Scientific evidence for a Timeless Dimension of Reality

In 1988 the famous physicist Stephen Hawking wrote his bestselling book ‘A brief history of time’. Since then the fundamental conclusion has persisted, namely that time only began at the Big Bang Creation. However, a very significant question remains: was there nothing before the Big Bang or was there a dimension of reality that can be described as a Timeless Dimension? Such a dimension would not be merely the absence of time. A Timeless Dimension would have its own laws and characteristics.

We are familiar with our four dimensional existence by which we experience our world through the dimensions of length, breadth, height and time. The big question facing physics today is: How do we explain the observed behaviour of realities discovered by quantum physics?

What are some of these realities? In fact these realities are so strange that physicists often refer to them as ‘spooky’. Chown (2002) wrote: For a theory that has the world’s finest physicists baffled, quantum mechanics is fantastically successful. It has made possible computers, lasers and nuclear reactors and explained how the sun shines and why the ground beneath our feet is solid. But it is also strange, frustrating and incomprehensible. It insists that the microscopic world is a shadowy realm where nothing is certain – where an electron can be in two places at once and photons at opposite extremes of the universe can communicate by some kind of weird telepathy.
Buchanan (1997) notes, *So it is as if the two entangled particles, no matter how far they are apart, are not really separate at all. Measure one, and as its spin becomes definite this triggers the other to respond... What is astonishing and disturbing is that this response happens instantaneously – even if the particles are separated by huge distances. Consequently, quantum theory requires action at a distance. What happens in one part of the universe can have instantaneous ‘nonlocal’ consequences in other parts, no matter how far away they might be. And this poses a problem, because instantaneous action at a distance is a punch in the nose for Einstein. His theory of relativity – the cornerstone of physics – claims that our universe has an absolute speed limit. Nothing, according to Einstein, can travel faster than light.*

These ‘spooky’ observations have forced physicists to coin phrases such as ‘non locality’, ‘superposition’ and ‘entanglement’, when describing behaviour of sub-atomic particles. Einstein spoke of this as ‘quantum weirdness’ that nobody could understand.

Attempts to reconcile these strange observations, with the laws of physics operating within our ‘arrow of time’ universe, have thus far met only with frustration. In New Scientist Journal of 22 September 2012 we read this statement by Liza Grossman. She quotes Nobel prize-winner Frank Wilczek and colleague Alfred Shapere saying; **We can’t ignore the absurdity of the situation any longer. It’s time to get to the bottom of what is really going on and in the process cement our understanding of the fundamental nature of the universe.**
The article continues, *Einstein’s widely accepted theory of special relativity states that nothing can travel faster than the speed of light. But the phenomenon of quantum entanglement seems to flaunt the speed limit by allowing a measurement of one particle to instantaneously change another, even when the two are widely separated. Einstein famously called this “spooky action at a distance”.*
In spite of the weirdness revealed by quantum physics, we have to accept that our time-locked universe is built up entirely from interactions between these quantum realities! This observation demands an explanation and that explanation lies within our understanding of ‘time’ and ‘timelessness’.

**A reconciliation between these seemingly irreconcilable realities requires us to accept that the interactions between quantum ‘particles’ takes place within a Timeless Dimension of Reality.** This Timeless Dimension is not merely an ‘absence of time’, it has its own laws.

Furthermore, since our universe originated from and is still held together by the laws operating between quantum realities, it is reasonable to argue that these quantum laws are what we call ‘Transcendent Laws’. This means they existed before our time-locked universe came into existence at the Big Bang. In a real sense our universe is still made up from and held together by Timeless Dimension laws that are by definition ‘Transcendent’.

Physics has repeatedly come up with calculations that seem to give substance to ‘infinities’. For instance, Arkani-Hamed et al (2000) suggested, *The visible universe could lie on a membrane floating within a higher-dimensional space...* Raman Sundrum of Stanford proposed that gravity itself may be concentrated on a membrane in a five-dimensional space-time that is infinite in all directions.

This is just one example where ‘infinities’ are proposed in order to help understand quantum realities. This adds further strength to the proposal that our universe is suspended within and built up by the Timeless Dimension of Reality. Whenever our calculations, made from within the limitations placed by our time-bound universe, impact upon realities in a Timeless Dimension, these give us the apparently nonsensical answer ‘infinity’.

However, ‘infinities’ are not nonsensical once we accept the reality of the Timeless Dimension. If we go right back to the Big Bang origin of our universe then, if we originate from energy existing within the Timeless Dimension, we have to conclude that this Timeless Dimension Reality had no beginning or ending. A Timeless Dimension simply exists. It is independent from time and can relate to any instant of our time dimension instantaneously! It has no
beginning or ending because it is independent from time! Such interactions between time and timelessness have to lead us to infinities!

So, we can try to relate this to a theistic understanding of reality. Science agrees that our universe is the result of a long list of ‘fine tuning coincidences’. The theist ascribes this to the designing mind of the God who operates within the Timeless Dimension.

Our universe was only possible because a long list of very precise characteristics of matter were all in place. Science agrees that the statistical probability of all of these being precisely as they are is minute. (See my last ‘Update’ article: Scientific logic for belief in God).

It is pointless asking where God came from because a Timeless Dimension has neither beginning nor ending. This is a mind-bending concept to grasp but it links perfectly with the scientific understanding that time only started at the Big Bang. It also agrees with biblical revelations about God as existing from ‘timelessness to timelessness’ or ‘everlasting to everlasting’. He revealed himself to Moses as the ‘I AM’, namely the one who exists without beginning or ending.

Furthermore, acceptance that the Timeless Dimension and the quantum realities revealed to us by science, all originate from and operate within this Timeless Dimension, helps us to understand the ‘spookiness’ spoken about by Einstein and by all quantum physicists since his time.

To my mind it is exciting that scientific discoveries have the potential to explain our universe in terms that are in harmony with biblical revelations about the Creator. Amazingly, such revelations were written down centuries before our scientific age.
We can come to look with new understanding at some New Testament writings, such as those of Paul in his letter written to the Colossian church, He wrote, *He is before all things and in him all things hold together* (Colossians 1:17).

The scientifically observed quantum characteristics of non-locality, entanglement, superposition, instantaneous action at a distance and particles existing in more than one place at the same time, all describe characteristics of a Timeless Dimension. If the Creator exists within this dimension and our time-locked universe is made up from and held together by this Timeless Dimension, then we can start to understand other revealed characteristics of the Creator. For instance, his ‘omnipresence’ (present everywhere at once), his ‘omniscience’ (aware of all things simultaneously and instantly), his ‘omnipotence’ (being in control of all events and processes in nature).

We can better understand the words of Jesus when he said, "*Your Heavenly Father notices when one sparrow falls to the ground and he knows how many hairs are on your head*" (Matthew 10:29-31).

**How does this relate to the evolutionary processes we see in nature, such as the evolution of our universe, the evolution of geological processes on earth and the evolution of life?**

To the Theistic Evolutionist there is no problem when science uncovers details of the laws and processes that have operated on our planet over billions of years. The theistic understanding is that the Creator is the originator of all these processes, is aware of every detail all the time and he can guide outcomes through the initial conditions he imposes onto the processes, mediated through the operation of his powerful mind. He guides processes towards his pre-determined outcomes.

Whenever the laws of our universe present evolutionary history with alternative options that can go a number of different ways, according to the laws of chance and ‘chaos theory’, the Creator maintains control by ‘nudging’ the process into the option he knows is required to achieve his pre-calculated outcomes. This subtle guidance within the ‘weirdness’ of the quantum reality is not detected by science because the option chosen by the Creator is following one of the possible scenarios that can be studied by science. Science is, according to the theistic understanding, merely tracing the past actions of God.
My theistic concept of God is that he is ‘In all things, through all things and by him all things are held together’ Furthermore, he is a hands-on Creator who is continually involved in his creation. He is also the Transcendent God who exists within the Timeless Dimension, even if the universe ceases to exist.

I have been incredibly privileged to personally experience the ‘hands-on’ activity of God, as described in my article ‘Personal journey of discovery’, available as a free download from my webpage www.FactandFaith.co.za If God can interact with individual humans, amidst the masses of humanity, then he can also interact in detail with every event and process down through the time-line of the universe.

This is the basic Theistic Evolutionist starting point from which to view the history of the universe, but also from which to try to understand human history.

For details of references quoted in the article: See below.

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References

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