

Daniel Simpson and Alan Wallace's Dialogue on Buddhist meditation and the cognitive sciences

Introduction: The following exchange between Daniel Simpson and Alan Wallace follows from Daniel Simpson's article "Buddhist meditation and cognitive sciences"¹ and Alan Wallace's oral response given during a recent lecture in Tuscany.²

Daniel Simpson: I appreciate your engagement with the article, and I'm grateful for your work on how materialism hijacks science. I particularly enjoyed reading *The Taboo of Subjectivity* and *Mind in the Balance*.

Alan Wallace: In your essay, you wrote, "To Wallace's frustration, science dismisses "nonphysical influences in organic evolution or in human affairs," despite having "no technology that can detect the presence or absence of any kind of consciousness, for scientists do not even know what exactly is to be measured." His critique is sound but he makes few suggestions (apart from endorsing meditation)..." When I read that, I assumed you hadn't read *Mind in the Balance*, for in that academic book I explain in quite some detail rigorous methods for exploring the nature, origins, and potentials of consciousness by integrating methods from contemplative and scientific disciplines. I also do so in many of my "Dharma books," such as *The Attention Revolution* and *Minding Closely*.

In your article you refer to panpsychism, which "treats consciousness as an intrinsic, fundamental property of reality." I am familiar with Giulio Tononi and Christof Koch's "Integrated Information Theory," which is the most sophisticated version of panpsychism I've seen, but it suffers from serious drawbacks. Koch summarizes this theory as follows: Any complex system has the basic attributes of mind and has a minimal amount of consciousness in the sense that it feels like *something* to be that system. If the system falls apart, consciousness ceases to be; it doesn't feel like anything to be a broken system. And the more complex the system, the larger the repertoire of conscious states it can experience."

As a Buddhist skeptic, my first response is that there is no empirical evidence to support the belief that any system that has even one bit of integrated information has a very minute conscious experience. Rather, this appears to me as an untestable hypothesis and is simply taken as an article of faith, or an unquestioned axiom, which I see no reason to accept. The most crucial flaw in his theory, as I see it, is that he fails to make the all-important distinction between quantitative and qualitative information, where the former is defined as the pattern of organization of matter and energy, and the latter as some pattern of organization and matter and energy given meaning by a living being (or its constituent parts).³

By conflating quantitative information with qualitative, which is commonly done by materialists, Koch ignores the fact that the latter must be given meaning by a conscious being, and rather assumes that this "conscious being" emerges when an uncomplex or broken system transforms into a complex system of integrated information. In asserting that such an IIT is conscious, he fails to recognize the point validly made by John Searle: "the information in the computer is in the eye of the beholder, it is not intrinsic to the computational system...The electrical state transitions of a computer are symbol manipulations only relative to the attachment of a symbolic interpretation by some designer, programmer or user."⁴

A third flaw is that Tononi/Koch present no cogent theory to explain how the minds of individual complex systems (e.g., the amygdala, hippocampus, etc.) bind together to form a

1 <http://www.danielsimpson.info/archive/buddhist-meditation-science-1sd>

2 <http://media.sbinstitute.com/courses/spring2016/79-1-alan-wallace-s-response-to-the-article/>

3 See Bates, Marcia "Fundamental Forms of Information" *Journal of the American Society for Information and Technology* [Volume 57, Issue 8], pp. 1033–1045, June 2006.

4 John R. Searle, *Consciousness and Language* (Cambridge: Cambridge University Press, 2002), 34.]

unified mind of a larger complex system (e.g., a brain). The “binding problem” has plagued all versions of panpsychism, and no one has solved it. A fourth flaw in this theory is the implausible implication that the Internet is a conscious being, but as you rightly admit, this is completely speculative. A fifth flaw is that there is no explanation of where consciousness comes from when an uncomplex or broken information system becomes an integrated complex system, or what happens to that consciousness when it “breaks.” Clearly the beginning and end of an integrated complex system are only vaguely defined, and Tononi acknowledges that “emergence of subjective feelings from physical stuff appears inconceivable.” So if there is no consciousness in an uncomplex or broken information system in the first place, transforming an uncomplex into a complex system or fixing a broken system won’t make it conscious. Tononi himself ridicules the idea that mere matter can generate mind. This is a mystery, he says, that is “stranger than immaculate conception... an impossibility that defies belief.”⁵ But this is the unavoidable implication when an uncomplex material system transforms into a complex, integrated system.

All versions of panpsychism appear to me as the last gasp of materialists trying to explain, or explain away, the existence of consciousness. Again, I think Searle gets it right when he claims, “It would be difficult to exaggerate the disastrous effects that the failure to come to terms with the subjectivity of consciousness has had on the philosophical and psychological work of the past half century. In ways that are not at all obvious on the surface, much of the bankruptcy of most work in the philosophy of mind and a great deal of the sterility of academic psychology over the past fifty years...have come from a persistent failure to recognize and come to terms with the fact that the ontology of the mental is an irreducibly first-person ontology.” And yet in an apparent fit of amnesia, he makes the bizarre claim in the same work, “Consciousness is, thus, a biological feature of certain organisms in exactly the same sense of ‘biological’ in which photosynthesis, mitosis, digestion, and reproduction are biological features of organisms.”⁶

Over the past 2,500 years, Buddhist contemplatives have fully recognized and come to terms with the fact that the ontology of the mental is an irreducibly first-person ontology, and they have devised very sophisticated ways of training attention and introspective skills to probe deeply into the origins and nature of consciousness. On the basis of such experiential research, they have concluded that each human mind emerges from an individual, subtle continuum of consciousness that precedes the formation of the brain and continues after brain death. This deeper dimension of consciousness can be accessed through rigorous meditative training in highly focused attention and introspection. By so doing, one can gain access to past-life memories, the validity of which has been rigorously tested by contemplatives. There is further supportive scientific evidence in studies of near-death experiences (e.g. Sam Parnia) and reports of past-life recall in children (e.g. Ian Stevenson & Jim Tucker). For many centuries, Hindu, Taoist, Jewish, Muslim, Christian, and Shamanic contemplatives have made similar claims, not to mention Pythagoras, Socrates, Plato, and Plotinus.

As far as I can tell, the scientific community has systematically refused to investigate or even acknowledge the existence of such claims with an open mind. But as Richard Feynman cogently advises, “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

⁵ *Phi: A Voyage from the Brain to the Soul* (2012)

⁶ John R. Searle, *The Rediscovery of the Mind* (Cambridge, Mass.: The MIT Press, 1994, pp. 93 & 95).

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.”⁷

To my mind, this claim by centuries of contemplatives and philosophers and recent scientific studies suggests the need for research involving sophisticated, sustained training in first-person, contemplative methods to complement third-person, scientific methods. Such research should examine the broadest possible range of states of consciousness, and be conducted by skeptical, rigorous, open-minded psychologists, neuroscientists, physicists, philosophers, and contemplatives. To enable such research, a network of research facilities should be created for training professional contemplatives in collaborative research with scientists and philosophers.

Daniel Simpson: I think you’re right that Richard Davidson is doing what he can to ride the edge of the paradigm, albeit accepting its constraints. Perhaps he could be encouraged to be a little more forthright, like Jay Garfield.⁸

Alan Wallace: It’s a step in the right direction, but what Garfield refuses to consider is that Buddhist philosophy, unlike Western philosophy, has empirical means to test its hypotheses, including the idea that it’s possible to transcend the limitations of the conceptual mind. So, just as Western scholars of religion have appropriated Buddhism within their discipline, treating it simply as a belief system, now Western philosophers are trying to appropriate Buddhism within their discipline, treating it as one more speculative philosophical tradition—one more case of blind men casing out the elephant.

Daniel Simpson: Although I agree there’s an in-built resistance to contemplative research, I’m not sure it’s the same as Cremonini’s refusal to look through Galileo’s telescope. For the analogy to stand, there would need to be a clearly defined experiment that scientists could do on expert meditators, which would give us more evidence for what they experience than what they say about it. Perhaps I’m missing something, but I know of no such experiment. As far as I’m aware, none has yet been proposed, apart from the sorts of studies that Garfield calls “much ado about what we all should have known already”; for example, demonstrating that attention can be trained.

Alan Wallace: I’m very surprised to read this, for in *Mind in the Balance*, I clearly set forth two such experiments, the “Jiva Project” and the “Alaya Project,” for which I have attached the summaries.

The very notion that the only way to proceed is to present a clearly defined experiment that scientists could do on expert meditators assumes that scientists alone have robust means of exploring the mind, while even the most expert meditators have only their (misleading) subjective impressions. Cremonini refused to look through a telescope on ideological grounds, for in his view (and in order for him to keep his job) the beliefs of Aristotle could not be challenged, regardless of any first-person observations that might be made through a telescope. Richie Davidson has adopted a similar view (also in order to keep his job and his standing within the materialistic scientific community), refusing to question the metaphysical assumption that all possible states of consciousness and mental activities are nothing more than activities of the brain. Giulio Libri, on the other hand, refused to look through a telescope for fear that whatever he might see would be nothing more than an optical illusion created by his brain. Psychologist

⁷ Richard P. Feynman, *The Character of Physical Law* (Cambridge: MIT Press, 1967), 127, 148, 158.

⁸ <http://www.nytimes.com/2016/05/11/opinion/if-philosophy-wont-diversify-lets-call-it-what-it-really-is.html>

Anne Treisman and philosopher Jay Garfield likewise refuse to take seriously any first-person claims made by even the most advanced meditators. The common point is that psychologists, neuroscientists, and philosophers refuse to “look through the telescope” of contemplative inquiry into the nature and potentials of the mind, for this would require years of rigorous meditative training (comparable to earning a Ph.D. in any of their disciplines). It’s not as easy as simply looking through a telescope that someone else has made for you.

Daniel Simpson: You mention the exposure of Mind & Life scientists to Tibetans who speak about *siddhis* and previous lives and characterize their response as “if I don’t know it, you don’t know it.” I’m not sure that’s accurate. Is it not also possible to accept that contemplatives may “know it” while noting “it” can’t be confirmed, except by taking people’s word for it? And what they say is a different form of evidence to that which can be verified by other means.

Alan Wallace; We’re back to the issue of: are you willing to look through the telescope of highly developed samadhi to explore the potentials of the mind that are hidden as long as the mind is untrained? There are very few scientists who acknowledge that contemplatives may have made discoveries about the mind and its role in nature, even if scientists can’t confirm those discoveries with physical measurements. This would be like Cremonini and Libri admitting that those who make ground-breaking discoveries by looking through telescopes may “know it,” but they can’t be confirmed by people who refuse to look through telescopes.

Daniel Simpson: The same applies to what contemplatives say about perception. I don’t think it’s a case of “either Jay Garfield’s right or they’re all wrong”. I appreciate you were speaking tongue in cheek, but is there not a middle way here? Even if scientists were to study the most accomplished of practitioners, how might it be proven that they can perceive without “inferential processes” and the other forms of filter Garfield mentions?

Alan Wallace: The spectrum of contemplative insights ranges from ones that are deeply embedded in conceptual frameworks to those with thinner and thinner veils of conceptualization. This entire spectrum is explained in great detail in the professional contemplative literature of Buddhism. While scientists who refuse to look through the telescope of advanced stages of non-conceptual samadhi may study the brains and behavior of those who have mastered such contemplative states, and they may draw inferences from the contemplatives’ first-person reports, they will remain as much outsiders to this realm of the mind as medieval scholastics to advances in astronomy. The obvious point that Treisman and Garfield overlook is that all their own observations are totally embedded within conceptual frameworks that filter and often distort their perceptions. So what are the grounds for being more skeptical of contemplative discoveries than they are of scientific discoveries and philosophical insights?

Imagine a group of neuroscientists who took an interest in advanced mathematics and decided the way to explore the validity of discoveries by the most accomplished mathematicians is to explore their brains and behavior and conduct interviews with them. Obviously, they will remain in the dark unless and until they are actually willing to undergo years of training in advanced mathematics.

Daniel Simpson: To move the conversation forward, I think it would help to frame what needs to change in terms of research that might be done. It sounds like you’re proposing this starts by encouraging scientists to engage more deeply in meditative practice. Yet whatever they observed would be dismissed by peers as anecdotal, and discussing it may even get them “excommunicated.”

Alan Wallace: Unfortunately, you’re quite right, and this was exactly the case of those medieval scholastics who dared to look through telescopes. As Max Planck famously commented, “Science advances one funeral at a time.” Closed-minded materialists who have based their

entire careers on their metaphysical beliefs will never budge, but they will die off over time, leaving the field open for young, open-minded scientists to forge ahead where they dared not go.

Daniel Simpson: Of course, this prospect shows the current paradigm is too rigid. But I don't really see what "contemplative science" consists of, beyond promoting meditation. That's no bad thing, but it wouldn't help communicate what people find, or prove its validity to anyone else. And despite the constraints on science, there's no one stopping us from pursuing it: we just need to practice.

Alan Wallace: I believe I've addressed those qualms above, and for further clarification I attach a set of slides on "What constitutes compelling evidence and for whom?" that make my point even clearer.

Daniel Simpson: You claim that Buddhist philosophy, unlike Western philosophy, has empirical means to test its hypotheses, including the idea that it's possible to transcend the limitations of the conceptual mind. Unless scientists are able to verify this objectively, it's not going to change the current paradigm. No experiment exists which could do so. Even if scientists are willing, as you propose, to change their own minds through meditative practice, what they experience would not conclusively prove that they're perceiving non-conceptually, for the reasons discussed by Garfield's article.⁹ To argue otherwise would assert that first-hand evidence trumps all other data. And if that's the case, why bother engaging with scientists? It would be sufficient to share Buddhist teachings.

Alan Wallace: I doubt that many people will care whether or not it's possible to transcend the conceptual mind, and even fewer will care whether scientists have verified this. Scientists commonly overestimate how much their views matter to the general public. I'm convinced that the fact that science illiteracy in the U.S. is so high—with more than 40% of the public believing in a literal reading of the Genesis account of creation—is due in large part to the scientific community's insistence on force-feeding the beliefs of materialism as they dish out reports of their latest discoveries. Materialism is so morally and intellectually repugnant to so many people, that if rejecting that belief system means they need to chuck out science as a whole, then so be it. I'm sure it's no mere coincidence that Christian fundamentalism arose during the late nineteenth century, exactly when scientific materialism first began to dominate all of scientific research, education, and media coverage of scientific advances. I'm amazed that so few scientists are aware that their own reductionist views so hinder the acceptance of scientific discoveries by the general public.

The value of contemplative inquiry doesn't hinge on the one issue of whether or not contemplative insights transcend concepts. First, we should bear in mind that all scientific observations and conclusions are made within the confines of the conceptual mind, and no one seems bothered by that. And William James, who was such a champion of the first-person perspective when it comes to exploring the mind, freely acknowledged, "introspection is difficult and fallible; and ... the difficulty is simply that of all observation of whatever kind... The only safeguard is in the final consensus of our farther knowledge about the thing in question, later views correcting earlier ones, until at last the harmony of a consistent system is reached."¹⁰ The third-person, cognitive/behavioral methods of psychology and the physiological methods of neuroscience may shed light on aspects of the mind that are not accessible to the first-person methods of contemplative science, and vice versa. All I'm suggesting is that all three approaches be employed and integrated, as William James advocated more than a century ago.

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[https://www.academia.edu/2833529/Ask Not What Buddhism can do for Cognitive Science Ask what Cognitive Science can do for Buddhism](https://www.academia.edu/2833529/Ask_Not_What_Buddhism_can_do_for_Cognitive_Science_Ask_what_Cognitive_Science_can_do_for_Buddhism)

¹⁰ William James, *The Principles of Psychology* (New York: Dover Publications, 1950), pp. 191-2

I'm firmly convinced that Buddhist and other contemplatives have made fundamental discoveries about the nature, origins, and potentials of the mind that are hidden to researchers who confine their observations to the brains and behavior of ordinary individuals. If Buddhist contemplatives have discovered truths, for example, about the existence of a subtle continuum of consciousness that carries on from one life to the next, then these truths should be made public and shared with everyone. So I'm now working with scientists to collaborate in long-term research with highly trained contemplatives, in which the scientists and contemplatives will treat each other as fellow professionals, rather than scientists denigrating contemplatives by treating them as mere subjects for their research.

Daniel Simpson: Although materialism places little value on subjective evidence, it doesn't stop anyone learning to meditate, or choosing to value their own experience.

Alan Wallace: Yes, but relegating contemplative insights to mere "subjective evidence" leaves the public with the false notion that science alone sheds light on the nature of reality as a whole, including the mind. It's time to break the monopoly of scientists being seen as the sole arbiters of truth. Scientific discoveries are based on measuring and analyzing objective, physical, quantifiable phenomena, which excludes all nonphysical phenomena from having any significant role in nature. That is nothing more than an epistemological bias that gives us a two-dimensional vision of reality as a whole. To progress to a three-dimensional vision of reality, we must include rigorous observations and analyses of non-physical natural phenomena, at which contemplatives excel, to complement the rigorous observations and analyses of physical phenomena, at which scientists excel.