Sustaining Cultural Heritage in South And Southeast Asia: integrating Buddhist philosophy systems theory and resilience thinking to support sustainable conservation approaches.

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Abstract

The World Heritage Convention, based on euro-centric principles espoused in the Venice Charter, provides a mechanism for listing and protecting tangible and intangible heritage in many countries. The World Heritage List is wide-ranging but not all-encompassing representing selected examples of indigenous heritages. However, there is an extensive collection of heritage that falls outside this safety net of recognition and protection, particularly in developing countries of Asia.

Many cultural heritages of Asia have their roots in the cultural traditions of the sub-continent developing independently to those of Europe. As a result the traditional view is that the cultural systems of the sub-continent are based on spiritual values, norms and beliefs, communalism, and holism. However western culture has evolved towards the development of values founded on the reality of the material world or materialism, and rationalism. Tangible and intangible heritages values have had a distinctive role in presenting the differences between the western mode of thinking and that of Asia.

This paper proposes that any sustainable approach to the conservation in South and Southeast Asia must be based on the cultural and philosophical traditions that have underpinned the formation of the cultural heritage. Through a review of literature synergies between systems theory, resilience thinking, based on holism, and the philosophical traditions of the region, particularly Buddhism are established. Focusing on a case study of non-secular built heritage in Sri Lanka it is argued that systems theory provides the foundation for an alternative paradigm supporting an original approach to sustainable conservation and protection of cultural built heritage in South and Southeast Asia. Outcomes presented in this paper indicate such an approach highlights the uniqueness of cultural traditions, notions of spirituality, place-making and spatial relationships particularly of non-secular monuments. Sound preconditions for sustainable cultural heritage conservation outside the institutional protection provided by the World Heritage Convention and euro-centric approaches.

**Keywords:** Sustainability, cultural heritage, Buddhist philosophy, systems theory, conservation theory, resilience thinking.
1. Introduction

1.1 Background

This paper explores the interconnections between Buddhism, resilience thinking and systems theory in the context of developing a sustainable approach for the conservation of non-secular built heritage in the South and Southeast Asian region. The non-secular built heritage is conceptualised as a complex system within the larger system of the culture in which it resides; thus providing the development of a theoretical basis for then constructing a conceptual framework (MacKee 2007). The functions and elements of systems theory are discussed to evaluate its usefulness as an approach to the conservation of non-secular built heritage. The paper reinforces and explores the links made between systems theory and Buddhist philosophy as developed by Chao and Midgley (2007a, 2007b), Midgley and Chao (2007), Macy (1991a, 1991b, 1976), Khisty (2006a, 2006b), Churchman (1968) and Ellis and Ludwig (1962). A discussion of these two overlapping worldviews is crucial to be able to propose systems theory as a credible framework for an Asian approach to conservation of non-secular monuments.

The essential proposition of this paper is that the current theories and representative wealth of charters and guidelines that govern conservation practice are the “tip of the iceberg”. Beneath lie an immense body of cultural philosophical and religious thought and traditions that underpin the whole sphere of Western approaches to conservation (MacKee 2007). This research poses a fundamental question: How would the rich and unique cultural built heritage of the Asian region be interpreted and conserved if the theories and guidelines that were to underpin it were based on the cultural and philosophical traditions of the region?

For the reasons discussed here, this research postulates a new paradigm supported by a conceptual framework for conservation of non-secular monuments in 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, predominately Hinduism. Buddhism forms the basis of the study for this reason; however it doesn’t provide a coherent foundation for the development of a conceptual conservation framework. For this purpose a search for an appropriate sound methodology was undertaken. From the literature review, the work of Joanna Macy (1991a, 1991b, 1976), a Buddhist and systems theorist, provided the initial links between Buddhism and systems theory which has since been supported by a number of others (Chao and Midgley 2007a, 2007b, Midgley and Chao 2007, Khisty 2006a, 2006b, Checkland 1999, Schmithausen 1997, Capra 1996, Churchman 1968, Ellis and Ludwig 1962).

Macy (1991a, 1991b, 1976), establishes links between Buddhist philosophy and systems theory based on the synergies and similarities between the Buddhist universal law of causality and the cyclical process of cause and effect and can be related to the notion of feedback loops in cybernetics and systems theory (Macy 1991a, 1991b, Schmithausen 1997). In Buddhism the concept of the universal law of causality is central to the notion of karma. *Karma* is an important notion in the context of a cyclical view to life processes, that is birth-death-rebirth, as...
opposed to a linear view and is a common theme amongst the religions/philosophies of the sub-continent (Harvey 2003, Kalupahana 1976). Macy’s (1976) other key links relate to holism, as she perceives Buddhism as providing a holistic view to life and empiricism. In Macy’s view, the Buddha is essentially an empiricist as he developed a philosophy based on his experiences and observation of life and has avoided all metaphysical arguments. She supports these further similarities by detailing the empirical basis of systems theory and how systems theory relies primarily on empirical data as a means of dealing with problems (Macy 1991a, 1991b, 1976). The established synergies between the philosophy of Buddhism and those of philosophical traditions of the region as proposed primarily by Macy in her work has been reinforced in the recent work of Khisty (2006a, 2006b) writing on systems theory; Kumar and Sankaran (2006) writing on management and systems theory; Capra (1996, 1982) writing on systems theory and changes in Western thought, and one of the early proponents of systems theory in management, Churchman (1968). Churchman’s links are implicit in a much broader discussion on spirituality. For Khisty (2006a, 2006b), while his connections broadly reinforce those of Macy, he further elaborates on the idea of Interbeing as proposed by the Venerable Thinh Nacht, a contemporary Buddhist priest, which is along similar lines to Macy’s proposal. Interbeing is a term that covers the Buddhist concepts of interdependence, interconnectedness and interrelatedness. Khisty (2006a) equates this with the idea of holism in systems theory and that all systems are interrelated, avoiding separation and reductionism in traditional management and problem solving. Kumar and Sankaran (2006) provide strong links with Hinduism and Checkland’s (1999) Soft Systems Methodology. Their starting point is the notion of context sensitivity and the concept of the flexibility of truth in the Indian context and how within this Indians react to their own context, and then act rather than accept the general abstract formulation of law applicable to all (Kumar and Sankaran 2006). This relates to the idea of a lack of a hard reality and how this is conceptually similar with Checkland’s Soft Systems Methodology. Checkland’s Soft Systems Methodology is situation driven and always iterative wherein a person internalises what they see, understands and then act according to their understanding of the situation (Hutchings and Cassar 2006, Checkland 1999 1990).

In the context of this research 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 region. This would ensure that all aspects of the uniqueness of the monuments and indigenous beliefs are taken into account in a sustainable context.

2. Systems Theory

The history of scientific investigation in the context of western enquiry has been based on a rationalist empiricist approach to problem solving (Capra 1996, Laszlo 1972, Van Bertalanffy 1968). Descartes' methodology for solving scientific problems has proved influential (Dicker 2003, Arrington 2003). His idea of reducing or "pulling apart" the problem into its parts, solving the parts and then reassembling them has been used to solve a range of issues (Du Plessis 2000, Capra 1996, Flood and Jackson 1991). Such reductionism has been predicated on the belief that any whole or problem can be described or defined by the sum of its parts. In
science there has been the tendency to adopt this approach, and in fact, many of the theories that we apply today are based on this foundation thinking. By way of an example of reductionist thinking, we can explore the issues and 'solutions' of the problems of public transport, these solutions are often then proposed as the panacea for a range of urban problems (Checkland 1999, Flood and Jackson 1991). Local authorities or public utilities that manage these systems may look at timetables, routes or quantities without looking at the complex issues of the total system that include all modes of public and private transport and their interrelationships to obtain a successful public transport system. Instead there has been a tendency to focus on the issues of the parts in isolation, rather than the connections that link the parts (Checkland 1999, Laszlo 1972, Churchman 1968).

This paper argues that the non-secular monuments of South and Southeast Asia, inclusive of all tangible and intangible heritages, need to be considered as part of a larger whole of the Asian region, society and culture in which they exist. This is particularly true in the situation of South and Southeast Asia where global Euro-centric conservation theories have been applied to complex and unique systems of heritage-cultural-societal interrelationships, quite different in conceptual foundations to those from where the conservation theories were developed in the first place (MacKee and Hartig 2007, MacKee and Hartig 2006, MacKee and Briffett 2000).

2.1 The application of systems theory in sustainable development

Historically, there has been a search for a better way to understand the complex relationships that make up the human-nature interface. Many authors (Khisty 2006a, 2006b, Eckersley 2004, 1992, Capra 1996) argue that is has been the commitment to a mechanistic worldview and reductionism that has resulted in significant environmental problems. The prevailing worldview for our (western) understanding of the environment has also been one of anthropocentrism, whereby humans are the centre of moral concern. The anthropocentric view has in part been reinforced by Judaeo-Christian teachings that humans are made in the image of God and have dominion over nature, which has been the orthodox interpretation of the Biblical account of creation (Passmore 1980). The work of many philosophers both pre and post-renaissance support this, for example Descartes is identified (Dicker 2003) with providing the philosophical basis for setting humans apart from the natural world (Khisty 2006a, 2006b, Dicker 2003, Rockmore 2003). 'Dualism' is the term given to this worldview and it also supported anthropocentrism and provided a theological cornerstone for philosophical dualism (Dicker 2003). The environmental degradation that has resulted from the Cartesian view is well documented and requires no detailed investigation (Cooper 2003). However, the contemporary claim that human domination of nature has been destructive has been accompanied by new scientific and theological paradigms that rethink the validity of strong anthropocentrism (Cooper 2003).

Rachel Carson's Silent Spring (1962) is considered to be the beginning of the ecological revolution and a counter to strong anthropocentrism. Ecocentrism (Eckersley 2004, 1992) is a position that argues that the whole of nature should be given moral consideration. It has similarities with deep ecology (Naess 1989, 1986, Sessions 1995, Devall and Sessions 1985)
where "biocentric egalitarianism" is forwarded as a counter to the idea that humans are at the top of the hierarchy of creation or evolution. The roots of the deep ecology movement can be found in the early writings of Thoreau Roszak and Mumford (Devall and Sessions 1985). Deep Ecology also has its origins and influences stemming in part from the writings of Spinoza and Zen Buddhism (Khisty 2006b, Devall and Sessions 1985). Khisty's insights into deep ecology are useful here because of the links to Buddhism in the form of Zen Buddhism. Among many other things, what has arisen from the debate between the advocates of anthropocentrism and ecocentrism is the contested notion of stewardship. Stewardship is the view that through divine intervention or evolution, humans are endowed with particular skills and talents that provide them with a level of consciousness and comprehension that allows them the responsibility to make moral decisions about the rest of creation/life, (Khisty 2006b, Passmore 1980). Where the anthropocentric movement put humans above nature, value was seen as residing in humans with nature only given instrumental value (Capra 1996). In contrast, deep ecology, which could be considered as a truly holistic environmental philosophy, considered human beings as an intrinsic part of nature, a unique strand in the fabric of life (Khisty 2006b, Capra 1996). Khisty (2006a, 2006b) sees deep ecology as an extension of spiritual systems, particularly that of Buddhism.

The discussions on spirituality and natural systems can be applied to the way in which we deal with environmental protection and our relationship with the environment to systems theory. This direction is supported by the notions of holistic thinking, that is the basis of systems theory, by looking at the idea that the natural-social-economic divide is actually one complete system of which each subsystem with very subtle relationships and links, communication loops, is related to the whole. The work of Du Plessis (2005, 2001, 2000, 1999) has focused on the application of systems theory to sustainable development for this reason, especially in the context of African cultures. Khisty's (2006a, 2006b) work, while providing strong links to Buddhist philosophy, has linked the environmental movement with systems theory through the tenets of deep ecology. The idea of systems in the context of the environment relates to a notion of natural systems that places humans within the emergent complexity along with all other aspects of the larger ecosystem. Once we understand the relationships between the various subsystems of which humans are only one of many, it is hoped that we can move towards a more environmentally sustainable future.

2.2 The concepts of Complex Systems and Resilience Theory

Earlier discussion has shown how, in general, systems are holistic, strongly connected, operate cyclically and to support the cyclical processes that rely on feedback loops (Macy 1991a, Laszlo 1972, Bertalanffy 1968). In studying the changes that occur in natural eco-systems research has led to the notion that these systems are invariably very complex (Walker and Salt 2006). The highest level of complexity is evident in social-ecological systems, that is the relationship between human systems and ecological systems (Walker and Salt 2006, Berkes, Colding and Folke 2003, Berkes and Folke 1998). Understanding the complexity of these co-evolving systems; their interrelationships, change dynamics and transformation has provided the rich foundation for looking at the 'resilience' of these systems (Walker and Salt 2006, Berkes,
Colding and Folke 2003, Berkes and Folke 1998). At the heart of resilience thinking is the very simple notion of coherence despite change and the idea that to ignore change is to increase our vulnerability and forego emerging opportunities (Walker and Salt 2006, pp 9-10). In resilience thinking humans and nature are considered as elements of the one system, as they are interdependent. To think of one in isolation of the other is to come up with only a partial solution (Walker and Salt 2006). In essence, Resilience, defined by Walker and Salt (2006) is a systems capacity to absorb disturbances without a regime shift and they see it as the key to sustainability (Walker and Salt 2006, p38).

One link between resilience theory and this research is Redman's (2005) discussion of the notion of resilience thinking in archaeology. He postulates that "...resilience thinking looks at change transformation and adaptive cycles and archaeology provides the opportunity to study not only one completed cycle but multiple completed cycles " (Redman 2005, p70). Redman's contention is that the study of persistence and change in systems is at the heart of resilience thinking and can be verified by archaeology in the study of many systems historically over time. In so doing archaeology confirms the notions of adaptive cycles of change and transformation and the dynamic changes that occur over time in social-ecological systems (Redman 2005). Redman's study has implications for the current research in that, as with archaeology, the conservation of monuments and specifically non-secular monuments is about dealing with persistence despite change and transformation. This changes the temporal, utilisation and management contexts. The research argues that culture; heritage and built heritage can be considered as systems that are interconnected and interdependent. The application of resilience thinking to the conservation of built heritage provides the opportunity to understand and deal with the persistence and survival of heritage against the ongoing forces physical, social and natural change. That is, resilience thinking engages in a trans-disciplinary way the dynamic interconnections and interdependencies amongst the key systems.

Another link between resilience and the current research is the notion of interdependence mentioned earlier in the context of considering human and natural systems as one, the social-ecological system. Buddhism also has a holistic view of the human and natural systems in that they are seen as one system, yet interdependent and interconnected to one another (Khisty 2006b, Macy 1991a).

Resilience thinking provides the opportunity to extend the ideas presented in this paper to the next level of exploring the concept of resilience in the context of a broader range of heritage issues. Systems theory provides a foundation from where to establish parameters as no other research has attempted this alternative interpretation of non-secular built heritage.
3. Developing an Asian Approach To Conservation: Integrating Systems Theory And Buddhist Philosophy

The discussion to 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. With its links to Buddhism specifically, 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 worldviews existing, that of the West and East and classified the differences in terms of mechanistic and systemic worldviews (du Plessis 2005, 2001, 2000, 1999). This mechanistic worldview is goal-orientated, the systems worldview is process orientated (Du Plessis 2000, 1999). As briefly discussed earlier in the introduction, 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 doctrines of rationalism and empiricism, the tools of conservation are observation, measurement and rational analysis lying within a linear causal framework. Determining the authenticity, significance and the values within the monument, it is argued here, are the "goals" of Euro-centric based conservation. To achieve one, a number, or all of the goals is the aim of conservation. It is the processes mentioned here that are 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.

3.1 The development of a systemic conceptual framework

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 philosophical 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 criteria3 (Jokilehto 2006). These criteria seek to analyse the monument in a rationalist framework, concerned with components seen in isolation rather than in a holistic sense. Concepts that define the monument or cultural built heritage (CBH) within very rationalist boundaries (Munjeri 2004) are in contradiction to Asian values and philosophies. Different values require very 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 recognise the uniqueness of South and Southeast Asia. In this context the protection and conservation of the cultural built heritage would be seen as a system within the larger complex system of the cultural and philosophical systems of South and Southeast Asia. In this way it is necessary to view the whole larger system in which the CBH is a subsystem, and not reduce the system to its smaller components such as authenticity, significance or its various values and look at these in isolation. The subsystems encompass questions of spirituality, naturalistic sensibilities (Seung-Jin 2005, 1998) the cultural landscapes (Taylor and Altenburg 2006, Taylor 2004) along with values, norms and societies (Munjeri 2004) that may form part of the larger system. These proposed subsystems are those that demonstrate the differences between Asian and Euro-centric conservations approaches.
This paper has briefly discussed the philosophical and cultural traditions in an attempt to synthesise the foundation for an Asian approach to the conservation and protection to the cultural built heritage in Asia. It has been argued that systems theory has strong associations with Asian cultural and philosophical thought, particularly Buddhism, and could be appropriate as the foundation from which to build a framework for the conservation of monuments in Asia.

3.2 The components of a framework based on systems theory

There are a number of key principles of Buddhism; including impermanence, karma, dukkha, the eightfold path and the four noble truths (Macy 1991a, 1991b, 1976, Kalupahana 1976). As argued above, three principles of Buddhism that provide strong links with systems theory are universal interconnectedness, radical interdependence and mutual conditioning (Khisty 2006a, 2006b, Macy 1991a, 1991b, 1976). It has been argued 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 is it important, and how it could be conserved. These are then three key relational qualities of heritage, chosen because they explain the complex multiple reciprocal relationships (Munjeri 2004) between heritage, communities, societies, tangible and intangible values that provide 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 3 summarises the process of the framework.

Table 1: The three key relational qualities of heritage systems within South and Southeast Asia (Source: The Author).

<table>
<thead>
<tr>
<th>Key Relational Quality</th>
<th>Description</th>
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<tbody>
<tr>
<td>Interconnectedness</td>
<td>The quality where interconnections exist between one system and another.</td>
</tr>
<tr>
<td>Interdependence</td>
<td>The quality where one system is dependent upon another.</td>
</tr>
<tr>
<td>Mutual conditioning</td>
<td>The quality where one system conditions another, one system must have existed for the other to come to exist.</td>
</tr>
</tbody>
</table>
Figure 3: This figure summarises the process of the framework and how this would be operationalised (Source: The Author).

The concept of universal interconnectedness relates to 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, 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 peoples spiritual. The interconnectedness described demonstrates that heritage is dynamic with relevance continuing through time. In relation to the systems that have been developed in this research, interconnectedness can be traced between the 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. 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 the 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 the framework it is sufficient to simply refer to interdependence. Buddhist cosmology considers the entire cosmos as a cooperative, where everything lives together as a cooperative (Harvey 2003, Macy 1991a, Kalupahana 1976). A noble environment can only be built, or protected, when we realise that the world is a mutual, interdependent, cooperative enterprise. Thus we have the belief that everything in life is interdependent, there are interconnections, and there is interdependence. These qualities explore how one system or subsystem may be dependent on another. For example the Buddhist stupa or pagoda is dependent upon people worshipping around it for its very being for all time, it is this action that provides the meaning. If people did not worship around it or had not developed a belief in its sanctity then what would it represent or would it ever have existed. Clearly one is dependent upon 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 the heritage? For some, cultural built heritage in the Asian region the circumstances that lay behind the origination underpin the character and qualities of the particular heritage. In Cambodia, Angkor Thom was erected as the heavenly palace of the ruler Jajavarman VII. This original conditioning led to the condition 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 Yammanu 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 systems theory.
Table 2: A framework for heritage conservation in south and Southeast Asia (Source: The Author).

<table>
<thead>
<tr>
<th>Key relational qualities of heritage.</th>
<th>Clarifying questions.</th>
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| 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 subsystem?  
• What are the interconnections with the intangible values subsystem? |
| Interdependence                       | • Is the subsystem dependent upon other heritage subsystems?  
• Is the subsystem dependent upon tangible value subsystems?  
• Is the subsystem dependent upon 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 4: This diagram shows all the cycles in the complete process of applying the framework to the conservation of non-secular heritage in South and Southeast Asia (Source: The Author).
3.3 Discussion of the framework

The conceptual framework and supporting ideas presented here provide an alternative to the Western/Euro-centric approach for conservation strategies for the cultural built heritage in South and Southeast Asia. It is argued that systems theory provides a means of operationalising the alternative paradigm that, while based on describing the heritage and the culture with in 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 systems theory moves beyond the existing system of looking at the heritage in the 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, 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 systems theory the proposed conceptual framework would be made operational by the use of empirical research and data (Checkland 1999, 1994). The answers for the clarifying questions (refer Table 2 and Figure 4) 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 the 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 (Taylor and Altenburg 2006, Seung-Jin 2005, 1998, Taylor 2004, Menon, 2003). 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 (Lombardi & Brandon 2003, Lombardi 1999, Lichfield 1998, 1988, 1976). Scenarios are seen as simulating real world situations that can be tested under "laboratory" conditions to explore possible outcomes and use the result 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.

4. Summary and Conclusions

This paper has presented an alternative paradigm and a structured framework for interpreting the cultural heritage of South and Southeast Asia for the purposes of developing conservation approaches. Based on established synergies between systems theory and Buddhism specifically (Chao and Midgley 2007a, 2007b, Midgley and Chao 2007, Khisty 2006a, 2006b, Macy 1991a, 1991b, 1976, Ellis and Ludwig 1962) and Asian cultures more broadly (du Plessis 2005, 2001, 2000, 1999, Churchman 1968), 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 (Khisty 2006b, Macy 1991a, Kalupahana 1976). 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. Providing 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 cultural built heritage in South and Southeast Asia. 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 systems theory deals with the communication between systems and the feedback loops that exist that make the process cyclical and informative. The synergies that have been identified between Buddhism and 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 allows for reiterative evaluation of the relationships while assessing the basis for protecting the cultural heritage.

Finally, from this discussion a conceptual framework was formulated that incorporated the philosophy of systems theory and principles of Buddhism. The framework has the key relational qualities, 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 the key relationships that give the heritage its values and meanings, significant qualities in the context of how people view the heritage.
References


