

**‘Does God Wear A Fig Leaf? Don’t Ask Newton,
He’ll Say It’s Not Relative, Right Einstein?’**

Or

‘Who You Calling Anthropomorphic?’

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Athenaeum Society
November 3, 2005

The day following the January Athenaeum meeting, 2005, I noticed a George Will column in the Louisville *Courier-Journal* about Albert Einstein's 'miracle year.' Intrigued, I read more. Seems that Einstein, traveling home in a streetcar from his job at the Bern, Switzerland patent office, wondered what the city's clock tower would look like if he observed it from a streetcar racing *away* from the tower at the speed of light. The clock, he decided, would appear stopped, because light could not catch up to the streetcar. His own watch however, he reasoned would tick normally.

According to Will, Einstein remembered that 'a storm broke loose in my mind.' That year, 1905, he produced five scientific papers that forever changed the world's view of the universe (1). It was indeed a 'miracle year.'

Einstein, to his credit, admitted 'standing on the shoulders of giants' to be able to see so far into the vastness of space. One of those giants also had a 'miracle year', or more precisely, a 'miracle year and a half.' From early 1665 to late 1666, Isaac Newton *devised* the binomial theorem, *created* differential calculus, *discovered* the color composition of light, and *postulated* the basic laws of gravity and gravitation. By age 26, he held the Lucas Chair of mathematics at Cambridge.

The precision of modern scientific instruments makes possible the confirmation of implications of Einstein's theories, and clarifies Newton's observations. That is, the universe had a beginning and its expansion is accelerating; time slows in a gravitational field and beats slower the faster one moves; the sun bends starlight; and black holes swallow light.

Three years ago we learned that our Milky Way galaxy contains a black hole weighing as much as two million suns. Thus, our moon revolves around the earth, the earth revolves around the sun, and the sun revolves around a black hole. Science removed us from the Aristotelian center of the universe,

to an unintelligible 'something' where space and time are warped. We were moved from the place called Eden to the trees of the forest and eventually to the grasslands and savannas of an earth that was much older than heretofore-imagined (2).

But both Einstein and Newton understood a universe that was at once dynamic and yet elegantly synchronized. Stating flatly, "I am not an atheist," Einstein expounded: "We are in the position of a little child entering a huge library filled with books in many different languages. The child knows someone must have written these books. It does not know how. It does not understand the languages. The child dimly suspects a mysterious order in the arrangement of the books but doesn't know what it is."(3)

Before we find ourselves in a discussion of religion, which we know as taboo in this society, let us first use the words of Einstein himself to investigate the concept he, Newton, and for that matter, many other scientists called 'cosmic influence.' And second, let us ask the questions that such an investigation beg, for they are as important to today's world as they were to Newton's and Einstein's.

'Everything that the human race has done and thought is concerned with the satisfaction of felt needs and the assuagement of pain...Feeling and desire are the motive forces behind all human endeavour and human creation...(4)

Now what are the feelings and needs that have led men to religious thought and belief...a little consideration will suffice to show us that...With primitive man it is above all fear that evokes religious notions-- fear of hunger, wild beasts, sickness, death. Since at this stage of existence understanding of causal connexions (sic) is usually poorly developed, the human mind creates for itself more or less analogous beings on whose wills and actions these

fearful happenings depend. One's object now is to secure the favour of these beings by carrying out actions and offering sacrifices which, according to the tradition handed down from generation to generation, propitiate them or make them well disposed towards a mortal. I am speaking now of the religion of fear. This, though not created, is in an important degree stabilized by the formation of a special priestly caste which sets up as a mediator between the people and the beings they fear, and erects a hegemony on this basis. In many cases the leader or ruler whose position depends on other factors, or a privileged class, combines priestly functions with its secular authority in order to make the latter more secure; or the political rulers and the priestly caste make common cause in their own interests. (Bertrand Russell expressed it thusly: "Mainly fear. Man feels himself rather powerless. There are three things that cause him fear. One is what nature can do to him... And one are what other men can do- they can kill him in war. And the third, which has a great deal to do with religion, is what his own violent passions may lead him to do... Fear is the parent of cruelty, and therefore it is no wonder if cruelty and religion go hand in hand.")

'The social feelings are another source of the crystallization of religion. Fathers and mothers and the leaders of larger communities are mortal and fallible. The desire for guidance, love, and support prompts men to form the social or moral conception of God. This is the God of Providence who protects, disposes, rewards, and punishes, the God who, according to the width of the believer's outlook, loves and cherishes the life of the tribe or of the human race, or even life as such, the comforter in sorrow and unsatisfied longing, who preserves the souls of the dead. This is the social or moral conception of God.'(5)

'The Jewish scriptures admirably illustrate the development from the religion of fear to moral religion, which is continued in the New Testament... the development from a religion of fear to moral religion is a great step in a nation's life. That primitive religions are based entirely on fear and the religions of civilized peoples purely on morality is a prejudice against which we must be on our guard.' (H.L.Mencken went further, stating "Moral certainty is always a sign of cultural inferiority. The more uncivilized the man, the surer he is that he knows precisely what is right and wrong"). *'The truth is that they are all intermediate types...'* (6)

'Common to all these types is the anthropomorphic character of their conception of God...But there is a third state of religious experience, which belongs to all of them... which I will call cosmic religious feeling. It is very difficult to explain this feeling...especially as there is no anthropomorphic conception of God corresponding to it.'

'The beginnings of cosmic religious feeling already appear in earlier stages of development--e.g, in many of the Psalms of David and in some of the Prophets. Buddhism...contains a much stronger element of it.' (7)

Consider this from the Taoist Chuang Tzu:

“When Great Nature sighs, we hear the winds

Which, noiseless in themselves,

Awaken voices from other beings,

Blowing on them.

From every opening loud voices sound.

Have you not heard this rush of tones?

There stands the overhanging wood on the steep mountain:

Old trees with holes and cracks

Like snouts, maws and ears,
Like beam-sockets, like goblets, grooves in the wood,
Hollows full of water:

You hear mooing and roaring, whistling,
Shouts of command, grumblings,
Deep droans, sad flutes.
One call awakens another in dialogue.

Gentle winds sing timidly,
Strong ones blast on without restraint.
Then the wind dies down. The openings
Empty out their last sound.

Have you not observed how all then trembles and subsides?

Yu replied: 'I understand:
The music of the earth sings through a thousand holes.
The music of man is made on flutes and instruments.
What makes the music of heaven?'

Master Ki said:
'Something is blowing on a thousand different holes.
Some power stands behind all this
And makes the sounds die down.
What is this power?'(8)

'The religious geniuses of all ages have been distinguished by this kind of religious feeling, which knows no dogma and no God conceived in man's image; so that there can be no Church whose central teachings are based on it. Hence it is precisely among the heretics of every age that we find men who were filled with the highest kind of religious feeling and were in many cases regarded by their contemporaries as atheists, sometimes as saints. Looked at in this light, men like Democritus, Francis of Assisi, and Spinoza are closely akin to one another.'

'How can cosmic religious feeling be communicated from one person to another, if it can give rise to no definite notion of a God and no theology? In my view, it is the most important function of art and science to awaken this feeling and keep it alive in those whom are capable of it.'(9) (John Ruskin in his The Stones of Venice, 1853, states, "I never yet met with a Christian whose heart was thoroughly set upon the world to come, and, so far as human judgement could pronounce, perfect and right before God, who cared about art at all").

'When one views the matter historically one is inclined to look upon science and religion as irreconcilable (sic) antagonists...The man who is thoroughly convinced of the universal operation of the law of causation cannot for a moment entertain the idea of a being who interferes in the course of events--that is, if he takes the hypothesis of causality really seriously. He has no use for the religion of fear and equally little for social or moral religion.' (Carl Jung wrote that "we should never forget that what today seems to us a moral commandment will tomorrow be cast into the melting pot and transformed, so that in the near or distant future it may serve as a basis for new ethical formations...forms of morality belong to the

category of transitory things.”) *‘A God who rewards and punishes is inconceivable to him for the simple reason that a man's actions are determined by necessity, external and internal, so that in God's eyes he cannot be responsible, any more than an inanimate object is responsible for the motions it goes through. Hence science has been charged with undermining morality, but the charge is unjust. A man's ethical behavior should be based effectually on sympathy, education, and social ties; no religious basis is necessary. Man would indeed be in a poor way if he had to be restrained by fear and punishment and hope of reward after death...’*

‘I maintain that cosmic religious feeling is the strongest and noblest incitement to scientific research...What a deep conviction of the rationality of the universe...Kepler and Newton must have had to enable them to spend years of solitary labour (sic) in disentangling the principles of celestial mechanics!’(10) (Paul Valery: “The universe is built on a plan the profound symmetry of which is somehow present in the inner structure of our intellect.”). (From Eagle Chief, 19th C. Pawnee chief: “...and from the stars and the sun and the moon should man learn...all things tell of Tirawa [God]”). (Joseph, chief of the Nez Perce: “The earth and myself are of one mind. The measure of the land and the measure of our bodies are the same...”). (Dhyani Ywahoo, Cherokee wisdom-holder: “One basic teaching is the interconnection of all people and things, despite distance, time and death.”). *‘The future (to the scientist) is every whit as necessary and determined as the past. There is nothing divine about morality; it is a purely human affair...the harmony of natural law...reveals an intelligence of such superiority that compared with it, ...all the acting of human beings is an utterly insignificant reflection. This feeling is the guiding principle of his life*

and work...it is beyond question closely akin to that which has possessed the religious geniuses of all ages.'

Let us now ask the questions.

1. Have the religious geniuses of all ages been distinguished by this cosmic religious feeling which knows no dogma? Indeed, was the religion that Christ expounded a dogmatic one?
2. Is it a function of science and art to awaken this feeling?
3. Is moral certainty a sign of cultural inferiority?
4. Should man's ethical behavior be based on sympathy, education and social ties, without a religious basis?
5. Did 19th century American Indians better understand this cosmic religious feeling than present-day researchers have credited them?
6. Does science undermine morality?

'It is true that convictions can best be supported with experience and clear thinking. On this point, one must agree with the rationalist... (his) weak point is, however, that those convictions which are necessary and determinant for our conduct and judgements cannot be found solely along... the scientific way... Objective knowledge provides us with powerful instruments for the achievements of certain ends, but the ultimate goal itself and the longing to reach it must come from another source.' (11)

'To make clear these fundamental ends and valuations... seems to me precisely the most important function which religion has to perform... And if one asks whence derives the authority of such fundamental ends, since they cannot be stated and justified merely by reason, one can only answer: they exist in a healthy society as powerful traditions... that is, as something living, without its being necessary to find justification for

their existence. They come into being not through demonstration but through revelation, through the medium of powerful personalities.'

(12)

'... What characterizes the aspirations of a person who gives me the impression of being religious? ... (He) appears to me to be one who has, to the best of his ability, liberated himself from the fetters of his selfish desires and is preoccupied with thoughts, feelings, and aspirations to which he clings because of their superpersonal value.' What seem to matter are not whether an attempt is made to unite these contents with a divine being, but the force and depth of the convictions. They neither require nor are capable of a rational foundation. 'Science can only ascertain what is; religion deals only with evaluations of human thought and action: it cannot justifiably speak of facts and relationships between facts.' Conflicts arise when science tries to make judgements with respect to values and ends, or religion intervenes in the spheres of a Galileo or Darwin. But keep in mind that reciprocal relationships exist between the two. For science without religion is lame, religion without science is blind. *(13)*

'Though I have asserted that, in truth, a legitimate conflict between religion and science cannot exist... I must qualify this... it has to do with the concept of God. [Early on] gods were created in man's own image, gods who influenced the phenomenal world. Man sought to alter the dispositions of these gods through magic and prayer. The idea of God in the religions taught at present is a sublimation of that old concept.

(14)

"... Nobody... will deny that the idea of the existence of an omnipotent, just, and omnibeneficent personal God is able to accord

man solace, help, and guidance; also, by virtue of its simplicity, it is accessible to the most undeveloped mind. But there are weaknesses attached... If this being is omnipotent, then every occurrence, every human action, human thought, feeling and aspiration is also His work. How is it possible to think of holding men responsible for their deeds and thoughts...? In giving out punishments and rewards, He would be passing judgement on Himself. (15)

'The main source of the present day conflicts between the spheres of religion and science lies in this concept of a personal God. It is the aim of science to establish general rules, which determine the reciprocal connection of objects and events in space and time.' Faith in these rules and laws of nature allow man to predict temporal behavior with astounding precision. To be sure, when the number of factors coming into play in a phenomenological complex is too large, scientific method fails us. But exact predictions in such cases are because of the variety of factors, not because of any lack of order in nature. (16)

'... the doctrine of a personal God interfering with natural events could never be refuted, in the real sense, by science, for this doctrine can always take refuge in those domains in which scientific knowledge has not yet been able to set foot. But I am persuaded that such behavior on the part of the representatives of religion would not only be unworthy but also fatal. For a doctrine, which is able to maintain itself not in clear light but only in the dark, will, of necessity, lose its effect on mankind, with incalculable harm to human progress. In their struggle for the ethical good, teachers of religion must have the stature to give up the doctrine of a personal God, that is, give up that source of fear and hope which in the past placed such vast power in the hands of

priests. In their labors, they will have to avail themselves of those forces, which are capable of cultivating the Good, the True, and the Beautiful in humanity itself. (17)

If it is one of the goals of religion to liberate mankind as far as possible from the bondage of egocentric cravings, desires, and fears, scientific reasoning can aid religion in yet another sense. Science seeks to reduce the connections [of facts] to the smallest possible number of mutually independent conceptual elements. It is in this striving after the rational unification of the manifold that it encounters its greatest successes... Whoever has undergone the intense experience of successful advances... is moved by profound reverence of [that rationality]. By understanding... he achieves a far-reaching emancipation from the shackles of personal hope and desires, and thereby attains that humble attitude of mind toward the grandeur of reason incarnate in existence... which... is inaccessible to man. This attitude... appears to me to be religious in the highest sense of the word. And so it seems to me that science not only purifies the religious impulse of the dross of its anthropomorphism, but also contributes to a religious spiritualization of our understanding of life. (18)

FOOTNOTES

1. Louisville (Ky.), *Courier-Journal*, January 7, 2005, page 6.
2. *Ibid.*
3. *Ibid.*
4. Albert Einstein, Ideas and Opinions, Crown Publishers, New York, 1954.
5. Ibid.
6. Ibid.
7. Ibid.
8. Chuang Tzu, Writings.
9. Einstein, Ideas and Opinions.
10. Ibid.
11. Ibid.
12. Ibid.
13. Ibid.
14. Ibid.
15. Ibid.
16. Ibid.
17. Ibid.
18. Ibid.