes. Of course, maintaining local knowledge that has an order of existence and value is needed to strike a balance in conservation and transformation, ensuring that our actions align with our environmental systems and do not conflict with the present and the future (McLennan, 2006).

Tradition as a Cultural Constant

Architecture as a cultural product can express the similarities of traditions in a culture and its differences with other cultures, which shows its uniqueness and actualizes its identity. Architecture manifests culture and traditions, reflecting common past experiences and the inheritance of cultural aspects, which can be seen as a resource for creating cultural identity (Hall, 1990; Japha & Japha, 1991). This identity expresses the similarities of traditions and culture among community members and differences with those who are not members (Brubaker & Cooper, 2000).

The concept of tradition was put forward by Shils (1981), a sociologist and social philosopher, who argues that the notion of 'tradition' refers to the 'filaments' of past practices or beliefs that are passed down. Furthermore, Shils stated that tradition is 'what is inherited' by parents, teachers, or authorities and learned and demonstrated again (or rethought) by agents through at least three successive "generations" (Jacobs, 2007, p. 140). Traditions are 'symbolic constructions' containing almost any content, such as physical artifacts, knowledge, stylistic artifacts, and ideologies, among others, as objectively identified entities (Samadhi, 2001). Tradition is related to behavior triggered by direct perceived interest, unique (mystical) experiences, beliefs, and political activities in social life. Tradition is manifested as "ritual" activities to reinforce tradition and carry out a more assertive repetition (Joshi, 2016).

Tradition is a non-static phenomenon that can adapt and transform in the transmission process between generations. The process of transmitting a tradition is described as the transfer of belief patterns in the form of a link or communication bridge in the interaction between generations, from the past to the present, to be carried forward into the future (Shils, 1981). It can be said that tradition is a cultural constant, built through time to some extent as the inheritance of cultural elements expressed and maintained in and through the built environment. Tradition changes in line with cultural changes, but if the principles of cultural essence persist, the identity of a place can still be understood by looking at the attachment of culture to tradition (Samadhi, 2001). In this context, tradition and culture reflect the communal historical experience and provide cultural codes, which can be seen as a resource for creating boundaries and identities (Hall, 1990; Japha & Japha, 1991).

Identity expresses a communal tradition and culture between members of a community and the differences between non-members (Brubaker & Cooper, 2000). Society expresses its identity through traditions, cultural activities, and architecture that are different from others. Thus, tradition is the inheritance of cultural elements which refers to the patterns and principles of manipulating space into the built environment (Oliver, 1989, 2006). The more the built environment reflects their culture, the more successful the pattern formed by tradition (Salama, 2015). Thus, traditions form patterns and generalities that ensure the fundamental beliefs of a group are expressed and maintained in and through the built environment and generate knowledge about the built environment, creating identity and even a sense of place for local communities towards their environment.

Relevance of Traditional-Religious Concepts in Urban Spatial

Residential and urban environments in Bali are examples of understanding the relationship between cultural traditions as identity-forming entities. Architectural of Balinese Traditional (ATB) manifest Balinese culture and traditions based on Hinduism. In practice has been adapted and developed according to the Balinese people's place, time, condition, and life (Figure 2). This adjustment has shaped the values, norms, views, and laws that were developed still based on the original religious teachings, called 'religious customs,' and subsequently passed down from generation to generation as "traditions" (Gomudha, 1999). It can be seen as a resource for creating cultural identity (Hall, 1990; Japha & Japha, 1991).

As a result of the relationship between cultural elements (ideas, physicality/artifact, activities) based on Hinduism creates values based on religion (Roth & Sedana, 2015). The relationship between ideas and activities gives birth to customs/awig-awig, which regulate and organize activities so that they run according to religious norms. The relationship between the form of ideas with physical/artifacts gave birth to the concept of the built environment, which was transformed into cultural works, including ATB. The relationship between physical activity and artifacts forms a residential pattern that manifests the Balinese people's efforts to maintain the harmony of life and livelihood.

In ATB, a space or component in it represents that the world (the universe) is divided into two opposite poles, the upper world (swah loka), which is related to the divine with the sacred direction, and the underworld (bhur loka or nether) with the divine direction. Between the two, there is a central room which is the center called madyapada/mertyapada as the place of life (Hobart et al., 2001). It is an embodiment of the concept of duality, which is based on the thought event of binary opposition, manifested in the pair's universal opposition, namely the utama (sacral), which is contrasted with nista (profane) (Suwena, 2003). This classification system underlies the mindset, feelings, behavior, or actions of the Balinese and is also reflected in the orientation of the direction in Bali.

In Balinese knowledge, the main and disgraceful values are related to the orientation towards two axes: the earth's natural axis (mountain-sea) and the religious axis (sunrise and sunset directions (Munandar, 2005; Suwena, 2003). First, the earth's natural axis is manifested in a pair of *kaja* orientations, referring to the location of Mount Agung (the highest mountain in

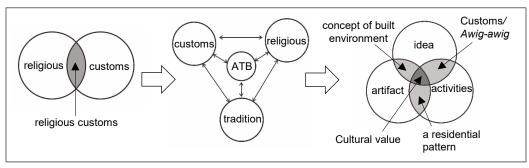


Figure 2. The relationship between cultural elements architectural of Balinese tradition in Gomudha (1999)

Bali), in contrast to kelod direction, referring to the location of the sea. The mountain is believed to be the residence of Sang Hyang Ciwa, another name for God, so it is seen as utama direction. The sea, as the estuary of all things, is the estuary of all useless things, so that it is believed to be a melting pot of all impurities, is seen as nista direction. Second, the religious axis is manifested in pairs of orientations; kangin direction refers to the direction of the sunrise as opposed to kauh direction refers to the sunset direction. The sun is believed to be Sang Hyang Surya, another name for the God who gives life. So, the direction of the kangin is of greater value than the direction of the kauh.

The concept of duality positions humans and nature as a single unit consisting of the same elements called the Panca Maha Butha, which composes physical and non-physical components. The concept of duality is based on the rules of Hindu cosmology, which are used in designing the spatial patterns of cities in Bali (Munandar, 2005). The principle of cosmology is the balance between the universe (macrocosm) and everything in it, including humans (microcosm). In addition, the duality concept also explains the concept of meeting space (east-west and north-south) and time (top-down/scaling-up), which is understood as a mandala. The meeting of the mandala has a center which is believed to be the axis of the balance of the universe that binds the elements around it (Atmaja, 2003).

The existence of this center is a Balinese mindset that tends to maintain balance in life (Eiseman, 1991), which is believed to

be the religious role of the Balinese people to maintain a harmonious relationship with God, fellow living beings and protect the environment which is a representation of God's power, which is a manifestation of God's power, embodied in the concept of Tri Hita Karana (Ashrama et al., 2007; Hobart et al., 2001). It is their effort to achieve religious goals in the form of Moksartham Jagadhita ya ca it Dharma, meaning that religion (dharma) aims to achieve spiritual happiness and physical well-being or physical and mental happiness (moksa). This philosophy inspires concepts related to the physical universe to living things, such as the tri loka concept (the upper realm for God/swah loka, the middle realm for living creatures/bhwah loka, and the underworld/ bhur loka), as well as the tri angga concept (utama-madya-nista or head-body-foot) (Hobart et al., 2001). The description of the formulation of the conception can be seen in Figure 3.

The implementation of this harmonization is realized in a more limited space scale, and its existence can be felt. It is manifested in the territorial scale of Bali, Desa Adat/Indigenous Villages, *Paumahan* (residential), and Bale to the architectural/Bale component (Table 1). In the architecture and design of settlements, this conception can be seen in housing complexes and Desa Adat settlements in the form of spatial zoning and the classification of elements (Samadhi, 2001). ATB broadly consists of three groups/typologies: the architecture of the holy place/*parhyangan*, residence/*pawongan*, and public facility

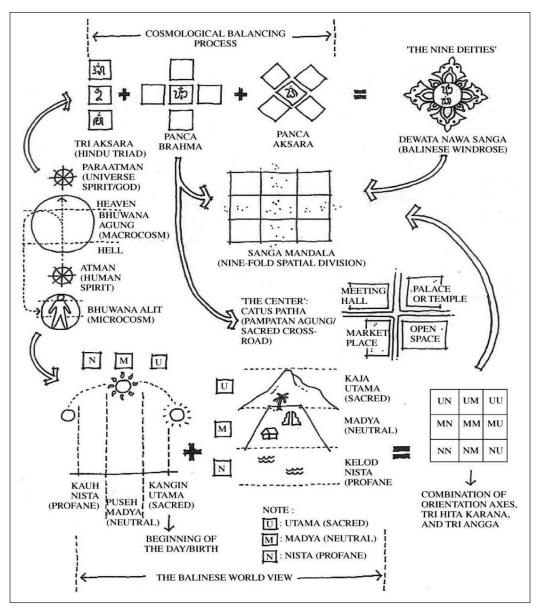


Figure 3. Balinese traditional-religious space conception by Samadhi (2001)

buildings/*palemahan* (K. A. P. Wijaya & Wiranegara, 2020).

In cosmological principles, the term city is built from the Desa Adat model (Widiastuti, 2002) as a symbolically independent unit of space (Samadhi, 2001). The Desa Adat as a cohesive spatial and

cosmological unit is strengthened by the fact that the village community serves the same temple (called *pemaksan*) and develops local values and knowledge systems to be formulated in *awig-awig* (customary law), which regulates the sociocultural life of the community. It is in line

Table 1
Implementation of harmonization in the level of the cosmos in Gomudha (1999)

	Microcosm	Macrocosm						
Value	Human body		Universe	Village	Temple	Settlement	Building Structure	
Utama Luan Upstream	Head	H A R M	Swah loka Mountain Kaja / kangin	Parhyangan	Jeroan (inner space)	Sanggah Merajan	Roof	
<i>Madya</i> Middle	Body	O N Y	Bwah loka Plain Middle	Pawongan	Jaba tengah (middle space)	Bale House	Frame	
Nista Teben Downstream	Foot		Bhur loka Sea Kelod / kauh	Palemahan	Jaba sisi (outer space)	Tebe (a garden in the backyard)	Building base	

with Egenter's (1996) statement that Desa Adat becomes autonomous culture with all the characteristics of a higher culture, harmonious philosophy, local ontology, value systems, aesthetics, social hierarchies, and others. Therefore, the Desa Adat is the only unit of Balinese settlement based on the traditional-religious spatial conception. It is what makes cities in Bali still able to reflect their identity, considering that existing cultural traditions can still be felt.

DISCUSSION

Gianyar as a Case Study

Gianyar is one of nine cities in Bali which is located 25 km to the east of Denpasar (Figure 4), representing a homogeneous residential neighborhood and city in Bali because it is based on Hinduism. The selection of Gianyar as a case study was based on several considerations. First, Gianyar is one of two other big cities in Indonesia, Semarang and Denpasar, which are members of the Organization of World Heritage Cities (OWHC). It makes Gianyar

a city on par with 280 other heritage cities with very high cultural uniqueness (Oebaidillah, 2017). Second, Gianyar has a high cultural heritage potential as indicated by the presence of archaeological remains, especially in the Sungai Petani, Pakerisan, and Wos watersheds, indicating that the area has become the center of community religious activities and rituals (Badra, 1997).

Third, Gianyar has a long history as the root of Balinese culture. Prehistoric and historical remains often found show Gianyar as the beginning of Balinese civilization. Even in the colonial period, through the ethical politics of baliseering (Balinization), it became the starting point for the introduction of gegianyaran style architecture as a physical representation of Balinese architecture (Picard, 1996). The Indonesian government continued this cultural agenda, which encouraged the transformation of Balinese architecture by making the gegianyaran style a reference for realizing the identity of Balinese architecture in the early 20th century (Achmadi, 2007).

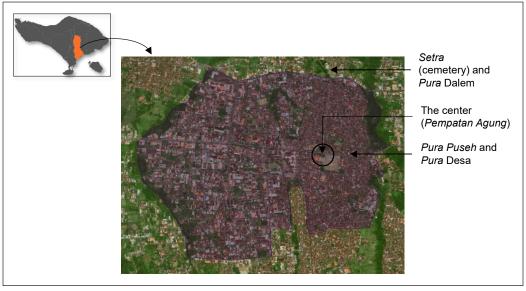


Figure 4. Gianyar city, Bali (source: Google Earth, 2021)

It is implemented in various architectural works, becoming a chosen architectural example for Balinese architecture and spreading throughout Bali (Putra, 2012; Putra et al., 2013).

Fourth, as a tourist destination in Bali and the largest foreign exchange earner after Badung, it cannot be denied that Gianyar is a tourism investment destination recognized as a trigger for social, cultural, economic, and environmental change. However, over 99% of the Gianyar people are Balinese and Hindus. So, it can be concluded that the city of Gianyar is culturally homogeneous.

Cultural Traditions as an Urban Form of Gianyar City

Based on the results of interviews, five groups of cultural constants were formulated that determine the structure of the city: (1) cosmological relations, (2) cosmological physical representations, (3) cosmological

space organization, (4) cosmological space management, and (5) cosmological meanings and symbols, produce culturally appropriate urban areas (Samadhi, 2001). Balinese tradition is a tradition of myths and symbols. Organizing the configuration of the elements of the cosmic region develops into a symbol system that expresses beliefs that are abstracted and translated into organizational principles. The spatial organization is in the form of cosmic diagrams embodied in the spatial organization of the sanga mandala, the way of life embodied in the organization of central elements and rituals, and the center of the universe embodied in the *pempatan* agung (catuspatha/crossroad) (Atmaja, 2003; Samadhi, 2001). Thus, the five groups of cultural constants are synthesized with meanings and symbols to produce some determinants of the urban form.

First, the cosmological relationship in human relations with the environment

is combined with symbols and meanings, making the Desa Adat cosmological unit and its elements one of the determinants. These elements are the parhyangan (the network of Kahyangan Tiga temples: Pura Puseh, Pura Desa, and Pura Dalem), pawongan (the inhabitants), and palemahan (region), as the embodiment of the concept of Tri Hita Karana. Second, the physical representation of cosmology in the form of a central concept combined with symbols and meanings makes pempatan agung (the center of settlement) and its elements the determinant. These elements include puri (palace), pempatan agung, and alunalun (field). Third, the organization and management of cosmic space, which is manifested in spatial planning, are combined with symbols and meanings, making the principle of the division of cosmological space (sanga mandala) and the conception of rwa binneda/binary opposition (luanteben/utama-nista), as the determinants. These three are the dominant characteristics that project the attributes of "fixedness" and "permanency."

Bali captures space through Hindu cosmology, transmitted in Desa Adat's spatial. In this approach, the term city is understood as the center of power, which refers to the Desa Adat's center, which appears as the most powerful (capital gate) among others (Widiastuti, 2002; Wiryomartono, 1995). Desa Adat has two cultural elements that determine the urban form. First, the *Kahyangan Tiga* temple network (Pura Puseh, Pura Desa, dan Pura Dalem) is a cosmic boundary and functional

area of Desa Adat. The placement of the three temples is transmitted into the spatial hierarchy of Desa Adat: (1) Pura Puseh is placed in the most sacred area (kaja or kangin), (2) Pura Desa is in the middle of the settlement (pempatan agung), and (3) setra (cemetery) and the temple of death (Pura Dalem) are in the most remote area (kelod or kauh). Pura Puseh and Pura Dalem represent the holiest and most profane areas in the region, so no area should be built outside this Desa Adat boundary mark. The second cultural element is the spatial dichotomy of luan-teben or upstream-downstream, which refers to land use and function locations according to the sacred-profane continuum.

The city of Gianyar has all three elements of the Kahyangan Tiga temple network as a religious indicator of Desa Adat. In their spatial arrangement, Pura Puseh and Pura Desa are placed to the east of the village center, while Pura Dalem and Setra are to the north of the village. In this case, Setra and Pura Dalem become customary unitary areas with the Desa Adat Beng and the boundary of the two villages. Its existence also cannot be separated from the history of Gianyar, which started in Beng Village. Apart from placing Pura Dalem and Setra outside the value system of luan-teben, a network of temples clarifies the implementation of harmonization between levels of the cosmos on a spatial scale as an embodiment of the Tri Hita Karana philosophy. Desa Adat has a role in ensuring that the harmonization of the macrocosm and microcosm is maintained for the achievement of the prosperity of the universe and to provide a framework in the form of rituals (Samadhi, 2001). Based on this, it can be said that the Desa Adat is the only cosmic area suitable to act as an urban design area. Desa Adat has areas with definite boundaries, socio-economic networks, and populations as features needed for planning and urban design activities.

The central concept of the Balinese mindset is the "point of view of direction and purpose" (Atmaja, 2003, p. 23), so it is always marked as space. The center does not always mean the geometric center of an area but the existential center. Determination of the center is based on relative position, which is based on the presence of a room or building, or area that becomes the center point, then other spaces are arranged to move away from the midpoint (Rapoport, 1989). This midpoint area is considered the axis of the universe, which marks the process of creation (Lundquist, 1993).

Three of the central elements in Gianyar are recognized as recurring elements of the city's cultural landscape, thus becoming a cultural heritage. The existence of the three in the spatial context can determine the shape of other cities. First, pempatan agung plays a role in the Balinese cosmoreligious belief system and is a place for ritual processions. The second element is the puri (palace), namely Puri Agung Gianyar, which is an object of historic preservation and a means to maintain the continuity of culture and place. Its physical appearance determines the shape and mass of the surrounding buildings, such as the height of

the building, the mass of the building, the decline of the building, the distance between buildings, and others. The last element is the *alun-alun* (field) as an open space that will determine the solid-void composition of the overall urban design.

The last cultural constant that determines the urban form is the sanga mandala which divides the Desa Adat area into nine spaces with different cultural-religious attributes. The division of space based on the sanga mandala is a consequence created from the confluence of the religious axis and the natural axis of the earth, forming the concept of the most sacred area (the utamaning utama space) and the most profane area (the nistaning nista space). Based on these principles, land use, and function within the Desa Adat area are determined. The results of the interviews formulate land use designation and function location planning in Gianyar city, which describes the ideal cultural situation of each urban environment by traditional-religious principles (Figure 5).

The description explains that the cultural landscape of the city of Gianyar is an element of tradition formation that has become a cultural constant. In other words, tradition successfully matches the built environment to the community's cultural needs and carries as much cultural meaning as possible. The Gianyar case study shows that cultural continuity can be seen from the ability of the built environment to preserve its cultural intimacy so that people are still able to understand or create their existential space. Although in practice,

			The most sacred zone
mandala of utama /sacred value	Utamaning nista space: hospital, drug store	Utamaning madya space: government office, education facilities, housing, military office, police station	Utamaning utama space: temple, puri
mandala of middle / neutral value	Madyaning nista space: shop/commercial facilities, park	Madyaning madya space: housing, park, shop/ commercial facilities	Madyaning utama space: Pempatan agung
mandala of nista / profane value	Nistaning nista space: setra (cemetery), garbage dump	Nistaning madya space: Public transportation terminal, housing, shop/ commercial facilities	Nistaning utama space: marketplace, alun-alun

Figure 5. Land use in Gianyar city according to sanga mandala (Source: the field survey in Gianyar, 2000-2021)

sometimes it is found that the cultural landscape deviation from one area to another can be explained as the application of the relevant local customary-religious regulations. In this case, the dictum *desa-kala-patra* (place-time-situation/condition) regulated by Desa Adat law applies and becomes a differentiator for the cultural landscape of each Desa Adat. However, whatever the elements, their culture's level of determination and importance builds their power as meaning givers.

CONCLUSION

The background of the cultural homogeneity of the island of Bali and the similarity between the urban landscape and Balinese settlements make the cultural constant of the city of Gianyar the same as other cities and settlements in Bali. Apart from natural and manufactured functional features, cultural constants are the determinants of city structure or provide elements of urban

form. They are three-dimensional objects or abstract conceptions whose dominance can give a certain form of physical development. The elements that give the urban form of Gianyar are natural, functional, and cultural, especially cosmology.

In urban design, the dominant characteristic is projecting permanent and non-permanent attributes. These elements provide functional forms such as the structure of roads, parks, and open spaces derived from elements related to culture. The city's identity in Bali is strongly influenced by cultural traditions originating from the concept of cosmology. Previous texts have identified and explained that cultural traditions can strengthen a city's identity, which is the basis for designing cities in Bali, especially concerning sustainable urban conservation. Cultural changes due to globalization cannot be avoided. However, one way that can be taken to maintain the continuity of identity is to rationalize the

concepts of traditional Balinese architecture as a cultural habit with the universalism of the meaning of tradition.

Understanding cultural traditions are full of important value in city preservation. When the community can feel the city's identity since its presence despite changes, then by itself, the principle of integrity as continuity of cultural meaning is fulfilled. In this study, the existing concepts are used to build culturally appropriate places, namely cities in Bali, that project the right cultural identity. The example of Gianyar city answers that tradition can bridge the change and development of community culture by ensuring the basic beliefs of a group can be expressed and maintained in a residential environment. It also shows that the area's identity is maintained where the residential environment has shown a pattern formed from a tradition. However, it should be realized that urban heritage cannot be seen only in one aspect. It does not rule out the possibility of further research on the concept of localization in shaping identity in urban transformation.

ACKNOWLEDGEMENT

This paper is part of the author's dissertation background, which is currently in process. The research would not have been possible without the overwhelming support of the supervisors, Bambang Soemardiono and Eko Budi Santoso. Their enthusiasm, knowledge, and diligence had inspired author during the work on the conservation path of the city where the author is working.

Sri Nastiti, Prof. Nyoman Pujawan, and Purwanita Sertijanti also examined the manuscript and patiently guided the writing of this paper. Finally, The author would love to express gratitude for the material and moral support from her partner and loyal friend, who constantly motivates her to fulfill what he calls "my obsession."

Disclosure Statement

The authors reported no potential conflict of interest.

Funding

The Scientific Research Fund, Sepuluh Nopember Institute of Technology, funded this research in 2022.

REFERENCES

Achmadi, A. (2007). The architecture of Balinisation: Writings on architecture, the villages, and the construction of Balinese cultural identity in the 20th century [Unpublished doctoral dissertation]. The University of Melbourne.

Appendino, F. (2017). Balancing heritage conservation and sustainable development - The case of Bordeaux. *IOP Conference Series: Materials Science and Engineering*, 245(6), 1-10. https://doi.org/10.1088/1757-899X/245/6/062002

Ashrama, B., Pitana, I., & Windia, W. (2007). *Bali is Bali forever: Ajeg dalam bingkai Tri Hita Karana* [Bali is Bali forever: Sustain in the Tri Hita Karana framed]. Bali Travel News.

Atmaja, J. (2003). Perempatan agung: Menguak konsepsi palemahan, ruang dan waktu masyarakat Bali [Perempatan agung: Revealing the concept of zoning, space, and time of the Balinese society]. Bali Media Adhikarsa.

- Avrami, E. (2011). Sustainability and the built environment: Forging a role for heritage conservation. Spring 2011. Sustainability and Heritage. https://www.getty.edu/conservation/publications_resources/newsletters/26_1/feature. html
- Badra, I. W. (1997). Penempatan bangunan suci di beberapa sungai di Kabupaten Gianyar [Placement of sacred buildings on several rivers in Gianyar Regency]. Forum Arkeologi, 1(97/98), 88-89.
- Bandarin, F., & van Oers, R. (2012). The historic urban landscape: Managing heritage in an urban century. Wiley-Blackwell. https://doi.org/10.1002/9781119968115
- Brubaker, R., & Cooper, F. (2000). Beyond "identity". *Theory and Society, 29*(1), 1-47. https://doi.org/10.1023/A:1007068714468
- Egenter, N. (1996). Architectural Anthropology: Semantic and symbolic architecture. An architectural-ethnological survey into hundred villages of Central Japan. Structura Mundi.
- Eiseman, F. B. (1991). *Bali sekala & niskala* [Bali: tangible & intangible concept] (Vol. 1). Periplus Edition.
- Elshater, A. M. (2015). Urban design redux: Redefining a professional practice of specialization. *Ain Shams Engineering Journal*, *6*(1), 25-39. https://doi.org/10.1016/j.asej.2014.08.004
- English Heritage. (2008). Conservation principles: Policies and guidance for the sustainable management of the historic environment. https://historicengland.org.uk//about/what-we-do/consultations/.
- Fithian, C., & Powell, A. (2009). *Cultural aspects of sustainable development*. University of Texas School of Architecture. http://hdl.handle.net/2152/11698
- Fredheim, L. H., & Khalaf, M. (2016). The significance of values: Heritage value typologies

- re-examined. *International Journal of Heritage Studies*, 22(6), 466-481. https://doi.org/10.1080/13527258.2016.1171247
- Frost, N., Nolas, S. M., Brooks-Gordon, B., Esin, C., Holt, A., Mehdizadeh, L., & Shinebourne, P. (2010). Pluralism in qualitative research: The impact of different researchers and qualitative approaches on the analysis of qualitative data. *Qualitative Research*, 10(4), 441-460. https://doi.org/10.1177/1468794110366802
- Gamil, A.-A. G., & Abdul-Aziz, O. K. (2018). The importance of cultural dimensions in the design process of the vernacular societies. *Ain Shams Engineering Journal*, *9*(4), 2755-2765. https://doi.org/10.1016/j.asej.2017.09.005
- Gomudha, I. W. (1999). Pernik manik spasial hunian tradisional Bali, dalam Ngawangun Ki Nusantara [Balinese traditional residential spatial beads, in Ngawangun Ki Nusantara] (Unpublished manuscript), Nominated in Archipelago Architecture Theory Writing Contest, Institute of Technology Bandung.
- Hall, E. T. (1990). Cultural identity and diaspora. In J. Rutherford (Ed.), *Identity, community, culture difference* (pp. 222-2370). Lawrence and Wishart.
- Hauge, A. L. (2007). Identity and place: A critical comparison of three identity theories. *Architectural Science Review*, 50, 44-51. https://doi.org/10.3763/asre.2007.5007
- Herawati, N. (2012). Kearifan lokal bagian budaya Jawa [Local wisdom is the part of Javanese Culture], *Magistra*, 24(79), 64.
- Hmood, K. F. (2019). Introductory chapter: Heritage conservation-rehabilitation of architectural and urban heritage. In K. F. Hmood (Ed.), *Urban* and architectural heritage conservation within sustainability (pp. 1-12). IntechOpen. https://doi. org/10.5772/intechopen.86670
- Hobart, A., Ramseyer, U., & Leemann, A. (2001). *The people of Bali*. Blackwell Publishers Ltd.

- Hocine, T., Ammar, B., & Saïd, G. (2017). Towards an environmental approach for the sustainability of buildings in Algeria. *Energy Procedia*, 119, 98-110. https://doi.org/10.1016/j.egypro.2017.07.053
- Jacobs, S. (2007). Edward Shils' Theory of tradition'. Philosophy of the Social Sciences, 37(2), 139-162. https://doi.org/10.1177/0048393107299685
- Japha, D., & Japha, V. (1991). Identity through detail: An architecture and cultural aspiration in Montagu, South Africa, 1850-1915. *Traditional Dwellings and Settlements Review*, 2(2), 17-33.
- Jokilehto, J. (2006). Considerations on authenticity and integrity in world heritage context. *City & Time*, 2(1), 1.
- Joshi, R. (2016). Theory of tradition: Aristotle, Matthew Arnold, and T. S. Eliot. *International Journal of Humanities & Social Science Studies*, 3(3), 191-197.
- Kamei, M., Mastrucci, A., & van Ruijven, B. J. (2021). A future outlook of narratives for the built environment in Japan. Sustainability, 13(4), Article 1653. https://doi.org/10.3390/ su13041653
- Keitsch, M. M. (2019). Heritage, conservation, and development. In W. Leal Filho, A. Azul, L. Brandli, P. Özuyar, & T. Wall (Eds.), Sustainable cities and communities. Encyclopedia of the UN Sustainable Development Goals (pp. 1-9). Springer, Cham. https://doi.org/10.1007/978-3-319-71061-7_5-1
- Little, W., & McGivern, R. (2014). *Introduction to Sociology 1st Canadian Edition* (B.C. Minis). Rice University.
- Loulanski, T. (2006). Revising the concept for cultural heritage: The argument for a functional approach. *International Journal of Cultural Property*, 13(2), 207-233. https://doi.org/10.1017/S0940739106060085

- Lundquist, J. M. (1993). *The temple: Meeting place of heaven and earth*. Thames and Hudson.
- Maaker, E. de, & Pottgiesser, U. (2020). LDE Heritage Conference on Heritage and the Sustainable Development Goals. In U. Pottgiesser, S. Fatoric, C. Hein, E. de Maaker, & A. P. Roders (Eds.), Lde Heritage Conference. TU Delft Open.
- Malpas, J. (2006). *Heidegger's topology: Being, place, world*. MIT Press. https://doi.org/10.7551/mitpress/3467.001.0001
- McLennan, G. (2006). Sociological cultural studies: Reflexivity and positivity in the human sciences. Palgrave Macmillan. https://doi.org/10.1057/9780230625587
- Meliono, I. (2011). Understanding the Nusantara thought and local wisdom as an aspect of the Indonesian education. *TAWARIKH: International Journal for Historical Studies*, 2(2).
- Munandar, A. A. (2005). *Istana dewa pulau dewata: Makna Puri Bali Abad ke-14-19* [The God palace of Bali Island: The meaning of Balinese Palaces in the 14th-19th Century] (E. Sudrajat, Ed.). Komunitas Bambu.
- Nezhad, S. F., Eshrati, P., & Eshrati, D. (2016). Developing a conceptual framework of integritas in urban heritage conservation. *Armanshahr Architecture & Urban Development*, 9(16), 95-104.
- Nicola, J. C., Willis, M. E. H., Barnes, J. S., Caddick, N., Cromby, J., McDermott, H., & Wiltshire, G. (2014). Analytical pluralism in qualitative research: A meta-study. *Qualitative Research* in *Psychology*, 12(2), 182-201. https://doi. org/10.1080/14780887.2014.94898
- Norberg-Schulz, C. (1971). Existence, space & architecture. Praeger.
- Oebaidillah, S. (2017, April 14). Gianyar terpilih menjadi kota pusaka dunia [Gianyar chosen to be a world heritage city]. *Media Indonesia*.

- https://mediaindonesia.com/humaniora/100753/gianyar-terpilih-menjadi-kota-pusaka-dunia
- Oliver, P. (1989). Cultural issues in conservation implementation. In R. Zetter (Ed.), *Conservation of buildings in developing countries* (pp. 2-13). Oxford Polytechnic.
- Oliver, P. (2006). *Built to meet needs: Cultural issues in vernacular architecture*. Architectural Press. https://doi.org/10.4324/9780080476308
- Osman, K. A.-A. (2018). Heritage conservation management in Egypt. *Ain Shams Engineering Journal*, 9(4), 2907-2916. https://doi.org/10.1016/j.asej.2018.10.002
- Pangarsa, G. W. (2006). *Merah putih arsitektur Nusantara* [Red and white Archipelago architecture] (1st ed.). Andi Publisher.
- Paterson, B. L., Thorne, S. E., Canam, C., & Jillings, C. (2001). Meta-study of qualitative health research. SAGE Publications, Inc. https://doi. org/10.4135/9781412985017
- Picard, M. (1996). *Bali: Cultural tourism and touristic culture*. Archipelago Press.
- Pitana, T. (2002). Sacred places in Java: The concept of site selection in Javanese architecture. Architectural Science Review, 45(1), 13-19. https://doi.org/10.1080/00038628.2002.9696931
- Putra, I. D. G. A. D. (2012). Tourism facilities on Balinese traditional housing extensions in Ubud Village Bali (in Term on Environmental Sustainability). *Ruas*, 10(1), 44-51. https://doi. org/10.21776/ub.ruas.2012.010.01.5
- Putra, I. D. G. A. D., Lozanovska, M., & Fuller, R. (2013). The transformation of the traditional Balinese house for tourist facilities: Managing a home-based enterprise and maintaining an architectural identity. Asia-Pasific Management and Business Application, 2(2), 120-131. https://doi.org/10.21776/ub.apmba.2013.002.02.4
- Ragheb, A., Aly, R., & Ahmed, G. (2022). Toward sustainable urban development of historical

- cities: Case study of Four City, Egypt. *Ain Shams Engineering Journal*, *13*(1), Article 101520. https://doi.org/10.1016/j.asej.2021.06.006
- Rapoport, A. (1989). *Dwelling settlement and tradition*. Prentice Hall Inc.
- Riany, M., Rachmadi, Y., Sambira, I., Muharam, A., & Taufik, R. (2014). Kajian aspek kosmologisimbolisme pada arsitektur rumah tinggal vernakular Dikampung Naga [The study of cosmology-symbolism aspects in the architecture of vernacular residential houses in Naga Village]. *Reka Karsa*, 2(4), 1-12.
- Roth, D., & Sedana, G. (2015). Reframing Tri Hita Karana: From "Balinese culture" to politics. *The Asia Pacific Journal of Anthropology*, *16*(2), 157-175. https://doi.org/10.1080/14442213.20 14.994674
- Salama, A. M. (2015). Urban traditions in the contemporary lived space of cities on the Arabian. *Peninsula Traditional Dwellings and Settlements Review*, 27(1), 21-39.
- Salman, M. (2018). Sustainability and vernacular architecture: Rethinking what identity is. In K. F. Hmood (Ed.), *Urban and architectural heritage conservation within sustainability*. IntechOpen. https://doi.org/10.5772/intechopen.82025
- Samadhi, T. N. (2001). The urban design of a Balinese Town: Placemaking issues in the Balinese urban setting. *Habitat International*, *25*(4), 559-575. https://doi.org/10.1016/S0197-3975(01)00024-8
- Setiprayanti, D., & Prijotomo, J. (2010). Hubungan makna rumah bangsawan dan falsafah hidup manusia Jawa dalam konteks organisasi ruang [The relationship of the meaning of the aristocratic house and the Javanese philosophy of life in the context of spatial organization]. *Rekayasa*, 3(2), 120-124. https://doi.org.10.21107/rys.v3i2.2300
- Shils, E. (1981). Tradition, comparative studies in society and history. In E. Shils (Ed.), *Special Issue on Tradition and Modernity* (pp. 122-159). The University of Chicago Press.

- Siregar, J. P. (2018). The meaning change of urban heritage: A socio-semiotic investigation of historic areas in Yogyakarta, Indonesia [Doctoral dissertation, Queensland University of Technology]. https://doi.org/10.5204/thesis.eprints.123709
- Smith, L. (2006). Uses of heritage. Routledge.
- Staniforth, S. (2000). Conservation: Significance, relevance and sustainability. *IIC*, *Bulletin*, 2000(6), 3-8.
- Suryanto, Djunaedi, A., & Sudaryono. (2015). Aspek budaya dalam keistimewaan tata ruang Kota Yogyakarta [Cultural aspects in the spatial privileges of the City of Yogyakarta]. *Jurnal Perencanaan Wilayah Dan Kota*, 26(3), 230-252. https://doi.org/10.5614/jpwk.2015.26.3.6
- Suwena, I. W. (2003). Makna orientasi arah di Bali [The meaning of direction orientation in Bali]. In J. Atmaja (Ed.), Perempatan Agung: Menguak konsepsi palemahan, ruang dan waktu masyarakat Bali (pp. 43-60). Bali Media Adhikarsa.
- Telebian, M. (2005). The role of authenticity in conservation of world heritage sites the experiences from dur-untash for authenticity-based conservation [Unpublished doctoral dissertation]. University of Tehran.
- Trancik, R. (1986). Finding lost space: Theories of urban design. Van Nostrand Reinhold.
- United Nations Educational, Scientific and Cultural Organization. (2011). Recommendation on the historic urban landscape. https://whc.unesco.org/uploads/activities/documents/activity%02638-98.pdf

- United Nations Educational, Scientific and Cultural Organization. (2015). Policy for the Integration of a sustainable development perspective into the processes of the world heritage convention. https://whc.unesco.org/document/139146
- Veldpaus, L. (2015). Historic urban landscapes: Framing the integration of urban and heritage planning in multilevel governance. Technische Universiteit Eindhoven.
- Viñas, S. M. (2005). Contemporary theory of conservation. Routledge. https://doi.org/10.4324/9780080476834
- Widiastuti. (2002). Spirit kota. Pendekatan budaya dalam perancangan kota. Kasus studi Pempatan Agung di Bali, Indonesia [City spirits. Cultural approach in urban design. Case study: Pempatan Agung in Bali, Indonesia]. In Widiastuti (Ed.), Penelitian kualitatif dalam arsitektur. Penemuan Jatidiri melalui Karya Tesis/Disertasi Penelitian Kualitatif pada Tesis dan Disertasi Arsitektur (pp. 295-385). Udayana University Press.
- Wijaya, I. N. (2004). Melawan ajeg Bali: antara eksklusifitas dan komersialisasi [Against ajeg Bali: between exclusivity and commercialization]. *Tantular Jurnal Ilmu Sejarah*, 2, 158-183.
- Wijaya, K. A. P., & Wiranegara, H. (2020). Balinese planning philosophy: implementation in Denpasar City plan. *International Journal on Livable Space*, 5(1), 11-20. https://doi.org/10.25105/livas.v5i1.6352
- Wiryomartono, B. P. (1995). Seni bangunan dan seni bina kota di Indonesia [Building art and urban architecture in Indonesia]. Gramedia.

