

How to Pursue Spiritual Growth Free of Superstition

“Science without religion is lame,
religion without science is blind.”

– Albert Einstein

Science is under attack. On Earth Day in April, a coalition of organizations and individuals marched to defend the insights science brings into the world, and Bill Nye has returned to the airwaves — this time on Netflix — to celebrate science as the greatest human invention.

Science is arguably more scarce in spiritual settings than in any other context. Yet embracing the power of science to illuminate truth is essential to our personal and community development.

If we are to flourish as human beings, we must learn to fuse rational intellect and spiritual practice together without permitting pseudoscience to creep in and corrupt the experience.

This document looks at how we can discern science from pseudoscience and pursue healthy spirituality in the process. It will give us common language for our group discussion. Enjoy!

Excerpts from [The Science of Enlightenment](#)

By Shinzen Young

This is pulled from the book's introduction and sets up the idea that science and enlightenment are complementary.

"I call what I present here a "science of enlightenment." By science, I mean an experiment that is reproducible by anyone. ... Science can also refer to a structured body of knowledge, which the path of meditation definitely represents.

The other noun in the title is "enlightenment." Defining enlightenment is notoriously tricky. Almost anything you say about it, no matter how true, may also be misleading. Having said that, here's a place to start: you can think of enlightenment as a kind of permanent shift in perspective that comes about through direct realization that there is not a *thing* called the "self" inside you.

This is a very rough and ready definition. We might call it the "executive summary." Notice that I'm not saying that there is no self, but rather no *thing* called a self. Of course, there is certainly an *activity* inside you called personality, an *activity* of the self. But that is different from a *thing* called the self. Meditation changes your relationship to sensory experience, including your thoughts and body sensations. It allows you to experience thoughts and body sensations in a clear and unblocked way. When the sensory experience of the mind-body becomes sufficiently clear and uninhibited, it ceases to be a rigid thing that imprisons your identity. The sensory self becomes a comfortable home, not a jail cell. That's why enlightenment is sometimes referred to as liberation. You realize that the thingness of self is an artifact caused by habitual nebulosity and viscosity around your mind-body experience.

Confusingly, the experience of no self can also be described as the experience of true self or deepest soul. You can call it no self, true self, big self, elastic self,

liberation, nature, or true love—you can call it whatever you want. The important thing is not so much what you call it but to know why it's relevant to your life and how you can feasibly get there. That's the purpose of this book."

"Almost all the mystic masters of the past have claimed that the experiences they have in contemplation reveal directly the nature of the real world. But are such claims justified? The twentieth-century British philosopher Bertrand Russell wrote the classic essay "Mysticism and Logic." In Russell's view, such all-encompassing claims based on mystical experience are philosophically unjustified. The mystic may learn things about the nature of experience that are useful, important, and not known by most people, but the nature of objective reality is the purview of science and science only. In general, I tend to agree with Russell."

Questions for discussion

- *What can science teach us about meditation?*
- *What can't science teach us about meditation?*
- *Can mystical experiences teach us about the nature of objective reality? If yes, are there limits to this type of knowledge? If not, what is the value of mystical experiences?*

Excerpts from [“On Intellectuals and Other New Age Nightmares”](#)

By Ken Wilber

Here Ken Wilber talks about the move from the pre-rational to the rational to the trans-rational. He also introduces what he calls the pre/trans fallacy, which will be a focal point of our conversation.

“The entire New Age movement—using that term in its broadest and most general sense—is on terribly ambivalent terms with its own mind. The New Age simply does not know what to do with the intellect, the rational mind, the verbal and conceptual capacity that tends annoyingly to arise in the midst of life. ... I offer this, not as an intellectual or academic discussion, but as a series of personal reflections.”

“People in new age or spiritual circles tend to be on very ambivalent and awkward terms with the intellect, and especially with rationality. And I think this is very understandable.

We all realize that spiritual awareness is, in many ways, trans-rational: it discloses a truth and goodness and beauty far beyond anything that the mind in general, and rationality in particular, could even imagine. And most of us who pursue a spiritual path — say, meditation or zazen or yoga — are in fact attempting to go beyond the mind and discover instead the "over-mind," the transcendental, the radiant glory of the very Divine, surpassing anything that can be put into words or concepts or mental ideas, the profound simplicity of what is, before it is named or categorized or intellectually boxed and caged.

We want to go trans-rational, and this is well and good. But in our haste to get outside the confines of the rational, we all too often end up uncritically embracing

anything that is non-rational, including many things that are frankly pre-rational, regressive, infantile, narcissistic.

This confusing of pre-rational with trans-rational is called the "pre/trans fallacy," and it works both ways: the orthodox and conventional theorists deny any sort of trans-rational reality at all, so every time a genuinely transcendental and spiritual occasion occurs, they simply claim it is merely the irruption of some infantile, pre-rational, regressive elements. And on the other side, those of us who know that there are real and genuine spiritual realities — trans-rational realities — sometimes in our zeal and excitement end up elevating pre-rational nonsense to trans-rational glory. Reductionists, elevationists: two sides of the same mistake.

And that is exactly why, I believe, we in new-age circles have such an ambivalent relationship to our own intellectual and rational capacities. We are indeed supposed to transcend rationality; but we have to get up to it in the first place! And too much of what we call "beyond rationality" is really quite beneath it.

So we don't quite know what to do with our minds. Love them or hate them, pursue them or reject them, polish them or smash them: this strange and ghastly beast the intellect.

And therefore we don't know quite what to do with our intellectuals. Because, of course, our intellectuals are in a "good cop, bad cop" role. They tend to criticize and clean out the pre-rational and regressive and narcissistic nonsense, but they tend also to deny and prevent the emergence of greater trans-rational truths. They "outlaw" both the lowest and the highest, and allow only the mediocre middle. We can appreciate them cleaning out the basement, but they also prevent a view from the rooftop!

And that, I think, is why it is so important for intellectuals to pursue, first and foremost, a spiritual discipline. A way to set the mind aside, and open to a grand and greater glory: trans-rational to the core, spiritual in depth, radiant in its release from the confines of the mind.

The intellect, of course, can be brought to the spiritual path, and there it is placed on the raging fire of primordial awareness, and there it burns to ashes along with everything else. When the intellect is made servant, it is wonderful friend, shining the brightest of lights on the darkest of realms, bringing warmth and clarity to all it touches. It is no accident that many of the very greatest spiritual sages have been jnani yogis: those who used intellect to go beyond intellect. Shankara, Aurobindo, Plotinus, Meister Eckhart, Schelling, Nagarjuna, Plato: their minds burned so brightly they sizzled the ego in the process.”

“At some point we ... must begin actual spiritual practice. You and I must begin contemplation, or yoga, or satsang, or zazen, or vision quest, or any number of other genuine contemplative practices (there are hundreds, I'm only mentioning a few). But we must actually do this as a practice; not talking religion, not chit-chat, but engaged, concerned, passionate, intense practice.

And in that practice, all your books, and all your thoughts, and all your ideas will fail you miserably. You will burn in the fire of your own primordial awareness, and from the ashes of the smoking ruins of the shattered ego, there will spontaneously arise a new destiny in the stream of consciousness itself, and you will be taken, transformed, ravished and transfigured in the glory of the Divine, and you will speak with the tongues of angels and see with the eyes of saints, and glories upon glories will enwrap and uplift your soul, and the lost and found Beloved will whisper in your ear, and the Divine will sparkle so intensely in every sight and sound, the wind will hum the hallowed names of the radiant Divine, while the clouds will crawl across the sky just to call your name, and your very Self will resurrect as the entire Kosmos itself, the haunting sound of one hand clapping in each and every direction, and it all will be undone in that extraordinary hymn. The hymn of spiritual practice.

That has nothing to do with books — reading them or writing them. But, as I was saying, many people are already engaged in merely approaching the Divine in

verbal forms, in mental forms, in religious games of chit-chat. In other words, they are not going trans-mental, they are simply stuck in the mental. They are not going trans-verbal, they are simply stuck in the verbal.”

“When the intellect is polished until it becomes radiant and shining, it is a staunch defender of a Truth and Beauty that reaches quite far beyond its own capacities, and in that reach it serves its Master more than faithfully.

As A. G. Sertillanges put it seventy years ago: "Do you want to do intellectual work? Begin by creating within you a zone of silence, a habit of recollection, a will to renunciation and detachment which puts you entirely at the disposal of the work; acquire that state of soul unburdened by desire and self-will which is the state of grace of the intellectual worker. Without that you will do nothing, at least nothing worth while."

And thus, when all is said and done, and we use our intellects in just that fashion, and we make friends with our own minds, we might likewise look upon our intellectuals as faithful servants of just that higher cause. Depending, of course, if our intellectuals themselves realize just what an important — and limited — role they have to play.”

Questions for discussion

- *What are the definitions of pre-rational, rational, and trans-rational?*
- *What is the pre/trans fallacy, and why do people fall prey to it?*
- *How do we avoid this fallacy so we can value science and spirituality together?*

Excerpts from [“Science and Pseudoscience”](#)

Stanford Encyclopedia of Philosophy

**Note that we've cut citations in these excerpts for better readability*

“The oldest known use of the word “pseudoscience” dates from 1796 when the historian James Pettit Andrew referred to alchemy as a “fantastical pseudo-science.” The word has been in frequent use since the 1880s. Throughout its history the word has had a clearly defamatory meaning. It would be as strange for someone to proudly describe her own activities as pseudoscience as to boast that they are bad science.

Attempts to define what we today call science have a long history, and the roots of the demarcation problem have sometimes been traced back to Aristotle’s Posterior Analytics. However it was not until the 20th century that influential definitions of science have contrasted it against pseudoscience.”

The logical positivists

“Around 1930, the logical positivists of the Vienna Circle developed various verificationist approaches to science. The basic idea was that a scientific statement could be distinguished from a metaphysical statement by being at least in principle possible to verify. This standpoint was associated with the view that the meaning of a proposition is its method of verification (see the section on Verificationism in the entry on the [Vienna Circle](#)). This proposal has often been included in accounts of the demarcation between science and pseudoscience. However, this is not historically quite accurate since the verificationist proposals had the aim of solving a distinctly different demarcation problem, namely that between science and metaphysics.”

Falsificationism

“Karl Popper ... rejected verifiability as a criterion for a scientific theory or hypothesis to be scientific, rather than pseudoscientific or metaphysical. Instead he proposed as a criterion that the theory be falsifiable, or more precisely that “statements or systems of statements, in order to be ranked as scientific, must be capable of conflicting with possible, or conceivable observations.”

Popper presented this proposal as a way to draw the line between statements belonging to the empirical sciences and “all other statements – whether they are of a religious or of a metaphysical character, or simply pseudoscientific.” This was both an alternative to the logical positivists’ verification criteria and a criterion for distinguishing between science and pseudoscience.”

For more from Popper, read his speech [“Science as Falsification.”](#)

The criterion of puzzle-solving

“Thomas Kuhn is one of many philosophers for whom Popper’s view on the demarcation problem was a starting-point for developing their own ideas. Kuhn criticized Popper for characterizing “the entire scientific enterprise in terms that apply only to its occasional revolutionary parts.” Popper’s focus on falsifications of theories led to a concentration on the rather rare instances when a whole theory is at stake. According to Kuhn, the way in which science works on such occasions cannot be used to characterize the entire scientific enterprise. Instead it is in “normal science”, the science that takes place between the unusual moments of scientific revolutions, that we find the characteristics by which science can be distinguished from other activities.”

Multi-criterial approaches

“Most authors who have proposed demarcation criteria have instead put forward a list of such criteria.

One such list [of non-scientific examples] reads as follows:

1. *Belief in authority*: It is contended that some person or persons have a special ability to determine what is true or false. Others have to accept their judgments.
2. *Unrepeatable experiments*: Reliance is put on experiments that cannot be repeated by others with the same outcome.
3. *Handpicked examples*: Handpicked examples are used although they are not representative of the general category that the investigation refers to.
4. *Unwillingness to test*: A theory is not tested although it is possible to test it.
5. *Disregard of refuting information*: Observations or experiments that conflict with a theory are neglected.
6. *Built-in subterfuge*: The testing of a theory is so arranged that the theory can only be confirmed, never disconfirmed, by the outcome.
7. *Explanations are abandoned without replacement*. Tenable explanations are given up without being replaced, so that the new theory leaves much more unexplained than the previous one.

Unity in diversity

“Kuhn observed that although his own and Popper’s criteria of demarcation are profoundly different, they lead to essentially the same conclusions on what should be counted as science respectively pseudoscience. This convergence of theoretically divergent demarcation criteria is a quite general phenomenon. Philosophers and other theoreticians of science differ widely in their views on what science is. Nevertheless, there is virtual unanimity in the community of knowledge disciplines on most particular issues of demarcation. There is widespread agreement for instance that creationism, astrology, homeopathy, Kirlian photography, dowsing, ufology, ancient astronaut theory, Holocaust denialism, Velikovskian catastrophism, and climate change denialism are pseudosciences. There are a few points of controversy, for instance concerning the status of Freudian psychoanalysis, but the general picture is one of consensus rather than controversy in particular issues of demarcation.

It is in a sense paradoxical that so much agreement has been reached in particular issues in spite of almost complete disagreement on the general criteria that these

judgments should presumably be based upon. This puzzle is a sure indication that there is still much important philosophical work to be done on the demarcation between science and pseudoscience.

Philosophical reflection on pseudoscience has brought forth other interesting problem areas in addition to the demarcation between science and pseudoscience. Examples include related demarcations such as that between science and religion, the relationship between science and reliable non-scientific knowledge (for instance everyday knowledge), the scope for justifiable simplifications in science education and popular science, the nature and justification of methodological naturalism in science, and the meaning or meaninglessness of the concept of a supernatural phenomenon. Several of these problem areas have as yet not received much philosophical attention.”

Questions for discussion

- *How do we best discern science from pseudoscience?*
- *Why does this matter? Have you seen examples where pseudoscience has caused harm or prevented growth?*
 - *How we do we root out pseudoscience while still honoring the earnest pursuit of spirituality and mystical experience?*