



Where Are We Going? The Quest for a Meaningful Human Future

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This essay is deliberately free thinking and informal to bring out some thoughts about our collective future as humans on this beautiful planet called Earth. Clearly, the question in the title is somewhat open-ended and in many ways cannot be answered in a single essay, with many books, though numerous discussions or even in the course of a vast number of conferences or university programs—if such programs existed to begin with. Yet, the question is not without meaning. It is after all an existential question that we as individuals surely have pondered, probably informally, hopefully deeply and with care, as we made and are making important decisions in our lives: Decisions such as what degree to earn, what employment to seek, whether to build a family, where to live—and so many everyday decisions facing each one of us. Here, however, I am teasing out some thoughts about our collective quest. This is why I refer to “We”, rather than just “I”. It is my firm belief that everything we do (in thoughts, actions, in interactions with others, etc.) affects not just ourselves and those near and dear to us but ultimately everyone and everything on the planet.

It sounds like an awesome responsibility and indeed it is. Because we humans individually *and* collectively build our lives and society, which hopefully evolve and advance with us and through us. Maybe this distinguishes us from other species that are driven primarily or wholly

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by biological and environmental factors. Yet, other species, I will call them our brothers and sisters because they do share the same planet, our home the Earth, maybe can teach us a couple of important lessons: that for example we are all part of the vast living ecosystem on Earth. We tend to consider ourselves superior to other species and, in the process, we seem to be making a mess of the entire living space we all share.¹ Even our species' name *homo sapiens*, which introduces the term "wise" to our collective existence, is somewhat presumptuous. Are we truly wise?

As I move forward in this essay, I will ask a number of questions, interspersed with thoughts and further questions. The style of this essay is *not* to provide answers but to ask some questions and move forward the "discussion" (discussion here means reading, thinking and hopefully contemplating the questions that need to be moved forward). It is to a large extent built on the Socratic method. As we ask the questions, the answers may be given from inside of us or at least the questions may lead each one of us to further ponder and come (closer) to an answer.

So the first question, Are we truly wise? Well what do we mean by "wise"? Are we self-acclaiming our species to hold a special place in the nature of things? Are we wise because we have somehow advanced to the pinnacle of evolution? What is that special pinnacle role? Here are some thoughts and some "not so good news": *Homo sapiens* is probably not more (latest estimates) than 250,000 years on the Earth. This is a mere fraction of the at- least 1 billion years that we suspect life has been on our planet—that fraction being 0.0025%. To put things into perspective, dinosaurs of different species were roaming the Earth for some 200-300 million years before an asteroid slammed into the general area of what is now known as Yucatán, some 65 or so million years ago, wiping out some 75% of all species that lived at that time, including all dinosaurs. Can we be as "wise" as the dinosaurs in terms of survivability and extend our species to, say, a few million years? Time will tell. The not so good news is that we seem to be rushing to self- extinction: Estimates by teams of very smart professors at places like M.I.T. are giving *homo sapiens*, or at least human societies as we know them today,

not many chances to make it beyond 2050. That is just around the next corner! Reasons? Well there could be several: environmental collapse, economic meltdown and everything that will follow such a collapse, including epidemics, small wars that eventually will get out of hand and lead to, perhaps, an all-out nuclear war. Studies have shown that even a “limited” nuclear war fought between India and Pakistan, or say in the Middle East, or who knows where, would lead to the general collapse of societies worldwide. Yet, we seem to still want to hold onto these weapons. Lately we hear of limited nuclear war or low-yield weapons, etc. My own doctoral thesis advisor was astrophysicist Philip Morrison at M.I.T. Prof. Morrison was the doctoral student of J. Robert Oppenheimer, the leader of the Manhattan Project at Los Alamos National Lab, who is credited with being the “father of the atomic bomb”. So my scientific grandfather (in the sense of the advisor of my advisor) was Oppenheimer. Morrison, as an important member of the Manhattan Project, helped assemble the bombs that were dropped on Hiroshima and Nagasaki in August 1945. Afterwards, Morrison visited Hiroshima and saw with his own eyes the destruction that had been unleashed on it. He, as many other physicists, became an ardent opponent of nuclear weapons. Yet, the genie had been let out of the bottle. Oppenheimer later made the remark that when he witnessed the first atomic explosion tested at the Trinity site in New Mexico, he thought of the words from the *Bhagavad Gita* “Now I am become Death, the destroyer of worlds”. Are we wise to have built these weapons which now threaten us all? Perhaps they have stopped another major global war because of the fear of total annihilation. Perhaps not, as we seem to have forgotten how truly destructive they are. Yet, we (I refer to those countries who one way or another are official members of the nuclear “club”) keep them; we modernize them and despite all the high meaningful talk, we are not readily going to give them up.

Second set of questions: What are we doing to other species right now? What are we doing to ecosystems on Earth? What are we doing to our own “modern” societies? Are those the actions of a wise species? Well, surely we know, we see it all around us. Species are disappearing

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faster it seems than the blink of an eye, due to our aggressive habits. Our oceans are becoming dumps for our pollution. Our cities become harder and harder to maintain. And we seem to be unleashing—with a lot of remaining questions about “how”—deadly viruses. Do we control energy sources and use them for the betterment of all? Or not? Do we threaten vast ecosystems like the Amazon rain forest? (For what? Is it profit? What else?) And we seem to be content to slaughter billions (yes, billions) of cattle, pigs, chickens and other land-based domesticated animals (not to mention billions of marine animals) to satisfy our insatiable palates. Even though our teeth are telling us we are basically not carnivorous. This is the “slaughter of the innocents” by the billions!

Wise? That is for each one of us to ponder.

Third set of questions: What kind of future society would we like to leave to our children and future generations? Do we know or even care? What will happen if we don't make it past 2050? Will life on Earth end? Who will inherit the earth and be the new “wise” ones? Some possible answers to ponder: No, perhaps life would go on but with different players. The wise ones would likely be the one or more species that already literally outnumber and outweigh us: The insects! Is this the fate that befalls intelligent species throughout the universe? To disappear and give room to other species that may do it better? Well, one thing we know is that planets similar to Earth abound in the cosmos, more than the grains of sand on all the Earth: 1 followed by 22 zeros, ten billion trillion planets! Therefore, chances are that other, let's call them “wise ones”, species on some of these planets will advance and turn their planets into heavenly worlds. Is that what we would tell our children? “My daughter doesn't have to worry. Even if we don't make it here on Earth, at some distant galaxy, at some far-away planet, our cosmic brethren will make it. So I hope that makes you feel good!”

Well, these several questions have been posed to set the stage for the big question that is the title of this paper. It asks the important question, *Where Are We Going?* Collectively, where are we now, where are we heading, and could our collective existence be summed up in the sub-title:

The Quest for a Meaningful Human Future? In order to ponder those issues, we should first take a look at what is common to everything in the cosmos. Scientists, philosophers and in fact humans in general—we all assume there is a common ground to everything, a common reality. Without it, there would be no possibility of even understanding each other, no way to make sense of what we are experiencing and in fact no memory, individual or collective.

Quantum mechanics—extended to many human endeavors and activities—presents us with a set of phenomena such as entanglement, non-locality, and participation that seem to derive from a small set of universal principles. These universal principles are most directly understood to apply in the workings of quantum phenomena, *quantum-like* phenomena, (behaviors similar to quantum behaviors) that apply at every level of reality, not just the microcosm reality of quanta.

I call these principles “Natural Laws”. Again, to emphasize my premise: universal laws are of course the foundation of science, the foundation of experience and everything else we can think of. Taking these into account, we can then legitimately ask, how would we search for a meaningful future? The simplest set of *Three Natural Laws* is shown in Figure 1. These three Laws have been described several times in several articles and books, in lectures and invited talks. They are: 1) *Complementarity* (Integrated Polarity, Unity in Diversity) “Yes and/or No”. 2) *Recursion* (Universality) “As here, so elsewhere”, “In Heaven as on Earth”. 3) *Creative Interactivity* (Flow) “Everything is a flow, relationships and interactions occur in everything and between all things”. The words in italics are the scientific terms, and the expressions in quotation marks are equivalent everyday expressions. Since everything in the universe follows these three Laws—they bring in order and allow us to begin to grasp an understanding of the world around us—will the quest for a meaningful human future also have to take them into account? As shown in Figure 1, even a simple, “dead” sea shell follows them.

Continuing with our method of asking questions, let’s now move to the term “We”. There are a number of issues that emerge, perhaps

common issues that concern the innermost presence, the Existence in each one of us. In contemplating the “We”, and of course the next thing, the “I” (these could of course be interchanged), we can play the game of 20 questions, which recently I have been asking audiences and asking all of “us” to ponder (see also Kafatos, 2020).

Here they are:

Is Fundamental Awareness the *underlying* total Reality? Are Science and Spirituality *converging*?

Has Quantum Mechanics (*QM*) opened the door to *the primary role of the mind*?

In that case, is the universe *informationally-noetic*?

Does the Field of pure Awareness, exist & manifest Itself through our *own* experiences in everyday life?

As such, do we live in a participatory Universe, in a cosmos brimming with an ever-existing *Living Presence*?

Is what we experience all the time, in our own individual lives, *not* separate from everything else?

What if we consciously live in unity awareness, would our lives then lead us to become the very abode of *sustained bliss*?

As such, is the blissful *existence not far away*, or is it far away in some transcendent realm, in some distant time? Or to put it another way, is it right here, right now, in us?

Is this vision, discovering what is already present in our lives, a profound, yet common reality, or not?

Is it important to explore how the findings of modern quantum mechanics are very *relevant* to our everyday lives?

Do we focus on *practical aspects* of the workings of the unity of Awareness?

Can we create our own list of practical aspects, to *participate* in the game of life?

The *reality that QM* has revealed, is it in agreement with spiritual and contemplative practices of both the East and the West?

Is the Presence, *Being*, always in *existence*, is it the *eternal Now*? Not inert, is it fully alive?

Does the very *conscious Awareness* exist in all of us?

Does *Awareness manifest Reality* through innumerable experiences — the *qualia* of sensing, feelings, thinking, experiencing color, sound, smell, space and time; that is through all of life's experiences?

As such, could *Qualia* be the *fundamental building* blocks of the Universe, not particles, atoms or physical objects? Do they constitute *That*?

What is *That*?

Are “We” *That*?

THREE NATURAL LAWS

Awareness *projects out* world of experience through:

THREE NATURAL LAWS



Complementarity (Integrated Polarity)
“Yes and/or No.” Unity in diversity.

Recursion (Universality)
“As here, so elsewhere.”
“In Heaven as on Earth.”

Creative Interactivity (Flow)
Everything is a flow.
Relationships and interactions.



Figure 1

Now this game of 20 questions that I am asking us to play, is a game, yes, but it has a serious purpose: To address the “We”. Leaving aside for now the 19th question, could one claim that a vision of *meaning* may

follow this game of questions? If one follows the above questions, then what would be the answer(s) to these questions? If the answer is “yes”, then maybe we are done in our quest? What is the underlying conclusion if the answers are all yes? Maybe armed with the three Natural Laws and the 20 questions, could it be possible that meaning would emerge in our collective quest? The first question, “Is Fundamental Awareness the *underlying* total Reality?” when answered in the affirmative, is it the one underlying glue that binds all these 20 questions together? Does it contain the *essence* of all the other questions that follow? In fact, the answer to the last two questions, the 19th and 20th questions, points back to the first question, *That* is Fundamental Awareness. This is the ancient statement of the Upanishads *Thou Art That (Tat Tvam Asi)*.

Moving on to the final considerations in our search: This Awareness constitutes a vast field of underlying Reality, that comprises all the “we’s” and all the individual “I’s” into one universal *That*. Leading one to go beyond the limited mind, which leads to underlying common Reality, the ancient truths that maybe an expanded science would begin to explore? Leading to the final questions: Who Am I? Who Are We? Are We *That*? What is *That*? Questions for us to contemplate.

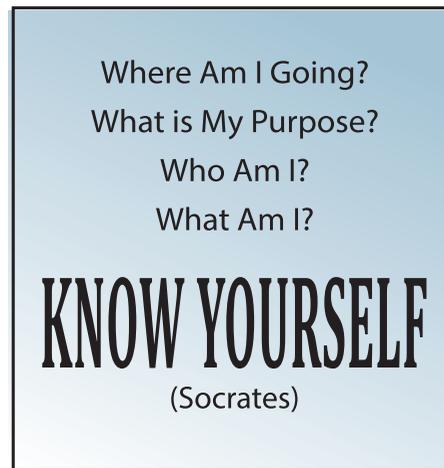


Figure 2

In the present essay, the questions above in Figure 2 are not just about I, the individual being or even about we, ourselves, the collective of all humans. Could it be that they are about everything that moves in Awareness? Could it be that the answer is for each one of us to pursue, explore and discover? Could it be *The Quest for a Meaningful Human Future* begins with these questions? Maybe guided by the great dictum of Socrates *Know Yourself*?

Epilogue

This essay, contributing to the *Festschrift* which acknowledges the philanthropic works of Navin Doshi, is meant to add to the honor bestowed on a great human being, who truly has contributed and continues to contribute in so many ways to society. Philanthropy has meaning beyond specific acts to assist or help fellow human beings. The word in fact means “friendship to humanity”. Navin Doshi’s contributions do indeed cover so many areas of benefit, areas of friendship to humanity. As an academic, I am particularly indebted to Navin for supporting faculty, studies and special conferences which advance our understanding of the cosmos. We had a two-day conference in October 2019 at both Chapman University and Loyola Marymount University in which we explored the implications of the Copenhagen Interpretation of quantum mechanics as they apply to many areas of human endeavor, s, impacted by the great quantum revolution of a century ago. Navin Doshi contributed both financially and organizationally to make this conference a great success. I consider this an example of his philanthropy because great intellectual advances help us to advance humanity and our place in the universe.

Footnotes

1. In a conversation with Genevieve Beenen on the question of intelligence, we both agree that other species too have intelligence. They actually think, feel and understand. They may even be more intelligent than humans. We make things, but in the process we destroy them, kill other species, and exploit not only them, but our own kind. That is not intelligent and no other species does that—Editor (DS).

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