Is there any common ground in Practical Experience of Science and Religion?

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Talents and temperaments differ. The experiences and experiments are interpreted differently by different people. Many find both the universe and their own life to be magnificent and designed; others find it to be purposeless. In my teens I read a book titled "Varieties of Religious Experience". To William James' Varieties we should add the anti-religious experience of contemporary indifference and unwillingness to reflect and meditate. Similar comments apply to academic pursuits, especially with physical science. While there is an accepted framework, it is no dogma; and stands ready to be corrected in the light of new evidence. While not everything has to be directly experienced by everyone, a scientist should be intimately and thoroughly acquainted with typical areas so that he can extrapolate from those. Like in the legend of St. Thomas, he should insist on direct personal experience. Things directly "seen" must form the basis of faith. Research work in the sciences is on the one hand a reflection on the orderliness and comprehensibility of the universe; on the other hand, careful critical examination of theories and experimental findings.

Not every scientist draws the same conclusions about the meaning, lessons and design of the physical universe. In general, this does not affect their scientific performance whether they think that the universe has a design and purpose, or think that the world is meaningless. As soon as one person asserts that his views on design or of no design is the only "scientific" position, that becomes dogma; it is bad for science and it is bad science.

Varieties of Perspectives

We have the same with our view of the world at large, the society in which we live and decisive events in one's life. Some people see a benevolent agency that guides (but not compels) us along in our life. If you take this to be a satisfactory model of life experiences, then you seek a meaning for the world of science: not in doing science any other way, but in seeing a purpose and a source of joy in the findings of science. Science ceases to be an end in itself but science becomes a spiritual discipline. The hymn of the "Thousand Names of Vishnu" begins with "The World as Vishnu". The Psalms exhort us to glorify the Lord for the glory of his creation.

Bigotry in science is the insistence that there is only one way of understanding science, that science is a "way without heart". I am not asserting that these people are wrong. The humble lesson is that our body of scientific knowledge is a "model", subject to revision and reworking in the light of known discoveries, theoretical and experimental.
Experience of Creativity

The experience of the creative scientist at the moment of discovery is one of impersonal knowledge manifesting in him rather than of his making the discovery; there is total newness and total familiarity and a feeling of great humility. Being at the moment of creation is a spiritual experience whether it is in science or spiritual discipline.

Most of the learned people assembled here have found meaning and would be inclined to seek a design and a benevolent agency guiding, causing and sustaining the universe. This we call God; assert that we are creatures and He is the Creator; that God is far greater than anything we can conceive in our awareness or insight. We may approach Him with fear and trembling. Therefore identifying oneself with God is blasphemy (according to the Abrahamic religion that originated in West Asia). The concern with blasphemy led to their torture and even death. No longer is this done, mostly because civil laws forbid such action.

Witnessing Awareness

Yet there are vibrant spiritual traditions which do not recognize blasphemy. Identification with the Designing Intelligence is considered as one of the highest spiritual experiences. In such traditions the highest state of awareness is identified with the Supreme Intelligence; and they hold that this is an attainable goal here and now. The classic text "Yoga Sutra" by Patanjali even furnishes a regimen of practices and provides a road map to that path, so that one may recognize the onset of various stages of awareness. Since awareness changes and changes the perceived world, the godhead is experienced in different ways. The essential point is that this is an experiential path and direct personal experience is essential. Those who deny the validity of these experiences are choosing an unscientific way to deal with this personal testimony.

Bigotry is the imposition of your world view on others without walking in their shoes: my way, or the highway! But it is not only in religion that bigotry exists, but also in science. Bigotry in science is the emphatic assertion that there is only one way of understanding science: some good scientists assert that the world is without design or purpose: that science is a "path without a heart". Such scientists certainly have the right to reject any design for the universe. They may even declare that there is no human cultural value in science (as distinct from technology).

The nature of awareness at the time of a great discovery or insight is not the same as for everyday awareness. Staring at the heavens, the mighty ocean, or watching a sunset—all these fill most people with a sense of joy and the loss of ego-sense. One is intensely aware but one is not limited to the limited form and location. The happiness and awe makes one fulfilled and utterly humble. This humility and happiness is true to an even greater degree in scientific discovery. There is newness with an uncanny familiarity. When you make the discovery it feels more like the discovery selecting you as the vehicle. This humility was what made Abdus Salam to say "Allah was with us in our deliberations" when asked what his thoughts were when his Nobel Prize was announced.

Hunters and Gatherers

People do science differently. There are the "gatherers" who accept the general view of leaders in his field; and allow themselves to be guided by the consensus view. They do not seek direct investigation from fundamental principles to the common viewpoint in their field, but feel that their appointed mission is consolidation and completion of that point of view. They make frequent reference to others like them; and, in turn, get referred to by others. The views are tempered by the ethos of the period; but as Norbert Wiener pointed out in his "Cybernetics",

electric generators drift in frequency but the drift is reduced by tying together many generators. The only problem is that under suitable conditions, there are wild swings in frequency when the whole systems crash. This same situation obtains in philosophy and religion.

The other mode is that of the "hunters" who go out on their own and challenge even the commonly held views and ask whether they are consistent, inevitable and satisfactory. Sometimes their work is celebrated, at other times it is ignored. But they do have the supreme joy of genuine discovery. The "hunters" is responsible for his views and assertions; and can relate them to first principles. They consider personal experience to be the supreme guide. Like St. Thomas who told his fellow disciples that they must be right in having seen the resurrected Lord, but for himself he has to see directly; and put his finger through the nail holes in the Lord's palm. In the Indian tradition, there is the legend of Sage Visvamitra who challenged the commonly held views throughout his earlier stages of spiritual awareness; one time he relinquished one-half of his spiritual merit to send a live embodied human being, Trisanku, to heaven. He did not quite succeed but got so far as to endow Trisanku with his own mid-heaven (from where he shines as a celestial trident).

Creative Sciences, Spiritual Traditions and Direct Experience

The same two kinds of approach to religion are pursued by different kinds of people. We need many more "gatherers" who are in touch with the community of believers and who hand down the great saying of prophets and saintly dead people. In the Abrahamic religions there is the imperative that "Thou shalt not have any god but Me", "Allah is the only God and Mohammed is His Prophet" and St. Paul's rather restrictive edict "Anyone who preaches differently from what you have been told by us, even if he is an angel, he will be called on himself the curse of the congregation." But there are isolated spiritually inclined people who seek the Supreme as direct experience, who question authority and who are often persecuted. In the Abrahamic religions, such people are viewed with suspicion. Only good saints are dead saints.

Yet discipleship, seeking help of one's betters to guide you seems to suggest a path intermediate to "hunters" and "gatherers". The Samaritan woman who encounters Jesus at a watering well, asks him, "Rabbi, my people have always worshipped under green trees on yonder hill; but your people say it should be in Jerusalem temple. What can you tell me?" Jesus gives an answer which is both simple and profound: "The time has come to express your devotion neither on this hill nor in Jerusalem; but the Lord is to be worshipped in the heart and in spirit."

In my life I was privileged to experience Joy and ecstasy in both the scientific and the spiritual paths; and at such moments I cannot distinguish whether it is spiritual or scientific. The majesty of the external universe, the power of the mathematical framework for physics; and the infinite creativity of the mind--all these fill me with joy, gratitude and humility.

In the aesthetic tradition of Abhinava Gupta and the School of Kashmir Saivism, the apex of aesthetic appreciation is indistinguishable from the highest spiritual awareness, "Truth is Beauty and Beauty is Truth." This perspective also allows for infinite creativity: "That which is truly Beautiful, is forever New."

There is a characteristic change in the perception of time during the enchanting events. Normally time flows from past to future, causation is from past to future, and each moment is transient. But at the time of discovery, or any spiritual peak experience, time has duration but no sense of being transient. The topology of time itself changes. Much of the profane past seems to have been so arranged to produce suitable conditions in the future. This recognition of teleology and non-transient duration is accompanied by the change in one's awareness: you are not the doer but only a witness.
When Abraham was following the Lord's commands and becoming the Father of the Faithful, he came across Melchizedek, who has no father or mother and has no genealogy, but eternally the Priest of the Lord. Abraham is greatly impressed and gave tithe to Melchizedek. In traditions where "who begot whom" was very important; where authority was well established; and where the Lord was demanding and exacting, Melchizedek with personal insight and ever-present ecstasy points to a godhead that is not different from the devotee, but the highest state of awareness. The Essence is Thee: tat tvam asi.

In the Indian tradition is a hymn in praise and in identification of the devotee with the Lord, the "Hymn to the Auspicious One". Loosely translated the concluding stanza says: My awareness is Thou, my intellect is Your Consort, my vital breaths are Your entourage, my body is Your abode, all my enjoyment of things is worship of You, and when I am asleep it is a spiritual repose in You, all my travels are pilgrimages to You, all my words are praise to Thee; why, everything that I do and that I am is an act of Worship of Thee." Surely, "everything that I do" includes my scientific work.

**Concluding Remarks**

In my tradition God is not something apart from me and my world; and therefore from my science. There is nothing that is apart from the Lord and hence nothing that is not sacred. While for convenience one may set apart a place, a time and a class of activities that are used for worship, everything at all times are sacred; and this is direct experience when my awareness (transcending body and mind) functions at its peak. All life is spiritual.

There is no suggestion that South Asian traditions are superior to West Asian traditions. But the main difference is of whether God is to be seen as distinct from man. But words do not settle such profound questions. One needs Grace to directly experience the enchantment of oneness with God. The question of one or many gods, of the Creator and the creatures would automatically resolve itself in the direct experience of transcendence.