

SAND Talk

Science and Spirituality: Potential Allies in Discovering Truth

Prepared this carefully, unlike last year. Read much aloud. Pardon me if dry. Questions at 12:30.

Tomorrow night in the main hall I'll be facilitating a conversation between Deepak and Rupert (not that they need much facilitation) on whether matter actually exists. Spoiler alert: it doesn't. Einstein: "Concerning matter, we have been all wrong. What we have called matter is energy whose vibration has been so lowered as to be perceptible to the senses as physical FORM. There is no matter."

You've all heard the Upanishadic expressions Aham Brahmasvi – I am That; Tat tvam asi - you *are* That: and Sarvam khalvidam brahma: All of this is That. If these expressions are true, if we take nonduality seriously, then it may appear that I am standing here talking to you and you are sitting there listening to me, but in reality, there's only consciousness interacting with itself, giving rise to apparent forms and phenomena, and hiding it's true nature from itself in the subjective experience of those forms. In other words, we are the Divine having a human experience. We're sense organs of the infinite; instruments of the Divine. People often thank me for doing Batgap, and I appreciate the thanks, but in a very real sense I don't feel like I'm doing it. It's more like I'm being done. If a paint brush could talk, it wouldn't say "I paint". It would say "I apply paint where the hand guides and directs me." During my decades of teaching meditation and more recently, doing Batgap, I've often felt like an instrument of something much larger and wiser than my individuality.

I'm sure we can all relate to this in our own ways. This sentiment was expressed beautifully in the Prayer of St. Francis.

[\(Show Graphic 01\)](#)

But I'm not comparing myself with St. Francis. Deer and rabbits run from me. Birds fly away. And my motivation has never been purely altruistic. I've always been zealous about spiritual evolution as much for own happiness as well as for what good I might do in the world. In the early days, my attitude was "I want enlightenment more than anything and I'll do anything to get it." You can see the absurdity in that phraseology. So in 1972, when my teacher said that if you're really serious about enlightenment you should become a monk, I abruptly and callously broke up with my girlfriend and embarked on a 15-year monastic phase. One of the incentives: Ashram in Himalayas. This is the view from a friend's balcony in that ashram.

[Slide - ashram photo](#)

This is another friend who lives there, aptly named Atmananda.

[Slide – Atmananda photo](#)

[Gangotri sadhu slide](#)

Recently Atmananda emailed me to say, “There is a beautiful sadhu in Gangotri who loves your Buddha at the Gas Pump stuff. He lives in Gangotri year-round, much of the time with no electricity, his kutiya buried in snow, but somehow he found your site and loves it!”

Gangotri is a tiny village, high in the Himalayas near where the Ganges emerges from a glacier.

So in a round-about way, I’m in the Himalayas, and a lot of other places, serving as an instrument of the Divine, not in the way I originally envisioned, but in a way for which I’m better suited and more useful.

That was all presented from an individual perspective. We’ll consider another perspective in a moment, but first, Part one of my talk. The preceding was just the prelude.

Part I

This is the Science and Nonduality conference. We bring together both the scientific and the spiritual traditions of gaining knowledge because the highest expressions of both realize that ultimately there is one non-dual reality appearing as diversity. At this conference we’re considering whether both traditions are talking about the same ultimate reality – not that there could be more than one - and how we can know or experience it.

If science and spirituality are both about understanding Reality, then they *should* be on the same team. They should concur about a lot of things, and for both, experientially verifiable evidence should be the arbiter of truth. Science fiction writer Philip K. Dick – “Reality is that which, when you stop believing it, doesn’t go away.” I might add that believing in something doesn’t make it real. Scientists are not concerned about belief. They don’t say “Believe my theory or I’ll blow you to bits and you’ll burn in hell for all eternity”. Rather they say, “Here’s a promising theory. My research supports it. See if yours does. In fact, see if you can refute it.” The highest forms of spirituality do the same. The Upanishads and similar scriptures don’t ask for belief or faith. They describe deeper realities that people have experienced, and invite the reader to experience them as well. On the other hand, science has given us the means to blow everyone to bits, and real spirituality on a mass scale is critically needed to prevent us from doing that.

The best scientists and spiritual aspirants have a lot in common. That ability to visualize the unseen has always been the key to creative scientific genius. As Einstein later put it, “Imagination is more important than knowledge.” The clearest spiritual realizers cultivate their realization systematically, scientifically, proceeding carefully by steps of knowledge and experience. If science adopted the best of spirituality, and vice versa, both paths of gaining knowledge would be greatly enriched. And this conference is an opportunity to do just that.

For a long time, religion has been the predominant expression of spirituality in the world. Religions spring from the experience of some sage who is a living embodiment of Truth, but even in his lifetime, most people don’t understand him because they don’t share his level of experience. After his death his message gets more and more distorted. Lacking the means to provide the experience their founders had, religions advocate belief, and unverifiable beliefs tend to clash. Hundreds of millions of

people have been tortured and killed over the distorted remnants of what started out as the most sublime experience a human being can have. So belief not corroborated by experience can be delusional and dangerous.

Science, and a scientific approach, can help restore experience, rather than belief, as the foundation of religion and spirituality.

Sagan Slide

Carl Sagan - "How is it that hardly any major religion has looked at science and concluded, 'This is better than we thought! The Universe is much bigger than our prophets said, grander, more subtle, more elegant?' Instead they say, 'No, no, no! My god is a little god, and I want him to stay that way.' A religion, old or new, that stressed the magnificence of the Universe as revealed by modern science might be able to draw forth reserves of reverence and awe hardly tapped by the conventional faiths."

Something of this nature seems to be happening. People are everywhere are waking up. They aren't satisfied with mere belief. They want direct experience. Many of them are leaving traditional religions. Others are breathing new life into those religions. And many regard science as modern day revelation, which is why conferences like this exist.

Erwin Schrödinger said "The more deeply physics probes, the more unified nature becomes. "Quantum physics thus reveals a basic oneness of the universe."

Plank Slide Max Plank, the founder of quantum theory, said "I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness."

So the most advanced physicists equate this basic oneness, which they may call the Unified Field or vacuum state, with consciousness. I'll use such terms as Unified Field, Consciousness, God, and Brahman interchangeably in this presentation. Richard Dawkins isn't here is he? OK, Good. Whew!

Physics tries to discover more fundamental levels of nature through **objective methodologies**. Because the physicist uses external tools, he can never overcome the subject/object split. At best, he can aspire to gain a mathematical understanding of non-dual reality, supported by evidence from massive particle accelerators and other tools. In other words, he can achieve some intellectual understanding of the Unified Field, but cannot experience his true nature as that field.

But if the ultimate reality is consciousness, then what instrument could be better suited to exploring it than the human nervous system? It reflects consciousness much more capably than a particle accelerator. Using the nervous system as an exploratory tool through **subjective methodologies** such as meditation, one can transcend the subject/object split and experientially realize one's true nature as the ultimate, non-dual reality. This tool is also much more publically accessible. We can't all get Ph.D.'s in physics and gain access to particle accelerators, but we all have nervous systems.

Part II:

If everything is consciousness, then the qualities we see displayed in the world must somehow reveal qualities of consciousness.

19th century Hasidic master Menahem Nahum: "The Creator's glory fills the whole earth; there is no place devoid of Him. But his glory takes the form of garb; God is "garbed" in all things. This aspect of Divinity is called *shekhinah*, "indwelling," since it dwells in everything."

Bible "For what can be known about God is plain to [people], because God has shown it to them. For his invisible attributes, namely, his eternal power and divine nature, have been clearly perceived, ever since the creation of the world, *in the things that have been made.*"

Let's consider some of the qualities consciousness is supposed to have and see whether science can help us detect those qualities in the "things that have been made" – the world around us.

PowerPoint text

- **It's everything. Everything is it.** – Advaita – nonduality - tells us that that which may appear physical is actually consciousness, appearing to assume physical forms. Physics tells us that apparently physical stuff is all the same, non-physical reality, appearing to assume different forms.
- **It's fundamental.** - Materialists argue that consciousness is an epiphenomenon of brain functioning that ends when the body dies. But physics understands the UF to be fundamental. The brain and everything else arises from it. Advaita says the same of consciousness.
- **It's eternal and indestructible.** - Bhagavad Gita - "Know that to be indeed indestructible by which all this is pervaded." If everything *is* consciousness, or the UF, then forms may come and go, but their true nature remains unchanged. One of the traditional metaphors is gold taking the form of various ornaments. Earrings can be melted down to form rings, but it's really just the same gold assuming different forms. The gold itself is indestructible.
- **It's all-pervading.** – There is no place or thing near or far, large or small, which can be found to be anything other than consciousness. It's not that consciousness permeates creation the way water permeates a sponge. Consciousness is both the water and the sponge. There is no distinction. There's a song that goes "God is watching us from a distance." Not so. God, or consciousness, can't be distant from anything. How can it be distant from itself? Every molecule, cell, body, star, and galaxy is governed perfectly. Not *by* consciousness, or God, as a puppeteer governs a puppet, or as a clockmaker makes a clock and then winds it up and lets it run, but *as* consciousness or God, interacting with itself. If God were distant, then he wouldn't be omnipresent, and it's obvious he's omnipresent, because everywhere we look or can imagine looking, there he is – Infinite Intelligence on display.
- **It's self-referral.** – If consciousness is all that exists, then it has nothing other than itself with which to interact. In terms of physics, the Unified Field refers to, "becomes aware of", or interacts with itself because there's nothing else down there for it to interact with. This self-interaction causes relative expressions such as force and matter fields to emerge. These, in turn, give rise to elementary particles as manifestation proceeds. The Vedas outline a parallel process. In the Bhagavad-Gita, Lord Krishna, who was said to have been an avatar – the Absolute in human form – says
Prakritim swam avashtabhya, Vishrijami punah punah

Curbing back on my own nature, I create again and again.

In other words, the self-interaction of the Absolute, of consciousness, gives rise to the apparent material creation.

- **It's intelligence.** – Consciousness is sometimes presented as silent and qualityless, but the more mature spiritual traditions regard it as both infinitely silent *and* infinitely dynamic - as the repository of all qualities, among them intelligence and creativity. The vast complexity of every bit of creation is beyond our comprehension, and far beyond our computational abilities. Most scientists don't have much to say about how the complexity and orderliness of nature is actually managed.

Slide. Physicist Paul C. Davies comments, "...to be a scientist, you had to have faith that the universe is governed by dependable, immutable, absolute, universal, mathematical laws of an unspecified origin. You've got to believe that these laws won't fail, that we won't wake up tomorrow to find heat flowing from cold to hot, or the speed of light changing by the hour. Over the years I have often asked my physicist colleagues why the laws of physics are what they are? ...The favorite reply is, 'There is no reason they are what they are--they just are.'" They are what they are because consciousness is pure intelligence, and the laws of nature are impulses of that intelligence. More on that in a minute.

Einstein said: **Slide.**

"Contemplate the mystery of conscious life perpetuating itself through all eternity, to reflect upon the marvelous structure of the universe which we can dimly perceive, and try humbly to comprehend even an infinitesimal part of the intelligence manifested in nature."

If we acknowledge intelligence as a primary quality of consciousness, then spirituality can help scientists understand what they now regard as a miracle and a mystery, and science can help spiritual seekers see that everything is consciousness. **Science tells us that in every cubic centimeter, anywhere in the universe, innumerable laws of nature are functioning flawlessly, and in perfect coordination with one another. Spirituality tells us that those laws are clear evidence of the omnipresence of intelligence.**

(elaborate on finger – not on acid) Carl Sagan said, "A single cell contains the equivalent information content of over 10 million volumes." (**Slide - play cell video without audio**) 40-100 trillion cells in the human body, each about as complex as Tokyo but only a few microns across; each containing about 100 trillion atoms, each capable of repairing and reproducing itself. Does this look like randomness or chance to you?

There are 20 elements in amino acids that combine in certain sequences to form the 700,000 kinds of proteins in our body. To make just one of these proteins -"collagen" - you need to arrange 1,055 amino acids in precisely the right sequence. If this had to happen by chance, it would be like a Las Vegas slot machine with 1,055 spinning wheels each with 20 symbols and you had to get the same symbol on all the wheels to win the jackpot. The odds of achieving this through chance are far greater than the number of atoms in the universe.

- **It's orderly, not random or chaotic.** – Nature's laws are perfectly orderly. Nothing is random, accidental, or arbitrary. In mathematics, there's something called **Chaos Theory**, in which seemingly random events are actually predictable from simple deterministic equations. As theologian Dr. R.C. Sproul put it, "If there is even one maverick molecule in the universe, there is no God." For all the talk of random selection in Darwinian theory, many scientists recognize that life could not have come into existence by mere chance. Astronomer Fred Hoyle said,

(slide) “The chance that higher forms have emerged in this way is comparable to the chance that a tornado sweeping through a junk yard might assemble a Boeing 747 from the materials therein”. Even inanimate creation is not random or accidental. Let’s take something that may seem random, and consider how it’s not - rocks in a tumbler. Or better yet, an asteroid field, which is the same thing on a larger scale:

(Star Wars video with audio).

The movements of the tumbling asteroids are not random. They are in perfect accord with gravitational and other laws of Newtonian physics. Our most powerful computers couldn’t compute all the variables involved, but all-pervading Intelligence has no trouble doing so. Another thing. When the guy flying that TIE fighter went splat into the asteroid, it was in accordance with the laws of karma – his karma and that of Han Solo and the other beings in the *Millennium Falcon*. The Bhagavad Gita says, *gahana karmani gatih* - "Unfathomable are the Laws of Karma (action)". They are unfathomable by human intellect, because they are infinitely complex, but the infinite, all-pervading Intelligence doesn’t break a sweat administering the karma of trillions of beings throughout the universe.

- **It is a field of infinite energy and potential.** – Physicists say that at the level of the vacuum state, a single cubic centimeter of “empty space” contains more energy than is displayed in the entire manifest universe. We are swimming in an ocean of subtle energy of such immense power that it is virtually incomprehensible. The big bang is happening constantly. As cosmologist Brian Swimme put it, “The universe emerges out of an all-nourishing abyss not only 14 billion years ago, but in every moment.” In our own experience, when we realize our true nature as pure consciousness, we become conduits, to whatever degree our physiology is capable, of infinite energy and creativity.
- **It’s infinitely correlated.** – Last year’s conference was about entanglement – how two entangled particles a galaxy apart communicate instantly with one another. Infinite correlation would mean that since everything is consciousness, and consciousness is not segmented or bound by time and space, every bit of creation is intimately and directly connected to every other bit. This helps to explain the realm of psychic and extra-sensory phenomena, precognition, etc.
- **Contact with it is blissful, fulfilling.** – The scientific relevance of this is that some scientists are seeking to understand the neurophysiology and neurochemistry of the blissful nature of enlightenment. You’ve heard the phrase “sat chit ananda”, which means Absolute Consciousness Bliss. Consciousness is bliss, or at least contact with it is. The Upanishads say “contact with Brahman is infinite joy”.

Slide

Taittiriya Upanishad 3.6.1

Out of bliss these beings are born,
In bliss they are sustained,
And to bliss they go and merge again.

If life doesn’t seem blissful, then perhaps we’re not connected with its source clearly enough.

Brahma Sutras: "Aanandmayo Bhyaasaat" . . . "With (regular) Practice That Becomes Blissful."

1.1.12 So bliss is one of the perks of realizing our true nature as Brahman, or Totality, and can even be thought of as a litmus test of it, but it might take regular practice to cash in on that.

- **Knowing ourselves as That eliminates fear -**

Slide. The Upanishads state, "Certainly all fear is born of duality". You are a wave, but the wave is the same water as the rest of the ocean – just stirred up a bit. If we experience ourselves as *only* a wave, we are isolated, short-lived, vulnerable, and at the mercy of forces we don't understand or control. If we know ourselves as the ocean, then we live primarily as That - secondarily as a wave. We abide in a felt sense of timelessness, immortality. The Bhagavad Gita states that even a little of the practice of uniting with the eternal, indestructible reality delivers from great fear.

- **It's us! It's what we are.** - Again, most fundamentally, you are pure consciousness - the intelligence permeating, containing, and governing the universe. If that's ultimately all there is, then what else could you be?

- **It's the home of all the laws of nature.** All the laws of nature governing creation reside within consciousness. The term "laws of nature" has an impersonal, mechanical connotation. We refer to gravity, electromagnetism, etc. as laws of nature. But if everything is consciousness – intelligence – then these laws and all others must be made of intelligence – impulses of intelligence. Plato described the universe as a single living creature that encompasses all living creatures within it. If we think of it that way, then the laws of nature are like specific currents of intelligence flowing within the ocean of intelligence, performing various functions. In the Vedic tradition, these currents are understood as *devas*, which is crudely translated as "gods". The Rig Veda says

Richo Akshare Parame Vyoman

Yasmin Deva adhi vishve nisheduh

"All the *Devas*, the impulses of Creative Intelligence, the laws of nature responsible for the whole manifest universe reside in the **transcendental field.**"

If you know yourself as that field, then you live as the home of all the laws of nature. All the impulses of intelligence governing creation reside within you. Your thoughts and actions tend to align with them, so they support you. If you do not know yourself as That, then you are estranged from those laws. You tend to act in opposition to them, so they oppose you and you experience obstacles and suffering.

The BG says: "He who has conquered his self by his Self alone is himself his own friend; but the Self of him who has not conquered his self will behave with enmity like a foe." BG 6, 4

Jesus (Gospel of Thomas) - "If you bring forth what is within you, what you bring forth will save you. If you do not bring forth what is within you, what you do not bring will destroy you."

Part III

If everything is consciousness, does it follow that everything is conscious? And to what degree? **Sufi saying** – "God sleeps in the rock, dreams in the plant, stirs in the animal, and awakens in man."

A rock is as much *in* consciousness and consciousness *in* it as is a human being. But rocks do not appear to be conscious in any meaningful sense. Yet at the atomic and sub-atomic levels, looking at carbon atoms for instance, a rock is indistinguishable from a human being. Some would argue that even at this level, nature is conscious.

Slide – Physicist and cosmologist Freeman Dyson writes that, at the atomic level, “Matter in quantum mechanics is not an inert substance but an active agent, constantly making choices between alternative possibilities... It appears that mind, as manifested by the capacity to make choices, is to some extent inherent in every electron.” Plants are incredibly intelligent. Read Michael Pollan’s recent *New Yorker* article - *The Intelligent Plant*. And it is obvious that animals are highly conscious, intelligent, and emotionally sensitive.

These examples suggest that everything is conscious to some degree, but that that degree spans a vast range. The Sufis are not disputing that these forms are made of God. They are just saying that God, in and as forms, varies in the degree to which He recognizes and expresses the fullness of His nature. The more complex and sophisticated the physical structure, the more fully consciousness can be reflected. We see much more sophisticated, complex structures in living beings than in rocks - structures capable of reflecting consciousness enough to be conscious, conscious that they are conscious, and in the enlightened, conscious that they are consciousness. God sleeps, dreams, and stirs in the rock, the plant, and the animal because they don't have brains and nervous systems capable of enabling consciousness to be fully awake to Itself. But human beings do. It's just a matter of taking full advantage of the instrument in our possession.

Albert Einstein - “He who can no longer pause to wonder and stand rapt in awe, is as good as dead...”

Vonnegut slide

Most of us don't go through our days “rapt in awe” or astonished. Why?

(William Blake) “If the doors of perception were cleansed every thing would appear to man as it is, Infinite. For man has closed himself up, till he sees all things thro' narrow chinks of his cavern.”

Our perceptual abilities are dulled and our hearts are numbed, so we tend to perceive only the surface value of everything around us and within us. Spiritual practice refines the nervous system and cleans our doors of perception.

You might ask, **if we know ourselves as Infinite Intelligence, will we know everything?** Will I know what xxx is thinking? Would I want to?

Sure, it's possible. The more we refine our faculties of knowing, the more we can know. But the human instrument is not designed for omniscience. It's said that it takes a celestial body for that. As sense organs of the infinite, we are filters, lenses, conduits. The electrical field powers all light bulbs, but no individual light bulb can illumine the world. If it tried to do so, it would burn out. 11th chapter of Gita.

Slide – Krishna

Now that we have established that in essence, we are the Totality - the infinite intelligence permeating and containing everything, that science offers evidence that we are That, and that we can know ourselves as That through spiritual practice, I want to switch gears and tell you a story.

Part IV

High fever as a kid.

Slide

Anor aniyam mahato mahiyan

Atmasya jantor nihito guhayam

(Katha Upanishad 1.2.20)

Atman (the Self), smaller than the small, greater than the great, is hidden in the hearts of all living creatures.

So you don't just dwell in this body. You dwell in the hearts of all living creatures. Also non-living, if we can draw that distinction.

Rumi Slide

SLIDE - (Shvetaashvatara Upanishad 4.3-4). "You are woman. You are man. You are the youth and the maiden too. You are the old man hobbling along with a staff. Once born, you are the face turned in every direction. You are the dark blue butterfly, you are the green parrot with red eyes. You are the thundercloud, pregnant with lightning. You are the seasons, you are the seas. You are without beginning, present everywhere. You, from whom all worlds are born."

I want to elaborate on this by showing you some examples of large and small things. You've seen presentations like this before, but I want you to watch this one while keeping in mind that this is not something that's happening "out there". It's happening within you – within consciousness, within infinite intelligence, God, Brahman, Totality pervading and perfectly orchestrating all these events..

[\(play video 05 Galaxy Collision – no audio\)](#)

Merging of Andromeda and Milky Way galaxies. Imagine that you are observing this merger in real time as a silent, eternal witness, because you actually are. According to Drake's equation, everything I say about the earth here is probably also true of 1,000's of intelligent civilizations throughout our galaxy, and billions throughout the universe. This merger will take over 8 billion years, so I'm going to speed it up since I only have 40 minutes.

| If a 1 second = | It would take | Which equals |
|-----------------|---------------|---|
| 1 year | 254years | |
| 100 years | 2.5years | Generous human lifespan. Trillions of lives blinking on and off like little strobe lights throughout both galaxies, with all their romances and heartbreaks, triumphs and tragedies, wars fought over bits of territory and little ideas. |

| | | |
|------------------|------------|---|
| 1000 years | 3 months | Lifespan of a civilization: Mesopotamia, Egypt, Rome, modern era. Also seems to be the frequency with which major religions are founded, most degenerating soon after their founding into the fundamentalist belief that they have a monopoly on the truth, and everyone else is doomed. |
| 10,000 years | 10 days | Modern humans (Homo sapiens) are believed to have originated around 250,000 years, or about 25 seconds ago. |
| 100,000 years | 1 day | Ice ages cycle. |
| 1,000,000 years | 2 Hours | Permian mass extinction 250 million years (4 minutes) ago, due to CO2 from volcanoes in Siberia causing global warming. Killed 90% of all life on earth, especially the larger species. |
| 10,000,000 years | 13 minutes | Continents visibly shifting, mountains rising and eroding, 100 ice ages scrubbing each second. Meteors and asteroids pounding the earth. Age of earth- 4.7 billion years – If arms outstretched – swipe of a nail file eliminates human history. In about 5 billion years, or about 7 minutes at this rate, the sun will become a red giant and consume the earth after turning it into a molten blob. At this point global warming skeptics concede that they the earth is warming, but still insist that it's not due to human activities. Kidding. Human race as we would recognize it will probably be gone in a second or 2. But other intelligent races will evolve, because it's the nature of universal intelligence to evolve itself into forms through which it can enjoy itself as a living reality. |

As large and long as this merger will be, in the big picture it's only a very brief, local event. And it's dwarfed by the eternity and unboundedness of the Self.

05 - Show Size Comparisons images in rapid succession.

- 01 - If you shrank the sun down to the size of a white blood cell and shrunk the Milky Way galaxy down using the same scale, the Milky Way would be the size of the United States:
- 02 - That's because the Milky Way galaxy is huge. This is where we live in it
- 03. All the stars you see at night are inside this yellow circle.
- 04 - But even our galaxy is a little runt compared with some others. Here's the Milky Way compared to IC 1011, 350 million light years away from Earth:
- 05 - Within the Hubble Ultra Deep Field there are approximately 10,000 galaxies.
- 06 - The total field of view represents only 1 ten millionth of the total sky.
- 07 – Local Galactic Group
- 08 – Virgo Supercluster
- 09 – Local Superclusters
- 10 – Observable universe

There are innumerable universes besides this one,
and although they are unlimitedly large,
they move about like atoms in You.
Therefore You are called unlimited.

This discussion of the vastness of the universe is like discussing the size of the Pacific Ocean without considering its depth. The universe is multidimensional and whether we consider dark matter, in terms of physics, or the subtle realms, in terms of spirituality, most of what exists is beyond the limits of ordinary perception.

The Church fought the idea that the earth was not the center of the universe because it made us seem less important. Each successive discovery of how large the universe is has caused some people to become depressed – to feel that we are an insignificant speck in a cold, mechanistic vastness. But you would only feel this if you were egocentric – if you felt that this (body) is all you are. But again, we are infinite Intelligence. Every new discovery of how vast the universe is should make us even more appreciative of how vast God – our true Self – is.

This vast, universal perspective does not negate or diminish our personhood. Some teachers emphasize over and over that “You are not a person. There is no one home. There is nothing to do and no one to do it.” I would say, courtesy of FB, that of *course* you’re a person. You’re just not *only* a person. The fact that you are the ocean doesn’t mean that you aren’t also a wave. You are both. Brahman, the totality, includes both Absolute and relative and both are full.

Some say that since we’re not a person, we don’t have free will. Ultimately this may be true, but knowledge is different in different states of consciousness, and we can’t live our lives based on an intellectual concept of a state of consciousness we’re not living. I would venture to guess that that’s what 99% of the people who say this sort of thing are trying to do. So if you perceive yourself as having free will, then exercise it to the best of your ability. As the Gita puts it, “the dharma of another brings danger”.

I’ve mostly covered *Anor aniyam* - **Smaller than the smallest** already. Just want to say something about atoms.

Number of atoms in a gram of hydrogen = popcorn kernels covering the US 9 miles deep. Each of these atoms is functioning with perfect orderliness in accordance with a variety of natural laws, both within itself and in relationship to all other atoms, again the expression of infinite, all-pervading Intelligence, which is our essential nature. Incidentally, atoms are huge compared with sub-atomic particles, and infinite intelligence manages those perfectly too.

Most of our atoms have been through the life cycle of several stars. That’s how they were formed. Atoms are so numerous that there are a billion of them in each of our bodies that were also in Shakespeare’s, Christ’s, Buddha’s, etc. Not Elvis’s and fortunately not Justin Beiber’s – takes a while to distribute.

So to conclude Part IV, everything we can observe, near and far, large and small, reveals infinite intelligence at play, and we are nothing other than that intelligence.

Part V

Practical implications of all this.

Martin Buber wrote a book called "I and Thou". One of the major themes of the book is that all of our relationships bring us ultimately into relationship with God, who is the Eternal Thou. But I think we can take it a step further. Ultimately we have an "I and I" relationship with the universe, because there's only one Reality. The Gita says one sees "The Self in all beings and all beings in the Self". Christ said "I and my Father are One." He also said, "... Inasmuch as ye *did* it *unto* one of *these* my brethren, even *these least*, ye *did* it *unto* me."

So all lives matter... All life is precious, because it's God embodied.

By clear-cutting the rain forests, we're destroying our own lungs. Literally. By polluting the rivers and oceans, we're poisoning our own blood. By exterminating species, we're lopping off our own fingers and toes. The 6th great mass extinction is well underway – the 1st manmade one. 150-200 species go extinct every day. If global temperatures rise by 6 degrees centigrade, which some authorities say is likely, these extinct species will include the human.

If we are the intelligence governing the universe, then why is the world so screwed up? Why are our lives so often screwed up? Or are they? From one perspective everything is perfect just as it is. I don't think that contradicts the fact that things can be improved. If life is problematic, perhaps it's because we're not in tune with our essential nature. Christ: "Forgive them father, for they know not what they do." They know not what they do because they know not what they are. If you know yourself only partially, then the products of your mind and heart will not reflect totality. Partial reflections of Pure Intelligence will produce mixed effects. Something will be accomplished, while unwittingly, some harm will be done. **A little knowledge is a dangerous thing.** Partial knowledge in our individual lives results in mistakes, which cause suffering. When partial individual knowledge on a mass scale is expressed through governments, wars are fought. When it expressed through corporations, harmful technologies and products are produced.

The more fundamental the level of nature's functioning, the more powerful it is. The molecular is more powerful than the mechanical. The atomic is more powerful than the molecular.

Therefore, the more fundamentally we tinker with nature's functioning, the more critical it is that we know ourselves as the Intelligence governing Nature - the home of all its laws.

Genetic Engineering – messing with a very basic level of nature, critical to all life, which we understand very partially. If we screw up on that level, the ramifications could be catastrophic, and irreversible.

The “drill baby drill” crowd says that if we extract all the oil and gas we know about, the U.S. could be energy self-sufficient for at least 100 years. Environmentalists say that if we burn all that oil and gas, humans won’t be around in 100 years. I say that there’s not really an energy shortage. There’s an intelligence shortage. Every individual in every country is sitting on an infinite reservoir of intelligence, and if enough of us begin to “extract” it, societies will become less wasteful and more conscious of the consequences of their actions, marvelous technological solutions will emerge, and small-minded opposition to them will evaporate.

So how do we realize our true nature as infinite intelligence? Where do we find it? Remember, it’s all-pervading. So the easiest place to find it might be right here (heart). God may be omnipotent, but He’s also omnipresent, so one thing He can’t do is remove himself from your heart. Once He is found there, eventually He can be found everywhere.

Chandogya Upanishad

[07 – song – There is a Light and 08 – There is a light lyrics. Both at once.](#)

“For the universe is in Him, and He dwells within our heart.” That means our heart contains the universe. They say we live in a holographic universe. In a holograph, each part contains the whole. Everything is essentially infinite. How much infinity does it take to contain the universe? The whole is contained in each of the parts.

Conclusion

Non-duality often presented in a rather dry, heartless tone. But the great nondualists were anything but dry. They were also great bhaktas – devotees. Why? Inevitable in the course of one’s spiritual development. We have hearts, and the heart enjoys the sweetness, even the ecstasy, of love and devotion. Shankara – the intellect imagines duality for the sake of devotion and wrote beautiful devotional poetry. Ramana – Arunachala. Nisargadatta – bhajans & pujas. So I think we can look forward to our hearts blossoming more and more as we grow in appreciation of the ultimate non-dual nature of everything.

[08 - Play Holy Now song](#)

For those who feel their spiritual evolution is retarded, or that it is finished, or who run into some teacher who claims to be finished. **“It appears that God Himself is on the journey.” – St. Theresa of Avila**