RESTORING NON-SECULAR CULTURAL HERITAGE IN SOUTH AND SOUTHEAST ASIA IN THE AFTERMATH OF A NATURAL DISASTER: Integrating systems theory and indigenous philosophical and cultural traditions to support sustainable conservation approaches.

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ABSTRACT

Indonesia, Kashmir, Pakistan, Sri Lanka and Thailand have recently experienced the impacts of the worst natural disasters of the last 100 years. These have impacted not only on the natural and built environment, but have also had serious implications for the cultural heritage of the region damaging monuments and affecting traditional ways of life. Restoring the cultural built heritage after such a traumatic event raises many questions of how to approach the work while dealing with the issues of possible World Heritage Listing, local institutions, needs of stakeholders, funding and global versus traditional approaches to conservation. In this regard it is often the intangible values that are lost requiring careful consideration in the methods adopted in their restoration so that the integrity and meaning of the cultural heritage is not distorted. This paper proposes that any approach to the conservation in south and Southeast Asia to deal with the impact of natural disasters must be based on the cultural and philosophical traditions that have underpinned the formation of the cultural heritage. Reviewing literature, synergies between systems theory, based on holism, and the philosophical traditions of the region, particularly Buddhism are established. Focusing on the development of a framework it is argued that systems theory provides the foundation for an alternative paradigm supporting an original approach to appropriate restoration of the cultural built heritage in the aftermath of a natural disaster. 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 dealing with the destruction caused by natural disasters on cultural heritage that is often not dealt with by institutional protection provided by the World Heritage Convention and euro-centric approaches. The research presented in this paper is a component of the Author's doctoral studies.

Keywords: Natural disasters, cultural heritage, systems theory, Buddhist philosophy, conservation theory.

1.0 INTRODUCTION

According to the World Disasters Report 2005 (International Red Cross 2005), the number of reported disasters has increased steadily over the past century and risen very sharply during the past decade. An average of 354 disasters of natural origin occurred per year in the period 1991 to 1999. From 2000 to 2004, this rose to an average of 728 per year. The Asia-Pacific region has experienced the greatest loss of life in absolute terms and in proportion to the population, due to earthquakes, floods and tropical cyclones. In economic terms, the World Disasters Report 2002 (International Red Cross 2002) assesses the average estimated damage due to natural disasters at US\$69 billion. Asia shows the highest reported losses. This reflects the potential risks to cultural built heritage and by association non-secular heritage in Asia.

In the 2004 Boxing day Tsunami Sri Lanka experienced one of its worst natural disasters in living memory with the loss of approximately 35000 lives and 80,000 homes. While the damage to the cultural built heritage has been less extensive the extent of the destruction to the non-secular heritage has been less publicised and not fully appreciated. There were a significant amount of temples and religious monuments that were partially or completely damaged by the enormous swell of water that was produced by the tsunami wave. The reconstruction or restoration of these damaged monuments is now the focus of national and local communities in the next phase after the reconstruction of infrastructure and housing.

Concurrent with these efforts to restore damaged heritage in the wake of natural disasters are the endeavours taken to conserve the cultural built heritage that has developed predominately driven by euro-centric interpretations of how cultural heritage is formed and protected. The beginnings of conservation in a Euro-centric sense lies in the awareness of the rich heritage of Greek and Roman culture and histories developing through the generations supported by a growing enthusiasm

for the protection, research, studies and writings of many people. The theories that drive modern conservation have their genesis in the philosophical traditions of 18th, 19th and 20th centuries. Philosophers such as Kant, Descartes (Arlington 2003), Hegel (Rockmore 2003), Heidegger (Sheehan 2003), Nietzche (Schacht 2003) have influenced the theories and ideas developed by Winckelmann, Ruskin, Riegl, Brandi, and Argan, amongst some of the leading intellectuals of conservation theory in the west (Jokilehto 1998, 2006).

While there have been recent trends toward inclusiveness of other cultures and views (The Indian Charter 2004, Principles for the Conservation of Sites in China 2002, Nara Documents 1994, Burra Charter 1999) the current pervasive view of conservation and restoration has been driven by Euro-centric forces and now forms the basis of global heritage protection enshrined in the clauses of international charters and guidelines. This has lead to the call for an "Asian" approach to the conservation of the Asian cultural built heritage (MacKee and Hartig, 2007, 2006, Raghunathan and Sinha 2006, Seung-Jim, 1998, 2005, Taylor, 2004, Taylor and Altenburg, 2005, MacKee and Briffett 2000, Chen and Aass, 1989, Agrawal, 1975).

Beginning in the mid seventies and gathering momentum since the nineties a number of authors have established connections between Asian cultures and their structures and systems theory (Macy 1991a, 1976, Du Plessis, 2001, 2000, 1999, Bell and Morse, 2005, Khisty 2006a, 2006b). Macy's work makes links between the universality and mutual causality of Buddhist philosophy and the holism approach of Systems theory (1991a, 1991b, 1976, Schmithausen 1997). Du Plessis discusses the connections between systems theory and the basic characteristics of Asian cultures in the context sustainable development. She argues that the similarities are in the areas of holism, communality and "...its tools are intuition, participation, and adaptability and it resides within a cyclical causal framework." (Du Plessis, pp1/8, 2000). Bell and Morse (2005) working within the area of sustainable development establish similar connections to Du Plessis.

While not making links to systems theory studying the work of Reyna (1971), Radhakrishnan (1966), Muller, (1973), Singh (1971), Harvey (2003), Conze (1962), and Kalupahana (1976) writing on Indian and Buddhist philosophy and culture and

the works of people such as Checkland (1999, 1994), Checkland and Scholes (1991), Laszlo (1972) and Ackoff (1974) on systems theory links can be made that support Macy's and du Plessis contention of the similarity between Asian culture and philosophy and systems theory. The strongest is the concept of holism. With the notion of the appropriateness of systems theory as the basis of a philosophy for Asian conservation this paper develops an argument for an Asian approach to Asian conservation founded on systems theory. Having argued the case a framework for conservation is constructed that could be used to support decision-making and the formulation of guidelines and policies in the subcontinent, south and Southeast Asia in the wake of natural disasters.

This aim of this paper is present a framework for conserving the non-secular heritage based on investigations into the interconnections between Buddhism and systems theory. This is done in the context of reinforcing the appropriateness systems theory as a foundation for a conservation approach for non-secular heritage in the region particularly in the aftermath of natural disasters. The cultural built heritage is illustrated as a complex system within the larger system of the culture in which it resides; thus providing the development of a metaphysical basis for then constructing the framework. An analysis of the potential functions that elements of systems theory has for an approach to the conservation of the cultural built heritage leads to a classification of some of the major issues dealing with the conservation of the cultural built heritage. In the same way that conservation in the west has been founded on solid theoretical practices supported by the philosophical trends, this paper argues that the same process should take place in the context of Asian philosophies leading toward workable theories and attitudes to the issues surrounding conservation practice. The study confines its focus to the predominant philosophies of the subcontinent whose sources are the Vedic texts and the Upanishads as the fountainhead of all major philosophies of the subcontinent, south and Southeast Asia (Cooper 2003, Reyna 1971, Raju 1971). This is done with two objectives, firstly looking at these traditions as the basis of attitudes, and secondly discussing these in the context of systems theory which is based on the idea of holism and opposed to reductionism, similar in concept to the basis of Asian cultures (Khisty 2006a, 2006b, Macy 1991a, 1991b, 1976, du Plessis 2001, 2000, 1999, Checkland 1999, 1994, Jackson and Keys 1984, Laszlo 1972). Systems theory is proposed as a foundation for the concepts of values, authenticity and significance in the Asian context.

2.0 CONSIDERATION OF SYSTEMS THEORY AS THE BASIS OF A BUDDHIST METAPHYSICS.

Macy (1991a, 1991b, 1976) in her work as a Buddhist philosopher and Systems theorist has written extensively on both topics and as early as 1976 started linking aspects of Buddhist philosophy with some of the key issues of Systems Theory because this suggested "...the possibility that the one can serve as a tool for interpreting the other. The hermeneutical possibility appears to be reciprocal." (Macy 1976, p21). Macy saw that systems philosophy could "...(a) provide a schema 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 through out the observable universe." (p21, 1976). Firstly, one of the most common aspects that needs to be reiterated in the links between Buddhism and systems theory is the idea that both are empirically based in the sense that The Buddha never attempted to answer the larger metaphysical questions or the ultimate source or status of things. His drive was method, not the 'why' or 'what' but 'how'. How it happens that we suffer, how we become free (Harvey 2003, Kalupahana 1976). For systems theorists the point is how do systems operate not why or what. The idea of the relationship of the subsystems, communication and information flows and how these operate underline the importance of systems (Khisty 2006a, Macy 19991a, 1991b). If we examine Macy's first point, 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. Both share the focus on the how so that people can perceive their own functioning as a system and subsystem, thereby freeing them to act responsibly. This is also found in the scientific sense in cybernetics, the idea that a reaction occurs from some basic action. In this context this rests on communication and feedback loops and is cyclical in nature an important concept in Buddhism underpinning karma, and systems theory.

Khisty (2006a, 2006b) reinforcing Macy's approach and provides similar propositions through two papers on the connections between Buddhist philosophy and systems theory. He looks at the whole notion of systems theory and its application within many fields, however two issues that he develops are, firstly, that he believes a spiritual content is missing from systems theory (Khisty 2006a). The other issue is his linking of Buddhism and systems theory, based on the concept of Interbeing. This is an idea proposed by the Buddhist monk Thich Nhat Hahn (Khisty 2006a, 2006b) that encompasses the notions of interconnectedness, interdependence and interrelatedness. While he acknowledges many over laps between systems and Buddhism, based on holism, the interconnectedness of nature and human beings, essentially his proposal is that Buddhism offers a spiritual base upon which 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 his second 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 causality (karma), interconnectedness, interdependent co-arising, impermanence and emptiness, relating these to the principles that drive systems theory.

The links established by Macy (1991a, 1991b, 1976) and Khisty (2006a, 2006b) between systems theory and Buddhism, and by Du Plessis (2001, 2000,1999) with Asian cultures more broadly, have been significant for the argument of this study. Buddhism alone does not provide a strong foundation upon which to base a framework for the conservation for the cultural built heritage. While Buddhism and the influence of other Asian religious movements, such as Hinduism, have very solid spiritual and rational philosophies that guide human behaviour and activities is difficult to translate to a basis for developing notions or ideas of cultural built heritage conservation. This could also be said for Christianity and its various movements, however their philosophies have been pervasive in the development of theories and attitudes to western conservation. With it's argued synergies with systems theory the influence of Buddhism upon an appropriate framework for the conservation of non-secular built heritage in the subcontinent region can pervade.

3.0 THE CULTURE OF SOUTH AND SOUTHEAST ASIA AS A COMPLEX SYSTEM

To commence the investigation of systems theory as an appropriate approach to the conservation of Asian cultural built heritage requires that we either start from the point of heritage, as its own system, or attempt to locate the greater system of which it is a member. Locating the larger system allows us to understand the genesis and some important characteristics of the subsystem (Checkland 1999, Identifying, describing and understanding the ontology of this primary system is the initial issue that we address here. A number of systems theorists (Laszlo 1971, Checkland 1999, 1994, Ackoff 1974, Churchman 1968) have identified this issue in the systems approach and suggest that all systems can have their genesis in the greater global system or natural system. However, this would be too obvious and counterproductive to say that the cultural built heritage in south and Southeast Asia is a subsystem of the Human system or a Universal Cultural system. While in the very broadest sense this may be true, and would support the idea that cultural heritage is the responsibility of humankind as defined by UNESCO (1965), it does not assist in our understanding of the formation, characteristics or the metaphysics of the particular subsystem that is the focus of this study.

The cultural built heritage can be described as the product of a culture built to support a range of specific cultural activities that vary from country-to-country and cultural-to-culture. Buddhists construct a stupa or Vihara as a place of worship. This structure occurs throughout Asia in many different forms but not in other regions of the world, except where there are gatherings of Buddhists. This is an example of built heritage as a product of a culture to accommodate a particular activity. The argument here is that one larger system exists and supports the other; understanding the characteristics and needs of Buddhists allows us to understand the structure and characteristics of the stupa or Vihara. There are many more examples, however there are only two possibilities. In addition to being a product of the "Buddhist system" it could also be argued that it is more appropriate to consider it as the product of a particular larger cultural system. An understanding the structure and the characteristics of this system helps to comprehend how Buddhism has arisen, which then allows us to understand the various activities and products. While this is true it is necessary to understand the systems that we are dealing with

and provide the best genealogy and description so that the system or subsystem that we work with is fully developed and properly located. Following through on the discussion above, and for the reasons implied, it is proposed for this study to adopt the culture of the South and Southeast Asia as the larger system with many subsystems, this has a number of advantages. Firstly, it has been established that this region is a genesis for much of the cultural, religious and philosophical traditions of the rest of the greater region (Arlington 2003). The ideas and concepts founded in Hinduism have spread and been re-interpreted in philosophies such as Jainism and Buddhism (Raju 1971, Reyna 1971), religions that have subsequently spread throughout Asia in many different interpretations. South and Southeast Asia as a system provides a sound base within which there are many other subsystems that contribute to the "operation" of the system that help us understand the cultural For this study there is one primary subsystem, the Cultural Built built heritage. Heritage that is important to define, as it is central to the discussion of the proposed framework. A series of subsystems within a larger system such as the cultural built heritage, secular and non-secular heritage and various religious belief systems are proposed as the basis for investigating and interpreting the cultural built heritage of South and Southeast Asia. This structure forms the basis of the examination that will be undertaken with the framework that is the purpose of the next section.

4.0 DEVELOPING AN ASIAN APPROACH TO CONSERVATION IN THE CONTEXT OF NATURAL DISASTERS: INTEGRATING SYSTEMS THEORY AND BUDDHIST PHILOSOPHY.

Essentially, this discussion attempts to coalesce the disparate links between the cultural and philosophical traditions of the region under study and develop a viable framework for conserving non-secular heritage. With its links to Buddhism specifically, Hinduism and Asian culture more broadly, it is proposed in this paper 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 2001, 2000, 1999). This mechanistic worldview is goal-orientated, the systems worldview is process orientated (Du Plessis 2000, 1999). Consequently, and as discussed earlier, the conservation theories, practices,

guidelines and policies of the West arise from this 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. The basic principles of authenticity, significance and the values within the monument, it is argued here, are the "goals" of conservation. To achieve one or a number or all of the goals to determine how to conserve is the aim of conservation. It is these "tools" 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.

4.1 The development of a systemic conceptual framework.

As indicated above, 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 criteria (Jokilehto 2006). These criteria seek to analyse the monument in a rationalist framework concerned with components rather than in a holistic sense. Concepts that define the monument or 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. A systems approach allows those wishing to conserve the CBH study holistically the

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¹ The nine criteria are design, material, workmanship, setting, traditions, techniques, language, intangible heritage and 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.

process of conserving accounting for subsystems within the larger systems of culture and nation. The subsystems encompass questions of spirituality, naturalistic sensibilities (MacKee and Hartig 2007, 2006, Seung-Jin 1998, 2005) the cultural landscapes (Taylor 2004; Taylor, Altenburg 2006) along with values, norms and societies (Munjeri 2004) that may form part of the larger system.

This discussion has analysed 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. There is evidence that systems' theory has the ability to account for the differences and uniqueness of those monuments.

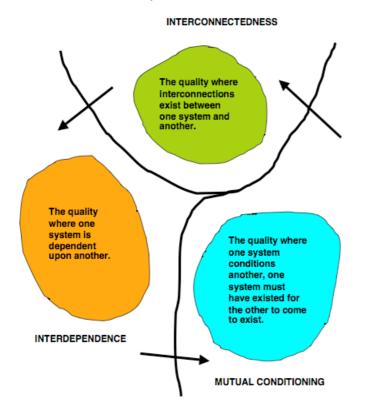
4.2 The components of a framework based on systems theory.

As discussed previously, there are a number of key principles of Buddhism; including impermanence, *karma*, *dukkha*, the eightfold path, and the four noble truths. Three principles of Buddhism that provide strong links with systems theory are universal interconnectedness, radical interdependence and mutual conditioning. It is suggested 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 these provide a basis for developing a theoretical framework for conservation in South and Southeast Asia. Table 4.2 provides the description of the elements of the framework while Figure 4.2 summarises the process of the framework.

Table 4.2. The three key relational qualities of 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 upon another.
Mutual conditioning	The quality where one system conditions another, one system must have existed for the other to come to exist.

Figure 4.2: This figure summarises the process of the framework and how this would be operationalised.



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 implicate order, and thus everything is a microcosm of all other things. Society along with all other things, are embedded in a context, within the universal system (Khisty 2006b). For non-secular cultural heritage the implications are that since their creation there has been a continuum that ties these to each period in time as much as the previous and the future. This suggests that this heritage is

interconnected to each period and relevant to each period in equal proportions. At another level it also implies that there is interconnectedness between the heritage and those that have created the heritage initially, and obviously. However there is also interconnectedness with those who consume the heritage through time. Within the heritage object there is then 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. The interconnectedness described shows that the heritage is dynamic with relevance continuing through time. In relation to the systems that have been established in this study there can be traced an interconnectedness 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 relying on mutual assistance, support, cooperation, or interaction between everything is Radical interdependence, for the purpose of the framework it is sufficient to refer to Buddhist cosmology considers the entire cosmos as a interdependence. 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. This quality explores 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 it is this action that provides the meaning. If people hadn't worshipped around it or hadn't developed a belief in its sanctity then what would it represent or be what it is or would it exist. In this way one is dependent upon the other for its significance or meaning. There are interconnections between these two aspects, however there is a greater link because of the dependence. Interconnections exist in a number of ways between many systems as discussed earlier, however 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). 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 Jajaratnam 1 this original conditioning lead to the condition of the environmental system which lead 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 of love first to bury a Queen and then the Emperor who worshipped her which 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 dealing with the origination and 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.

4.3 Discussion of the framework.

The framework and supporting ideas presented here provide an alternative approach for conservation strategies for the cultural built heritage in South and Southeast Asia in the wake of natural disasters. It is argued that systems theory provides a means of operationalising this 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 (Jokilehto 2006) that are essentially a series of material terms with token gestures to traditions, feelings and spirit. The acceptance of the notions of intangible or immaterial values as described in the Nara Document (Larsen 1995, ICOMOS 1994) or the Indian Charter (2004) are really only the presentation of possible exceptions to the accepted procedures and interpretations that are given in international charters and guidelines. achieve enough toward substantiating or reinforcing an alternative method of looking at heritage. The framework presented here has moved on from these documents and has gone to the very roots of the cultural and philosophical experiences of the region to explore how an alternative might be developed. This is much in the same way as the current systems, they are only a product of the cultural and philosophical traditions of the west as argued earlier. Conversely the premise for this framework has been to trace a similar journey with the outcome presented in this framework.

In the tradition of systems theory the framework would be made operational by the use of empirical research and data (Hutchings and Cassar 2006, Bell and Morse 2005, Checkland 1999, Laszlo 1971). The answers for the 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 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, while Western heritage is assessed to have authenticity resulting from a number of material values (Taylor & 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.

The 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 probably 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.

5.0 CONCLUSIONS

This paper has presented an alternative paradigm as a structured framework for interpreting the non-secular cultural heritage of South and Southeast Asia for the purposes of developing conservation approaches. Based on established synergies between systems theory and Buddhism specifically (Macy 1991a, 1991b, 1976, Khisty 2006a, 2006b) and Asian cultures more broadly (du Plessis 2001, 2000, 1999, Churchman 1968), the framework has been constructed that takes into account the intangible values, sense of place, cultural traditions and philosophies that are elements of the 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. For these reason Buddhism is seen as a holistic approach to the questions of life and matter. These provide the basis of a Buddhist hermeneutic and so are seen to explain most of what occurs in Buddhism, as discussed in this chapter these 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. To support the construction of the framework systems theory has been used to provide a holistic method to analyse the complex relationships between the

components of cultural heritage. Systems theory is a methodology of investigating problems from the point of view of looking holistically at the problem. Traditionally problem solving in the scientific context has been reductionist in nature, breaking down the larger problem into smaller components. Systems theory has focused 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.

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