A Buddhist-Systems Paradigm for Conserving Cultural Built Heritage

Development of a Conceptual Framework for Conserving Non-Secular Monuments in South and Southeast Asia[†]

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This paper presents the development of an alternative paradigm for the conservation of non-secular monuments in South and Southeast Asia. The proposed paradigm and supporting conceptual framework are based on the synergies between Buddhism and the systems theory. The purpose of the adoption of Buddhism is based on the need to find a culturally sensitive holistic and organic approach as opposed to the rationalist materialist approach of the current Euro-centric approaches. The differences in approaches to the conservation of monuments between the East and the West have been discussed widely amongst conservationists, with the development of a number of guidelines to deal with the issue. The use of systems theory, while being based on established synergies with Buddhism, provides a structured foundation to build the conceptual framework. The proposed alternative paradigm and conceptual framework are based on three Buddhist principles of interconnectedness, interdependence and mutual conditioning.

Keywords: Buddhism, Systems theory, Buddhist-systems paradigm, Heritage conservation, Non-secular heritage, South and Southeast Asia

Introduction

This is the first of two papers presenting the doctoral research that looks at the development of an alternative paradigm for the conservation of non-secular built heritage in South and Southeast Asia. This paper describes the development of the paradigm and supporting conceptual framework based on identified synergies between Buddhism and systems theory (Ellis and Ludwig, 1962; Churchman, 1968; Macy, 1976, 1991a and 1991b; Capra, 1996; Schmithausen, 1997; Checkland, 1999; Khisty, 2006a and 2006b; Chao and Midgley, 2007a and 2007b; and Midgley and Chao, 2007).

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Culture and people across the world have often been labelled in a binomial manner: East and West, occidental and oriental, and Western/European and Asian. One manifestation of this divide is in the appreciation of the built heritage that has been produced from these cultures. While there have been recent trends towards inclusiveness of other cultures and views (Wijesuriya, 1993 and 2003; ICOMOS, 1994; Larsen and Marstein, 1995; Australia-ICOMOS, 1999; UNESCO, 2005; and Jokilehto, 2006), the current pervasive view of conservation and restoration has been overwhelmingly driven by Euro-centric policies (Seung-Jin, 1998 and 2005). The basis of global heritage protection has been enshrined in the clauses of international charters and guidelines determined by western imperatives (Seung-Jin, 1998 and 2005; and Jokilehto, 2006). However, representation and interpretation of art and architecture irrevocably differ between the Asian and European mode. For example, arguably, the cultural systems of the sub-continent is based on spiritual values, norms and beliefs, while the western culture has evolved, particularly since the enlightenment (Capra, 1982) through values founded on the reality of the material world or materialism (du Plessis, 1999, 2000, 2001 and 2005; and Macy, 1976, 1991a and 1991b). The implications of these differences are significant within conservation practices.

An alternative paradigm is postulated, supported by a conceptual framework for conservation of non-secular monuments of South and Southeast Asia, based on the cultural and philosophical traditions of the region. This is represented by the philosophical foundations of Buddhism that has widespread acceptance throughout Asia and a number of key similarities with other philosophies in the region, arguably Hinduism. Buddhism forms the basis of research for this reason, however, it does not provide a coherent foundation for the development of a conceptual conservation framework. For this purpose, a search for an appropriate sound methodology was undertaken. The work of Joanna Macy, a Buddhist and Systems Theorist, provided the initial links between Buddhism and the systems theory which has since been supported by a number of others (Capra, 1996; Schmithausen, 1997; Checkland, 1999; Khisty, 2006a and 2006b; Chao and Midgley, 2007a and 2007b; and Midgely and Chao, 2007).

In the context of this paper, these issues are relevant predominately because they offer an organic, holistic, pluralistic ontology of aspects that may guide the conservation and preservation of non-secular built heritage in the South and Southeast Asian regions. This should ensure that all aspects of the uniqueness of the monuments and indigenous beliefs are taken into account.

Consideration of Systems Theory as Basis of Buddhist Metaphysics

The idea of exploring the systems theory as an appropriate basis for developing an approach to the theory of conservation is based on the synergy that was initially proposed by Ellis and Ludwig (1962) and further explored in greater detail by Macy

A Buddhist-Systems Paradigm for Conserving Cultural Built Heritage: Development of a Conceptual Framework for Conserving Non-Secular Monuments in South and Southeast Asia

[†] This is the first of two papers exploring the conservation of non-secular heritage based on Buddhist-systems synergies. The second paper applies the conceptual framework developed in this paper.

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(1976, 1991a and 1991b) and then subsequently by others (Capra, 1996; Du Plessis, 1999 and 2000; Khisty, 2006a and 2006b; Chao and Midgley, 2007a and 2007b; and Midgley and Chao, 2007) between the theoretical framework and Buddhism and Asian cultures, Churchman (1968) argues on systems theory that certain principles of Buddhism and Hinduism can be interpreted as containing elements of the systems approach. While Buddhism has a very structured set of authoritative texts and tenets for ordering life, it is important that nothing formal exists that will allow the development of an ordered framework to conserve and protect cultural heritage. Allowing for the adoption of an existing system with Buddhism provides an established discipline for addressing the problems facing the conservation of heritage in general and non-secular heritage in particular. Adopting an existing system has benefits from the point of view of an established hermeneutic system. While it is intended that Buddhism is appropriate for the principles that may underpin any framework, there needs to be a foundation on which the framework can be constructed. Providing a strong foundation is the underlying aim of adopting the systems theory.

Systems Theory as a Hermeneutic for Buddhist Philosophy

Macy (1976, 1991a and 1991b) wrote extensively on both the Buddhist philosophy and systems theory and as early as 1976 started linking the aspects of Buddhist philosophy with some of the key issues of systems theory. She did so because this suggested "...the possibility that one can serve as a tool for interpreting the other. The hermeneutical possibility appears to be reciprocal" (Macy, 1976, p. 21). Macy recognizes that the systems philosophy could "...(a) provide a scheme for interpreting the principles of causal process perceived in Buddhist thought and at work in Buddhist practice; and (b) both broaden this vision and integrate it with the science by revealing the operation of these principles throughout the observable universe" (1976, p. 21). Firstly, one of the most common aspects that needs to be reiterated in links between Buddhism and the systems theory is that both are empirically based on the sense that Buddha never attempted to answer the larger metaphysical questions or the ultimate source or status of things. His main principle was method, not the 'why' or 'what', but the 'how'. 'How' it happens that we suffer, 'how' we become free (Kalupahana, 1976; and Harvey, 2003). For the systems theorists, the point is not 'why' or 'what', but 'how' the systems operate.

The idea is the relationship of subsystems, communication and information flows and how these operate (Ellis and Ludwig, 1962; Macy, 1991a; Khisty, 2006a and 2006b; Chao and Midgley, 2007a and 2007b; and Midgley and Chao, 2007). On examining Macy's first point (see above), the link between the systems theory and the concept of causality in Buddhist thought derives from the notion of *karma*— the idea that for every action there is an equal and opposite reaction. Causality in Buddhism and the systems theory share a focus on 'how', so that people can perceive their own functioning as a system and subsystem, thereby freeing themselves to act

The Icfai University Journal of Architecture, Vol. I, No. 1, 2009

responsibly (Ellis and Ludwig, 1962; and Macy, 1991a and 1991b). Causality is also found in a scientific sense in cybernetics, the idea that a reaction occurs from some basic action (Heylighen and Joslyn *et al.*, 2002). In the context of cybernetics, causality rests on communication and feedback loops and is cyclical in nature.

Khisty (2006a and 2006b), reinforcing Macy's approach, provides similar propositions through his two papers written on the connections between Buddhist philosophy and the systems theory. He looks at the whole notion of the systems theory and its application within many fields. However, the two issues that he develops are: (1) he believes that a spiritual content is missing from systems theory; and (2) there is a link between Buddhism and the systems theory based on the concept of Interbeing (Khisty, 2006a, p. 10). Interbeing is an idea proposed by the contemporary Buddhist monk Thich Nhat Hahn (Khisty, 2006a and 2006b) and encompasses the notions of interconnectedness, interdependence and interrelatedness. While Khisty acknowledges many overlaps between systems theory and Buddhism, based on holism and the interconnectedness of nature and human beings, essentially his proposal is that Buddhism offers a spiritual base to enrich and move systems theory forward. His contention is that the application of systems thinking to problem solving must have a spiritual content (Khisty, 2006a). In another paper, Khisty (2006b) explores in greater detail the many overlaps that he alludes to in the earlier paper. In going beyond the idea of interbeing, he looks at the core values of Buddhism, universal law of causality (karma), interconnectedness, interdependent co-arising, impermanence and emptiness, relating these to the principles that drives the systems theory.

The links established by Ellis and Ludwig (1962), Macy (1976, 1991a and 1991b), Khisty (2006a and 2006b), Chao and Midgley (2007a and 2007b), Midgley and Chao (2007) between the system theory and Buddhism, and by Du Plessis (1999, 2000 and 2001) with Asian cultures, have been significant for the argument of this study. Buddhism alone does not provide a strong foundation to base a framework for the conservation of cultural built heritage. Buddhism and the influence of other Asian religious movements, such as Hinduism, have very solid spiritual and rational philosophies that guide human behavior and activities. However, it is difficult to translate these philosophies into a basis for developing notions or ideas of cultural built heritage conservation. With its synergies with systems theory, the influence of Buddhism on an appropriate framework for the conservation of non-secular built heritage in the subcontinent region can now be developed.

Developing an Asian Approach to Conservation: Integrating Buddhist Philosophy and Systems Theory

The discussion on this point has attempted to coalesce the disparate links between the cultural and philosophical traditions of the region under study and develop a viable theory. As discussed above, with its links to Buddhism specifically and Hinduism and Asian culture more broadly, it is proposed that systems theory provides

a foundation to develop a viable theoretical framework. The literature reveals the notion of two world views existing, that of the West and East, and classifies the differences in terms of mechanistic and systemic world views (du Plessis, 1999, 2000, 2001 and 2005). This mechanistic worldview is goal-orientated, whereas the system worldview is process-orientated (Du Plessis, 1999 and 2000). As discussed earlier, the conservation theories, practices, guidelines and policies of the West arise from a mechanistic worldview, drawing on the philosophical heritage of the West/Europe. Based on the doctrines of rationalism and empiricism, the tools of conservation are observation, measurement and rational analysis that lie within a linear causal framework. Determining the authenticity, significance and the values within the monument, it is argued, are the 'goals' of Euro-centric conservation. To achieve one, a number of, or all of the goals is the aim of conservation. It is the process which is used to protect heritage on the World Heritage list and other heritage outside the scope of the list, by default, as no other formal mechanism exists.

The Development of a Buddhist-Systemic Paradigm

The essential principles of current global conservation practice are based on the test of authenticity, the significance of the monument and the values that are contained within the monument. These principles have been formulated within the mechanistic worldview sustained by the rationalist and empiricist philosophy supported by a reductionist model. For example, the essence of these principles has sought to assess the monument by the 'reduction' to a set of nine criteria¹ (Jokilehto, 2006). These criteria seek to analyze the monument in a rationalist framework, concerned with components seen in isolation rather than in a holistic sense. The concepts that define the monument or Cultural Built Heritage (CBH) within very rationalist boundaries are in contradiction to Asian values and philosophies (Munjeri, 2004). Different values require different conservation approaches. As the systemic approach has been linked to the cultural traditions and values of the East, any approach to conservation developed within this milieu would recognize the uniqueness of South and Southeast Asia. In this context, the act of protection and conservation of CBH would be seen as a subsystem within the larger complex system of the cultural and philosophical systems of the South and Southeast Asia. Based on the nesting idea explored earlier, the conservation subsystem would 'nest' within the larger subsystems based on, for example, religion or philosophy, thus, establishing critical links to these important values of non-secular heritage. These types of links are overlooked in a Euro-centric context in favor of a rationalist scientific approach (Seung-Jin, 1998 and 2005). The adoption of subsystems encompass questions of spirituality, naturalistic sensibilities (Seung-Jin, 1998 and 2005), the cultural landscapes (Taylor 2004; and Taylor and Altenburg, 2006) along with values, norms

The nine criteria are design, material, workmanship, setting, traditions, techniques, language, intangible heritage, spirit and feelings. The last six were added in an amendment in 2005 in response to a growing understanding of the differences in approaches between western and Asian conservation.

and societies (Munjeri, 2004) that may also form a part of the larger system. For example, a subsystem dealing with spirituality would include all those relationships between non-secular heritage and its environment that would include sentient and non-sentient beings so that these are identified and recognized.

This paper discusses the philosophical and cultural traditions in an attempt to synthesize the foundation for an Asian approach to the conservation and protection of CBH in Asia. It has been argued that the systems theory has strong associations with Asian cultural and philosophical thought, particularly Buddhism, and could be appropriate as the foundation to build a framework for the conservation of monuments in Asia. There is an evidence shown in the explanation of the framework (Figure 1) that systems theory has the ability to account for the differences and uniqueness of those monuments.



An Alternative Paradigm Based on Buddhism and Systems Theory

As discussed earlier (Kalupahana, 1976; Macy, 1976, 1991a and 1991b; and Harvey, 2003), there are a number of key principles of Buddhism, including impermanence, *karma, dukkha*, the eightfold path and the four noble truths. As argued by Khisty (2006a and 2006b), Chao and Midgley (2007a and 2007b) and Macy (1976, 1991a and 1991b), the principles of Buddhism that provide strong links with the systems theory are universal interconnectedness, radical interdependence and mutual conditioning. It has been argued by these authors that these principles provide the methodology for describing intra and inter-systems relationships that would be the basis for determining what is important about the heritage, how it is important and

how it should be conserved. These are then the three key relational qualities of heritage, chosen as they explain the complex multiple reciprocal relationships (Munjeri, 2004) between heritage, communities, societies, tangible and intangible values. This provides a basis for developing a theoretical framework for conservation in South and Southeast Asia. Table 1 provides the description of the elements of the framework, while Figure 1 summarizes the process of the framework.

Table 1: The Three Key Relational Qualities of Non-Secular Built Heritage Systems Within South and Southeast Asia	
Key Relational Quality	Description
Interconnectedness	The quality where interconnections exist between one system and another.
Interdependence	The quality where one system is dependent on another.
Mutual conditioning	The quality where one system conditions another, one system must have existed for the other to come to exist.

The concept of universal interconnectedness relates to the fact that everything is a part of everything else, not only spatially, but also temporally. Society is situated in an intricate order, and thus, everything is interconnected with other aspects of a larger society or culture (Khisty 2006a and 2006b). Society, along with all other things, is embedded in a context, within the universal system (Khisty, 2006b). For non-secular heritage, the implications are that since its creation, there has been a continuum that ties the non-secular heritage to each period in time as much as the previous and the future, implying that there is a relevance to all people at various points in time. This suggests that heritage is interconnected to each period and relevant to each period in equal proportions. At another level, it implies that there is interconnectedness between the heritage and those that initially created the heritage. However, there is also interconnectedness with those who consume the heritage through time. Within the heritage object, there is interconnectedness between the various elements that in sum are the total of the heritage. This encompasses material elements, spiritual values, norms and other intangible values that can be identified. In Sri Lanka, for example, Ruwanweliseya stupa encompasses these elements because of its place in people's spiritual psyche. The interconnectedness described demonstrates that heritage is dynamic, with relevance changing continually. In relation to the systems that have been developed in this research, interconnectedness can be traced between various systems, from the primary system of culture to the subsystems of heritage and non-secular heritage. Within subsystems, there is interconnectedness, as according to Buddhist philosophy, everything is connected to everything else (Macy, 1976; and Khisty, 2006a and 2006b). This relationship of systems is significant in describing the reciprocal relationships that exist between the heritage and other systems that tie these to tangible and intangible values and to culture at the higher level.

In Buddhism, the notion that everything is dependent and reliant on mutual assistance, support, cooperation or interaction between everything is termed radical interdependence (for the purpose of framework it is sufficient to simply refer to interdependence). The Buddhist cosmology considers the entire cosmos as cooperative, where everything lives together as a cooperative (Kalupahana, 1976; Macy, 1991a; and Harvey, 2003). A noble environment can only be built, or protected. when we realize that the world is a mutual, interdependent and cooperative enterprise. Thus, we have the belief that everything in life is interdependent, there are interconnections and there is interdependence (Kalupahana, 1976; Macy, 1991a; and Harvey, 2003). These qualities explore how one system or subsystem may be dependent on another. For example, the Buddhist stupa or pagoda is dependent on people worshipping around it for its very being for all time, it is this action that provides meaning. If people had not worshipped around it or had not developed a belief in its sanctity, what would it have represented or would it have even existed? Clearly, one is dependent on the other for its significance or meaning. As discussed earlier, it is the next level of the relationship, the interdependence, of one system with another that a specific heritage system develops significance.

The mutual conditioning principle means that all conditioned things and events in the universe come into being only as a result of the interaction of various causes and conditions. This is significant because it precludes two possibilities-first, that things can arise from nowhere, with no cause and conditions, and second, that things can arise on account of a transcendent designer or creator (Dalai Lama, 2002 cited in Khisty, 2006b). The all-encompassing range of mutual conditioning is best caught in the short, though deceptively simple formulation: "When this is, that is; this arising, that arises. When this is not, that is not; this ceasing, that ceases" (Smith and Novak, 2003 cited in Khisty, 2006b, p. 301). Initially, what was the context for the creation of heritage? For some, cultural built heritage in the Asian region and the circumstances that lay behind the origination underpin the character and qualities of that particular heritage. In Cambodia, Angkor Thom was erected as the heavenly palace of the ruler Jajavarman VII. This original conditioning led to the conditioning of the environmental system that led to the conditioning of the landscape system and the relationship between this and the building. In Agra, India, the Taj Mahal, the white marble monument created as an act to bury a much-loved queen and then the emperor who worshipped her, conditioned the monument as a mausoleum. The construction of this monument and its formal gardens conditioned the landscape on the banks of the Yamuna river, thus conditioning the greater environment with its form and silhouette against the horizon. The conditioning analysis can be extended further and further. The conditioning, dealing with the origination, impacts with the other systems in which the heritage has relationships. While defining mutual conditioning, this discussion highlights the notions of holism and cyclical relationships implicit in the systems theory. The notion of conditioning will be explored further in relation to the conceptual framework in the following section.

Buddhist-Systemic Conceptual Framework: A Theoretical Hermeneutic

The aim of applying the conceptual framework to the conservation process is to determine the answer to the general question of conservation—what and how to conserve? The process also provides an alternative means for viewing, appreciating and interpreting heritage. The framework consists of three key relational qualities as described above, supported by clarifying questions. The questions provide the basis for investigating the heritage and its various multiple reciprocal relationships within its own subsystem as well as other external subsystems and larger systems. The relational approach is seen as important, as it implies inclusiveness and communality, notions that are elements of Asian cultures (Macy, 1976, 1991a, 1991b; Khisty, 2006a and 2006b; and Munjeri, 2004). Table 2 shows the elements of the framework highlighting the clarifying questions that provide the second layer to the framework allowing its practical implementation. Figure 2 shows the final process for applying the framework, highlighting its cyclical structure.

The process outlined in Table 2 and graphically represented in Figure 2 would allow the community and institutional stakeholders to determine what it is about the heritage that is relevant or important and to whom. This enables decisions on how to protect in the context of the tangible or intangible; can the monument be pulled down without destroying that which is of heritage value; or should the building be kept; or can it be rebuilt or restored extensively; or how it can be reused. It is

Table 2: A Framework for Heritage Concernation in South and Southeast

Key Relational Qualities of Heritage	Clarifying Questions
Interconnectedness	 What are the interconnections with the cultural system? What are the interconnections with the communal subsystem? What are the interconnections with the tangible values.
	What are the interconnections with the intangible values subsystem?What are the interconnections with the intangible values subsystem?
Interdependence	 Is the subsystem dependent on other heritage subsystems? Is the subsystem dependent on tangible value subsystems? Is the subsystem dependent on intangible value subsystems? Is the subsystem dependent on other cultural systems?
Mutual Conditioning	 In what context was the heritage created? In what context has the heritage existed? In what context is the heritage perceived? In what context is the heritage to be conserved/restored/ rebuilt?

Figure 2: All the Cycles in the Complete Process of Applying the Framework to the Conservation of Non-Secular Heritage in South and Southeast Asia



necessary to explore the elements of framework to understand its intentions. The concept of interconnectedness is the first relational quality. Figure 3 shows how this is realized in an operational context. The interconnectedness relation quality

25

A Buddhist-Systems Paradigm for Conserving Cultural Built Heritage: Development of a Conceptual Framework for Conserving Non-Secular Monuments in South and Southeast Asia

24

The Icfai University Journal of Architecture, Vol. I, No. 1, 2009

has been qualified by four clarifying questions that relate to the interconnectedness with culture, community, tangible and intangible values. A heritage subsystem exists within the larger cultural system. As discussed earlier, it is important to understand and identify the between heritage links subsystem and cultural system. For example, where and how does heritage sit within the cultural system? Are the interconnections secular or non-secular (or both as is the case when tourism operates simultaneously, sometimes very uncomfortably, with spiritual observance)? The secular and non-secular are arguably two means by which heritage can have a relationship with the cultural system. In exploring interconnections with the communal system, the answer to

Figure 3: The First Stage of the Framework Working Through the Inter-Connectedness Relation Quality



the first clarifying question (Table 2) will provide a context for looking at these connections. For instance, if the connection between the heritage subsystem and cultural system is non-secular, the interconnections with the communal system would be veneration, worship, or as with the *stupa* a feeling of overwhelming happiness and peacefulness. While these are non-material in the Asian sense, these interconnections are those that give the heritage significance within the cultural system (Wijesuriya, 1993; Taylor, 2004; and Taylor and Altenburg, 2006). The next clarifying questions (Table 2) look at values and whether there are tangible or intangible values that provide an interconnection between the heritage subsystem and cultural system. Tangible values include the juridical, skills and traditions that have been constant in the use of the heritage, while on the other hand, the intangible includes the ideas, oral traditions, beliefs, philosophies, experiences that interconnect heritage to the cultural system similar to the practice of religious acts or the belief in the philosophies that underpin these traditions.

The next key relational quality is interdependence, this is a methodology of exploring those links between the systems that are of significance to the existence of the heritage subsystem (Figure 4). Previously, we looked at interconnections between all aspects, but the function here is to take that to the next level and determine those of which the heritage is dependent on for its significance and character. The first clarifying question looks at the interdependence of the heritage subsystem with other subsystems; this establishes the links that might exist with other traditions or experiences that may reinforce the significance of the heritage



subsystem being examined. One example is the *sangha* subsystem that exists in countries, such as Sri Lanka, Thailand, Cambodia and Myanmar, where Theravadin Buddhism is practiced and is dependent on the people for support with such concepts as *dana*, or *pinnapada*²—there is an interdependence of one system on the other. The next two clarifying questions are an important step in refining and focusing on the specific tangible and intangible value systems that are broadly identified as having interconnections with the heritage subsystem. The interdependence of value subsystems and heritage subsystems would explore the issues of a two-way or one-way interdependence; an example might be the values contained within the skills

27

A Buddhist-Systems Paradigm for Conserving Cultural Built Heritage: Development of a Conceptual Framework for Conserving Non-Secular Monuments in South and Southeast Asia

² This is the practice of monks moving from one house to another in search of alms and then conferring *pinna* for the offering.

and traditions of the master masons responsible for maintaining temples in India and existence of heritage that supports these skills (Menon, 1994 and 2003).

Mutual conditioning is the last key relational quality that needs to be unpackaged in the exploration of the heritage system (Figure 5). This looks at the formation of the heritage subsystem, how and why heritage exists, when it was created and why. These questions explore the history of the heritage subsystem, establishing reasons for its existence and contextualizing the creation of heritage. Looking at history, the next question explores the life of the heritage, how it has changed, what remains and what was there before and how it survived through the ages. The final clarifying question of mutual conditioning ties the whole process together and looks at the context in which heritage is to be conserved. This establishes a range of possible



scenarios for the protection from rebuilding to restoration, minimal conservation/ maintenance and even demolition. Using the data generated from the previous relational qualities, the scenarios are assessed with information generated from these answers.

The scenarios are a means of exploring possible approaches that 'best fit' the outcomes from the exercise of looking at relational qualities. The experience and abilities of a range of stakeholders in the process are used to generate a number of realistic scenarios that would be possible. The scenarios should be structured in terms of their method of conservation. If rebuilding was proposed as a scenario, this would include the description of how it should be rebuilt, why it is being proposed, stating clearly the aims and objectives of rebuilding and the philosophy underpinning the approach. The assessment of the scenarios would be a process that looks at their aim, objectives and approach against the answers resulting from the relational quality exercise.

This process is reiterative until one scenario remains and this is the 'best fit' to the outcome of the relational quality exercise. Figure 6 shows how these scenarios are developed before being tested through the framework. The true value of using these scenarios comes from them being as real as possible. They may vary from one extreme of completely rebuilding to the other of doing minimal work and simply maintaining heritage. However, they provide an opportunity to examine a solution that provides the best approach to the conservation of heritage.

Developing scenarios is the final stage in the relationship with the systems theory. The initial stages of the framework rely upon the process of defining the key relational qualities of heritage. Defining the key relational qualities has been in the context of



defining the relationships that exist between each defined system and subsystem. The relationship between the system and subsystem explains the qualities, history and the values that underpin the existence of the heritage item being studied.

The next phase of framework involves the assessment of each scenario against the responses provided to the clarifying questions. This phase is an iterative process that assesses the scenarios based on the concept of feedback loops that not only acknowledges one of the key aspects of systems theory and communication loops (Laszlo, 1972; and Checkland, 1999), but also as Macy (1976, 1991a and 1991b) and others (du Plessis, 1999, 2000, 2001 and 2005; and Khisty, 2006b) have shown, it is also a basis of Buddhism where the notions we have adapted—interconnections, interdependence, mutual conditioning—and other principles such as *karma, dharma* and the wheel of law are all cyclical system or systems relying on feedback loops to support decision making.

A Buddhist-Systems Paradigm for Conserving Cultural Built Heritage: Development of a Conceptual Framework for Conserving Non-Secular Monuments in South and Southeast Asia

Discussion

The conceptual framework and supporting ideas presented here provide an alternative to the Western/Euro-centric approach for conservation strategies for the culturally built heritage in South and Southeast Asia. It is argued that the systems theory provides a means of operationalizing the alternative paradigm that, while based on describing heritage and culture (within which it exists as a series of systems and subsystems), has its theoretical argument very much founded within the philosophical and cultural experiences of the region. It is proposed that the systems theory framework is a means of exploring a heritage system, whether it is tangible or intangible, and determining how the heritage system exists within the larger cultural system in the context of developing a strategy for protection. The adoption of the systems theory moves beyond the existing system of looking at heritage in terms of conditions of authenticity that are essentially a series of material terms with token gestures to traditions, feelings and spirit (Jokilehto, 2006). The acceptance of the notions of intangible or immaterial values, as described in the Nara Document on Authenticity (Larsen and Marstein, 1995; and ICOMOS, 1994) or the Hoi An Protocols (UNESCO, 2005), are the only presentations of possible exceptions to the accepted procedures and interpretations that are given in international charters and guidelines. They do not offer a viable alternative method for conserving heritage in South and Southeast Asia. In the same way, as the current systems, they are only a product of the cultural and philosophical traditions of the West. It is argued that the framework presented here has substantially strengthened the premises of those documents by employing the essence of the cultural and philosophical experiences of the region.

In the tradition of the systems theory, the proposed conceptual framework would be made operational by the use of empirical research and data (Checkland, 1994 and 1999). The answers for clarifying questions would be provided by careful research into the heritage and its history, the values that underpin its existence, and all other data that provides a complete story about heritage. This information would come from oral traditions and more tangible sources. The crucial issue is to understand the heritage subsystems and all its interconnections and relationships with the larger systems and other subsystems. This process is in marked contrast with Western heritage that is assessed to have authenticity resulting only from a number of supposedly universal material values (Seung-Jin, 1998 and 2005; Menon, 2003; Taylor, 2004; and Taylor and Altenburg, 2006). The purpose of these clarifying questions, while exploring material values, is to underpin authenticity in the Asian context with those values that are significant to the heritage based on relational qualities of subsystems and systems.

As discussed above, the proposed conceptual framework is supported by the process of generating scenarios that are then examined against the outcomes of providing answers to the clarifying questions. While scenarios have not been

commonly used in the conservation decision-making process, these are common in planning decision making (Lichfield, 1997a and 1997b; Lombardi, 1999; and Brandon and Lombardi, 2005). Scenarios are seen as simulating real world situations that can be tested under 'laboratory' conditions to explore possible outcomes and use the results to make choices for courses or action. In this sense, the scenarios generated for the framework would be based on real-life solutions, creating probable courses of action. The reiterative process of testing these scenarios would then result in an appropriate course of action that accounts for the intangible values and sense of place that are critical to understanding the significance of Asian heritage. The scenarios can all be tested for their resilience in the face of known destructive forces, technological change, development pressures and tourism.

Conclusion

This paper presents an alternative paradigm and a structured framework for interpreting the cultural heritage of South and Southeast Asia for the purpose of developing conservation approaches. Based on the established synergies between the systems theory and Buddhism (Ellis and Ludwig, 1962; Macy, 1976, 1991a, 1991b; Khisty, 2006a and 2006b; Chao and Midgley, 2007a and 2007b; and Midgley and Chao, 2007), and Asian cultures more broadly (Churchman, 1968; and du Plessis, 1999, 2000 and 2001), the framework has been constructed that takes into account, for example, the intangible values, sense of place, cultural traditions and philosophies that are elements of the specific cultural heritage of the region under study.

The philosophy of Buddhism is founded on three principles—interconnectedness, mutual conditioning and radical interdependence (Kalupahana, 1976; Macy 1991a; and Khisty, 2006b). The notion that everything is related or connected to everything else, that an action cannot occur without a previous action, is the key to these three principles. For these reasons, Buddhism is seen as a holistic approach to the questions of life and matter. The systems theory provides the basis of a Buddhist hermeneutic and is seen to explain most of what occurs in Buddhism. As discussed in this paper, Buddhist ideologies and principles have been adopted as the key relational qualities of the framework that has been developed to provide an alternative approach to conserving culturally built heritage in South and Southeast Asia. To provide a holistic method to analyze the complex relationships between the components of cultural heritage, the systems theory underpins the construction of the framework. Traditionally, problem solving in the scientific context has been reductionist in nature, breaking down the larger problem into smaller components. Conversely, systems theory focuses on looking at the problem and its context in terms of systems and looking at relationships between these systems. The other aspect of the systems theory deals with the communication between systems and the feedback loops that exist make the process cyclical and informative. The synergies that have been identified between

Buddhism and the systems theory are based on the nature of holism and the cyclical nature of communication and feedback loops. The cyclical qualities of the communication channels between systems allow for reiterative evaluation of the relationships while assessing the basis for protecting cultural heritage.

Finally, from this discussion, an alternative paradigm supported by a conceptual framework was formulated that incorporated the philosophy of the systems theory and principles of Buddhism. The framework has the key relational qualities—o interconnectedness, interdependence and mutual conditioning—that form the basis of the relationship between the heritage and the people who consume it. The interpretation of these key relational qualities is done with clarifying questions, which provide the opportunity to describe key relationships that give heritage its values and meanings, significant qualities in the context of how people view heritage. The second paper in this series applies the conceptual framework to two non-secular monuments in Sri Lanka. α

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33

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35