

The Need for an Integrative Model of Myth Making (A Viewpoint)

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Arguably, the realm of neurobiology and myth provides a fertile area for research and analysis for young scientists to explore. The universality of myth may be suggested to offer a “novel environmental stimuli” which enables participants with a degree of ontological security within their cognizant environment. Myths provide templates for organizing life, assisting during life crises and self discovery. Myths may deliver psychological healing and directs human consciousness through various life stages, and for mitigating the potential for psychological fragmentation. Myth narratives play a part in arousing sub-cortical levels in the brain’s limbic areas which coordinate affective states. In this sense, myth serves as a neural model for its motor expression ritual.

Characteristic of myth and ritual sequences in many societies is there capitulation of the mythical world, its entities, animals, places and objects. The mythical world is “created by the process of classification and the repetition of the classification of itself perpetuates the knowledge which it incorporates”. An understanding of myth demands a neurobiological examination of those brain areas where myth and ritual are generated. As suggested, that the study of human behaviour under the auspices of social science needs to locate human symbol making capacity to human biology. Human beings are biological beings with a unique propensity towards symbolic construction. The crowning point of human beings is an advanced central nervous system of massive parallel capacity for complex problem solving and self awareness. The human brain consists of approximately 100 billion neurons and 100 trillion synaptic connections; an extensive neuronal network operating a vast range of cognitive functions. Human cognitive functions are vehicled via cortical maps, connecting the neo-cortex, limbic and complex areas of the brain. This neuronal circuitry is a multifarious feedback system which modifies “multiple and parallel mappings of sensory surfaces,” and interactions with motivational and affective “structures in subcortical areas”. The neurosensory system responds to certain patterns of stimulation which are proffered by myth and ritual to the production of arousal, ecstasy, distress, anger, calm. Representation of mythic and ritual patterns can be perpetuated, and “modified to produce variation, and communicate mimetically, dramatically, or symbolically to others, in storied forms which we learn and are socialized”. The brain has a triune level of organization, consisting of composite archaean limbic areas and the neocortex. Each part of the brain has a different phylogenetic history and “distinctive organization,” albeit, being interconnected by the neuronal network. The neocortexco-ordinates

abstract thinking, problem solving, language, and self reflexive consciousness, the birthplace of culture which modifies genetically programmed behaviour. “The evolutionary hypertrophy of the prefrontal cortex,” resulting in much of human higher brain functions characterises “human cognitive ability” such as the inventions of symbolic behaviour. The neuroplasticity of the neural tissue is subjected to the emergence of a supervenient symbolic world such as myth” and ritual. Consciousness is largely dependent on “somatic marking” such a ritual which foregrounds the body as mythic representation.

In addition, the brain consists of left and right hemispheres. The right brain hemisphere seems to be actively involved in the social world while the left brain hemisphere seems to be more receptive and private. More investigation needs to be done on the two brain hemispheres and symbolic emergence. The right brain hemisphere which coordinates intuitive, artistic and spatio-temporal modalities has been largely dismissed.

The construction of myth is inherent in the neural structure of the brain. From an evolutionary point of view, the problem solving capacities of myth which herald a cognitive imperative maybe regarded as being cultural advantageous to environmental adaptation. Myths are organized precisely because cognition demands order and existential mastery. Such “organization of reality into mythic structures” is seemingly innate and an immanent feature of the human brain. In short, humans cannot live without creating myths. As Hefner declares: “Our hardware is so made that we are open to the sacred”.

My overview of neurobiology to the study of myth as attempted to highlight areas in which memetics may be involved in such an analysis. Bateson’s ideas of high civilisation are important here. The pathologies of the present age indicate an over-emphasis of left brain hemispheric functions which have resulted in loss of adaptational strategies. This brain asymmetry needs to be redressed. The dilemma facing modern societies is one in which we are facing collective entropy due to widespread ecological degradation and loss of social flexibility. Bateson purports that a “budget of flexibility” of ideas is central to the workings of civilization and that the transmission of unwise ideas has led to our present pathology. Our present civilisation is in need of a more integrated brain function which harmonises left and right brain hemispheres. Myth assists in the training of the human instincts and emotional life. As I have shown, the neuroanthropology of the brain views myth as inculcating basic life principles. Mythogenesis is intertwined in the neural chasis; the biogenetic roots of myth have influenced human cultural and biological evolution. The memetic complex of myth is facilitated by ergotropic and trophotropic systems which when working in unison may generate new memes. These memes are transmitted in mythopoeic forms between human generations that produce new possibilities for cultural evolution.