

Empowering the Subject: A Buddhist Critique of the Science of Consciousness

A Dialogue with Acharya Dan Hessey and Dr. B. Alan Wallace

[0:00:08.0] Acharya Dan Hessey: Hello and welcome to The Science of Meditation, hosted by Shambhala Mountain Centre, I'm your host today Acharya Dan Hessey. It's my pleasure today to be here with Doctor B. Alan Wallace for a discussion of the interface of Buddhism and Science. Alan, thanks for being here.

[0:00:27.3] Dr. B. Alan Wallace: It's my pleasure, thank you for the invitation.

[0:00:29.1] Acharya Dan Hessey: So I thought we could get right into it, in my personal experience, I came from a family of scientists and as I was growing up it became clear to me that reality was known by science, not by people, that my native perception of the world was sort of formed by habits and sort of sloppy and didn't get the real information, that the real information was found at a laboratory by people who were smarter than me and I always felt disempowered by that. And I think that's one reason I started meditating is to see if I could find a way of knowing, it was really related to me as a person, that had validity, that I could trust. Do you think that kind of experience is relevant to the dialogue between science and meditative disciplines today?

[0:01:26.1] Dr. B. Alan Wallace: I think it's not only relevant, but enormously important here, especially as psychologists and neuroscientists have begun the scientific study of meditation. On the one hand it looks like a good thing, bringing these two worlds together, but they're being brought together in a way that absolutely lacks any kind of parity at all, because with almost no exception meditators are subjects, the professionals are the scientists and the scientists interview, do brain scans and so forth and they do cognitive measures of the meditators as if they were basically two legged Guinea pigs with no perspective of their own. But then the scientists publish their papers, but there's a long history of this, and not to give you a too academic or too elaborate answer, this brings us back to the origins of modern science, back to Galileo, because Galileo a very devout Christian was seeking was to approximate a God's eye view on reality because he wanted to know the mind of the creator by way of the creation. Actually seeking a God's eye view, a view that is absolutely transcending the human perspective, transcending reality as a whole and looks on reality as it absolutely is, so that was the ideal of a completely detached objective perspective, totally without bias that is absolutely correct, and scientists sought that for the first three hundred years or so.

Acharya Dan Hessey: It's often then that when someone says I'm having a subjective experience that means it's unreliable in other words you can almost say they're synonyms from the point of view of validity. And when we're meditating that's not quite the case, is it?

[0:03:07.7] Dr. B. Alan Wallace: Well, if one excludes the subjective perspective from meditation, which a number of scholars are happy to do, and cognitive scientists are happy to do, you've eviscerated it. You've completely eviscerated it, you've filleted Buddhism, you've taken out the backbone and then you have something you can munch on.

[0:03:29.0] Dr. B. Alan Wallace: So you have all the epiphenomenon but you've lost the heart of it, is that correct?

[0:03:35.0] Acharya Dan Hessey: Well, exactly and you know what this God's eye view that has dominated modern science since about the mid-nineteenth century has been taken over by a materialistic view which is then by the words of Thomas Nagel, a very well-known philosopher, a view from nowhere, but if the notion that somehow scientists are objective and scientific measures are objective and they tell us what's really going on, then as you say the word subjective is kind of like a dirty word. When I say "Oh you're being so subjective" this is like you're stupid, you're biased, you cannot be relied upon, and this perspective is actually very prevalent in cognitive psychology, when cognitive psychologists interview their subjects, I heard this from Anna Stresemann who's a

very very distinguished psychologist, she says we do not take their first person accounts to be true, we simply say that's what they said. But regarding first person experiences to be fundamentally an array of hallucinations, except the first person experience of the scientist, and somehow they give themselves a special caveat. I love science and I admire science, I've studied science and I've done a lot of scientific research, but science has been infested as with a parasite with a metaphysical belief and a methodology truism from the time of Thomas Hudson a hundred and fifty years ago that science is the only way to understand anything and that means the mind as well. That gives the scientists conundrum, because the mind is not objective, it's not quantitative and it's not physical, while they're trying to study the mind as if it were physical, subjective and quantifiable, and it's not so they study it indirectly by way of behaviour, brain and interviews, but the first person perspective is left out. Now this is like starting a new branch of astronomy that says well we're going to have this branch of astronomy but by the way you should never look at the sky and using telescopes is taboo.

[0:05:24.1] Dr. B. Alan Wallace: Well, it's interesting, in your book *Choosing Reality* you said that the objective view is always mixed, you know the sense of objectivity is always mixed with subjectivity inherently, but it's not acknowledged as part of the process. So in that you're saying that what we observe is not nature itself, but nature exposed to our method of questioning and our method of questioning is, I think it was from Eisenberg you quoted it, but the point is how we look at something, how we choose to examine helps with what we learn from it.

[0:05:59.8] Acharya Dan Hessey: Exactly, exactly Einstein, quoted by Eisenberg, that it's, I paraphrase him here, it's easy to think that our view is determined by observations, whereas you said in reality what we observe is determined by our view.

[0:06:14.6] Dr. B. Alan Wallace: Yes, exactly.

[0:06:16.4] Acharya Dan Hessey: And so when it comes to introspection it was, introspection as in mode of enquiring directly into the nature of the mind, mental processes and so forth, was discarded almost entirely within academic psychology more than a hundred years ago when behaviours moved in and they said we will now, in behavioural psychology, make no references, this is John D Watson writing about a hundred years ago, we will make no references to subjective experience and we will not use introspecting at all, we will be scientific which means we will only study behaviour, which is objective, physical and quantifiable, we're back on comfortable terrain, the only thing they've left out is mind. So this is the cultural and intellectual milieu that we're in, we breathe this air as modern westerners, we take it for granted in an unexamined way that we've been disempowered and we just think well, that's the way it is you know, I'm not a bird, so I can't fly, there's no reason I should think that I should have wings, that my perception is somehow unreliable and that means that fundamentally, I'm not a very useful being in the world. So that's how we come to meditation, I'd be curious to see how, as a normal meditator, because we have millions of people who are interested in meditation now for lots of reasons, and they're dependent on the authority of science to tell them that it's worthwhile and they understand meditation in terms of how science has framed it. I'd like to look at that a little bit before we look at the alternative of a deeper way and some of the other ways we can look at meditation that are more deeply empowering to individuals and lead up to a different path, in other words move back to that idea that the questions you ask frame the results you get, so how are we framing the questions we ask in meditation, based on the scientific milieu.

[0:08:22.3] Dr. B. Alan Wallace: Well, I think it traces back to behaviourism, BF Skinner for example said that here's our strategy, it was like a political strategy or that of an evangelical religious person and that is; here's going to be the campaign, we're going to simply assume that the mind is a biological function, then we're going to assume that the mind is the brain, then we're going to assume a human being has a brain, and then we'll make really good progress. So they've made really good progress for themselves, what they've done for humanity with this ploy is their approach is dehumanising, disempowering and demoralising and the neuroscientists starting about fifty years ago, they actually established a discipline with the same program or kind of propaganda, they said we will approach this whole discipline with the aim of understanding all subjective psychological states, mental processes and so forth in terms of biological functions. They didn't get given the evidence

whether that was true or not, they simply skipped the whole mind-body problem and treated as if it had already been solved, so they took that theory as an item of faith as you were saying earlier on. It's simply an item of faith and I'm perfectly happy for people to have faith, it's a free but what's not legitimate is to take in item of faith, turning it into a working hypothesis and then, as a sleight of hand, present it as if it's a scientific truth, and this is what the neuroscientific community has done for fifty years now and the media, and I say shame on them, the science writers, shame on all of them, that have swallowed this lock, stock and barrel or hook, line and sinker, and now we see in the media everywhere that the mind and brain are being used interchangeably, the brain now is the agent, not you, not your mind. To speak very bluntly, I like doing that...

[0:10:08.0] Acharya Dan Hessey: But tell me how you categorise things, I'm trying to draw you out here.

[0:10:13.2] Dr. B. Alan Wallace: Well, I'm not being shy and I'm not being politically correct, because I'm not trying to get tenure and I've already published enough, I'm not going to perish for a lack of books. So this is a scam, a scam that is dominating the neuroscientific community totally and they have mesmerised the media and the general public into thinking that the first person perspective is completely unreliable and the only people who have a valid perspective are the scientists. This is what the Roman Catholic Church did in its darkest hours, during the inquisition, they wouldn't let the bible be translated, and they refuted people's first person experience and said only the priests can tell you really what God said what's in the bible. Now, the Roman Catholic Church has gone through many evolutions since then, so this is not a criticism of Roman Catholicism, but I am saying the scientific community, especially academic psychologists and neuroscientists are taking on the role of "priests" as though they alone have valid access to our minds, which is actually without any basis in empirical evidence. So its faith based entirely and it's got a real political manoeuvre to it because it gives them a lot of resources, a lot of money and prestige and influence, which frankly is unwarranted.

[0:11:30.2] Acharya Dan Hessey: Yes, I see, so let's look at the implications of... let's say if you were coming from that perspective, which would be a fun exercise for you to do, to put on those shoes, and say well, what is meditation? It's a way of stress relief, you're optimising mental processes, and you're tuning up the chemicals in your brain, what does meditation do from the scientific perspective?

[0:11:55.8] Dr. B. Alan Wallace: Scientific perspective, understandably, is looking for objective measures so they can validate or could repudiate whether meditation does anything at all. And for a long time meditation was simply ignored by the scientific community as something new-agey, or mystical and so forth and so on, and now over the last twenty years or so the neuroscientist psychologists have gotten in and what they want to see, the ones who are interested in this, is what are the constructive benefits, and if there are disadvantages what are they, how does meditation modify the brain? If they are simply assuming the mind is what the brain does, in fact, one very well-known neuroscientist, who is very prominent in the scientific study of meditation said and I quote him "the only way to understand meditation is by understanding the underlying neural mechanisms." This is a turf war, he's basically saying hey, all you meditators, you don't really know what's going on because you don't know the brain, but we neuroscientists will let you know. So it's kind of imperialism-colonialism...

[0:12:57.4] Acharya Dan Hessey: ...you know blindly, you stumbled on to these techniques over twenty five hundred years...

Dr. B. Alan Wallace: Yes, you people have some really good hunches and techniques I think we can probably appropriate and we'll find out how meditation influences the brain, how we can help you with performance, in emotional resilience and so forth you know that it's basically activating those parts of the brain and influencing the chemical process in the brain that will give you greater extrinsic happiness. Because it's basically hedonic and that is kind of what Buddhists would call mundane pleasure. Which means they're missing entirely the whole point of meditation and Buddhism, which if you want mundane pleasure go out and have a nice meal, if you want extrinsic pleasure just take drugs, it works pretty well...exactly right, it's the shortcut, goes directly to the brain and there are

people now that are arguing that meditation does basically what drugs do, missing entirely the context of ethics, cultivating exceptional mental wellbeing and balance, cultivating direct insight, radically empirical direct observations and discoveries about the nature and the potentials of the mind and in fact the Buddhist perspective and the Buddhist insights on the nature of mind are almost entirely being ignored by the scientific community interested in meditation. Because they're basically assuming that the Buddhist have a lot of nice hunches but so much superstition about reincarnation and so forth that their perspective doesn't really count, but the scientist and the secular Buddhist will come in and straighten everybody out. So let's take a look now, we're going to change paths now from the scientific view to the Buddhist view, if you were speaking as who you are, as someone who's studied this for a lifetime, how would we distinguish the mind and the brain and their relationship? Because I think well, is the mind the same as the brain? Is the mind completely separate from the brain? How do they talk to each other? Because you think well, if I have a stroke, then part of my mind seems not to be functioning, so that's something that happened in my brain and yet my mind doesn't seem to have a colour, a shape or a location, on more investigation. How would you talk about that for ordinary meditators or curious "all right, the mind's not the brain, what is it?" The way that this is all framed by mainstream academia is "Which are you? Do you have a scientific approach or are you adapting the approach of Descartes, which is a radical dualism, the mind is utterly independent from the body and so forth, they're couching in a way that stupefies the whole question, and so we point out immediately that Descartes is completely inadequate so if we believe him we're completely out of touch with reality, and probably religious, whereas if you're realistic then you follow the evidence and the evidence suggests the belief that the mind is either equivalent to brain function or to the brain, or it's a function of the brain, the mind is what the brain does. Now it's good to pause here, why do they believe that? Because if these people are not unintelligent, but simply the thinking here is extremely crude. So here's the first one; they measure a certain part of the brain in any way, and the correlated subjective experience, memory, visual perception and so forth and so on, can either be damage impaired or obliterated, so there's one, there's one reason, that's good, that's good finds. The second one is they found in some cases they can stimulate certain parts of the brain, either with drugs or electrical stimulation, and they can activate or cartelise a specific subjective experience. Now those are two really good scientific facts. On the basis of this, basically those two things, then the scientific community dominated by the beliefs of scientific materialism, has gone with the conclusion which we never questioned, and that is the mind is simply a function of the brain. If this is true, if that's sufficient reasoning, then let's take the keyboard of a computer. I have one on my lap right now, it's literally a laptop. So here's the key for M, right, if I should damage the key itself or the underlying mechanism that's connected to the rest of the computer, if I damage that, then what appears on the screen will be either impaired or it can be obliterated, it can be wiped out, right, but if I hit it, then for example the letter M appears on the screen. Therefore let's conclude that if I damage the key and the corresponding function on the screen is impaired or vanishes, or if I activate the key it does appear, let us now assume that the computer is what the keyboard does. It's exactly the same reasoning.

[0:17:46.5] Acharya Dan Hessey: I see, I see.

[0:17:47.4] Dr. B. Alan Wallace: Exactly the same reasoning, because we can say the screen is like behaviour, because that is what you really see, and the keyboard is what the neuroscientists get to tinker with and they get to see that, then the mind in this analogy is the hard drive. So it's like the neuroscientists are unaware that since there's something called the mind, independent of the keyboard, but there is a hard drive independent of the keyboard that, in computers nowadays, if you're a novice like me, is sitting behind the screen. If you went from computers twenty years ago to now you say hey, there's no more hard drive, only a screen and the keyboard. And that's the naiveté that the neuroscientific community is bringing to the mind, they can't see it, what they do see is the keyboard and they simply assume that the mind is a function of the brain, just like the computer must be a function of the keyboard, it's extremely superficial thinking.

[0:18:36.7] Acharya Dan Hessey: But the whole sub strait between the sense receptions and the mammal consciousness, the inputs and our sense of ourselves, and there's a whole sub strait that you

might, sort of like a straw house, like a hard drive, that isn't being seen because it doesn't have a manifestation of its own, but nonetheless it's at the heart of the whole process. It is at the heart of the process and the beauty of this that is almost entirely ignored by the scientific community, is that it is not hidden, it is not obscure, and it can be directly observed, just not by using the methods of mainstream science. It can be used...

[0:19:14.8] Dr. B. Alan Wallace: Well I say if we can't measure it, it doesn't exist.

[0:19:18.1] Acharya Dan Hessey: And this is the attitude of a hard-core, closed minded religious fundamentalist, that if it's not in our condition it doesn't exist.

[0:19:25.1] Dr. B. Alan Wallace: It's not, it's exactly the same mentality. It doesn't have to be Christian but it's a Bible thumping Christian evangelical that says we have the only way, and if you don't follow us you're damned, and that's what the scientific materialists are saying. Science is the only way and so if it can't be measured objectively, physically and quantifiably, it doesn't exist, including the mind that just came into that inclusion, so there are neuroscientists that actually say consciousness doesn't exist. There's a neuroscientist who just wrote, from Duke University, he's actually a philosopher but he's working in the neuroscience institute, that introspection doesn't exist, that we have no privileged access to our thoughts, so what's happening here is for many philosophers and a lot of people in the cognitive sciences, it's as if the whole discipline is being run by people who are meta-cognately interred, they have so little awareness of their own thoughts and emotions they're ignoring them entirely and entirely focusing on the external, which again, if the brain is doing everything, the brain is a biological organism like the liver or the gallbladder, it operates according to the laws of physics, biology and chemistry, which means it's immoral.

[0:20:32.3] Acharya Dan Hessey: Yes.

[0:20:32.8] Dr. B. Alan Wallace: No morality in the laws of science, which means if the brain is simply a biological organ and it's doing everything, then you and I and everybody else, we are not responsible for anything we do, there is no moral responsibility, we are absolutely disempowered because the brain is doing everything and we are either non-existent or a mere epiphenomenon of this mindless machine called the brain. It's really a terribly destructive view as well as being a stupid one.

[0:20:58.7] Acharya Dan Hessey: So let's look at this sense of different domains of investigation. We have a domain of investigation that science particularly works with which is the sense of creating models and then testing them through repeatable processes. We have a domain of investigation that's related to our sense perceptions, which is dualistic, but it's intimate, it's not distanced that way. And then, if I'm hearing you correctly we have a domain of investigation so to speak that has to do with the mind looking at itself. In other words, what I'm hearing you say is that that testing mechanism that science uses can't actually access, the mind is a blank box from that point of view, hence says the computer screen can't access mind because it's actually in a dualistic relationship with the object of perception of the mind that is experiencing it, but it's sort of involved with itself, so to speak. So within their own domains those kinds of investigations can come up with valid investigations, but when they leave their own domains, they're somehow impaired, they can't look at things that they can't access. But how can you use mind as a way of investigating mind if you can't see mind with external investigations or with the senses?

[0:22:34.6] Dr. B. Alan Wallace: Well, first of all just start out with common sense.

[0:22:37.0] Acharya Dan Hessey: The question, does that make sense?

[0:22:38.3] Dr. B. Alan Wallace: Absolutely, sure. But let's start out with common sense and that is what the untrained person, untrained in meditation, never spent a moment meditating, an ordinary person an accountant, a bricklayer, a football player and so forth, are they aware when their mind is agitated, when it's calm? Are they aware when there's a lot of rumination going on or not? Are they aware when they're angry or when they're peaceful, whether they're happy or sad and so forth or do they have to look in a mirror and see their facial expressions or watch their behaviour to infer, since

after all they don't have access to their own minds? This is so stupid that it's amazing anyone says that with a straight face, but it is being stated by philosophers and scientists that we have no privileged access to our minds, which is just flat-out insultingly stupid. And so here's the first point, if the untrained person clearly has the ability to be aware to varying extents whether you're intoxicated, if you had two martinis are you drunk or not? You know, we do have that, but these issues have not been raised yet in a hundred and thirty five years of cognitive psychology, not been raised, is this natural ability we all have and only the most metacognitively impaired people deny it, can it be refined? Because as William James says so rightly, introspection is fallible, but he said it's fallible like any other type of observation. So the first telescopes were very fallible, whether the lenses are properly aligned and so forth and so on, but telescopes got better from the three power telescopes that Galileo started with until now the Halo telescope and so forth. This is where Hinduism and Buddhism and other contemplative issues are lightyears ahead of modern science, because we recognise the problem, the Buddha himself did. And first of all, very briefly here, they got to cultivate a way of life that is conducive, in your whole way of life, to refining your mind, balancing, refining, developing your mind and this is where ethics comes in. Then you have, this is ethics, then you have the midrange of Samadhi, that's not just developing concentration, developing exceptional levels of mental balance including very advanced attention skills, including stability and clarity, and with that basis which provides you with some objectivity of observing your own mind, then you move into the realm of wisdom or vipassana. So John Searle, who is one of the most renowned philosophers abiding the country, made one of many trivially naive comments and that is, no, introspection doesn't happen, there's no specting intro because the mind cannot observe itself. This is, it sounds like a person who've never had a mind, really, who haven't been observing a thought or observing my emotions, my desires, mental states. I can observe with a dispassionate mind that I'm a bit upset, I can observe when I'm clear of mind, when I'm a bit dull, a bit sleepy I can observe and so forth and so on. So it's not one thing observing itself, but to use Marvin Minsky's term, the Society of Mind, the mind is a parallel processing whole system and one aspect of the mind can observe others, and what we're cultivating in shamatha in particular and then in vipassana and mahamudra and dzogchen is developing a perspective that is called very misleadingly, bare attention, where you're resting in a state of stillness, of clarity, of non-reactivity, and observing what comes up in the mind without the cognitive fusion, without being caught up in and carried away by, so within the context of subjective experience you're developing a type of objectivity which enables you to observe with greater rigor and sophistication what's going on in the mind. And a final point here is that scientists might say that this is subjective, how can we ever know if anything is true here? And I would say if that's really your best shot, then you have to invalidate all of pure mathematics, because mathematics is entirely subjective, what you write on the board or on the book is just symbols. Mathematicians, through a high degree of training and inter-subjective validation and reputation have come up with an enormous body of pure mathematics that is consensually, inter-subjectively and consensually validated even though the validation occurs only in the minds of the mathematicians and not objectively, physically or quantifiably out there in the external world. So this is how great meditators are, there's an enormous amount of consensus, even for all the diversity within Buddhism about fundamental insights in the nature of the mind, it's not objective but its inter-subjective and when all is said and done, all of scientific validation is only inter-subjective, they're never validating any theory relative to some independent, freestanding, objective reality. That never happens, so scientifically its inter-subjective, mathematically inter-subjective, contemplatively inter-subjective.

[0:27:41.3] Acharya Dan Hesse: What I'd like to take a look at this series which you just presented, which is really important of sila, samadhi and prajna, or ethics, mental balance, and bare attention or insight...or wisdom... Wisdom is a better word, yes, that's exactly right, and especially the ethics because it seems like a lot of, in terms of how you begin as a meditator as an ordinary person, it's by learning a technique and it's sort of ethics free, it's just a technique it's like oh, you want to know how to let's see, some cool thing you'd learn how to play guitar, it's an ethics free thing, here's the chords, here's the moves, you get better at it and you'd be able to play tunes ethics free and that's not what you're saying here, so I'm very curious about if you want to use the tool of mind, how do you relate in

an interdependent world, as a person, your relationship to your world has a lot to do with that, why would that be true?

[0:28:42.7] Acharya Dan Hesse: It's true in a completely empirical way and that is ethics is often loaded with a metaphysical world view for better and worse. God will punish you or reward you, you'll have good karma, good future rebirth, bad future rebirth, but it's kind of based on faith and on the base of your faith, then you're good and you try to avoid evil. And that's understandable, I'm a traditional Buddhist, I believe in karma, but one can take a lankly empirical approach to this and that is we can ask what modes of behaviour in my body, my speech but also modes of behaviour of my mind, are ways of thinking the type of attentions I pursue. What modes of behaviour are conducive to, I own another's genuine wellbeing, or you call it intrinsic wellbeing or intrinsic wellness, what modes of behaviour, the way I'm interacting with other people, the environment, there's also environmental ethics, which ways of my behaving, my body speech and mind are conducive to the wellbeing of others and myself, and then within this context of ethics, Samadhi and wisdom, which types of behaviour are conducive to and which are corrosive of my intents to balance and refine my mind, cultivate greater and greater inner wellbeing or intrinsic wellbeing and refine my attention skills, my mindfulness, my intelligence, so that I can actually develop a rigorous first person perspective to investigate the nature of my mind and enter into intersubjective collaboration with other highly trained meditators so that we can develop a growing body of consensual, intersubjectively corroborated, validated insights that if it's happened already in Buddhism, it's hardly begun in Buddhism in the modern world. So give me an example, maybe from your own life of a kind of behaviour that was undermining to that kind of intersubjective investigation or the radical empirical investigation and intersubjective corroboration and as you address that, how that changed your ability to engage this level of investigation.

[0:30:51.1] Dr. B. Alan Wallace: Well it's classic Buddhism but it's also very much my own experience, and that is I'm sure you're aware, in Buddhism we speak of the eight mundane concerns. So the concerns, getting more stuff and not losing the stuff I've got, so clinging, an attachment to that, then hedonic pleasure or expended intrinsic pleasure or what will make me happy, who, what, where makes me happy, clinging to that, who what where makes me unhappy, trying to get rid of that or avoid it and so forth, there's two. The third one is clinging and attachment to praise, appreciation and so forth. The fourth one is more generic, other people's admiration, reputation, status and all of that. These four, actually four sets of two, craving for one in aversion to the opposite. If you're a scientist, let's just step over there for a moment, if you're a scientist and your scientific research is heavily influenced by the amount of money you'll get, how much sheer pleasure you'll get out of it, maybe with your money that you have, how much praise you'll get and what it will do for your status and reputation, all of those four factors are going to be profoundly contaminating to scientific research, they will be subjective biases and your science is going to be driven dominantly by reputation, how much fund do you get, how much influence do you have and in fact this is been a major contamination to twentieth century science, which has been... A lot of the research papers that are published now there's problems with them not being reviewed or their being manipulated because people had to hand in their career. Of course then people pursue only the kinds of research that are funded, so the notion that science is value free has never been true, but has never been less true than it is right now where money and prestige and status and so forth are so profoundly articulated. Now come back to Buddhism, we sang for material goods and then simple extrinsic pleasure and then praise or reputation and then reputation, if one is a dharma practitioner or is a dharma teacher, I've been teaching now for forty years, insofar as I let those influences; how much money will I get, do I get any money out of this interview? Or if I publish a book, do I get money? Oh no, I'm afraid not. Oh phooey, let's stop. But insofar as a practitioner, but also as a dharma teacher and a scholar and a writer and a translator insofar as I am making decisions about my practice and my public service is influenced by money, how much pleasure do I get out of it, how much will people praise me and what will happen to my reputation, then I'm screwed and it defiles contaminates everything, so if I've gotten older and I'm no longer in any system, like I was in academia for ten years, then I feel that I care less and less and less about things and I'm in such a situation now that I'm in no financial worries,

so I just don't have to worry about money, and as for the other stuff, you know I'm getting older here, just getting older and hopefully getting more mature in practice. And it gives a lightness, a freshness and a joyfulness, but also objectivity in my own meditation as well as...

[0:34:10.5] Acharya Dan Hesse: Because this is really important when I'm sitting, because I think well, if I'm not sitting, you know in order to be successful or experience pleasure or in order to be respected or get better at stuff, and I, you know this is dangerous, I'm putting a lot of time into something, how am I going to survive in the world, where is my happiness going to come from if it's not from these extrinsic sources, in other words, it's reasonable for me not to want to suffer unnecessarily and to want to be able to provide for my relative needs. If I'm not competing in the world to have my status and success and all these things we've just mentioned, how am I going to get by?

[0:34:49.5] Dr. B. Alan Wallace: You know there's a theme in Buddhism and it's also in modern psychology, it's interesting, there's an excellent book called *The High Price of Materialism* by Tim Kasser, but all of the evidence is completely compelling and it's not debatable and that is if you've impoverished, you worry you don't have enough money, wealth to be able to take care of your family's basic needs, food, shelter, clothing, medical care and education, you're in the lower realms but then if your prosperity increases and you get up to the point where you're comfortable, you're no longer worried, then there's a direct correlation between increasing wealth and happiness. That's a fact. And so I think it's a responsibility of governments and society at large to do everything they possibly can to lift people from poverty so they have no anxiety left. So this is a very important point, that there's nothing wrong with one of the things you said, having enough for your family; food, shelter, clothing, education, medical care.

[0:35:50.0] Acharya Dan Hesse: What about the next hundred thousand dollars?

[0:35:52.7] Dr. B. Alan Wallace: Well, and this is where the science comes in, from that point where phew, I'm covered, I'm ok. Now that we have this, as the Dalai Lama so often said, he said we human beings, we want something better. Or I like to say we human beings, like all of the centre beings we want to be happy, but we human beings want something else, we want to be happier. And no matter how happy we are, we want happier, this is what's driving us to perfect enlightenment when we finally wake up to what really makes us happy, but until then we get to this point where we have enough and we say I'm happier now than I was when I was impoverished, if I had ten times as much I bet I'd be happier, and that goes for wealth, and power, and prestige, and so with this kind of myopia, what I call an imagination deficit disorder, and not seen the fact and this is a scientific fact that from that point there is no correlation. You're now more famous, you're now more powerful and you're more wealthy, there's no correlation now between your increasing level of wellbeing, there's none, and so we're being led on a wild goose chase and this is being driven by a consumer driven society, the notion you know when the government freaks out with people not consuming as much, the GDP is not growing as much, it's kind of a mass hypnosis that even the government is part of, of thinking we have to consume more and more and more, then we'll all be happier and happier, there is no basis for that and the Buddha himself saw with total clarity that once you have enough, this is a time to move to the meaning of life that could actually give you satisfaction, fulfilment and satisfy your innermost longing, which wealth, prestige and power will never do in a million years.

[0:37:34.4] Acharya Dan Hesse: So let's take a few minutes now and look at the sort of cultural meeting, because this is a very exciting time in Buddhist history and in scientific history that these two traditions meeting each other, is an amazing situation and it was really driven by political events in many ways, there's this great reverse diaspora. Buddhism came from India and there was a great, the great diaspora to that, China, Japan, Sri Lanka, all over Asia, and you know the power of materialism undermines the societies that had supported those traditions and all these great teachers ended up in the west over a period of fifty years and everyone's having this great conversation we haven't seen here for a thousand years and that's really exciting, but at the same time another conversation has been engaged in a much more off-chord way I think, between the sort of European scientific dualistic view of how the world can be known and Buddhism and there's been some cherry

picking you might say between them and I wonder if you'd address that dialogue from sort of a bird's eye view.

[0:39:02.1] Dr. B. Alan Wallace: Well, I'm happy to be a bird, but I'm not trying to give a God's eye view, and then people can say oh, I'm such a bird-brain, when I understand. Some people have already drawn that conclusion and I'm very happy with that, no problem. So I am very critical of certain aspects of the scientific community while loving science, but I have no love for scientific materialism. I think it's really the root of much of the misery in the modern world. Having said that, I'm a very, I think a very devoted and devout Buddhist, but this means I also must be critical of my own tradition and I do feel it's very much my tradition as it is yours and any other westerner's and nations of course, but I feel we really are at a crossroads now in Buddhism in the modern world and I see two extremes, so I'm looking for a middle way, very traditional. And one way that I think is not a middle way at all is insisting on pure dharma and pure dharma means practice according to tradition what we've seen from our teachers and their teachers and their teachers with no adaptation, no assimilation, this is the pure dharma, by the way, you people probably don't, but my lineage, my guru, my set we do, and we're going to do this by the book as it was done, and so we do our rituals, we do our chanting, we do our studies and it's by the book and we're ignoring the modernity, figuring we'll somehow just outlive it. Somehow. And I'll make a prediction, these kind of centres and teachers who are completely closed off from modernity and just following their own niche, their centres are going to be museums in fifty years because the young people are not buying it, of our generation well there are a number, just for whatever reasons and I think they'll be complex, many of us are going to emulate Tibetans and so forth and so on, but this insistence on abiding by tradition as it was with no modification is going to turn them into museums or simply warehouses or somebody else will take over entirely. So there's one extreme of simply ignoring eternity and ignoring science and so forth. And the other extreme is this big emphasis on secular Buddhism, which throws out the ethics, it throws out the wisdom, it throws out the insights of the Buddha. It throws out all institutions and all ritual entirely and feels now this is the real Buddhism, as some people like to say, this is Buddhist meditation without the mumbo jumbo, which means it's an eviscerated fillet of hardly even anything Buddhist at all often just boiling down to being here now, amoral new ageism, it's absurd. And then saying this is the essence of Buddhism is frankly fraudulent propaganda. And so there are two extremes here, one is the watering down, the de-contextualisation, and the removal of ethics, and the corroded frame of Buddhist ethics, meditation and world view and then secularising it, basically simply corresponding to western anti-religious bias into religion. So these are two extremes I think. Now to be entirely constructive, because I've just been critical. Yeah, now I want to be very constructive, pointing out again that science is heavily burdened by the dogma, the unquestioned metaphysical assumptions and methodological constraints of scientific materialism. And this is why there's been no progress for the last hundred and thirty five years on understanding relationship between mind and brain, I mean none, they're just pretending as if the problem was solved, which again is fraudulent, there's no nicer word for it. So I think these two, if we just focus on one of the many consecutive traditions of the world of Buddhism and maybe the one that we know best, Buddhism is in severe danger and has succumbed in many ways to its own dogmatism, our own closed-mindedness, our reliance on authority, my Llama said, my Llama's omniscient, my you know its Milarepa, its Padmasambhava, its Tsongkhapa its what have you, it's Buddha himself, and so completely eviscerating Buddhism of the radically empirical approach that the Buddha himself advocated. It's not something made up, the Dalai Lama represents this beautifully now, you know we must follow the evidence, we must follow reasoning and not simply eat something up on the basis of authority. So the greatest Buddhists have been saying this for centuries and the Dalai Lama's one of those greatest Buddhists, but many people ignore that, and so where can we learn from science? I don't think we're benefiting very much from learning about the brain, it's all very nice for the neuroscientists and their making a lot of money and discoveries and reputations, I have yet to hear one insight from a neuroscientist which helped me or anybody else I know in terms of how could you say, developing our meditative practice. You found a brain corollary big deal, I mean really nice for you because you're a brain scientist, but the rest of us are actually living our lives, and you know Buddhism have done very well for twenty five hundred years without having any brain science at all, it's completely peripheral, but what can we learn? And that's science at its best, I'm interested in

Buddhism at its best and science at its best, and that means both of these dogma free, closed minded free, right? And so science at its best is always willing to, or scientists at their best are always willing to reassess their most cherished assumptions, they're willing to raise questions in public forum, put them to the test of experience, follow the evidence and start over themselves, by making fresh discoveries and overturning previously unquestioned beliefs. And they're rigorous and they're intelligent and they found wonderful experimental methods. This is why I love science and there are many outstanding scientists and I am delighted to have collaborative relationships and friendships with them. Buddhists can learn from the scientific community by taking the teachings of the Buddha and the way he presented them, not his dogma where we have to believe because he said so, but take these if you will as working hypotheses and put them to the test of experience and reason and check them for yourselves. So we in the modern world are very often treating things like reincarnation as oh, that's a religious belief, or it's mumbo jumbo, or it's the Buddhist way it must be true. That's not what the Buddha asked either way, rejecting just because it's religious or accepting just because he said it, but take that as one central theme of the Buddhist teaching, there's no avoiding that. I think people who try to avoid it are just fooling themselves and other people leave their stuff and put it to the test of experience, how do you test that? Well, the answer is shamatha, shamatha is sufficient for probing into this underlying subtle continuum of suchness and seeing whether it or the brain is the actual repository of memories. It's a simple question. It can be studied, but only if you do the actual practice, you can't just give a talk. And so the Buddhist community can have its own empiricism, its own pragmatism that revitalised by engagement with science, because that's science is at its best, empirical and pragmatic, and then the scientific community can benefit tremendously if they start listening to Buddhists and not simply studying them and be relieved of the burden of their own advisable dogma and bias and closed mindedness. Number one the methodology that you have to look outwards to find truth, that the first person is completely you know hopeless, which undermines them of course because all of scientific observations are made by first person.

[0:46:12.3] Acharya Dan Hesse: Yeah, that's how it's done.

[0:46:13.1] Dr. B. Alan Wallace: And then it's intersubjectively corroborated, so they're shooting themselves in the head when they say oh, first person experience is you know invalid, and we say well, what kind do you have, are you a third person? Really. And so we've hardly even begun this <inaudible 0:46:28.8>, but I think it can happen and it has enormous potential to reinvigorate the profoundly pragmatic intrinsic wellbeing orientation of modern science and it's radical empiricism willing to challenge even the most cherished of assumptions and letting the scientific community challenge the Buddhists, now with all of these theories, who among you are testing them? Have you tested it? How did you test it? Can we join you? Can we be collaborators in your contemplative inquiry and we'll come and join you as partners and not simply invite you as subjects in our laboratory where we will happily study your brains and we'll write papers about you.

[0:47:11.4] Acharya Dan Hesse: Doctor Wallace, this has been just a tremendously invigorating journey and I just feel so grateful for this dialogue and that you're willing to share it, and as you say, not being overly subject to the eight worldly dharmas, you can speak directly, which is refreshing and I think the helpfulness of it is that it challenges both scientists and meditators. That the ethics and you know mental stability and you know insight or wisdom is important to every level of discourse and inquiry that takes place, and that means we, as you say, we can be collaborators as opposed to subject to each other's dogma, and that's something gladly to be wished for. So I just want to thank you for your generosity and insight and what a wonderful journey you've taken us on.

[0:48:14.2] Dr. B. Alan Wallace: Thank you for the opportunity, for your wonderful questions, I think these can stimulate all of us hopefully in very constructive ways.

[0:48:21.0] Acharya Dan Hesse: Great, well, for Shambhala Mountain Centre, again thank you to Doctor Wallace and thank you all for taking part in this journey and I hope it's stimulating to your own inquiry and encouraging you to take these journeys personally to take the goals of the dharma and read it for yourself to see if indeed it is pure.