

Pulsation of a Universe in the Tattvabodha

Aman Chawla

June 8, 2025

Abstract

In this brief note, the author examines the first verse from the Tattvabodha and relates it to an expanding and contracting universe.

In the Tattvabodha of Adi Sankara, the first invocatory verse is:

vasudevendrayogendram natva gyanapradam gurum|
mumukshunam hitarthaya tattvabodhaha abhidhiyate||

Vasudevendrayogendra → the Lord amongst the yogis

Natva → Having bowed

Gyanapradam → Bestower of knowledge

Gurum → to the Guru-preceptor

Mumukshuunaam → the seekers after liberation

Hitarthaya → for their benefit or welfare

Tattvabodhah → the Tattvabodha

Abhidhiyate → is expounded.

In the commentary to this sutra, Swami Tejomayanandaji translates Vasudevendra as the *consciousness pulsating in each of us*, incarnated as the son of Vasudeva and Devaki, due to the demand of the age [1].

In this brief essay, I will examine in more detail the pulsation of consciousness referred to above and relate it to the universe as a being. For instance, pulsation may not be the only mode of activity of consciousness. When we think of pulsation, immediately the heartbeat rhythm comes to mind. Then the pulsation of breathing comes to mind. Both these rhythms are channeled into the body via the medulla oblongata. Thus the neural signals, traveling in pulses and channeled downward are referred to here.

What does it take for a neural signal to be generated in pulses? A detailed look at the biophysics tells us that ions are exchanged between inside and outside of an axonal fiber. There is a specific gate which is voltage sensitive and it opens in response to the pulse. Thus we see that this pulsation is mediated by the

exchange from in to out and out to in, in succession. We need two things (inside and outside) and then when they interact rhythmically, it generates the pulsation of life. This motif can be found wherever we look.

But for an exchange and interaction to take place, first there must be a separation of the two interacting entities. Thus to create is to separate the homogeneous mass into two polarities and to operate it is to allow a very limited and controlled interaction of the polarities. To end it is to dissolve the partition.

In this translation of Vasudevendra as the primordial pulsation of consciousness in each one of us, the author presumes that the separation of creation has already occurred and the dissolution by homogenization has not yet occurred. This aligns with the concept of Brahma as the creator, Vasudeva as the preserver and Mahesvara as the destroyer and it is indeed the case that Vishnu is seen commonly as the active preserver of life.

However, it is quite remarkable that the preservation of life involves controlled destruction and controlled creation in succession. This motif is also visible everywhere we look around us. How can we take this idea of “limited” or “controlled” interaction forward?

If we think of control theory, the plant is controlled by signals from the controller. These signals tell it when to enhance the plant signal and when to decrement it. In this sense, here the controller is consciousness, the plant is the heart or neuron and the signals are the pulses which direct the plant to move from one side (lower) to the other (higher) or back. So in this case, inside and outside or separation has been replaced by lower values and higher values. Thus space has been replaced by the vertical real axis which represents the amplitude of the plant signal.

Thus any time when one can define an “extent” either spatial or linear or in the amplitude domain, it is preservation. This immediately hints that the state of creation and destruction are point-like. They have no extent which can be divided into two regions for a controlled interaction. Thus we can say that consciousness was a point to begin with and then expanded and finally will contract back to a point.

This coincides with the idea of an expanding universe whose expansion is accelerating. The acceleration of expansion is somewhat like a growth spurt. It happens that sometimes a child grows rapidly in bodily size and then slowly. Likewise mentally also there are growth spurts in human cognitive development. All of these are indicators that the universe is like a being which is undergoing a growth spurt.

The question of why the expansion will reverse and retreat to a point, is an important one and is left for future investigation. It also relates to the question of whether there is a multiverse or just one universe. If there is a multiverse then several universes could arise and contract in succession or in parallel, mutually observing one another¹.

¹This is also an extension of Wheeler’s idea of the universe as a self-excited quantum circuit [2, 3].

References

- [1] Swami Tejomayananda. *Tattvabodha*. Central Chinmaya Mission Trust.
- [2] John Archibald Wheeler. World as system self-synthesized by quantum networking. In *Probability in the Sciences*, pages 103–129. Springer, 1988.
- [3] John Archibald Wheeler. Genesis and observership. In *Foundational Problems in the Special Sciences: Part Two of the Proceedings of the Fifth International Congress of Logic, Methodology and Philosophy of Science, London, Ontario, Canada-1975*, pages 3–33. Springer, 1977.