

A Radically Empirical Approach to the Exploration of Consciousness

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Radical Empiricism

William James:

“I say ‘empiricism’ because it is contented to regard its most assured conclusions concerning matters of fact as hypotheses liable to modification in the course of future experience; and I say ‘radical,’ because it treats the doctrine of monism itself as an hypothesis, and unlike so much of the half-way empiricism that is current under the name of positivism or agnosticism or scientific naturalism, it does not dogmatically affirm monism as something with which all experience has got to square.”

Buddhist Empiricism

- Buddha: “Monks, just as the wise accept gold after testing it by heating, cutting, and rubbing it, so are my words to be accepted after examining them, but not out of respect for me.”
- Dalai Lama: “A general basic stance of Buddhism is that it is inappropriate to hold a view that is logically inconsistent. This is taboo. But even more taboo than holding a view that is logically inconsistent is holding a view that goes against direct experience.”

The Evolution of Science

- Galileo, rigorously observing physical celestial and terrestrial phenomena, launched a revolution in the physical sciences.
- Darwin, rigorously observing biological phenomena, launched a revolution in the life sciences.
- William James proposed that radical empiricism and introspection should be central to the science of mind, but this approach was rejected because it was incompatible with the ideological and methodological principles of scientism.

The Metaphysical Principles of Scientism

- Scientific inquiry must confine itself to investigating objective, physical, quantifiable phenomena.
- Science is the only way to understand human nature and the universe at large.
- The universe consists solely of mass-energy, space-time, and their emergent properties and functions, namely, those things that scientists can measure.

A Blind Spot in the Scientific Understanding of Consciousness

- No scientific definition of consciousness
- No objective means of detecting consciousness or any mental phenomena
- Ignorance of neural correlates of consciousness
- Ignorance of necessary and sufficient causes of consciousness
- Ignorance of how the brain generates or even influences mental phenomena

The Heart of the Scientific Method

- “Exceptional claims require exceptional evidence.”
- This is presented as the heart of the scientific method and a model for critical thinking, rational thought and skepticism everywhere.
- It is far from clear what would count as “exceptional evidence” or who would set that threshold. Dismissing empirical observations *a priori*, based solely on biases or theoretical assumptions, underlies a distrust of the ability of the scientific process to discuss and evaluate evidence on its own merits.

A Truly Exceptional Claim

- Biologist Thomas H. Huxley (1825–1895): “How it is that anything so remarkable as a state of consciousness comes about as a result of irritating nervous tissue, is just as unaccountable as the appearance of the Djinn, when Aladdin rubbed his lamp.” [*The Elements of Physiology and Hygiene: A Text-book for Educational Institutions*. D. Appleton, 1869, p. 178]
- Neuroscientist Donald Hoffman: “Now, Huxley knew that brain activity and conscious experiences are correlated, but he didn't know why. To the science of his day, it was a mystery. In the years since Huxley, science has learned a lot about brain activity, but the relationship between brain activity and conscious experiences is still a mystery.”

An Empirical Response

- Neuroscientist Giulio Tononi: “How could mere matter generate mind?” This is a mystery “stranger than immaculate conception... an impossibility that defies belief.” [*Phi: A Voyage from the Brain to the Soul* (2012)]
- There is in fact no empirical evidence that consciousness is produced solely by the activation of neurons.
- The necessary causes and conditions for generating consciousness are unknown to science.
- Since consciousness itself is physically undetectable, its principal cause may also be physically undetectable.

The Final Absurdity of Scientism

- Philosopher David Chalmers: The hard problem is the sheer fact of our first-person, immediate experience (qualia) and its relation to the brain.
- Physicist Michio Kaku: “There is no such thing as the Hard Problem.” A thermostat has the lowest possible level of consciousness while humans represent the highest level currently known.
- Princeton neuroscientist Michael Graziano: “How does the brain go beyond processing information to become subjectively aware of information? The answer is: It doesn’t... there is no subjective impression; there is only information in a data-processing device.”

An Empirical Response

Physicist Adam Frank:

“Thus the essential mystery of our lives — the strange sense of presence to which we’re bound till death and that lies at the heart of so much poetry, art and music — is dismissed as a non-problem when it’s exactly the problem we can’t ignore. If we’re to have anything like a final theory of consciousness, we had better be attentive to the complexity of how we experience our being.”

The Big Lie

George Orwell (*Nineteen Eight-Four*):

- “Blackwhite”: The habit of impudently claiming that black is white, in contradiction of the plain facts.”
- Doublethink: “To tell deliberate lies while genuinely believing in them, to forget any fact that has become inconvenient, and then when it becomes necessary again, to draw it back from oblivion for just so long as it is needed.”
- “*Crimestop* means the faculty of stopping short, as though by instinct, at the threshold of any dangerous thought. It includes the power of not grasping analogies, of failing to perceive logical errors...and of being bored or repelled by any train of thought which is capable of leading in a heretical direction. *Crimestop*, in short, means protective stupidity.”

Out with the Old...

Sigmund Freud:

“The problem of a world constitution that takes no account of the mental apparatus by which we perceive it is an empty abstraction, of no practical interest...No, our science is not an illusion. What would be an illusion would be to think that we might obtain elsewhere that which science cannot give us.” (*The Future of an Illusion*, 1927)

In with the New

Stanford physicist Andrei Linde (Recipient of the Fundamental Physics Prize, 2012):

“Will it not turn out, with the further development of science, that the study of the universe and the study of consciousness will be inseparably linked, and that ultimate progress in the one will be impossible without progress in the other? After the development of a unified geometrical description of the weak, strong, electromagnetic, and gravitational interactions, will the next important step not be the development of a unified approach to our entire world, including the world of consciousness?”

Freeing Science from Scientism

- Occam's Razor: "It is vain to do with more assumptions what can be done with fewer assumptions."
- Apply Occam's Razor to the insistence that all states of consciousness are emergent properties or functions of the brain, and what have you lost?
- Add rigorous first-person contemplative inquiry to the mind sciences, and what might you gain?

Samādhi:

The Telescope of the Mind

- Indian countercultural truth-seekers (c. 4,000 years ago) learned to develop stable, highly focused attention ~ *samādhi*
- Since then, Zoroastrian, Pythagorean, Buddhist, Taoist, Jewish, Christian, Muslim, and Shamanic contemplatives have used introspection to explore multiple dimensions of consciousness in radically empirical ways.
- The union of highly focused concentration and discerning introspective observation and investigation have illuminated three dimensions of consciousness, only the first of which is known to modern science.

The Psyche: The First Dimension

- The embodied mind, including conscious and unconscious mental processes, conditioned by the body, personal history, physical environment, and society
- By investigating the psyche directly with refined introspection, deep insights have been gained regarding the inner causes of genuine wellbeing and genuine suffering and ways to cultivate exceptional mental balance and health.

Subtle Continuum of Consciousness: The Second Dimension

- By experientially penetrating through the psyche, contemplatives have discovered a subtle continuum of consciousness from which all mental activities emerge at birth and into which they dissolve at death.
- This is a subtle dimension of consciousness in which all sensory appearances, thoughts, and mental images have disappeared, which is accessed in deep sleep, at death, and in deep samādhi. It precedes conception and continues on after death.

Verification

- Perceived directly by first-person experience with the achievement of samādhi
- Scientifically inferred on the basis of verbal reports, behavior, and physiological signs suggestive of past-lives and near-death experiences.

Primordial Consciousness: The Third Dimension

- By cutting through the individual, subtle continuum of consciousness, contemplatives have discovered an ultimate, atemporal, nonlocal, ground-state of consciousness, pervading all phenomena, transcending all concepts and the intellect.
- It is indivisible from the ground of being and its creative energy that manifests in all appearances throughout the universe, in which consciousness is fundamental, not derivative of matter/energy.

Verification

- Perceived directly by first-person observation through the cultivation of contemplative insight
- Scientifically inferred from a third-person perspective on the basis of research on remote viewing and precognition

Scientific Skepticism

Richard Feynman (1918 – 1988):

“It is only through refined measurements and careful experimentation that we can have a wider vision. And then we see unexpected things: we see things that are far from what we would guess—far from what we could have imagined. . . . If science is to progress, what we need is the ability to experiment, honesty in reporting results—the results must be reported without somebody saying what they would like the results to have been . . . One of the ways of stopping science would be only to do experiments in the region where you know the law. But experimenters search most diligently, and with the greatest effort, in exactly those places where it seems most likely that we can prove our theories wrong. In other words we are trying to prove ourselves wrong as quickly as possible, because only in that way can we find progress.”

Toward the First Revolution in the Mind Sciences and a Renaissance in Contemplative Inquiry

- Implement rigorous, sustained training in first-person, contemplative methods to complement third-person, scientific methods.
- Explore the broadest possible range of states of consciousness, integrating the methods of psychology, neuroscience, physics, and contemplation.
- Create a network of “contemplative observatories” for training professional contemplatives in collaborative research with scientists and philosophers.