Evolution of Consciousness: An Aurobindonian Perspective

Ulrich Mohrhoff
Sri Aurobindo International Centre of Education
Pondicherry 605002

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Today I would like to share with you some glimpses into the Evolution of Consciousness from an Aurobindonian Perspective.

According to many mainstream philosophers (particularly the materialist variety), reality is whatever physicists say it is. The problem with this is that there is no agreement among physicists about what reality might possibly be. Let me show you some results from a recent poll conducted among the participants of a conference on the foundations of quantum mechanics [1].

*What is your favorite interpretation of quantum mechanics?* Twelve options were given, five had no takers, but seven had significant numbers of adherents.

| a. Consistent histories: | 0% |
| b. Copenhagen: | 42% |
| c. De Broglie–Bohm: | 0% |
| d. Everett (many worlds and/or many minds): | 18% |
| e. Information-based/information-theoretical: | 24% |
| f. Modal interpretation: | 0% |
| g. Objective collapse (e.g., GRW, Penrose): | 9% |
| h. Quantum Bayesianism: | 6% |
| i. Relational quantum mechanics: | 6% |
| j. Statistical (ensemble) interpretation: | 0% |
| k. Transactional interpretation: | 0% |
| l. Other: | 12% |
| m. I have no preferred interpretation | 12% |
What interpretation of quantum states do you prefer? In particular, are the theory's chief calculational tools epistemic (representing knowledge or information) or are they ontic (representing reality)? Both views received nearly equal scores.

The measurement problem is...

While 24% of the participants saw it as a severe difficulty threatening the general theoretical framework of contemporary physics, 27% thought that it was a pseudo-problem.
How much is the choice of interpretation a matter of personal philosophical prejudice? 58% of the participating physicists believed that choosing a particular interpretation of quantum mechanics is very much a matter of personal philosophical prejudice.

This brings me to my own personal philosophical prejudice. It is based on the philosophy of Sri Aurobindo [2], who, incidentally, denied ever having been a philosopher.

There is an Ultimate Reality, whose intrinsic nature is (objectively speaking) infinite Quality and (subjectively speaking) infinite Delight or Bliss. It has the power to manifest its inherent Quality/Delight in finite forms, and the closest description of this manifestation is that of a consciousness which creates its own content.

An important feature of this Consciousness is that its Self is coextensive with its Content. We may call this "the view from everywhere." In the Mother's *Agenda* [3] we find tantalizing hints of the evolutionary re-emergence of this kind of consciousness. Here is one:

It’s as if the consciousness were no longer in the same position with respect to things, so they appear totally different. The ordinary human consciousness, even the broadest, always occupies the center position, and things exist in relation to that center: in the human consciousness, you are in one point, and everything exists in relation to that point of consciousness. But now, the point is no longer there!... My consciousness is within things; it isn't something that “receives.” (17 November 1971)

In a secondary poise, the Self stands back from the Content, or else it projects the Content in front.
At the same time the Self projects itself into the Content...

... and it does this many times.

Localized within the Content of its Consciousness, the Self now views this Content in perspective, and from a multitude of standpoints.
It is here, in this secondary poise, that the dichotomy between subject and object becomes a reality. In the primary poise it did not yet exist: Being was implicit in Consciousness. The reason why the dichotomy between Being and Consciousness is now a reality is that the content of an individual consciousness cannot be identical with the determinations of an individual being. The properties that an individual has cannot be the same as the properties that an individual perceives.

Sri Aurobindo characterizes the process by which the Self assumes a multitude of standpoints within the Content of its Consciousness as a multiple concentration of consciousness. Let's see what happens when this multiple concentration becomes exclusive.

We all know the phenomenon of exclusive concentration, when consciousness is focused on a single object or task, while other goings-on are registered subconsciously, if at all. A similar phenomenon transforms individuals who are conscious of their mutual identity into individuals who have lost sight of this identity. This is the first stage of what Sri Aurobindo calls “involution.”

Involution takes place in stages, which correspond to the stages of creation — the manifestation of infinite quality in finite forms.

This manifestation begins with the creation of expressive ideas, which are then realized by means of an executive force as finite forms:

   Infinite Quality → Expressive Idea → Executive Force → Finite Form

Sri Aurobindo’s term for the original creative consciousness is “Supermind.” The supramental dynamism encompasses the entire process of creation or manifestation.

Individuals who lose sight of their mutual identity also lose access to the supermind’s “view from everywhere.” Their consciousness is situated at the level of mind, whose characteristic occupation is the formation of expressive ideas. To the extent that this consciousness serves to express quality, it receives it from a source of which it is not aware. Unlike the mind that has emerged in the course of evolution, this mind still commands a wholly effective executive force, which works in a perfectly pliant medium.

Carried a step further, involution gives rise to a consciousness concerned with execution rather than idea-formation, a consciousness that receives the ideas it serves to execute from a source subliminal to it. Mind is then involved in Life.

Carried still further, involution gives rise to finite forms in which life too is involved.

And carried further still, involution gives rise to a multitude of beings in which even the principle of finite form is involved. When these formless beings re-emerge in the course of evolution, we call them elementary particles, and we look upon them as the ultimate constituents of matter.
Remarkably, quantum mechanics confirms that all of these formless beings are really one and the same being. Let me show you how.

Consider the following situation: Initial measurements indicate the presence of one particle in region A and one particle in region B. The next thing we know is that there is one particle in region C and one particle in region D.

Now which particle is which? Is the particle in region A the same as the particle in region C or the same as the particle in region D? If the particles carry identity tags, represented here by straight lines, then what really happens is represented by either of these diagrams. But if the particles do not carry identity tags, then what really happens is represented by neither of these diagrams. Instead, quantum statistics implies that the particle in A is identical with both the particle in C and the particle in D.

The reason why these formless beings nevertheless are (or appear to be) many is that spatial relations (or distances) exist between them. And the reason why they are not really many, or at least not many separate beings, is that the spatial relations between them are reflexive. They are self-relations.

When involution is carried to its ultimate extreme, even these relations cease to exist. All that then remains is a single Being, in which Consciousness (along with its creative powers) is involved.

Involution thus takes us from a Consciousness in which Being is implicit to a Being in which Consciousness is implicit.

Physical cosmology tells us that the universe — and this means not only matter but also space and time — came into existence with a “bang.”

It would not be amiss to attribute this “bang” to the re-emergence of spatial relations or distances. Once there are spatial relations, there is space, and there is an apparent
multitude of relata. As I said, we call these relata elementary particles, and we tend to think of them as the ultimate constituents of matter.

Setting the stage for the adventure of evolution also calls for laws that govern how spatial relations change with time. We call them “the laws of physics.” Why do the laws of physics have the particular form that they do? It can be shown that these laws have more or less exactly the form that they need to have if they are to set the stage for evolution [4].

In all poises of consciousness that have arisen in the course of involution, consciousness has been direct. The dependence of consciousness on brains is a consequence of its evolutionary emergence, and so are the questions that arise from this dependence.

If evolution were simply the reverse of involution, formless particles would have acquired forms. What happened instead is that particles remained formless, and spatial relations between formless particles came to constitute forms.

Instead of reversing the involutionary transition from finite forms to formless particles, evolution makes use of the outcome of this transition (the formless particles) to manifest what has been involved in the transition (the finite forms).

And so it is with life and mind. Material forms are instrumental in the evolutionary emergence of life, and certain organic structures are instrumental in releasing consciousness from its latency in formless particles.

The emphasis is on “instrumental.” Brains create neither subjects, nor thoughts, nor qualia. They only make it possible for subjects to manifest themselves, to think, and to experience a colorful world. So what may be the role that brains play in perception?
Recall that the realization of mental ideas in terms of material forms is effected by an executive force. When life evolves, what evolves is essentially this executive force.

In us it serves (among other things) as the mediating link between mental decisions and physical actions. Because it can causally link the mental to the material, this executive force can also link the material to the mental. It also serves as the mediating link between sensory stimulation and perception.

The mediating role played by patterns of neural activity in both directions is, as the familiar euphemism goes, “not fully understood.” However, neural oscillations are now seen as the most promising candidate mechanism for cognitive processes such as memory, attention, and sensory representation [5,6].

This resonates with what Sri Aurobindo wrote about the relation between quantity and quality (LD 319): “Quantity and number are powers of existence-substance,” while “quality and property are powers of the consciousness and its force.” The latter can therefore “be made manifest and operative by a rhythm and process of substance”. In other words, the mediating link between a sensory stimulus in the substance domain and a phenomenal object in the consciousness domain consists in rhythms or oscillations in the substance domain.

But this cannot be the whole story.

Regarding the physical instrumentation of human cognition, Sri Aurobindo wrote (LD 547):

These means are so ineffective, so exiguous in their poverty that, if that were the whole machinery, we could know little or nothing or only achieve a great blur of confusion.

Here Sri Aurobindo anticipated the by now well-documented fact that the neural construction of our visual world is guided by astonishingly sparse sensory clues [7,8,9].

What cognitive neuroscience has so far failed to take into account is that there intervenes a sense-mind intuition which seizes the suggestion of the image or vibration and equates it with the object, a vital intuition which seizes the energy or figure of power of the object through another kind of vibration created by the sense contact, and an intuition of the perceptive mind which at once forms a right idea of the object from all this evidence. (LD 561)

The truth of the matter is that the construction of the phenomenal world is not simply “a perceptive reproduction of its objective actuality” but “a response coming from within that throws up from there an inner knowledge of the object, the object being itself part of our larger self” (LD 560–561).
To recap, the surface consciousness is not a creation of the brain, nor does the information it receives from the object via the brain account for the perception of the object. The insufficient information received via the brain is supplemented by an intuition from a subliminal source, whose knowledge of the object is direct.

What about the future of evolution?

We humans stand, as Sri Aurobindo says, at the turning point of the whole evolutionary movement. The evolution beyond mind, he wrote,

is not confined to a conscious progression of the surface nature, but is accompanied by an attempt to break the walls of the Ignorance and extend ourselves inward into the secret principle of our present being and outward into cosmic being as well as upward towards a higher principle. (LD 750–751)

He goes on to say that

The foundation of the developing existence will be the new spiritual status above or the unveiled soul status within us....

The whole concentration of the being will be shifted from below upwards and from without inwards; our higher and inner being now unknown to us will become ourselves....
The outer world itself will become inward to the spiritual awareness, a part of itself, intimately embraced in a knowledge and feeling of unity and identity.... (LD 753)

When the veil between our inner and outer selves has been rent, when all our knowledge has become direct knowledge, when the so-called external world will once again be internal to our selves, will we still need a brain?

As you will recall, the process of creation or manifestation — that is, the development of infinite quality into finite forms — involves several stages.

The evolution of life brings into play the force that serves to execute expressive ideas, but it does not transform matter into a perfectly pliant medium. A fantastically complicated anatomy is needed to support it.

The evolution of mind brings into play a consciousness whose characteristic occupation is the formation of ideas, but it, too, does not transform living matter into a perfectly plastic medium. An incredibly complicated nervous system is needed to realize the mind’s ideas.

The evolution of supermind, on the other hand, brings into play a consciousness that spontaneously develops its essence of quality into expressive ideas and spontaneously casts these into the forms of a perfectly pliant material substrate.

The evolution of the supermind, therefore, brings with it the full integration of mind, life, and matter into its native dynamism. When this has been achieved, our present anatomical constitution can be discarded. It will have served as a scaffold for the evolutionary manifestation of the Divine in matter.

In a reply to a question by a disciple, Sri Aurobindo illuminates the future of evolution from a different angle, writing that

Immortality also can come by parts. First the mental being becomes immortal (not shed and dissolved after death), then the vital, while the physical comes only last. That is a possible evolution, recognised by occult science [10].

In The Life Divine he makes the same point when he writes:

It could happen if our mental being came to be so powerfully individualised on the surface and so much one with the inner mind and inner mental Purusha and at the same time so open plastically to the progressive action of the Infinite that the soul no longer needed to dissolve the old form of mind and create a new one in order to progress.

To which he adds that
A similar individualisation, integration and openness of the vital being on the surface would alone make possible a similar survival of the life-part in us, the outer vital personality representative of the inner life-being, the vital Purusha. (LD 853–854)

In other words, both our mental and vital parts can become integral parts of the psychic being and partake in its immortality — its evolution uninterrupted by death. Sri Aurobindo then hints at the possibility of a similar integration of the physical being into the psychic being:

This consummation of a triple immortality,—immortality of the nature completing the essential immortality of the spirit and the psychic survival of death,—might be the crown of rebirth and a momentous indication of the conquest of the material Inconscience and Ignorance even in the very foundation of the reign of Matter. (LD 855)

The complete integration of mind, life, and body into the psychic being is equivalent to the complete manifestation of the psychic being in matter, as we gather from the Mother's Agenda. Here is what She said on July 1, 1970:

I had an experience which I found interesting, because it was the first time. It was yesterday or the day before, R. was here, just in front of me, kneeling, and I saw her psychic being towering above by this much (gesture about eight inches) taller. It was a sexless being: neither man nor woman. So I said to myself, “But the psychic being is the one that will materialize and become the supramental being!”...

I found it very interesting, because that being seemed to tell me, “You’re wondering what the supramental being will be – here it is! Here it is, this is it.”

This famous psychic being, which plays such an important part in the integral yoga of Sri Aurobindo, how does it fit into the overall scheme of things?

Let me remind you once more of the steps by which infinite quality manifests itself in finite forms. Evolution does not begin with matter alone. Infinite Quality, too, is present from the beginning. What is initially missing is the dynamic links between Infinite Quality and Finite Form. The psychic or soul principle is the presence, from the start, of this Infinite Quality or Delight which is the very essence of Conscious-Being. Evolution may therefore be likened to the building of a bridge. On the side of nature there emerges, first, the executive force of life, then the formative principle of mind. On the side of the soul, a psychic being evolves, commanding an increasingly effective soul power, through which it infuses its guiding light and bliss into mind and life.
When the veil between the inner and outer selves is rent, the complete integration of the determinisms of nature into the dynamism of the soul becomes a possibility, and with the evolution of supermind, this possibility becomes a reality.

As we are trying to assimilate this information, we remain handicapped by our present mode of consciousness. This mode of consciousness has given us not only “the view from nowhere” but also the linear, spatialized conception of time, to which we owe the concepts of progress and evolution.

Looking back in time, our present mode of consciousness reveals much that is relevant to understanding the evolution of life and mind, although we are baffled by the essential fact — the evolution of consciousness itself. But when we try to look into the future, we are severely handicapped, for our present consciousness cannot foresee the future transformations of the manner in which Conscious-Being presents itself to itself.

The world experienced by us is conditioned by the consciousness of a particular species. It is how Conscious-Being manifests itself at the poise of consciousness it has attained in us. We do not know the world that is experienced by a bat, but there are earlier expressions of human consciousness that reveal how our present mode of consciousness differs from earlier modes of human consciousness [11].

Consider, for instance, the ancient notion that the world is contained in a sphere with the so-called fixed stars attached to its boundary, the firmament. We cannot but ask: what is beyond that sphere? Those who held this notion could not, because for them the third dimension of space (viewer-centered depth) did not at all have the reality that it has for us.

This is also why they could not handle perspective — that became possible only during the Renaissance — and why they were unable to integrate our distinct perspectives into that invariant “view from nowhere” which is a prerequisite of modern science. Their way of experiencing the world found its characteristic expression in myths, while ours finds its characteristic expression in philosophy and science.
The transformation of the body does not take place in a world that is conditioned by our present mode of consciousness. It takes place together with a radical transformation of the manner in which Conscious-Being presents itself to itself.

Here are some glimpses of how the world will be affected by this transformation [3].

On October 16, 1971, the Mother said:

> With a certain attitude, everything becomes divine. Everything. And what is so wonderful is that when one has the experience that everything becomes divine, all that is contrary quite naturally disappears—quickly or slowly, at once or gradually. It means that becoming conscious that all is divine is the best means of rendering everything divine—you understand—of annulling the oppositions.

And later the same month she remarked that

> The consciousness is on the way to where it is at once the vision of what should be and the capacity of realizing it.

As long as the world is seen as divine by only a few, HIV, terrorism, corruption, and all that will remain in existence yet will be seen as divine — by some.

But there is going to be a tipping point.

Not only will the change in the way the world is seen by some eventually change the way the world is seen by all, but the oppositions will be annulled.

Here is what the Mother said a month later, on November 27, 1971:

> For a moment, all of a sudden, I saw how... the Divine sees the world.... You can’t describe how wonderful it is.... Naturally, this must begin with the consciousness, and then, gradually, the things will become such, that is to say be aware of themselves in the same way, as the Divine is aware of them.

And this, She once said, could happen in a flash.
2. Sri Aurobindo: *The Life Divine*, Pondicherry, Sri Aurobindo Ashram Publication Department, 2005; cited as “LD” followed by page number(s)
3. *Mother’s Agenda*, 13 volumes, English translation, Institute for Evolutionary Research, New York, 1979 onward