

Charles Andersen
Dr. Patrick Mahaffey
Hindu Traditions MS 503
Fall Quarter 2003

THE QUANTUM KEY TO HINDU TRADITIONS

Rising like a modern ziggurat from my coffee table is this immense pile of books. There are books about the Rig Veda, the Upanishads, Indian Philosophy, Indian History, Ramayana, Mahabarhata, Bhagavad Gita, Hindu Mythology and so forth. Perhaps one more book will hold the key, but alas I cannot find it. Stories flood my consciousness, images of gods and goddesses, warriors and immense spans of time—endless teeming images of icons and yantras, mandalas and other symbols of this ancient and alien world view. Zimmer hasn't helped nor has Campbell. The words of sages and scholars, sagas and stories teem in my rapidly declining consciousness. Then the doorbell rings, and like manna from heaven there are more books from Amazon.com. Surely Feurstein will hold the key. Alas, only more frustration. While stimulating, Tantra holds no golden key for me.

And then, like the sunrise of a new dawn it strikes me that my quest is the fundamental problem. I am culturally bound by the quest for the Holy Grail. Much like western science searching for the Grand Unified Theory (GUT), I find myself looking for that magic algorithm that will make everything clear. Frustrated like those seeking to reconcile relativity and quantum mechanics, I cannot find that sacred bridge that will allow me to cross easily from one world view to the next. Paradoxically, in that insight I found my "Golden Key."

In a recent work by Jeffery Satinover, he states:

Part of the puzzle, I knew, had to do with the contrast—not really a contradiction, but a subtle tension—between the two premises of modern biology: machinelike behavior and randomness.
Pg. 157

In essence then, the problem I've been experiencing is the dichotomy between determinism and randomness. I want to be careful so that we make the distinction between an order/chaos problem and a determinism/randomness problem. Chaos is not necessarily random, because of the idea of Sensitive Dependence on Initial Conditions (SDIC). La Place stated:

If we can imagine a consciousness great enough to know the exact locations and velocities of all the objects in the universe at the present instant as well as all the forces, then there could be no secrets from this consciousness. It could calculate anything about the past or future from the laws of cause and effect. (quoted from Archetypes and Strange Attractors by John R. Van Enwyk-pg 40)

Chaos isn't necessarily random, it's just the result of very difficult computations that are considered to be non-computable. For a fuller discussion of the difficulties of non-computable problems see Goedel-Escher-Bach. So the idea behind determinism is that if

we had the right “algorithm” we could know all future and past states of any system. While paying lip-service to the Heisenberg uncertainty principle, western science is still looking for their holy grail (GUT). There are those who think “string theory” may be the golden key.

So, as I see the problem now, virtually all western systems are deterministic at their heart. God is just another term for a deterministic system, as is science, and most western philosophy—looking to find the key to understanding everything. I have been trapped in a western paradigm without realizing it. In the sense I’m going to use randomness, I’m going to refer also to mystery—that which cannot be known or predicted. One of the foundations of western science is that of predictability. The notion of mystery, while acknowledged, is avoided at almost any cost in the west. Not so with Hinduism.

Hinduism, I now believe, comes from a totally different paradigm—one that not only accepts randomness, unpredictability and mystery, but embraces it as a fundamental aspect of life. My first clue should have been the dice game in the Mahabahrata. Dice is one of the most obvious and clear symbols of randomness that humans have. While that may have been a “loaded” dice game, all subsequent events were a result of the consequences of allowing what was perceived to be randomness to determine events.

While Zimmer may have been right when he stated from a western perspective:

Hindu philosophy, Hindu orthodoxy are fundamentally monistic, monotheistic, in spite of the hosts of gods and super human beings with which the mythology teems. The multitudes of apparitions are only specializations, specific virtues, attitudes, components, facets...the apparently contradictory aspects of existence—creation—duration, dissolution—are one and the same as to origin and meaning and end....The understanding of this unity is the goal of Hindu wisdom. Pg. 136

I don’t believe that is necessarily accurate within the context of Hinduism itself. I now think that all forms of “reductionism” are alien to the fundamental nature of Hinduism. In order to demonstrate that the “quantum key” is not reductionistic I’ll need to provide some basic background.

The first thing we need to understand is that the “world” as we know it exists on many different scales. There is certainly the cosmic scale where everything is vast and gigantic. Then there’s the earthly scale which, while enormous, is somewhat comprehensible to us. Then there’s the human scale of our ordinary lives, and beneath that is the molecular scale of all the biological actions that produce the effects we experience. Below the molecules is the atomic and sub-atomic worlds ruled by the laws of quantum mechanics. On this scale, everything is very different than we would expect. The limits of this paper don’t allow a full discussion of the quantum world, but the bibliography suggests some really helpful reading to explore this dimension of existence.

Whizzing about all over the place at the quantum level are all types of particles that aren’t actually particles until you stop them to take a look. Of course, when you stop them you no longer know where they’re headed, which leads to the “uncertainty principle.” You know one thing (the location of the particle now) but you’ve lost the rest of the

information (where it's going-then). The principle is stated as momentum and location, but it essentially means the same thing. All one can hope for is to have a probability statement without any absolute certainty. The idea of this bothered Einstein a great deal, which inspired his famous quote, "God doesn't play dice." Well, from a quantum perspective and a Hindu perspective, God does roll dice. That's what makes it all so interesting.

For instance there's the various stories of the creation. These vary from The Rig Veda X, where Primal Man is sacrificed to become the world, the Prajapati (The Golden Embryo) where Prajapati who is born from the primordial waters, forms an embryo of fire that creates but has no form himself, a being who is his own father. There are other stories from the Vedas and Upanishads and Purana, one of my favorites is the Jain Myth of Jinasena: There Is No Creator. The range of such stories is virtually endless, and from a western perspective also pointless because they explain nothing.

From the above collection of stories, there is no comprehensive picture to be derived. There are no particular moral/ethical positions to be established, no sets of expectations revealed and imposed. Instead the picture gets even more random.

The western view of time tends to be somewhat linear, whereas the Hindu concept of time is very cyclical. Reinforcing the theme of randomness, Campbell states:

Every day of a Brahma lifetime of 100 Brahma years, the god's eyes slowly open and close 1,000 times.

Krita, 4, "the lucky throw"

Treta, 3

Dvapara, 2

Kali, 1 "the worst" Pg. 142

The whole affair is equal to over 311^{12} human years, and as Campbell continues:

At the close of each Brahma lifetime, Brahma and all dissolve into the body of the cosmic dreamer, who remains then absorbed in dreamless sleep for a period in length to another Brahma lifetime—until presently something within him stirs, the lotus dream again unfurls, and all begins anew. Moreover, in the distances of infinite space innumerable lotus universes are everywhere unfurling, flowering, and fading, each with its Brahma, as on a boundless lotus lake. Nor in the infinitudes of time will there ever be an end—as in the past there was no beginning—of this flowering and fading of Brahma worlds. Pg. 143

In the world of Quantum Reality, according to physicist Nick Herbert, there are eight different versions of the way things are—totally different explanations of worlds we can see and not see. One of the most interesting, which has the attention of many leading physicists is Quantum Reality #4, the infinite many universes theory of quantum mechanics. Every time there's a choice, new universes are created to reflect the various paths chosen or not chosen. Interestingly enough, each of the eight quantum realities has a number of leading theorists backing it as the single most effective source for explaining such anomalous occurrences.