

SPIRITUALITY IN A QUANTUM WORLD

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INTRODUCTION

One's view of the world influences one's view of the human being and even one's notion of God. Therefore a paradigm shift would have consequences on theology and spirituality.

There is no completely developed Quantum spirituality. Some theologians (Alan Wolf, Durmiud O'Murchiu among others) have attempted to draw theological conclusions from the Quantum perspective of the world. From these we could derive insights regarding some possible characteristics of spirituality.

But first, it is necessary to see the difference between the Newtonian perspective of the world which has prevailed throughout the centuries and the Quantum perspective which has just gained recognition in the last century although it had earlier antecedents. I will confine myself to its main insights and to the theological consequences that have already been made by some theologians.

FROM THE NEWTONIAN TO THE QUANTUM PERSPECTIVE OF THE WORLD.

The Newtonian Perspective

Since it is difficult for me to summarize the scientific part of the two world views, I will rely largely on Joseph Shore to explain this portion of this statio conference.

The Newtonian view of the universe is a vast space filled with real particles called matter. That apple that fell on his head was "real." In the Newtonian world view, things are separate and real. The universe is a collection of "stuff" that bumps into itself according to laws of motion and gravity. People are also seen as separate from one another as much as a bunch of rocks. In Newton's world, time is viewed in a linear way, past, present and future all separate though related in causality. This world view is really a scientific description of the "common sense" view of reality that we work in every day. Things and people are separate and they bump and grind on one another. I am being colloquial here because this is not intended to be a lecture on physics per se, but rather an observation on how our world views affect every part of society including religion. (from the Internet)

The main tenets of the Newtonian perspective are:

- Everything is predictable. **If you know about the parts, you can know about the Whole!**

- **Logic and mathematics can explain everything.** If one understands how the most basic processes in the universe works, you can make prediction about the bigger events.
- The world is made of matter and the forces acting on them. The matter can be divided into smaller particles up to the level of atoms and subatomic particles. All the particles and the matter made up of those particles (from very small to the largest celestial bodies) follow the same classical physics' laws.
- The reality is what you can perceive, or manage to perceive through your five sensory channels. **If anything is beyond this level of perception, it does not simply exist! (Dr. Sudeep Shroff)**

The Quantum Perspective

Then came Einstein, whose theories challenged Newtonian Physics. First he showed that time was relative, and that mass and energy were equivalent by the formula $E=MC^2$. Our ideas about the world were slowly changing. Next came Alfred North¹ Whitehead who saw the cosmos as an organism, not a collection of things as Newton had. Whitehead was thinking and writing before the discovery of Quantum Mechanics, but his theories were in line with later quantum development. Newton taught that electrons, were solid particles. Quantum Physics proved that each electron is composed of packets of energy and each part of the packet, Whitehead termed "actual entities." These living bursts of energy make up the universe.

The main insights of this perspective may be summarized as follows:

- At the core, **everything is nothing but energy.** The experiments in the field of Quantum Mechanics has revealed that the electrons orbiting around a nucleus of an atom can exist simultaneously as a possible particle or an energy wave packet.
- There is no fixed path which electrons take around a nucleus. Instead, they exist as '**Electron Clouds**' around a nucleus in various orbitals and shells
- Any single electron **can exist simultaneously at more than one places!** This is really bizarre and difficult to accept when you are exposed to this information for the first time.
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- Everything exists in the form of **pure potential or possibilities.** The observation collapses the possibilities into a reality. So, there is no reality if there is no observation. Everything exists **because we observe.**
- An electron can jump from one energy level (orbital, shell) to an another energy level, without actually moving through the space in between. It just changes its energy state. No logical, gradual progression through the space in between!

- **We are all energy beings.** So not only the laws of matter (particles to be very specific), but the laws of waves also apply to us. Our existence does not only have physical shape and space occupancy that we all are familiar with, but we all have our own frequencies at which we vibrate. We all have our **Energy Existence** too. We can go to an extent and say that the Energy Existence is the primary existence, although we may not perceive it routinely.
- We are all connected at the core. You and me both exist and vibrate in the same energy field. Our frequencies may be different, and so we have different experiences, but the core of both of us (and actually all of us) is the same. (**Dr. Sudeep Shroff**)

THEOLOGICAL CONCLUSIONS OF BOTH PERSPECTIVES

The Newtonian World-view: has this idea of God and the universe:

From the very beginning of homosapiens “God” was viewed as a separate, big, powerful being, or group of beings, who lived somewhere in the heavens and whose favor early man wished to curry. The common sense world view as it interacted with theology gave a picture of a three-storied universe with God and Heaven at the top; earth in the middle and hell on the bottom. Every human being was created as unique and separate by God and each created person was separate from God. Each person experienced himself as imperfect and in need. People offered sacrifices to the image of gods they projected from their own consciousness. They longed for a savior. (Joseph Store)

The Quantum Perspective, on the other hand, has the following theological insights

The upshot of Whitehead’s discovery is that consciousness is at the very foundation of the cosmos. The actual entities actually choose from possibilities offered to them by God, who is there with the actual entities as the “unique actual entity.” From eternal potentials God presents to the actual entities possibilities for choice. Here we have the beginning of a Quantum view of the cosmos. God is not far off. He is imminent within the deepest foundation of the cosmos. The cosmos is not a bunch of junk floating in dead space. It is an organism which grows by quantum choice. God is the World’s Fellow Traveler who grows and becomes more as the cosmos grows (Joseph Shore)

Charles Hartshorne developed Whitehead’s philosophy into theology.

The basic tenets are summarized here by Joseph Shore:

- ***God is not omnipotent in the sense of being coercive. The divine has a power of persuasion rather than coercion. Process theologians interpret the classical doctrine of omnipotence as involving force, and suggest instead a forbearance in divine power. "Persuasion" in the causal sense means that God does not exert unilateral control.***

- *Reality is not made up of material substances that endure through time, but serially-ordered events, which are experiential in nature. These events have both a physical and mental aspect. All experience (male, female, atomic, and botanical) is important and contributes to the ongoing and interrelated process of reality.*
- *The universe is characterized by process and change carried out by the agents of free will. Self-determination characterizes everything in the universe, not just human beings. God does not totally control any series of events or any individual, but God influences the creaturely exercise of this universal free will by offering possibilities. To say it another way, God has a will in everything, but not everything that occurs is God's will.*
- *God contains the universe but is not identical with it (panentheism, not pantheism or pandeism). Some also call this "theocosmocentrism" to emphasize that God has always been related to some world or another.*
- *Because God interacts with the changing universe, God is affected by the actions that take place in the universe) over the course of time. However, the abstract elements of God (goodness, wisdom, etc.) remain eternally solid. (Charles Hartshorne)*

We have thus a world view where consciousness is at the very building block of reality. Reality is not hard, non-malleable stuff. It is mutated by consciousness. God is not an Emperor in the sky. God is the unique actual entity guiding quantum choice at the deepest level.

Another theologian, C. Robert Mesle, brings these insights into liberation theology coming up with the following conclusions:

1. *There is a relational character to the divine which allows God to experience both the joy and suffering of humanity. God suffers just as those who experience oppression and God seeks to actualize all positive and beautiful potentials. God must, therefore, be in solidarity with the oppressed and must also work for their liberation.*
2. *God is not omnipotent in the classical sense and so God does not provide support for the status quo, but rather seeks the actualization of greater good.*
3. *God exercises relational power and not unilateral control. In this way God cannot instantly end evil and oppression in the world. God works in relational ways to help guide persons (Robert Mesle)*

SPIRITUAL REFLECTIONS:

The Newtonian worldview is not false, it is just not complete because it does not cover the whole of reality, only that which we can perceive with our senses. The Quantum perspective on the other hand, backed by scientific experiments, opens up to us new dimensions which have consequences on our way of viewing the world, our concept of God and therefore also our spirituality.

The Quantum perspective sees the human being as having a conscious and subconscious mind. The subconscious mind is made up of all the conditionings, all the ideas we have learned from others. So we act according to our conditioning, for example regarding stereotypes of gender, intolerance of difference, fear of the unknown, etc. The conscious mind enables us to be totally present here and now. If we live in a distracted manner, we are propelled by our subconscious mind. When we become mindful, we take hold of our own lives. Therefore **LIVING MINDFULLY** is of the utmost importance. This makes us clear and deliberate in our choices and options and not swayed by other people's opinions, learned biases and fears, compulsions, addictions. And what helps us to live mindfully is **MEDITATION** and **CONTEMPLATION**.

Another significant insight is the **INTERCONNECTEDNESS**, not only of human beings with each other but with all created things in the universe. This gives a new dimension to the teaching on our being the **MYSTICAL BODY OF CHRIST**. If we are conscious of this interconnectedness, we really will be able to love others as ourselves because in a way, we are truly one. We will realize that the sufferings of others are our sufferings, their joys our joys. We will then also of course be more caring for other creatures, plants, trees, animals, etc. It is the basis of creation-centered spirituality.

Quantum theology takes seriously the **PARTNERSHIP OF GOD AND THE HUMAN BEING**. God truly uses us to do good to the world. Remember that crucifix in our parlor which has no arms. We are God's arms with which God embraces the world. It is through us that people experience God's loving kindness and compassion.

The Quantum perspective sees reality not as static entities but realms of possibilities and the consciousness of human beings can influence the realization of these possibilities. When Jesus said, "Your faith has made you whole", He really meant it. The human beings' conscious choice to be healed contributes to their healing. The so-called positive thinking, synchronicity, serendipity, or daily miracle which I am sure all of us have experienced may be explained by this. Our acts of faith and our prayers do bring about the realities we pray for.

CONCLUSION:

There was a time when people thought the world was flat. And even when it had already been proven that the world was round, some people still lived as if it were flat. I am sure most of us still live within the confines of the Newtonian perspective of the world. When will we get out of that box?

REFLECTION QUESTIONS:

1. Have you ever taken seriously the findings of quantum physics?
2. What do you think of the theological conclusions treated in the article?
3. Are the spiritual reflections on these conclusions helpful to you?
In what ways?

Note: I hope this conference has not been too abstract. I tried my best to make it understandable, concrete and relevant but I am not sure I succeeded.

SMJ