

REACTION PAPER

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All the papers that were presented including the various reactions have provided us a good account and interpretations of the rich cultural belief systems and myths particularly with regards to man's creation and his ecology as perceived and practiced by selected tribal groups in the country.

From the perspective of natural science I'll attempt to do my version of analysis but from a limited viewpoint of ecology, for this is what my training in the field and my very casual encounter with tribal communities will allow.

The objective of this ecological analysis is to help the audience appreciate the wide ranging significance of cultural beliefs, myths and rituals and the functional role they play in shaping human behavior and guiding bio-physical interactions.

The analysis would proceed by treating cultural myths and rituals as aspects of human ecosystem. By ecosystem is meant to include the natural or bio-physical environment and the social cultural aspect.

From this perspective, we could discern that cultural myths relating to creation and environment serve as adaptive strategies for the perpetuation of the human species. Cultural beliefs often provide interpretations, understanding, security, and the basis for social solidarity and action, and in this sense, beliefs are considered primarily as adaptive strategies. Moreover, these beliefs are critical for the survival and continued well-being of the cultural communities as these enhance preservation of the physical environment.

We will discuss the possible ecological principles behind some of these adaptive strategies and provide some specific examples as described in certain papers earlier presented.

It will help us if we analyze the tribal perceptions based on the context of systems as Dr. Robert Rice suggested specifically on human ecosystems. There are at least four aspects/components of this human system which are related to our discussion. They are Ideology, Information Flow, Hierarchy or Social Structure and Behavioral and Population Dynamics.

We would endeavor to discover the basis or the ecological principles with which the various beliefs, cultural practices, symbols, and rituals are anchored upon under each component.

1. *Belief System or Ideology.* I'd hazard to say that belief systems serve primarily as adaptive strategies and therefore critical for the survival and continued well-being of society and its members. These belief systems cover myths, songs, rituals, value systems, taboos and rituals which cut across the various aspects of human activities. These beliefs serve as the underlying force behind technology, social/hierarchical order and population dynamics and provide the thread that makes up the larger social fabric. It promotes cohesiveness among the members.

Ideology recognizes the fundamental tenets of life that the unity or cohesion of organisms, tissues, cells and molecules spells life while their disintegration means death and decay. Invariably, it is my observation that belief systems as assembled and manifested in various forms serve to guide and insure harmony and order, motivate or inspire (or energize), moderate and regulate the behavior and activities of all the members of the community.

A shared pattern of beliefs provide a strong sense of solidarity and unites the members into an efficient and cohesive group which is expected to succeed in ensuring maintenance and the continuity of the community.

2. *Social Structure Hierarchical Order.* All the papers presented highlighted the virtues of harmony and resource sharing as this relate to conservation, social order; maintenance and continuity of tribal communities. Harmony on achieving balance by any forms of organisms or components of an ecosystems is a basic dynamic ingredient in any ecological processes. Stability of communities or organism, whether simple or complex, is described

as an ecological phenomena called Homeostasis or a state where the various components of the ecosystem come into balance or harmony with each other. In short, these practices translate ecological balance on the human plane. This graphically describes is the dynamics of evolution as a spontaneous adaptation or adjustment and harmonizing process.

Human societies anywhere seem to share the tendency to account for their existence in relationship with things. This unique human tendency to conceptualize produces cultural ideas about the nature of the universe (as described in several papers with diverse characterization) and its process, and controlling forces (cosmology like turning into a stone), beliefs about how the universe was created and developed (cosmogony) and how man should interact to be in harmony or in balance or in balance with these processes and forces are examples of this stabilization process.

To situate itself in the order of things, and understand its role in the system, the tribal communities have clearly established the segmentation and organization of time and space including social hierarchy - as can be gleaned from the recognition of the supreme being and the various lesser gods, humans, and other supernatural beings above the mortal plane.

3. *Information Flow (Technology)* - One can discuss that cultural belief systems are meant to be handed down from generations to generations for the benefit of the tribal people. In the perpetuation of natural systems, information flow as a medium of technology is a very fundamental function. The flow of information as in energy and materials must take place if the entire universe or any group of organism decides to continue to exist.

Songs, epics, rituals and other cultural practices and folklores involve the transmission about the cultural traditions and practices of the tribal group from one generation to the next. The pattern of beliefs may also provide a framework in which information and impressions can be organized, stored for later use and eventually transmitted to other members or other generations.

4. *Behavioral and Population/Dynamics* - Assigning spirits in trees, in the land, the water, animals, mountains appeared to be a commonality among the papers presented. The elements of sanctity, awe, and reverence are accorded by tribal peoples, or, in fact any people or race for that matter, to what is perceived to be enchanted, unexplainable, divine and superior and this has tremendous impact on the conservation of resources.

Paying homage or performing rituals, offerings to a variety of spirits or gods, seemingly are psychologically important in the sense that it provides meaning and explanations for these aspects of human experience that are not easily or fully comprehended through normal thought. Reverence to surroundings underliably is a potent force in tribal communities where this is practiced, the forest and other natural resources remained intact and well protected. These beliefs seem to allow the tribal groups to proceed toward particular goals with greater confidence in themselves and the universe' willingness to cooperate with them toward the goal. This is apparent in tribal offerings during planting season to ensure a successful crop. Clearly these are supplications to the many elements of nature not to unleash their hostile forces to avoid crop failure - which bring us to the reality that in the topics agriculture faces a lot of uncertainties.

Beliefs in evil spirits, bad omens and punishments, petrification and rewards tend to encourage certain types of social behavior and expression and also tend to discourage other types. In this context, they may be extremely important forces in effecting social conformity and order. These beliefs also ensure compliance among members of the need for prudence and judicious use of their natural resources.

Achieving a certain kind of behavior is to put order in a natural system. A system of rewards and punishments is commonly used here. This phenomenon exists in nature through rewards and repellants. For example, the process of pollination is perpetuated through attractants (honey) for a preferred bee.

Other Observations:

1. Strong cultural beliefs in taboos, marital fidelity and monogamy are common among tribal communities. Such beliefs play a significant role in controlling population in these communities.
2. The myths in prudence and thriftiness in various tribal groups have a bearing in natural resources conservation and the sustainability of livelihood activities such as hunting and food gathering. Obviously, it is encouraged among these communities no to gather, hunt or consume more than what they need. This is a sound conservation practice.
3. The technology of hunting and food gathering seemed to have developed from keen observation of the natural world processes. These include the employment of:
 - a. Mimicry in hunting games.
 - b. Understanding of seasonal fluctuations to guide farming and hunting.
 - c. Culture and domestication of honey bee, fishes, animals and food crops.
 - d. Use of tools, superior intelligence and cunning as survival strategies.
4. The belief system ensures that the following conservation virtues are developed:
 - a. Resource-sharing; communal ownership of resources.
 - b. Hierarchy of status of tribal members and even their gods.
 - c. Virtues of being peace-loving, patient, prudent and gentle people.
5. The practice of establishing territorial limits avoids conflict of resource-use.

In summary, tribal beliefs, myths and practices invariably lead towards the institution of order and harmony among the tribal members, then among the tribal groups and with their bio-physical environment. Summarily, this promote the wise use of their natural resources.

These evolved "Rules" which compel respect of nature and everything in the cosmos allows the tribal groups to co-exist with nature and for society to live in perpetuity, hence, in harmony with the natural environment.