Episode 06: Norman Farb Buddhism and Contemplative Science

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SPEAKERS
Norman Farb
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FULL TRANSCRIPT (with timecode)

[00:00:00.00] Norman Farb: There's a pretty good consensus that meditation helps people feel better in general. Maybe not every person, but in general, and so the question is why.

[00:00:16.23] Sarah Richardson: Welcome to this episode of The Circled Square the podcast where we talk about teaching Buddhism in higher education. My name is Sarah Richardson from the Ho Center for Buddhist Studies at the University of Toronto.

[00:00:27.08] Sarah Richardson: In this episode, we sat down with Norman Farb. Norman is an associate professor in the department of psychology here at the University of Toronto. In his research he's specifically interested in how cognitive training practices like mindfulness meditation foster resilience against stress, reduce vulnerability to affective disorders and help against depression. In his teaching he uses a lot of body practices and teaches students to self-observe. So he's leading students in ways to manipulate their own psychology. So enjoy this episode with Dr. Norman Farb about Buddhism and contemplative science.

[00:01:05.12] Norman Farb: My name is Norman Farb I am an associate professor of psychology at the University of Toronto. I'm at the Mississauga campus and I study the psychology of mental health. I study meditation and mental habits and depression vulnerability. So kind of both sides of the spectrum, how people try to condition themselves to be happier and also how they inadvertently become conditioned to be miserable sort of. But some people flip between those things.

[00:01:34:22] Sarah Richardson: Wonderful. And you also teach things called contemplative practices, right? You teach about contemplative practices? So what are, in one to two sentences, what are contemplative practices?

[00:01:48.29] Norman Farb: Contemplative practices are a family of different techniques people use to try to change their minds, sort of, from the inside out. So as opposed to having someone else help you unpack your thoughts and change them like in psychotherapy or by doing it through drugs or some sort of exercise program or something like that, contemplative practices are about introspection leading to change. So looking inwards and understanding your own mind and the workings of your own mind or maybe everyone's minds and using that understanding then to leverage acting differently than one would by default or by habit.

[00:02:26.25] Sarah Richardson: So are they things that are open to anyone, possible for everyone?

[00:02:31.24] Norman Farb: Yeah, I think anyone could engage in contemplative practices. Often, they seem sort of mystical or esoteric especially in the West is that sort of a trope of the, the wise master and you have to climb a mountain somewhere to find them. But these days with apps and self-help books and just drop in meditation sessions and things like that it's quite accessible for people to dip a toe into the waters of introspection as it were.

[00:02:55.12] Sarah Richardson: And what is different also in calling them contemplative practices verses meditation practices or Buddhist or Buddhist practices. What's, what's different in using the term “contemplative”?

[00:03:09.17] Norman Farb: Well I think in the west there's been a pretty strong effort to, maybe it's not the right word, but to kind of sanitize or secularize religious practices so that they can be made sort of universally accessible so people don't have to feel like they're violating their own religious beliefs by accidentally sipping someone else's Kool-Aid. So in terms contemplative practices I think are just a way of making it seem more generic than saying, oh I'm doing a Buddhist spiritual tradition, and someone saying, "Oh but, but you're Jewish or you're Christian how can you do someone else's religious practice?" So yeah, it's a bit of a blanket term in some ways that's a bit more of an inclusive umbrella term for using introspection to try to create this this change.

[00:03:54.14] Sarah Richardson: Right. So today I want to ask you a bit about a graduate level course that you teach them, that you've taught, called the foundations of contemplative science. So it's a psychology course. And what is this course constructed to teach students?

[00:04:11.03] Norman Farb: Yeah. So we only teach graduate classes about once every four years so it's not like some well-rehearsed class for me, I've been around that circuit once. But the idea was for it to be a survey type of class for students are interested in this nascent field because when I was a grad student there was no contemplative studies in psychology or in cognitive science or anything like that. So it's supposed to be a kind of parallel track of both conceptual learning where students would read papers on different topics in contemplative science so where researchers have found some traction in trying to study this art of people studying their own minds, and then the other track is an experiential track where these students get to try a different meditation, cobbled together by me, that is supposed to sort of resonate with whatever we're doing on the didactic conceptual side. And then the evaluation is for most grad courses is it's something like a term paper they do like an academic term paper, but they also have to do a meditation diary where they reflect on their experiences doing the meditations. What worked for them, what didn't work for them, questions that were raised that sort of thing, seem to engage a little formal written contemplation around their contemplation.

[**00:05:21.02] Sarah Richardson:** Yes. So how did you break up the course? What, what was the structure that you gave to the topics to break up contemplative practices for them?

[00:05:30.23] Norman Farb: Well as someone who swims in this sort of admittedly kind of small pool, there are just different luminaries in this pool already who've had success publishing in mainstream journals or in psychology or beyond as they've researched the effects and mechanisms of contemplative practices. So I kind of just started with like a who's who of, who's had success in getting other people to listen and that sort of thing.

[00:05:57.01] Sarah Richardson: Who is in that pool with, with you or what are the or who do you find…

[00:06:00.15] Norman Farb: Oh myself of course!

[00:06:02.09] Sarah Richardson: … to be the important luminaries. Yes of course!

[00:06:04.11] Norman Farb: Yeah. So and part of this, this, is nuts across different domains of psychology. So some of the earliest empirical research on meditation was clinical research and that's really laid the groundwork so there has to be a strong theme of why people even care about meditation. What's the efficacy of meditation practices in conditions like chronic pain, depression, anxiety, and beyond? [**00:06:23.09]** So try to sample all the way from like the origin of mindfulness based stress reduction in the West, like Jon Kabat- Zinn publishing paper and like hospital psychiatry or something like 1982, that sort of being like a paper that launched a thousand ships that took a couple decades to get going. And that's dealing really just with people's quality of life in chronic pain conditions and the single that sort of fanned out chronologically into looking at anxiety and depression and depression relapse vulnerability and so talking a bit about evidence around there and that's still about sort of meditation as relief of symptoms but chronologically, **[00:07:04.01]** My understanding is that really was most of the literature for the first decade or two and then you start seeing all these mechanisms and more specialized topic papers coming out. So, I know for myself, I study a lot of things that are on the body, body awareness or interoception. So I'll give them a paper on interoception. When I was in grad school the researcher Amishi Jha was trained as an attention researcher and started looking at attention training through meditation, so let's talk about attention. And then there have been…

[00:07:30.04] Sarah Richardson: Sorry, what is interospection?

[00:07:32.03] Norman Farb: Interoception. Like a reception like a satellite receiver receiving something intero. The internal landscape of the body so it just a fancy way of saying yeah like awareness of what's going on inside your body as opposed to extra reception taking in information to your external source senses right.

[00:07:51.11] Sarah Richardson: What are the ways to measure, this version of what's happening in interoception? How can you measure that in others or teach your students to look for it?

[00:08:02.08] Norman Farb: Yeah. So traditionally I think the only way to measure it would be through self-report. So what people describe in their own internal experience. And that's true of most personality characteristics like personality researchers would look at, or mental health characteristics like happiness or suffering usually that you can't really get that much better than asking people directly, and then you can do a little bit better by that, and it's also resonates in some of the more traditional texts that I've read where you can ask other people who know the person know is anything changing how are they doing. They say they're this compassionate person. Do they help other people, or they just get it talking about how compassionate they are? **[00:08:43.28]** So you can get these sorts of third person reports and those can sort of triangulate. Like the gold standard is if you get three different people to rate one person you can like the shared agreement of those three people it's probably going to be a pretty replicable or accurate sense of how people in general will see them. And then I'm quite interested because they come more from like a brain imaging neuroscience sort of background at trying to see whether there are more objective metrics of something like body awareness which seems quite ephemeral. But from neurology for instance, there's tests to see what's the smallest distance between two points where you can still feel two points on your skin so you can look at really standard kind of medical tests that were just tests, like if you're neutrally intact. **[00:09:28.28]** Though I found that that's not something that's that amenable to training. You just have a certain amount of distance between sensors on your skin and I don't know if meditation changes that. There are formal questionnaires in that kind of area. And then we do things like brain imaging and look at what happens when someone is asked to turn their attention internally compared to external use, they can have their eyes open or be asked to focus on the feeling of their breathing or a colored square on a screen.

[00:09:56.17] Sarah Richardson: Right.

[00:09:57.02] Norman Farb: And that same physical setup we can see really big changes in brain activity and start to infer that maybe there really is something happening in terms of the flow of information to support awareness.

[00:10:07.26] Sarah Richardson: Right so you're actually looking at parts of the brain light up or neurons firing.

[00:10:12.16] Norman Farb: Yeah and we're still doing that research. Some pretty crazy things happen actually when you ask someone just to focus on their breath that really turns off a lot of our, our higher cortical parts of the brain in ways that are really, I think, unexpected. We're still sort of plumbing that.

[00:10:25.13] Sarah Richardson: Interesting and in what ways does… What do you see happening in the brain? What are the things that what are the kind of notable divisions for a layperson who's not familiar with brain imaging?

[00:10:37.20] Norman Farb: For paying attention to the body like for interoception?

[00:10:40.15] Sarah Richardson: Yeah.

[00:10:41.08] Norman Farb: Yeah, I think the biggest thing we're seeing right now is that when people focus on their breathing, even in a really well controlled experimental setup, you get mostly a deactivation of a lot of the higher or more evolutionarily recent parts of our brain. **[00:10:57.00]** So a lot of the brain actually starts to turn off, despite the fact that they could still even be reporting on like in breaths or out breath, it's not confounded with maybe their mind wandering or falling asleep. You can get a lot; the brain is just kind of settling down and you think a lot of the initial benefits of contemplative practice is that kind of stillness or quietness that can be achieved by focusing on a particular sensory input. I don't know if the breath is super unique compared to like your toe or sound but, because it's so central to a lot of the meditation practices that I've studied. We often start with that. **[00:11:31.26]** And then also this kind of may explain why there's a sort of mistaken idea that meditation is about just completely silencing the mind, because that might be one of the first benefits that people perceive for themselves when they start meditating like oh, "things are so noisy, and now it's so quiet, so that feels really good and like I'm getting it, OK I've got it, I'm a meditator now." That's not to say that there isn't some benefit from that, but that's clearly not, I think, the downstream reason why people started focusing on their breath back in the day in terms of having broader aspirations to improve themselves and the people around them.

[00:12:11.07] Sarah Richardson: Interesting. What are the later benefits that you think accrue for people?

[00:12:15.20] Norman Farb: Yeah, I think that the traditional definitions of meditation as I've been told by people who study those things, are mindfulness is about keeping intentions and values in mind. And so sensory anchors help us realize how transient any thought or interpretation might be. So that it can't completely disrupt our, our focus from what we actually think is important in the world. And if we don't have that kind of anchor we can easily get carried away in a pattern of defensiveness or reactivity or justification and end up acting in ways that are not consonant with our values. So that's a much I think greater, or a bigger game to play than just like I want my, my mind to be quiet. But you can see how if, if, if things are too noisy and you're just feeling completely overwhelmed, all you can really do is try to protect yourself. **[00:13:07.02]** So getting them to have some faculty to quiet the mind, or get some distance from a really negative thought or a really strong feeling of threat, might be really important in that endeavor.

[00:13:18.16] Sarah Richardson: It might be the necessary first step but not...

[00:13:21.10] Norman Farb: Right, right. Necessary but not sufficient for living the life you want. Yeah. Not getting sidetracked by the first stress or challenge. Yeah it seems like a good skill to have if you're up to something.

[00:13:32.00] Sarah Richardson: So this connects. You gave a wonderful public lecture a few weeks ago here at the University in Toronto and it was called "Getting Mindfulness Right" and in that you were talking about some of what you perceive as sort of, sort of potential pitfalls of the mindfulness boom that we're seeing kind of all around us. **[00:13:49.10]** On the cover of Time Magazine and in the marketing of candles at the dollar store. We're getting kind of a focus on that maybe the benefits of that first stage. But what, what did you mean by this, that there's some pitfalls to kind of the mass marketing of mindfulness that we're seeing around us?

[00:14:11.11] Norman Farb: Yeah, I think a lot of the, the pitfalls quite frankly are pitfalls that are being shouted out to the meditation community as opposed to pitfalls that have been realized internally by that community. But there are some too, so perhaps I can enumerate a few of those. So I think that the big charge against the secular mindfulness movement is that it's offering a watered-down sort of ineffective, capitalist driven form of training that's not really that efficacious.

[00:14:37.10] Sarah Richardson: Right.

[00:14:38.02] Norman Farb: And at its best it is doing this sort of mindfulness as a relief kind of action where you kind of quiet down the mind a bit like "oh, that feels better", and then you think, oh that's the project I'm doing it right, but the consequence of only trying to self soothe through a meditation practice is that you're not really likely to change your habits very much. If anything you're just going to be a little more tolerant of current conditions and so that that could lead to a kind of pacification of the workforce. Right, it's like, oh you're really stressed at work, well we could talk about changing your hours or work conditions or you could just meditate a bit and then if you're if you're still feeling stressed maybe you're just not a very good meditator. So it is kind of like blames the victim in a way right.

[00:15:20.18] Sarah Richardson: That's Ronald Purser's critique, right? In that *McMindfulness* book.

[00:15:26.00] Norman Farb: Yeah, I think that's one of the central attacks in *McMindfulnes*s is that it just becomes a way of keeping people busy and instead of telling them it's their fault that they're getting stressed because of that. And so you don't really get any real change in ostensibly these practices are supposed to help people unlock the potential for really radical change. And then on the other side, there are I think real concerns about whether deep meditation practice that's fairly unstructured or unsupported by a community, by a skilled teacher. **[00:16:02.01]** If these are really powerful transformative techniques you would want some kind of mentorship there .If you were working with like a set of advanced like power tools and you could easily cut through like an iron bar with a saw, you wouldn't want someone just be like "hey I got, I've got a saw, I'm just going to wave it around and hope good things

happen." And so there are cases of people having depersonalization, derealization disorders that are associated with intense meditation practice.

[00:16:28.04] Sarah Richardson: What is derealisation disorder?

[00:16:30.00] Norman Farb: So these are I think lesser known than depression or anxiety. But if you think of mood disorders often as getting too caught up in the story of what's going on in your life, depersonalization, derealization disorders are disorders where nothing seems real. So either in depersonalization you start feeling like you're just watching yourself going through life and you actually have no agency, no power, which is actually very distressing. And derealization similarly is sort of like going through life feeling like it's just a dream and nothing really has this emotional importance. And it's, it's almost like applied nihilism. **[00:17:03.16]** It just doesn't really matter what you do because nothing really feels real. And as you might imagine, if you're not personally responsible for your actions or the world isn't real, this is going to lead to some problems. Usually, not people acting out and hurting other people, more just like total lack of motivation, like someone sitting on a couch, you say goodbye to them you come back a few hours later and they're still sitting on the couch, it hasn't occurred to them that they ought to do something. So the charge is that this is unlocked sometimes by really intense or maybe not even that intense meditation practice. And so that's the second charge more from within the community I think sometimes that meditation isn't unequivocally good no matter how you use it. If it is a powerful tool that it could be misused and we would never think that oh you can just take whatever drugs you want nothing bad could happen but somehow people have this Pollyanna-ish idea about meditation that's like super powerful and it can do no wrong and it feels like one of those things can't be true. **[00:17:56.21]** I think the jury's still out as to whether meditation is causing these, these events, these psychoses and disorders to occur at higher than base rate levels. It's, it's really confounding. You can’t assign someone to meditate until they have a psychotic break or anything like that, but at least that's, that's a second kind of concern that I think is lesser known that's more internal to the community.

[00:18:19.11] Sarah Richardson: And you brought up also the potential danger of setting people loose without context and without community to support them in practices. Certainly in the, in the Buddhist context most of the higher forms of meditation were always undertaken with a lama, a guru, a teacher and, they are to report back to, and a community of potentially, of people who are going through similar things. So what is different when people are set to this alone?

[00:18:51.10] Norman Farb: Yeah I think it's an interesting tension if you're trying to import a set of transformative contemplative techniques to the west and you have a sort of xenophobia around other religions invading the West, is a fine path to walk in terms of saying well, we want to let you still pursue Western values and just make you a bit happier doing it. And so in that sort of enterprise was this idea of stripping out the need for a community that's determining whether your practice is working right or not whether or not you're being virtuous all that stuff is sort of left to the culture that receives the meditation training. **[00:19:34.08]** And instead you just have the bare elements of the attentional practices maybe with some attitudinal

instructions being like curious and open but not where that curiosity and openness is supposed to lead you, like there's an, a later set of instructions about how to evaluate whether those practices are leading you in the right direction or not. **[00:19:53.26]** And I think in the initial cases when you have people who are generally coming from fairly privileged backgrounds and actually have fairly deeply entrenched value systems but maybe life got in the way, if the meditation is helping them kind of clarify in return to that simpler set of purpose and not be disrupted as often, it might not be that dangerous a thing to do. But in all clinical interventions, not just a meditation you have the sort of efficacy drop when you move from the primary centres where interventions or therapies are developed out into the community.**[00:20:29.22]** And I think in meditation this is an especially a large issue because if you start assuming that as you start clearing away negative patterns of responding that underneath it is a fully formed value system that's going to work well for people. That's a big assumption for people who might have a history of adverse childhood events, poverty, trauma, where they maybe never had that deeper learning around like well here's what and where meaning comes from in my life and in a healthy sustainable sort of wholesome way. So to then not provide that at the same time or subsequent to helping people strip away bad habits, again, it might be people with not much in terms of a sense of purpose or direction. **[00:21:08.29]** So I think that's a valid concern but it also does sometimes feel to me a little paternalistic like, well, you couldn't possibly self-determine if we helped free you up like you're just going to, make mistakes and you need Buddhism or you need community. So I just see kind of both sides of it. Right. That probably for some people they might just be lost, and they could really use a value system, but then you run into the wall of like well who's, a good enough or wise enough person to tell you what that value system should be. **[00:21:38.10]** And the Western ideology or maybe it's a bit hubristic is to say like, no one is, you have to do it for yourself and if you can't do it for yourself and there's no one better. And so I think fundamentally there's going to be that kind of tension.

[00:21:50.26] Sarah Richardson: So in your course when you when you divided up types of meditation practices for students you started with breath and then you went to body scan, progressive relaxation, sound focus, visual focus, Chakra's, compassion, integration, loving kindness, and then you've finished with transcendental. So, can you give us an example of how like, one of those topics, how did you actually introduce it in class, and teach it, and set it up for the students?

[00:22:19.23] Norman Farb: Yeah. So the curriculum was largely informed by my own teacher training in mindfulness-based stress reduction, where these eight-week programs which do seem like they have good clinical efficacy in helping people with their mood.**[00:22:33.12]** And this is that same lineage that was started by, by John Kabat-Zinn in the late 70s early 80s with chronic pain patients. There is a progression of meditations that move from focal attention to something sensory like the breath or feeling in the body or maybe eventually sounds and eventually moving into noticing feelings and the thoughts and moving into what we call more like an open awareness or choiceless awareness where it's a very broad non sticky form of attention, but arguably you need to have that ability to focus on particular things and know what it feels like to focus and disengage and focus and disengage before you have a hope of staying non-sticky. **[00:23:12.24]** So the first half of the course is sort of taking people through

that progression. And then the second half of the course and we start introducing ideas like compassion, loving, kindness, self-transcendence is like the, what's missing from just that eight-week introductory course. Which is mostly about restructuring attentional habits and building flexibility in attention system so it's like, then where is the content? So many meditation traditions try to marry the sort of cold teaching around attentional focus with some sort of value-based practice and what's had quite a lot of success in the West because it sort of fits with our hippie derived platitudes, are practices around love or kindness, right? **[00:23:56.30]** Most people don't get too upset if you're like we are going to teach some values, it's being nice to other people or they're like try to love each other like “oh that's against my religion,” I haven't heard that yet. So those practices seem to work quite well in terms of not offending people's existing values and one can get a lot out of them if there's some skillfulness, developed around those practices. And then, the really big picture stuff are these sort of deeper metaphysical insights around, the nature of reality and not seeing yourself as being the primary motivator of all of your own actions and sort of selflessness. **[00:24:31.23]** This idea of transcendence, so we want to move on a bit into that. And the Chakra's is just like, it's out there, I know it more from yoga, I've never really used it in my own meditation practice. It's like well I can read up a bit on that and we can talk about well what if you localize particular values or particular capacities to different parts your body and use those as sort of conditioned anchors. Regardless of whether there's a deeper metaphysical truth about like that this particular energy is in your belly versus your chest or something. Why not survey that too? There is really a sense of having a survey, but a survey that was ordered in terms of focal attention cultivation first and maybe broader attention and then starting to bring in particular values into that that sandbox once that sandbox has been loosely scaffolded by these initial practices.

[00:25:15.18] Sarah Richardson: And when you're introducing these practices to students, do you get any pushback? Do they feel discomfort or excitement? What is the reception from students when they're asked to take on a daily practice for a week of focusing on their Chakras or compassion?

[00:25:36.23] Norman Farb: It was pretty positive, my students were the weird of the weird because you already have grad students in psychology and then they have a couple, maybe like two elective classes and then they're electing to take this, pretentiously named Foundations of Contemplative Science class, so they're not going to show up arms crossed like "I'm not going to meditate", it doesn't really happen.

[00:25:58.01] Sarah Richardson: They have chosen it.

[00:25:59.01] Norman Farb: Yeah, it's really, it's really an elective, like there's no way they had to take this class, but it is popular. **[00:26:03.23]** People are hungry I think for finding things out on their own through their direct experience instead of always having to go through the lens of statistical analysis which is very much the governing model in psychological science. So I don't know if everyone enjoyed every meditation or I guided each one equally skillfully, but we had a

pretty good reception and some people found some meditations better than others and I keep it in the journals.

[00:26:29.30] Sarah Richardson: What were the ones that were more popular? Do you think in terms of the student reception, what worked best for the class you had?

[00:26:37.16] Norman Farb: I think people in general really liked the body scans. I think it gives them some... It's a good marriage it's like giving people something to do. Like it's not just focus on this one single point and do nothing.

[00:26:48.05] Sarah Richardson: And can you describe a body scan for us?

[00:26:50.02] Norman Farb: Body scan, it's still a focal attention practice where you're asked to notice momentary sensation that you can feel right here and right now in a particular part of your body. And then we slowly guide people to move from body part to body part. So generally speaking go toes up or from the crown of the head down. **[00:27:09.15]** Sometimes if I'm feeling frisky, I'll start from the breath, the core, and then fan out to the extremities. So it's sort of you can choose your own adventure but there is this sort of pacing of like you're going to focus and then release, focus and release. Then just like we're going be on the breath for 20 minutes. And your job is just not to freak out and if you notice you're freaking out it's okay. Go back to your breath. I think can be more challenging especially in longer meditations. We weren't going much past, I don't think we did meditation longer than 20 minutes out of like a two or three hour class.

[00:27:41.00] Sarah Richardson: And then you advised them to do this for what, 10 minutes a day or something for a week and journal about it.

[00:27:47.26] Norman Farb: I Provided, either scrounged off the internet or recorded myself, guided meditations for about 10 minutes long on all the off days to give some structure. But the invitation was if you feel like you really have some competency in this type of practice and you're more comfortable doing it without an audio recording, go for it. But the push is do some practice. you can't know what it's going be like unless you do it yourself. Well one of my graduate students wrote a paper where we looked at just giving people different anchors of meditation and the majority people assume they're going to like the breath over sound or visualization but a lot of people change their minds, like almost half of people change their minds when they try different meditations and that's just a really simple example of without any broader theory, just some things just feel better, fit better, and you won't know until you try.

[00:28:34.18] Sarah Richardson: And when you talk visual focus, I'm just curious, I'm fascinated by visual foci and art. But did you supply the visual focus for people or was it something that they were to go out and find on their own?

[00:28:48.20] Norman Farb: In a classroom setting I usually wouldn't supply a focus for the experimental study because you want everything to be like kind of controlled. I think we just gave people like a blue, teal-ish like circle on a screen and said like really look at the circle, now see if you can see that circle in your mind's eye and try to hold it there. **[00:29:07.27]** And though there are much, much more complex visualization practices like construct a rose in your head and every pedal, every fold. But the people who are being asked to do those practices usually have a much deeper background in building themselves up to that point. So you're starting with the training wheels on, I think.

[00:29:28.18] Sarah Richardson: And then when you're learning about these, when your students are examining these contemplative practices, you were also evaluating them in terms of mechanistic lines of inquiry. So what are mechanistic lines of inquiry in your class?

[00:29:42.07] Norman Farb: Yeah. So I think we're at the point now where there's a pretty good consensus that meditation helps people feel better in general. Maybe not every person but in general and so the question is why. **[00:29:55.25]** And that's so mechanistic lines of inquiry means try to come up with some ideas for why you're getting the effects you're getting. If you find that you get this feeling of bliss and euphoria, what's happening there? Is it just this total black box where you focus on your breath and just joy leaks in? Or is it that you realize there's like a feel that some change in the quality of your experience that precedes the emotional change? Psychology and med science grad students taking the course, I think they already have that sort of that curiosity around like how do, how do things work. Like, why are you asking me to do this? So is this sort of empowering them to take that a bit further and we're like yeah, ask that about each practice and don't be content to just sit with the outcome without trying to have a deeper understanding of what's going on under the hood. And of course it's all subjective, but you get some interesting dialogue around when people say "oh that was not a very useful practice, or it was useful practice." There's almost always a sort of lay theory underneath it around like, "well because this was helping me have some more space in my mind it's too crowded with worry" or "it's not really that useful I'm just swapping out one thing for something else and it's, it's not really actually changing the way my mind is working" so it's just a distraction. **[00:31:14.02]** So yeah, it's interesting to see people try to almost justify, their experiences in a way even if it might not actually be the true mechanism underneath that, it's really fertile ground for brainstorming and from that kind of brainstorming comes new research projects. Is there a way we could formally test this theory and see if we've got that answer right or not? If we can measure this one thing changing, does it explain and change it while being, or not, or a change in mood? And I think it all just comes from introspective and wondering why, as opposed to always just trying to read someone else's theory and absorb someone else's idea.

[00:31:50.15] Sarah Richardson: So an example of one of those was self-reference. What are ways that you can test people's ability to connect to themselves in, at, post or pre these contemplative practices?

[00:32:08.21] Norman Farb: Experimentally or in the classroom? [Which] do you mean?

[00:32:11.02] Sarah Richardson: Experimentally, I guess.

[00:32:13.24] Norman Farb: So mostly we've used neuro imaging because asking people, because the theory behind it was that a lot of the self that has been studied already is the self that is reportable. For obvious reasons because that used to be something that someone can report on. So that's the whole, whole problem with self-report is if self-report, so lexical language laden in conceptual descriptions of the self is the only thing you can measure, then you'll come to the conclusion that that is what the self is. **[00:32:44.11]** But there's also the possibility there's many other forms of identification that aren't easily expressive along words and broken up into simple concepts and you can't by definition can't see those things if they're outside of verbal reportability. **[00:33:00.15]** We would use neuro-imaging while people were engaging in self reference where we kind of pushed them to try to be really open about their experience and not just to go into a narrative and that sort of language base and also to notice momentary sensations, thoughts, feelings but as they arise and pass. And then we would see, does the brain look different when people have some meditation training and you ask them to be kind of expansive about the sense of self. Everyone with or without meditation training can get into narrative descriptions of self, it's how we're trained to relate to each other and understand ourselves and hold ourselves accountable and be responsible there's lots of good reasons to be able to do that. But it takes a certain skill, it seems in the West at least, to stop doing that or not do that completely. And also notice there's a lot of other things that aren't canonized or reified as concepts about the self or traits or properties of the self that that are chaotic but are happening all the time.

[00:33:58.24] Sarah Richardson: How do you get people to engage in self reference outside of narrative. What does that mean?

[00:34:03.21] Norman Farb: The instructions are usually not that different than a meditation instruction, it will say something like when you're watching these words on a screen like honest, dishonest, loyal, cowardly, whatever the words are, read the word, but notice, not just the judgment, does this describe me or not, or what do I think about this word, but also notice is there is there any kind of response in your body? Are you noticing a memory sort of popping up or an image or sound popping up in your head? Are you noticing a feeling in response to this word even if there's just like “I feel this is a good word” or “it's a bad word” and you can say that, but what does it feel like? And keep coming back to moment saying "what else can I notice right now" so don't let yourself be satisfied with the first explanation that comes out. And so when we train people to do this, well I use an example most commonly of like stubbing your toe, I'll say, imagine you stub your toe, like what would normally happen like "ah damn I stubbed my toe, I'm so clumsy who put this wall here" and saying okay so that's one way you can respond to stubbing your toe. What would it be like if you stubbed your toe and you had those thoughts and you thought "oh and what does my toe feel like right now and right now and right now?” Is the sensation changing? Is it getting stronger or weaker? Is it really sharp and acute or is it a dull throbbing? We kind of take them through like one model of how you could renegotiate that experience. And then we would ask the person can you think of an example of toggling between just explaining what this means but use a person versus what it

feels like in the moment and then once they can come up with an example of that we'd be like, okay good you're ready for the scanner. And then the real manipulation was had these people already done eight weeks of meditation training or not. **[00:35:44.16]** And so we saw this 2007 paper that people who have meditation training were able to more reliably activate the sensory input parts of their brain in being in response to trait words which are very conceptual like honest, dishonest. Whereas people who hadn't done the training, they could verbalize and sort of understand this conceptual distinction but they couldn't sustain this kind of momentary sensory awareness and response to a trait word reliably enough for it to show up in the scanner where we're averaging like 30- 36 seconds of brain activity together at a time.

[00:36:18.06] Sarah Richardson: Those people that had had some meditation training were actually better able to locate to sensory, to input sensory experience where it wasn't, like to think themselves into their body? In a sense?

[00:36:31.11] Norman Farb: They're more well, they were able to attend to the sensory qualities of their experience, the sort of chaotic stream of input. So they were familiar with this idea of like William James like stream of consciousness. Which is just like a little voice in your head talking what's going on. But there's also stream of like finger sensations, a stream of toe sensation, the stream of positive feeling, stream of negative feeling, stream of itchiness, there [are] all these streams running in parallel. **[00:36:56.20]** And it's, it's convenient for us to just see one stream and with practice what we're seeing is people can flexibly alter the ingredients of that stream. They can say like I'm going to take in a little more foot sensation right now, I'm going to be open to the sounds. Whereas by default there's just sort of one way that we tend to move through any given context in terms of what information is still treated as relevant. So it's not that people without meditation training can't feel their toes but can you make the toes seem important enough that it sticks around in your mind for 30 seconds, it's hard. **[00:37:30.00]** It's a lot harder than people would think. So listeners out there can you stick with your toe for 30 seconds? It's different to say you can, than to actually do it is what we're seeing.

[00:37:39.03] Sarah Richardson: Yes.

[00:37:39.05] Norman Farb: And it might take practice.

[00:37:40.20] Sarah Richardson: Right. Right. So is it hard for you to reconcile the kind of your more scientific and research selves with your personal experiences in this course or in your personal experiences in meditation or, or mindfulness practice? And I guess attendant to this question too is can you tell us kind of the short narrative of how you got here. How did you become this person who can, who is trained in psychology and now is an associate professor of psychology but also teaching about research into contemplative practice?

[00:38:17.23] Norman Farb: I would say just that the first question around. Is it hard to reconcile it? I don't think so I think. I think psychology is already a science that that came from introspection in the first place. So it's all about isn't that weird that our minds do this I wonder if everyone does this. I wonder if there's a way to test this. I wonder if there's a way to give

instructions for testing this that someone else could, could also do come to the same conclusions as me. So that's like the basis of science. I think there's something here and I can replicate the conditions in which other people can see it. That's a scientific model. **[00:38:48.04]** So I don't think it's that hard to do that. I think the advent of, of psycho physiology and neuroimaging that lets us peek under the hood as it were of what's going on in people's bodies and minds without interrupting them and breaking their experience with an interrogation, I think that's really what's opened the door to this generation of research. Because it's not like they weren't very smart people in decades past who were quite interested in these topics, but they always had to move through the gate of self-report which has limitations we discussed already. **[00:39:23.24]** I think that curiosity and the yearning to understand the mind is central to most people in psychology and just having another lens or at an angle to get at it especially this idea that you could train the mind to have different constituents than it, than it has just by default or by dint of history or personal conditioning, is really exciting to people and is also at the heart of why we might try to do psychotherapy or have positive psychology or anything like that. I don't think it's that hard to reconcile actually once you get down into the nitty gritty of what's happening in under the umbrella of these more mystical and the spiritual and faith based, it's supposed to be very empirical. Even in a lot of contemplative traditions you learn patterns from your own experience and from there you can generalize things about your own conditioning and eventually generalize to understand how everyone has conditioning and then you get these sort of deep metaphysical insights so it's still a very empirical practice.

[00:40:20.23] Norman Farb: It's just not about sampling other people its sampling the self over and over and over again. But you could still have a very robust and reliable sample if you take enough measurements of yourself and there's just the question is does it generalize or solipsistic. Anyway. So I don't think it's that unscientific an enterprise and then as for my own path. I was always curious about the nature of mind and consciousness. **[00:40:42.20]** That was one of the big questions that I gravitated to. I thought I would get to it through artificial intelligence. I went to university for computer engineering and found it just soul destroying how much math there was combined with like seeing what the job prospects were, I wouldn't actually be doing what I wanted to be doing, it would be more about, building better circuits for an employer. **[00:41:03.02]** So I dropped out after first year and went into psychology and philosophy instead and got really into existentialism, was really like my passion for a bunch of years, and the idea of treating yourself is responsible for your, for your life, for your existence no matter what, kind of thing, it kind of appealed to me. And I wanted to know how that could be communicated or articulated in a more general way. Again like getting past that idea like oh maybe it just gets good for me doesn't mean it's good for other people. **[00:41:37.04]** And psychology seemed like a way to move into thinking about groups of people as opposed to just the primacy of the individual experience. And so ultimately at the end of undergrad I'd sort of renegotiated how to be a good student, went into psychology for grad school after working in a lab for a year, just sort of testing out the day to day life of it. And I went into a emotions neuroscience lab, because I wanted to understand well-being and how people's habits make them happier or suffer, still all along those lines and got to do some neuroimaging and we

happened to have a collaboration with Zindel Segal who helped develop mindfulness-based cognitive therapy and I got to be the guy who is...

[00:42:18.00] Sarah Richardson: Sorry who?

[00:42:18.25] Norman Farb: Zindel Segal. He's a professor at the University of Toronto in the clinical faculty, clinical psychology faculty. So he kind of became the shadow mentor through my PhD and started doing a lot of meditation neuro-imaging studies and getting more interested in this idea of changing the components that build up a sense of self or how emotions are processed, like that that word sad could mean a lot of different things.
[00:42:43.22] It does mean a lot of different things in the brain in terms of how it's represented in the brain and also how it's experienced. And it really just became the focus of my dissertation and so I just kind of ran with it from there so. Along the way like I tried a lot of things. I tried like working at a law firm, I worked in I.T., and I did a lot of different things. I tried engineering and, I sort of just like kept trying and leaving things until I found the right fit for myself. And I tried not to listen too much to other people telling me whether they thought it was a good idea or not because even doing emotions neuroscience was seen as kind of risky.
[00:43:20.00] But I had an adviser who was very successful being the minority of people who were doing imaging, neuroimaging and who cared about emotions instead of just memory or sense perception, which are the two still dominant fields in neuroimaging. Then it's like, well if he can hack it just by trying to be principled and run a lot of extra analysis toys show that he cares about falsifying his own ideas, I can learn how to internalize that process and apply it to meditation. And like it has worked so far. Okay. I don't think we've necessarily had figured out how meditation works. I think in some ways we're ruling out a lot of explanations that people might believe are the mechanisms as opposed to actually finding the deeper mechanisms which may be ephemeral. But I think that's an important part of the process.

[00:44:05.00] Sarah Richardson: Sure. What are some of the myths that you've ruled out in your mind of what some of the falsehoods we believe meditation to be doing but in fact, are not what it's doing?

[00:44:15.03] Norman Farb: One thing I've been really preoccupied with. There have been in the past decade or so is this idea that like all what are you doing in meditation practice when focusing on sensory awareness, at least not the sort of mindfulness meditation is, “Oh ok, so if I could get really, really good at sensing things in my body”, for instance, “then I would be a better person.” This idea that becoming like a super sensor is, is the training trajectory that's going to lead to wellbeing. And it seems to me, in many different ways of analyzing this kind of question. That's not true at all. So it's not about becoming a more sensitive sensor of like what's happening on the surface of the body, it's not really about being better at detecting your own heart rate, there's a bunch of studies showing that like long term meditators are more confident in detecting a heart rate than the average person but they're actually not any better at it. **[00:45:08.16]** And so on one side you could say like "Oh so it's not doing anything". But I think that clearly there are these sort of well-being benefits that have been replicated over and over again in the literature. So if it is doing something but it's not because people are getting

better at feeling things in their body. Instead what's actually happening is people are learning to value the signals they already have access to in a different way. So all this breath focused attention is not to really make you better at detecting small differences in your breathing rate or qualities of breathing, it is to make you care about your breath at all. **[00:45:42.20]** Because most people don't. And actually the way people answer meditation questionnaires if they haven't been doing any type of contemplative practice is really different. So if you ask someone like, this question that's supposed to be a sign of progress in meditation like I don't worry too much about sensations in my body, that those questions are designed to get at this idea of equanimity right. So I feel something in my body I don't let it sidetrack me or freak me out. And then therefore I'm able to stay more engaged and continue to pursue a life consonant with my values. **[00:46:13.19]** But to the layperson, if you forgive the term, who doesn't do any meditation practice saying I don't care, I don't, I don't worry about what's in my body means I don't care about what's in my body. Right, so you give it to the average like 19-year-old undergrad that the more they rate themselves high on I don't worry about what's happening to my body, the more they are suffering usually. Because they're not treating this as a valued source of information, as opposed to learning to negotiate how upsetting it is to be aware of that sensation sometimes, but also, it being a really important sense source of information about what's causing you to react and learning about who you are as a person and how you've been conditioned. **[00:46:52.15]** I think the science in some way, a contemplative scholar would be like "well we already knew that, no one thought it was a body awareness" but I think it lets us sort of start to rule out these sort of low hanging, obvious in some ways, simplistic explanations for that as meditation is doing and I think it's important because like I maybe even told you the story before, Sarah, I've been to like a, a conference or someone's come up to me and been like I have complete awareness of my body all the time. Nice to meet you. Well that's a really socially awkward way to start the conversation like some people are walking around like valorizing the fact that they're constantly attending to their body. **[00:47:26.00]** As though that were the end goal. As opposed to someone who's really just learned to pay attention to their body signals as an important source of information so that I can live a more harmonious life. That kind of person would never introduce themselves as a super receiver, because they realize it feels super awkward when they talk that way. So in some ways it can feed back and help even on the teaching side to be like you may think I'm just training you to be like a super good reporter on your breath, but that's not really what we're trying to do, that's not where the action is. And trying to even measure variation in like the ability to detect small differences in breathing rate and showing that that's not correlated with mental health, I think is an important role. **[00:48:07.00]** So it's not just always about finding the right mechanism, it's starting to rule out plausible mechanisms that really aren't where the action is.

[00:48:14.27] Sarah Richardson: And then just to finish up here as you continue your research now, what are you most excited about? Better understanding in the study of contemplative practices and the way they work or don't work on people?

[00:48:33.07] Norman Farb: Yeah. So I think, having had all of these interesting failures to show that it's about sensory acuity or things like better meditation training, I think the real interesting frontier is more on the side of intentionality. So what does it mean to even think

that you're trying to improve yourself or improve your mind or have a better understanding in your mind, what [does] it mean to take on a project of contemplation or self-reflection? We've found that in undergrad classes if we ask people, as I teach like intro to normal psychology, I've taught it for like six years in a row now, sometimes we'll ask people just to write like really brief, I'm talking about like two minute diary entries, on their mental health and sometimes you get these sort of heartbreaking, wonderful responses where someone says like I've never sat down and thought about whether I'm taking care of myself or not. **[00:49:24.14]** And one side again, it's not crazy to think, it's not that earth shattering to see this and say like oh an 18-year-old isn't worrying too much about taking care of themselves like me. They're there to have experiences and have fun and learn and hopefully not fail classes and, and that sort of thing. But the flipside is like so when does that learning occur? Right so, you get through undergrad, is now when you start sitting back and thinking like now, I'm going to be intentional around the consequence how I occur in the world and whether I'm taking care of myself and whether I'm being a good person? If it's not already happening when you're 18, is it magically going to happen when you're 21? Is it going to happen when you're 25, is something really disruptive or bad going to have to happen in your life before you start to take stock and be like "oh man should I have been actually paying attention, is or could have prevented this thing from happening if I'd actually been keeping track."? **[00:50:13:00]** And the flip side is if we can get students without stressing them out too much, which is really hard because asking students to anything often stresses them out when they're already feeling overwhelmed. But if you can get students to even do a tiny modicum of self-reflection around self-care or even just notice how stressed they are sometimes that can empower them to make different decisions. And part of that is even like from the institution saying look it's valuable it's important how you feel and it's not just about exams and building that into assignments or anything like there's an assignment that's just about you getting to, to know yourself and how, how things are going is important. **[00:50:50.00]** As much as being able to define this psychiatric disorder or something like that, if we're going to be talking about mental health. So this idea of how you help cultivate and just give people nudges to be intentional I think is where a lot of the action is. And then getting back to some of my earlier phrases, like or points about the paternalism of trying to impose a value set, the value I want to impose is that people should be like trying to hold themselves responsible, but then, what they want to be responsible for, like, I don't think I should be telling them that, right? **[00:51:20.23]** But I would like them to at least be getting a better recipe I think for happiness and life satisfaction thinking like "well I at least tried to live the life I wanted" other than, as opposed to like "well life happened and I never really got to be a participant in deciding how that went."

[00:51:37:14] Sarah Richardson: And that sounds like something that actually people in all sorts of classes then could be opening up just a small amount of space for their students to think about their own mental health and well-being in the context of courses and beyond. Right?

[00:51:51.00] Norman Farb: Yeah. I think the challenge now is how do you do that in a way that's not just like totally trivial where something just like glides by people, and there's no impact but also they're even asking people do a small amount of work every day during like midterms is just like super painful and anxiety provoking for them. So what's the right level of

interaction where people feel supported? They have to put a little work in to get something out of it but for it not just to be like one more thing that the university is doing to us or that my employer is doing to me to stress me out. In a formal meditation class, you would get way more stressed before you got stress relief because you come into contact with the suffering you've been deeply committed to avoiding. **[00:52:31.24]** But I don't know if we're going to build that into an intro physics class or something like that so then what's the right level of engagement? And then if people get something, they're hungry for more and they want to commit more time and create a space where that's going to be okay for them, like not during exams, maybe that's that can happen, but what's the thin edge of the wedge to get people into that sort of living an intentional life? I find just a fascinating question that's what lights me up right now.

[00:52:58.15] Sarah Richardson: Great. And then how do you see your teaching developing as you go forward what would you like to teach next or in the future around helping students access the powers and pitfalls of contemplative sciences?

[00:53:12.18] Norman Farb: Yeah, I'd like to help students feel like their curiosity that got them into taking a psychology class is more important than like their grades in some way without, you know, making them fail out. I just I'm trying to find ways of building into like, a standard university curriculum. I mean I can motivate people because I can pay them with marks. So then what's the best you, what's the best return on investment. And if I paid too many marks just for participation, then other people would be like "oh you're just grade inflation". So there's other tensions there too. So let's say I have 10 marks that I can pay students with to do what I want in a in a class that's ostensibly, let's say at least like in the ballpark of the curriculum, it's a normal psych class or happiness class, I can give them I can pay them do something around those topics. Well, what's the best way to use, use that? Is it just like discussion board posts? Is it making them participate in like an online trial where they're asked to do attention practices sometimes and other times not and then debriefing as a learning exercise? We just tried that this year. Is it about making them do journal entries every, every week about self-care or just about how things are going or about how they could be more connected with others or get them like a topic each week. **[00:54:35:16]** There's, there's so many things to play with and I don't know. I just every, every term I get feedback on whatever we did the term before and we make a new experiment and it just keeps on unraveling and hopefully, my hope is in another few years I'll have at least like a package of things that could go to the university administration with and say like hey here's things we can do essentially for free, like we can get a site licence to use this online questionnaire company and then students can will or 70 percent, 80 percent of students will report benefits even if we can't get them all and it will cost them like a minute a day. **[00:55:12:50]** So I'm trying to find that sweet spot that makes like a policymaker think oh yeah this might be actually useful and it might make me look good as the policy and where the students they like "yeah this was actually more useful than stressful for us" and it wasn't just like a make work thing, and that's kind of the game we're playing in next couple of years.

[00:55:29.15] Sarah Richardson: And towards the wonderful goal though of building a more conscious and more present group of people who are choosing their own paths.

[00:55:37.26] Norman Farb: Totally and getting back to what asked over the very start. Underneath that is this feeling of community like oh the university cares about how I feel and they want to empower me to take care of myself, so I'm not just like on my own. It's not just me vs. UofT which by second year if you read like the Reddit forum for UofT it's like "isolation", "how am I going to survive this", like, "no one cares about me". And if that is the context for interaction is always one of evaluation or with the potential for rejection. That's the feeling you get. So yeah that has to be there, like the university has to rank people for us to hold people accountable for learning. **[00:56:12.00]** And it doesn't only have to do that. So we're not going to be people's moms or dads, but it doesn't have to be like no support either. Like, where does the community feeling come from? And can it be built into our coursework or the undergrad experiences is I think, super exciting.

[00:56:25.24] Sarah Richardson: Yeah. Well wonderful. Thank you so much. I think you're really building a more compassionate University, which is ultimately I think a really productive and positive space for all of us. Thank you so much.

[00:56:39.12] Norman Farb: Sounds good! We'll see how it goes. Thanks for listening. Thanks for the opportunity to share.

[00:56:46.13] Sarah Richardson: Thanks to Norm for sharing so much with us that day and for speaking so honestly about his teaching and his research. We wish you well as you continue to learn and grow as a teacher. Thanks so much to all of you for listening and being here with us for this conversation. For reference to the resources that we discussed in this episode. Please check our show notes. If you like what you heard, please subscribe to our podcast The Circled Square. This has been a really rich conversation and we'd love to hear more from you about the links between teaching about Buddhism and teaching with Buddhist practices like mindfulness and teaching in the contemplative sciences. **[00:57:23.20]** So please reach out. We'd love to hear from you. Find us on Facebook. Send us an email. Let us know about your teaching practice or your questions related to teaching Buddhist Studies. A very big special thanks to our creative director Dr. Betsy Moss who's in charge of making these podcasts here in Toronto. And thank you for listening! Be well.