

Called to a New Understanding Living Spirituality and the Future of Religion

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Man's curiosity searches past and future
And clings to that dimension. But to apprehend
The point of intersection of the timeless
With time, is an occupation for the saint.

T.S. Eliot

True religion needs science like instant coffee needs water. Jesus made this point in different terms when he was asked what was the most important religious commandment, and replied, “The greatest commandment is, ‘Love God with all your heart, with all your soul, **with all your mind** and with all your strength’.” (Mark 12:30). We do not often reflect on what it means to love God with all our mind, but since the greatest triumphs of the mind for three centuries have come from the discipline that we know as science, it would be perverse to think that the findings of science are not relevant to religion in its highest form. The fact is that science, from physics, chemistry, biology and neurology to cosmology, is revealing such great marvels about creation that it has been called “the new epiphany.” As we learn about the processes of creation, we learn more about the Creating Power, and suddenly comes the realisation that if the new creation story of science is right, we are one with this power, we share our identity with it, we are an extension and manifestation of it. Then science, which so many regard as hostile to religion is seen to be a potential bridge, offering us an unexpected passage from knowing about this power which Jesus called “Father” and God and knowing its love – which is a totally different and transforming experience.

Enormous effort has been made by many thousands of very intelligent and highly trained individuals to discover the intellectual treasures of science, but the ordinary person has been given access to them through many books which have popularized them and distilled their significance, so that all individuals of goodwill can, as St Paul put it, “sing songs of praise with the mind” (1 Cor 14:15). We owe a debt of gratitude to these popularisers, for most people feel rather fearful of science or mathematics and now, given the right directions, this fear can be taken away and replaced with reverent awe. If institutional religion was doing its job, all this would be taught from the pulpit and integrated in the liturgy but, alas, with rare exceptions religious leaders have never had their eyes opened to the new wonders, and, indeed, many feel it is their moral duty to keep their eyes tight shut. Very few feel that scientific knowledge is a necessary element in theology, still less a vitally important help in attaining the sense of oneness with the creating power that is the ultimate purpose of religion.

There is, of course, much interest in the science-theology debate, but that is not at all the same thing, for we are talking here of applying the mind to science

in the cause of *metanoia*, transformation of habitual awareness from the normally human to the spiritual. The world's great religions (the theistic faiths, at least) all see their highest purpose in the quest for a meaningful relationship with a creating power – Brahman, Allah, Jahweh or God - but none offers to lead the seeker to deeper knowledge of the creator through scientific knowledge of the processes of creation. On the contrary, science is usually felt to be not only non-spiritual of its nature but anti-spiritual. The view that science was irrelevant to religion was expressed dogmatically as early as the third century of the Christian era by the theologian Tertullian and crystallized in his rhetorical question, "What has Athens to do with Jerusalem?" Athens was used here as a code word for Greek philosophy and science, while Jerusalem, the "holy city", stood for Christianity. Fortunately, there have always been those who have recognized that all truth, whether of the mind or heart, is one, and from their conviction has arisen Western civilization. Today we are again at a crossroads where the future of civilization will depend upon a creative resolution of the question that Tertullian raised so bluntly.

The expression "creative resolution" is of vital importance. Mere harmonization will not suffice, for we are dealing here with two truth systems which cannot ignore each other without the whole concept of truth being ultimately deformed. Many scientists with religious sensibility, while rejecting Tertullian's confrontational stance, would favour the non-creative solution of mutual co-existence between the two systems, and the late Stephen Jay Gould, although himself religiously agnostic, formalized this live-and-let-live attitude as a principle which seemingly acknowledges the cultural importance of both.² Each, he argued, has its own proper domain of truth, and must not be allowed to encroach on the other or make judgments about the other's conclusions. The principle, which he called "non-overlapping magisteria of authority", abbreviated to NOMA, sounds eminently reasonable, but this essay will propose the opposite. Accepting that science and religion do have different lines of demarcation – as, indeed, do physics and biology – there is something vital to be gained by a deeper understanding of the interface between them. It will argue that to seek a science with total honesty – i.e., in which theory does not blind itself to unwelcome evidence - and a religion based on historical and scientific fact will generate a cultural purpose with power to create a new civilization.

Fine words, but are they anything more than wish-fulfilment? A close look at the state of science at work in the world reveals deep currents that are taking genuine seekers of truth away from the split vision of Tertullian and Gould towards a new kind of synthesis whose final form can be only dimly perceived. Among these evolutionary factors may be mentioned the emergence of ecology, which brings together many sciences with a new kind of planetary ethic that must soon become central to religion. Another is the new communications science which is shrinking the globe, transcending national and religious barriers, and making a true human family possible for the first time in our history – indeed, not only possible but necessary. It is, however, in the new cosmology that science and religion come together most dramatically, for Big Bang theory, by postulating a creation event of some kind, is taking physical science into territory that previously was assumed to be the preserve of theology. Less obviously, it is taking ordinary religion into territory that previously was the preserve of the mystics, and this is the particular point of the essay.

Since its inception science has been diverging from religion, for the great religious truths have been largely understood and communicated through stories without much regard for whether or not they were factual in the scientific or historical sense. The purpose of the story was to entertain, to educate and socialize, and the line between fact and creative fiction barely existed. In many primitive languages, including ancient Hebrew, there is, in fact, only one word to cover myth, legend, fairy tale and history – all alike were stories. Indeed, it is only 150 years since the word “scientist” was coined by William Whewell to indicate someone who self-consciously adopted the new ideal of objective truth that governed science. The word “scientist”, therefore, implied intellectual maturity but, paradoxically, also the naïve honesty of the child, who demands to know “But is it true, is it *really* true?” This yearning to know the “real reality”, both scientific and theological, has been called by the social philosopher Richard Tarnas, “the passion of the Western mind”,³ and it bears thinking about, for if Gould’s solution were to be applied to the undoubted problem of reconciling scientific and religious truth, it would drain the passion and purpose from both. Science’s philosophic power would increasingly be subordinated to technology and profit-making, while religion would fossilize into non-communicating “faith communities”, each held together by an inherited tribal myth. To assert this is far from saying that science must become a new religion or that religion will no longer need stories to communicate great truths. What it emphasizes is that both truth systems, for their own integrity, need to build as far as possible upon a body of common and rational faith or to justify their reasons for not doing so. Honesty is everything, and perhaps the greatest gift that science brings to the dialogue is its moral principle, as T. H. Huxley put it, that a beautiful theory must be allowed to be slain by an ugly fact.

Without for a moment playing down the spiritual wisdom of particular religions or the ultimate necessity of individual conscience, it must be emphasized that a world divided permanently into different historical faiths is not a noble ideal. Although it is often argued that the great religions teach the same truth under the form of different myths, the case is rarely so simple, and when myth and factuality are manifestly at odds this comfortable answer no longer convinces. There is a story told of the eminent physicist John Wheeler which starkly emphasizes the point. After a talk he had given on Big Bang theory a woman stood up and said, “That may be the version of you scientists, Professor Wheeler, but you are quite wrong. The world is supported on the back of a great turtle.” Nonplussed, he asked her, “But what is the turtle supported on?” To which she replied, after a few second’s pause to work out the logical consequence of her act of faith, “It’s turtles all the way down.” The story is good for a chuckle and is probably apocryphal (since one hears it told of others), but has a very serious message, for when we are talking about the physical realities of creation, so far as we are given to know them, what is true for science must be true for religion as well, or we might as well join the woman with the turtles.

History has shown, as in a laboratory experiment, what happens when a deliberate decision is made to cut religion adrift from science. In the 12th century, the rift between the science of the day and the sacred scriptures of both Christianity and Islam seemed unbridgeable. Where the Old Testament and the Koran taught that God created the universe at a moment in time, “by his word”, the great scientific authority Aristotle had reasoned that it must have existed from

eternity. The dispute generated the most heated debate, which was resolved in two ways. The Spanish Islamic philosopher Averroes, under pressure from religious authority, proposed his own version of NOMA, maintaining that it was intellectually and religiously allowable to hold both a religious and philosophical answer to the same question of fact, a solution which came to be called the Double Truth Principle. The outstanding exponent of the opposite view, that truth must ultimately be single, was Thomas Aquinas, who wrote his monumental *Summa Theologica* in its defence. Significantly, although it became a new orthodoxy almost within his lifetime, when it first appeared, it was publicly burned by the archbishop of Paris in 1277 for polluting sacred scripture with pagan science. It may seem today to be a faraway philosophical storm in a teacup, but its historical consequences have been profound. Islamic science, which was at that time far in advance of European science, dwindled, while the Thomistic synthesis laid a critical part of the intellectual and spiritual foundations on which Western civilization was to build. Though the foundations have crumbled, the achievements of the human spirit which rest upon them are still very visible – the university system of open enquiry (as against the rigid authoritarianism of the Islamic madrassa), and a political and legal culture based on the rights of the individual.

Fast forward to the twenty first century, and the same conflict is apparent. The world has moved on from the protoscience of Aristotle to the classical science of Galileo and Newton, to quantum physics and the cosmology of an expanding universe. Religion, however, has stayed essentially the same, and a new and deeper rift between science and religion has developed. On both sides the crisis is caused by a failure of nerve and of imagination.

From the side of science, the failure comes partly from an unwillingness to wind back the film of cosmic expansion to its very beginning. With the notable exception of the pioneers Alexander Friedmann and Georges Lemaître, most theorists stop it at the so-called “Planck wall”, a time so close to the very beginning that to go the whole way might seem to be unnecessary. The fact is, however, that if that last tiny step (trillionths of trillionths of a second) is taken, the whole cosmos shrinks to a dimensionless point, a “naked singularity”, where three-dimensional reality and time disappear together. Physical science has no way of dealing with this, for it is by normal logic a nothing in a nowhere and a “no-when”. To avoid this theoretical impasse, it is easier to assume that the universe began as a small but finite reality which had existed for ever – shades of Aristotle! – and it is this assumption which justifies the orthodox explanation that it all began as a random fluctuation in the quantum vacuum. This has a superficial plausibility, but it says hardly more than at this level of ultra-microscopic reality we just don’t know what could happen. To cite Heisenberg’s Uncertainty Principle in this situation, as physicists often do, merely cloaks our ignorance with an illusory appearance of scientific wisdom.

An uncaused fluctuation may have the advantage of enabling physical science to retain its ideal status as a God-free zone, but this theoretical fig leaf is not available for a cosmology which assumes a point origin, for this would be the point where time began also and, of course, without time there could be no fluctuation. If we hold our nerve, however, and look back in history at the way in which science has evolved, it becomes apparent that such a feared collapse could, in fact, be a natural entry into a new scientific paradigm. Winding back the

imaginary film of an expanding universe to the point where our familiar 3D world disappears brings realization that this is the point where time must have emerged from the timeless, and three-dimensional space from a higher dimensioned space. Science must therefore consider as a foundational postulate that our familiar universe is a subspace of some hyperspatial reality. The way in which our familiar 3D reality and hyperspace may be related is a challenging question for mathematics, particularly for topos, and for philosophy, particularly for ontology and epistemology. Our cosmos may perhaps be nested in a 4D space within a 5D space *ad infinitum*, for which a topological model may be found, but we can probably obtain an adequate first understanding by imagining the ordinary world of sense experience dissolved in the higher reality as salt is dissolved in brine.

Failure of religious nerve arises partly from inability to appreciate the significance of evolutionary theory, both cosmological and biological, and partly from the pull of ancient theology which focuses too strongly on the creating power as a single transcendent entity, a God “out there” or “up there”. Rigid monotheism brought Judaism and Islam into being and continues to be their great strength, but it limits our understanding of a creator within creation and particularly, within human consciousness. In their different ways Christianity, Sufism and Vedantic Hinduism are all attempts to overcome this limitation, and mystics in all religions know an immanent divinity experientially, but traditional religions, on the whole, treat them as marginal. Those rare individuals who know divinity within and all around, and live habitually in awareness of an “earth crammed with heaven, and every common bush afire with God”, are considered at best as something to be marvelled at and at worst as a threat to orthodoxy. If it be conceded, however, that religion, like science, evolves, the next stage must surely be marked by this experiential knowledge of our ultimate source becoming a new and higher norm. This is where the science of cosmic creation comes into the picture, taking religion into a new Axial Age, where it must redefine its goals and ultimately its structures.

For this to happen a new foundation of four postulates is needed, the first two of which are already experimentally proven.

1. The first postulate is full acceptance of the fact that solid matter, which physics once took to be composed of Newton’s “hard, solid, massy, unbreakable particles”, is essentially electromagnetic radiation. In the most literal sense the ordinary world which we know is made of particles of light.
2. The second is that human consciousness is always associated with the same kind of radiation, for when the brain waves (as they are popularly known) cease, life departs. We “live, move and have our being” within an ocean of electromagnetic waves, which are as real as the invisible radio waves we take for granted. From this perspective, what we call spiritual awareness may have a physical basis in resonance akin to that which enables radio communication to happen. The human brain may act as a tuned emitter and receiver, through which a particular part of our consciousness is set vibrating, much as the wires in a piano will vibrate in sympathy with a tuning fork.

As a consequence of this postulate it follows that conscious will is a particular kind of the same energetic reality with which science routinely deals. From a purely scientific point of view conscious will can be classified as trigger energy, since the decision to lift my arm, for instance, is necessary to set off the neural and muscular train that enables it to happen. Once the principle is accepted that consciousness is a particular form of energy, science, which began as the study of moving bodies, takes on a new direction.

3. The third postulate, following naturally from the second, is that the energetic trigger which initiated the expansion of the cosmos at time zero was not a quantum fluctuation but an act of conscious will or decision. This immediately raises the seemingly unscientific and unanswerable question of what made the decision, but there are good precedents in modern science for simply taking the unanalyzed assumption and judging its truth retroactively by its systemic consequences. This is essentially the postulational method advocated by Einstein, and quantum physics provides a particularly clear example in the way it uses, indeed depends upon, i (the square root of minus one) which resists logical analysis, yet issues ultimately in a coherent and predictive theory. The postulate of a conscious origin to the universe may be justified initially on the same grounds, thus bypassing the logical impasse of an infinite regression of causes. In a word, to postulate the emergence of our cosmos as the consequence of an act of will which actualized a three-dimensional reality from a higher order of potential and times realities may be justified if resolves the many anomalies that afflict physical theory today. The fact that it may be an act of religious faith too does not necessarily make it unscientific. In both cases it is the consequences that follow which validate the initial postulate.
4. The fourth postulate is that although the universe may be treated as a closed system for practical purposes, it is not closed in an absolute sense. Not only is the cosmos “embedded” in a higher dimensioned reality, but in some meaningful way it is open to conscious energy. Ultimately it may turn out be, as the astrophysicist Sir James Jeans expressed it, “more like a great thought than a great machine”.⁴

Science, theology, and indeed mystical experience, are now converging as we gain understanding from different perspectives of point-source and point-self, and as physical and biological science come to grips with the ubiquitous role of consciousness. The origin of our universe in a dimensionless point of energy has been sketched above, one can illustrate from religious literature how time and the timeless intersect at a point, echoing the lines from Eliot which head this essay. Here are some quotations to exemplify.

Humility collects the soul into a single point by the power of silence.

Isaac of Nineveh, 7th century

I saw the whole Godhead concentrated, as it were, in a single point, and thereby I learnt that he is in all things.

Julian of Norwich, 13th century

We must find our unity and blessing in that little spark of the soul which is touched by neither time nor space. This core of unity is a simple stillness by whose immobility all things are moved, and all receive life who live by reason and have that centre within themselves. That we may live so intelligently, may God help us.

Meister Eckhart, 14th century

At the centre of our being is a point of nothingness ... a point of pure truth, a point or spark which belongs entirely to God It is, so to speak, His name written in us.

Thomas Merton, 20th century

In the context of the present theme of being called to a new religious understanding through science it is also worth citing Eckhart's conviction that "all receive life who live by reason" and his prayer, "that we may live so intelligently, may God help us." But the last word may be left to Thomas Merton, who elsewhere, in an often quoted passage, reveals the connection between the individual sense of oneness with the divine and the essential oneness of the human family.

At the corner of Fourth and Walnut ... I was suddenly overwhelmed with the realization that I loved all these people, that they were mine and I theirs, that we could not be alien to one another even though we were total strangers. It was like waking from a dream of separateness, of spurious self-isolation If only everybody could realize this!⁵

Ah, indeed, if only! What new sense of purpose, what passion, would then animate us, what seed might be sown for a genuine global family. A long, long road it must inevitably be, but the vision of a new kind of science and a new kind of religion, sharing a common understanding of reality, calls to truth seekers of all religions, and of none, to take the first step.

References

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