

# George Sudarshan

## One quest, one knowledge

### Introduction

In the Hebrew Bible, there is a story about a remarkable man to whom Abraham pays his tithe. His name is Melchizedek. Unlike most other people whose genealogy is known and recited, Melchizedek has no clan, no genealogy, no birthdate and no fixed address. As a priest, he is a figure who, in a sense, resides outside time and space. To Hindu eyes, he represents the eternal hidden within the temporal. In this essay, I would like to discuss the relationship between the scientific and spiritual quests from a Melchizedekian perspective or, as the Apostle Paul said to the sophisticated Athenians with their many gods, "I want to talk to you about the unknown God." I will focus more on the spiritual aspect of the Hindu perspective and not at all on its institutional history because my tradition represents not so much a particular religion as it does the human spirit; and "Hindu" is used here as the old Greeks and Persians used it to denote the way of life of the people of a geographic location.

Experiences and experiments are interpreted differently by different people. Many find both the universe and their own lives to be magnificent, well-designed creations. Others find only meaninglessness and purposelessness. When I was in my teens, I read William James's *The Varieties of Religious Experience*. In addition to the religious experiences expressed so beautifully by James, we need to add the contemporary anti-religious experience many people have of feeling indifferent toward reflecting and meditating on their lives and the world around them. This is obviously not entirely true – otherwise the SSQ conference would not have drawn such a large audience – but it is a prevalent characteristic of our contemporary culture. It seems to apply to many engaged in academic pursuits, and especially to those who work in physical sciences.

### The scientific attitude

While there is a generally accepted framework for scientific research, no unalterable dogma of scientific method exists. Science evolves and stands always ready to be corrected in the light of new evidence. Although not

everything has to be experienced directly, all scientists, skilled researchers, are intimately and thoroughly acquainted with the broad issues of their discipline and can extrapolate from them to their own experiences. The scientific attitude is not unlike the attitude which Saint Thomas, one of Jesus' disciples, took toward Jesus' resurrection: "Unless I see the mark of the nails in his hands, and put my finger in the mark of the nails and my hand in his side, I will not believe" (John 20: 25). The basis of faith, therefore, just as much as the basis of science, must be in things directly seen or experienced. Scientific research is, on the one hand, an examination of the orderliness and comprehensibility of the universe. On the other hand, it demands careful, critical examination of theories and experimental findings at every step. Not all scientists draw the same conclusion from the same data. The meaning, lessons and design of the physical universe are seen and evaluated differently by different well-informed, skilled researchers.

Whether a scientist thinks that the universe is designed or not, that it is meaningless or not, does not in general affect his or her scientific performance. But as soon as someone asserts that his views on design in the universe, or lack thereof, is the only scientific position, this view becomes a dogma. This is bad science, and it is bad *for* science. Similarly, differences of interpretation exist with regard to the world at large, the society in which we live, and the decisive events of our own lives. Whereas some see a benevolent agency guiding us along, others see nothing but chance and individual choice. Both views are possible.

However, if you are inclined to find meaning in the experiences of your life, then you will also be more inclined to find meaning within the world of science, too. This does not necessarily mean doing science any differently, but it opens the possibility of seeing science as a source of joy. In this case, science ceases to be an end in itself and becomes a spiritual discipline. In a Hindu hymn called "A Thousand Names of Vishnu," the very first phrase says, "The world is Vishnu." This hymn calls us to see the world as a manifestation of the Lord, just as the Psalms call us to glorify God for the magnificence of the creation. Scientific bigotry insists that there is only one way to understand science. One might suppose, for example, the path of science is separate from the path of the heart. While I would not wish to deny those who take this view the right to their opinion, I do hope they are wrong. Most importantly, all scientific knowledge, as a model of the world, is subject to rethinking in the light of new discoveries, both theoretical and experimental.

### **Purpose and discovery**

In modern science, making a reference to teleology is considered bad form. In spite of this, however, even scientists plan their lives with some good in mind. When we look back on our lives, even random events appear to have been part of a plan. We can see looking back that there was indeed a pattern to the movement of our lives. In fact, the best explanation of your life, if

you only knew the history of yourself in advance, is in terms of teleology, that is, in terms of some greater purpose. The most adequate explanation of everything that happens in your life is that there is a design, and that this design is being carried out.

I believe this to be true, even in cases where apparently bad things happen to good people. When I was an undergraduate, I became very ill one year around the time of my annual examinations, so ill, in fact, that I could not appear for my exams. I was put in a college hospital where the doctor very rarely came to check up on me. As I did not speak the local language well, I could not converse with the infirmary attendants. I had a lot of time to reflect on myself and my life. To add to the isolation, two students from a nearby high school who had chicken pox were put right next to me. Thus, anybody who might otherwise have come to see me, did not. At the time I thought, "My God, what is the value of this? Why did this happen to me?" And yet, in looking back, I can see that this time was the moment when I started studying physics very seriously. I was fortunate to have the time to reflect on my life, physics and the whole universe.

The openness of scientists in the moment of discovery is one of impersonal knowledge manifesting itself within, rather than one of discovering something outside oneself. This particular point deserves emphasis because many scientists are very careful to avoid any talk about the role of their personal experience in their discoveries. In general, people try to appear civilized and not talk about how personal experience figures into their scientific accomplishments. In the Hindu tradition, however, personal experience is the ultimate authority with regard to all things. All scriptures, all sayings, all teachings, are only a guide for organizing one's life. If things don't work out on a particular path, find another. If this works, then you have found what you were looking for.

Within my tradition, much emphasis is placed on the moment of discovery. Such insights need not be earth-shaking. They could be something quite trivial or small, but nonetheless they involve discovery. And when you discover something new, several powerful things happen. One is that you experience great joy. At that particular moment, there is nothing wanting, nothing you don't possess. Second, the discovery is something radically new. Humans have not been here before, but now this piece of knowledge has been uncovered for the first time. Finally, and somewhat paradoxically, at this very moment, you also see that this discovery is *not* something new, but in fact is something very familiar. There is no sense of strangeness in discovery, only a sense of belonging. It is as if you were returning to your point of departure. The cyclical nature of the world, as well as what you are in your own true nature, is uncovered in the moment of discovery.

### Where is God?

Many people believe that the universe has a purpose, and that it is guided by

a benevolent, sustaining agency. The West calls this agency "God," and asserts that we creatures belong to a powerful Creator who is far greater than anything we can conceive in our awareness or insight. Thus, within all the Abrahamic faiths, one must approach God with fear and trembling. To identify oneself with God is a blasphemous act worthy of banishment from society. In the past, drastic punishments were inflicted upon persons foolish enough to claim to be God, but these days civil laws protect them from such consequences.

The vibrant spiritual tradition belonging to my part of the world, namely the Hinduism of central and south Asia, believes instead that God manifests Himself, or Herself, in many ways and in many contexts. My tradition affirms that any spiritual search, whether academic or not, is bound to lead to God. Within Hinduism, there is nothing which is not sacred. God is not an isolated event, something separate from the universe. God is the universe.

Yes, God is more than the universe, but He is the universe. Therefore, there is no time which is not a time for prayer, no place which is not sacred, no event in which God is not present and involved. Consequently, someone from my tradition feels no sense of awe when encountering the divine, at least not in the sense of being filled with fear and trembling. How can you fear something which is yourself? This may seem to be a rather blasphemous attitude, to identifying oneself with God. At the least, isn't it an arrogant and egotistical misunderstanding of the true nature of God? Not if we examine the situation more closely. Not if we scrutinize the kind of God we are talking about.

As children, we wanted our fathers to be powerful. ("My daddy can beat up your daddy.") As we grow into adults, however, we want our fathers to be wise. The same goes for our models of God. Upon first thought, we want God to be all powerful. As our relationship with God matures, we want a wise God who can walk alongside us. Obviously, you don't walk alongside someone before whom you feel you must fall down in fear and trembling. Rather, in such a relationship, you expect to be shown certain things which you hold most valuable in life. In particularly insightful moments, riches lose their importance; only the feeling that wealth is significant makes them valuable. What we yearn for in our walk with God is permanence, happiness, enlightenment. All these things, therefore, must be aspects of God. If our awareness grows toward the eternal and permanent, then this is what we are yearning for. If our essential nature is happiness, then we seek happiness in order to be most fully ourselves in this world. The search for happiness is the search for our true being; it is, therefore, a spiritual path.

### **Hunting and gathering**

Amongst those who devote their professional lives to science, there are two different categories of people. First, there are the gatherers, the integrators of available knowledge, who are especially adept at assembling knowledge,



digesting it, and presenting it in such a fashion that most of us can understand. When we see how deftly a master presents difficult and complicated concepts, we think to ourselves that we could do it too, if only we tried. The gatherers are the ones who create consensus. They are guided by all the things happening around them, and they seek to put everything in its place. But they have a vested interest in things as they are. This makes them hostile to radically new ideas and frameworks.

There is, however, a problem with this kind of approach to science. Just as those who built the Tower of Babel needed to be of one mind and one tongue to achieve their goal, the scientific gatherers of our day depend upon a common vision in order to build their tower reaching up to heaven. But how many aspects of the mind and of reality must be covered over and concealed in order to achieve such unanimity? How much of reality do we miss in pursuit of a common goal? What degree of hubris lies beneath such attempts? And what are the consequences when our towers fall?

Norbert Wiener (1961), in his book on cybernetics, talks about the problems of frequency drift with regard to electrical generators. When one connects many generators together, the result is that each one will pull the other into synchrony, so that, by and large, the frequency of the electricity they generate in tandem does not drift. Wiener points out, however, that this doesn't really solve the problem, because when instability does set in, it is much wilder than before. The scientific gatherers of our day create systems that look impressive for all their clarity and scope, but they remain susceptible even to small disturbances in our knowledge of reality.

Then there are the hunters, those who go after knowledge. Hunters are not particularly sociable types. They don't seek agreement with conventional wisdom, and often devote themselves to one particular idea or experiment to the utmost of their ability. Often, such scientists end up traveling many years of their lives down blind alleys, with everyone feeling sorry for them in the end. Occasionally, though, hunters come up with a landmark discovery which is eventually integrated into the larger store of human knowledge.

In a similar way, the spiritual quest also must have hunters and gatherers. By and large, most people in religion, just as in science, are gatherers of wisdom. Not everyone can hunt, otherwise there would be few left to integrate the discoveries and insights, and what we had found would lack coherence. No one would be able to interpret the significance of the hunters' trophies. In a sense, religion as a whole is the gathering place of all spiritual insights and findings, whereas the individual's spiritual quest, if one is courageous, is the life of a hunter.

In my own life, I have been privileged to experience the joy and ecstasy of discovery in both the scientific and spiritual domains. In such moments, the distinction between scientific and spiritual paths vanishes for me. In fact, the feeling is identical for both. The majesty of the external universe, the power of the mathematical description of the world, the infinite creativity and insight one finds within, all of these fill me with a sense of joy, thankfulness

and humility: joy, because it turns out that I am right, that I have discovered something true about reality; thankfulness, for the preparation I received which allowed me to receive this insight at this particular time; and humility, for having been entrusted with this vision.

Hinduism does not consider aesthetic aspects of reality to be different from the Godhead. True beauty is forever new. The divinity and purpose in the universe, as well as in our awareness, grasps and shapes beauty; it searches for beauty and meaning. Beauty is truth, and truth is beauty. Reality, therefore, is not something that can be grasped from only one perspective. A three-dimensional object can be recognized as such only by seeing multiple projections from different perspectives, with, so to speak, different attitudes, and by integrating them into one reality. They only appear contradictory to one another. For example, looking at a person face to face yields one aspect of that person. Looking at them sideways brings another aspect into view. These two views appear contradictory, and they *are* contradictory as long as they remain two-dimensional in our minds. But if we consider them in three dimensions, we discover that they imply not contradiction but depth, and can be integrated with one another, removing the contradiction.

In the Hindu tradition, then, the spiritual quest is in fact not distinct from the scientific, aesthetic or, for that matter, any academic pursuit. Once a year every year, we remind ourselves about the beauties of humanity by reciting certain verses which focus our minds upon the glory of human inspiration and insight. But we also recite verses having to do with each of the major disciplines: mathematics, astronomy, rhetoric, and poetry. These verses remind us that our sacred duty is not only to so-called "holy" knowledge, but to all knowledge because, in fact, all knowledge is holy.

### References

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