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The Paradigm of Cosmovision – Based Conservation

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Abstract

The purpose of this article is to try to explain the benefits that can be obtained by learning the traditional knowledge of indigenous people around the world to overcome current perceptions and practices about the environment that has experienced serious degradation. Traditional Ecological Knowledge offers the appropriate tools to learn more the insights of "Sacred Balance". The research method used in this article was an in-depth analysis of the literature written by experts in the fields of biodiversity, culture, anthropology and ethnography. Synthesis has been taken from the review of this literature as described in this article with various modifications from field verification. This verification has been carried out in Bali through panel discussions with the heads and members of the banjar (village association) in Gianyar, Jatiluwih, Kerobokan and Ubud. The panel's focus was on the concept and practice of "Tri Hita Karana", the philosophy of Balinese life that embodies the cosmovision of "Sacred Balance". The results showed that the cosmovision of "Sacred Balance" which emphasizes on harmony and equilibrium as a way of life is a philosophy that can be emulated by humans throughout the world not only to achieve conservation but also a means for peace and happiness. This can be obtained by further studying this philosophy which has been practiced since time long standing by many people around the world through deeper studies of Traditional Ecological Knowledge.

Keywords: *Conservation, Cosmovision, Sacred Balance, Traditional Ecological Knowledge.*

A. Introduction

There is an increasing need lately for humankind to adopt a more benevolent attitude towards the environment. Western views have placed humans apart and above the rest of nature which has led to a form of possessive individualism that through its utilitarian application has contributed to the current serious global degradations. Neither has so called "modern" science with its accumulations of empirical facts been able to unravel the growing problems facing nature and its relation to humanity.

Indigenous people's philosophy of life provides better insights into these issues on human-environment among various cultures of the world. This philosophy is based on a general understanding that the living world is made of three interrelated worlds : the human world, the natural world and the spiritual world together representing the worldview or cosmovision. This cosmology provides the local people with a living guide strongly embedded in their religion directing their behavior to maintain a harmonious balance among the components of the cosmic order. This means that such worldview depends not only on the relations between humans and nature, but also on the relations between human and the invisible ancestors, spirits and deities, providing links between life, land and society encapsulated in the concept of the "*Sacred Balance*". This indigenous philosophy of life is therefore guiding human behavior within the cosmic order to maintain or restore the "*Sacred Balance*" in order to establish a relations of harmony and equilibrium with the rest if the universe, rendering human efforts as principally conservation oriented. The analysis and understanding of such complex relationships among the invisible factors of knowledge, beliefs and perceptions vis-a-vie conservation practices can best be served by the study of Traditional Ecological Knowledge which provides more complete and accurate data than western scientific disciplines.

The purpose of this article attempts to shed light on the benefits that can be derived by learning the traditional knowledge of indigenous people worldwide to overcome current perceptions and practices on the environment which has undergone serious degradations. Traditional Ecological Knowledge offers the appropriate tools to study further the insights of the *Sacred Balance*.

B. Literature Review

Cosmovision

The word 'Cosmovision' can be divided into 'cosmos' and 'vision'. The etymology of 'cosmos' can be traced back to its Greek roots: stemming from the Greek word "Kosmos", it refers to an ordered world or universe including all of existence. Ossio(1997) explains how a society denotes its knowledge through their perception of the universe's composition. A cosmovision present show human beings position themselves within a certain society. Nowadays it is exactly this notion of knowledge that has become the topic and the name of a

field of science, cosmology that is conceptually and thus not mainly based on modern science. In modern science, the cosmos or the 8universe is a representation of the total of all physical things (Dierckxsens, 2012). This refers not only to matter in its firm state of being but also to matter in concepts like time and space(Ossio1997: 548).

Throughout time and along many anthropological discussions, the term 'cosmovision' somehow seems to have arrived at two different meanings. Firstly and mainly, it refers to cultural and religious matters. The second meaning, as we mentioned before, has a deeper focus on a scientific aspect to the exclusion of a wider context. It has been claimed by Greaves (2002) that only the history of religions continues to look at cosmologies in the older sense of the word. Cosmological studies seem to be associated with the secular domain, as it can be perceived in the literature. This field of study is usually based on a holistic approach and shows profound interest in structure and order. It is easily associated with the study of religious world views. Every religious world view could be seen as a cosmovision, but not the other way around (Dierckxsens, 2012).

Traditional Ecological Knowledge

The concept of traditional ecological knowledge (TEK) comes up frequently in certain segments of environmental and natural resources science and policy literatures (Houde, 2007). According to Usher (2000:285), TEK refers specifically to all types of knowledge about the environment derived from experience and traditions of a particular group of people. TEK is a rational and reliable knowledge that has been developed through generations of intimate contact by native peoples with their lands (Mauro and Hardison, 2000). It is held by peoples in relatively nontechnological societies with direct dependence upon local resources (Kimmerer, 2002). It is applied by combining the knowledge and skills that are a product of a person's cultural history and learning, and expressing them in the context of prevailing environmental circumstances currently affecting resource use and management (Charnleyet al., 2008).As defined by Berkes (2008:7), TEK encompasses (1)factual knowledge about ecological components and processes, (2) knowledge put into practices of environmental use, and (3) the cultural values, ethics, and philosophies that define human relationships within the natural world. To various degrees, all these TEK "categories" have contributed to environmental research and management by improving baseline data on species and ecological processes (Gagnon and Berteaux, 2009), by providing insights that can be used to develop alternative resource management systems or by renewing conservation ethics (Berkes, 2008). TEK can be a source of new biological insights and potential models for conservation and sustainable utilization (Mekonen, 2017).

C. Research Methodology

This article is an in-depth analysis of a compilations of literary researches and articles by a multiplicity of renowned experts in the field of bio-cultural diversity, ecology, anthropology and ethno science experts such as Maffi, Warren, Slikkerveer, Geertz, Haverkort and Posey. A synthesis has been drawn from these literary reviews as described in this article with various modifications from field verifications. These verifications have been carried out in Bali through panel discussions with heads and members of banjars (village associations) in Gianyar, Jatiluwih, Kerobokan and Ubud. The focus of the panel was on the concept and practices of "*Tri Hita Karana*", the Balinese philosophy of life which embodies the cosmovision of the "*Sacred Balance*".

D. Result and Discussion

1. Cosmovision and Traditional Ecological Knowledge

In the ongoing endeavour to extend in-depth information on human-environment interactions among various cultures around the globe, ecologists, anthropologists and ethno scientists have further studied *Traditional Ecological Knowledge (TEK)* as a major subject of the multidisciplinary field of ecological social sciences. As Oviedo and Maffi (2000) note, '*In many cases, TEK is found to be more complete and accurate than Western scientific knowledge of local environments*'. This position has also been supported by the Convention on Biological Diversity as one of the major international organisations underscoring the importance of indigenous knowledge for *in situ* conservation. The advances in this field have not only contributed to the ongoing international debate on the indigenous peoples' role in conservation and sustainable development, but also helped to bridge the gap between the natural and biological sciences. These studies have sought to contribute to the conservation of biocultural diversity of the indigenous and traditional peoples' own view and vision on their use, management and conservation of resources. In finding an answer to the crucial question which Maffi (2004: 22) rightly poses in this context: *'What determines the vulnerability or resilience of the nature-society system in particular kinds of places and for particular types of ecosystems and human livelihoods?'*, there is a growing interdisciplinary interest emerging to study *Traditional Ecological Knowledge* with a view to analyze and understand the complex relationships among the 'invisible' factors of knowledge, beliefs and perceptions in relation to traditional conservation practices in various settings.

The study of local perceptions and belief systems within the dynamic context of environment and development in relation to conservation has strongly influenced the recent interest in the field of ethnobotany, Various ethnobotanical studies which have been able to assess *'indigenous management systems'* from the local people's view indicate that the key to maintaining the prolonged use of resources lies in local belief concerning management of

agricultural and botanical resources. Also, comparative research in medicinal, aromatic and cosmetic plants and herbs reveals a similar predominant influences of traditional views of nature on the use of these plants for forest conservation and improvement of health care.

Linking up with classic ethnoscience studies in the 1950's of local perceptions and classifications of indigenous peoples, followed in the 1980's by a new, more dynamic approach of indigenous knowledge systems within the context of development, the 1990's heralded a more differentiated research effort into the knowledge, beliefs and practices of indigenous and traditional communities for biocultural conservation. The cross-cultural approach of Warren, Slikkerveer and Brokensha (1995) to define the dynamics of local knowledge as the *'cultural dimension of development'* presented already a compilation of case studies in which gradually the recognition of a spiritual dimension of *Traditional Ecological Knowledge* started to emerge. Later on, this complex dimension of traditional biocultural conservation was explicitly brought to the fore in the pioneering work by Posey on *Cultural and Spiritual Values of Biodiversity*, published as a complementary study to the comprehensive *Global Biodiversity Assessment* of Heywood (1995).

Indeed, for the peoples themselves*, Traditional Ecological Knowledge* embodies more than a mere accumulation of empirical facts. In many cases it is based on a general understanding that the living world is made up of three interrelated worlds: the human world, the natural world and the spiritual world, together representing their worldview or cosmovision. Although it has become clear that there are several factors which-from a Western point of view-cannot be brought directly in relation with local conservation practices, they obviously guide many of the traditional practices and methods whereby local people manage and use their diverse resources in a sustainable mode. Theses factors are part of the cultural and spiritual worldviews or cosmovisions providing the base for most indigenous knowledge systems including *Traditional Environmental Knowledge*. As documented by several studies such as by Plaskow and Christ in India (1989), Haverkort et al. in Peru (1992), Millar in Ghana (1993:1999), Ramakrishnan et al, in India (1998), Mahale and Soree in India (1999) and Slikkerveer in Indonesia (1999), in many indigenous and traditional cosmovisions, people perceive the universe as made up by these three worlds: the human world, the natural world and the spiritual world. While the human world includes the social life of the people in all its dimensions – community life, family and kinship ties, ethnic groups, traditional leadership and institutions – the natural world encompasses nature in all its manifestations-animals, plants, crops, trees, landscapes, rivers and seas. The spiritual world is often composed of a variety of spirits-deities and gods, and the ancestral spirits. These three worlds are interrelated, rendering the various notions to form the cosmovision in which humans take a central position. In essence, cosmovisions are the

organizing spiritual and conceptual frameworks used by many indigenous peoples to organize themselves and integrate their communities into the world.

From an *emic* point of view, a division of six different types of resources can be made on the basic concept of these three interrelated worlds, united in the local cosmovision. As Haverkort, Van Hooft and Hiemstra (2003) note, they include:

- natural resources, such as land, ecosystem, climate, plants and animals;
- human resources, such as knowledge, skills, concepts, ways of learning and experimenting;
- human-made resources, such as buildings, infrastructure and equipment;
- economic-financial resources, such as markets, incomes, ownerships, price relations, credit;
- social resources, such as family, ethnic organizations, social institutions and leadership;
- cultural resources, such as beliefs, norms, values, festivals and rituals, art, language, lifestyle.

In this way, the cosmologies provide the local people with a comprehensive philosophy of life, often strongly embedded in their religion which guides them in their behaviour to maintain a harmonious balance among the components of the cosmic order. Their more or less sanctioned conduct includes their use, management and conservation of their resources, with the ultimate objective to achieve their fulfillment of life. These worldviews on the cosmic order and its components form the base for most traditional philosophies of life, guiding human behaviour and religious conduct, rendering the people as guardians or stewards of their environment. Moreover, many of these traditional philosophies have continued to play a major role not only in the maintenance of the human relations with the environment, but also in the overall survival of indigenous cultures under pressure of external forces, development experts and scientists ignoring, neglecting, forbidding or ridiculing this traditional system for centuries.

2. Traditional Worldviews on the 'Sacred Balance of Nature'

The increased interest in holistic and philosophical aspects of traditional peoples' 'indigenous management systems', natural and social scientists are continuing to document in their studies on *Traditional Ecological Knowledge* the specific orientation of indigenous peoples towards sustainable use and conservation of their resources. Here, a new impetus is given to biocultural systems approach to the study of indigenous management and conservation of biocultural diversity in developing countries. Embarking on the evidence that most traditional livelihood systems are constantly adapting to changing social, cultural, economic and ecological conditions, these studies contribute to the

literature that such systems are not always inherently destructive but in many cases rather sustained. Although these principles cannot be regarded as universal, according to Posey (1999: 4), they emphasize in general the following values:

- co-operation;
- family bonding and cross-generational communication, including links with ancestors;
- concern for the well-being of future generations;
- local-scale self-sufficiency, and reliance on locally available natural resources;
- rights to lands, territories and resources which tend to be collective and inalienable rather than individual and alienable;
- restraint in resource exploitation and respect for nature, especially sacred sites.

The last mentioned value of *'respect for nature'*, especially for sacred sites, underscores the indigenous peoples' cosmovisions as an integral part of their culture. Although, basically, management and conservation are rather pragmatic activities, indigenous peoples generally regard their knowledge to be rooted in a spiritual base. To them, all creations are sacred, and in their holistic view of the universe, the secular and sacred are often inseparable. By consequence, the knowledge about the environment not only depends on the relation between humans and nature, but also on the relation between humans and the invisible world of ancestors, spirits and deities. The links between life, land and society, encapsulated in the concept of the *'Sacred Balance'* is often part of the local belief system. For example, such relationship is well expressed in traditional African religions which are regarded as a way of life with the aim to bring order into human relationships with fellow humans, and with the environment (*cf.* Opoku 1978; Odera Oruka 1994; Agazzi 1994).

Evolving from 'new' ethnoscientific research showing that several indigenous systems of knowledge and technology are being marginalised or put at risk of extinction as a result of external forces, Slikkerveer (1999:174) documents that the concept of biocultural diversity has also been further elaborated: *'in order to stress their crucial complementarity for achieving an alternative, less exploitative philosophy of nature and the environment for improved sustainable natural resource management and conservation'*. Similarly, Haverkort & Hiemstra (1999) document on the sustained agricultural system in the Andean Highlands of Bolivia: *'In working together with rural communities, the technicians learned that farmers in their tradition were not only practicing organic farming, but that their knowledge was based on a comprehensive philosophy that was the result of a worldview or cosmovision that was much richer than expected'*. This perspective links up with Harmon (1992), who identified a number of indicators of the world's cultural diversity, ranging from the use of local languages, ethnic affiliation, forms of social organization practices, land management, diet, medicine, to aesthetic and religious manifestations. His

assessment of the current status of these indicators reveals an overall downward trend in all cases. Since the position of humans within the universe is an essential component of most Non-Western philosophies rooted in various religious systems, it is interesting to note that in contrast to the Judaeo-Christian view of nature which has dominated Western philosophical thought, the related environmental ethics of several indigenous philosophies are not human-centered.

Indeed, the common Western view of nature in which humans are placed apart, and above the rest of nature has led to a form of possessive individualism which through its utilitarian application of modern science and technology, according to some observers, has contributed to the current global environmental degradation. Odera Oruka (1994) argues that this philosophy is spreading in today's world: *'as pluralistic democracy and a free market economy are becoming the dominant political and economic norms for humanity'*. Such anthropocentric ethics of Western philosophy are not found in the less harmful environmental philosophies, indigenous to Africa and Asia. As Wiredu (1994) notes: *'It is well known that Hinduism, Buddhism, Shintoism, Confucianism, Taoism-all in their different ways teach respect for nature'*. In these Non-Western systems of thought, human beings are basically seen as fellow participants together with animals, plants and non-living things in one organic system in the universe.

As this philosophy of life is guiding human behaviour within the cosmic order, *i.e.* to maintain or restore the '*Sacred Balance*' in order to establish a harmonious relationship with the rest of the universe, it renders human efforts principally as conservation-oriented. For the local population, in daily life cosmovisions not only provide explanations of the way in which spiritual and natural processes are taking place, but they also form the basis for peoples' interventions in nature and culture. As Posey (1999:5) notes, harmony and equilibrium are basic concepts in most cosmovision, and can provide: '*balance for well-being through relationships not only among people, but also nature and deities*. Thus, the local practices to manage, use and conserve resources can be regarded as a traditional philosophy guided by soul, nature and religious beliefs for human behavior which providing for a *Sacred Balance* way of life.

F. Conclusion

The cosmovision of the "*Sacred Balance*" which emphasizes on harmony and equilibrium as a way of life is a philosophy that can be emulated by humankind worldwide not only to achieve conservation but a means for peace and happiness. This can be had by further studying this philosophy which has been practice since time immemorial by many people across the globe through a more thorough study of Traditional Ecological Knowledge.

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