This is an excerpt from a report on the workshop on mind and attention in Indian philosophy at Harvard University, on September 21st and 22nd, 2013, written by Kevin Connolly, Jennifer Corns, Nilanjan Das, Zachary Irving, and Lu Teng, and available at: http://networksensoryresearch.utoronto.ca/Events %26 Discussion.html

2. How can we train our attention, and what are the benefits of doing so?

When thinking about how we can train our attention, the initial question to address is this:

What determines what the mind attends to? At the workshop, Alex Watson's paper compared two prominent classical Indian theories of attention in response to this question.

- According to one picture (espoused by the Brahminical thinkers, especially by the Nyāya-Vaiśeṣika philosophers), there is an internal sense organ, *manas* or the mind, which has two functions. In the case of ordinary sense-perception, it serves as a gobetween that connects the self with the sense organ: once the self is connected to the mind, the mind to the sense organ and the sense to the object, awareness of the object can arise and the self can attend to the relevant object. In the case of introspection, it behaves as an internal sense by which the self can attend to its own cognitive states. In each case, the self, by controlling the mind, controls what it attends to. Watson raises two problems for this view. First, it makes attention voluntary; but not all attention is voluntary. Secondly, the self needs to already have awareness of what objects the mind could possibly attend to, in order to make decisions about how to direct the mind. But, *ex hypothesi*, such awareness could not arise unless one were to have directed attention to those objects.
- According to the other picture (endorsed by the Buddhist), there need not exist any self in order for attention to be possible. The mental life of an agent consists merely of a sequence of discrete awareness-events, each of which involve attention. The problem for

this view is to explain (i) cases in which an agent attending to an area in anticipation of the object that will arrive there, (ii) cases in which an agent seems to choose what it attends to, and (iii) the cases in which several objects compete for attention and the need for resolving this conflict arises. A large part of Watson's paper was devoted to the Buddhist replies to these worries. In response, Sebastian Watzl asked how the Buddhist would explain the datum that the phenomenology of attention typically involves experiences of oneself controlling the focus of attention. Watson's reply was that these are just brute facts about the particular agent's mental life.

After determining what the mind attends to, our next step toward answering how we can train our attention is to ask: What kind of top-down influences is attention open to? David Nowakowski's paper nicely illustrated how the range of objects that we can attend to is restricted by our previous awareness-episodes. This discussion focuses on a debate between the Buddhists and the Nyāya philosopher Udayana about the momentariness of objects.

The Buddhists seek to prove the momentariness of various middle-sized objects by appealing to a universal premise, namely that everything existent is momentary. Against this, Udayana points out that, in order to establish this universal premise, the Buddhist must not only show that some existents are momentary, but also show that no non-momentary object is existent. In order to do this, it must be possible to cognitively attend to non-existent objects. For the Buddhist, this is possible, because we cognitively attend to a cognitive object (ākāra), which in the veridical case just is an inner replica of the mind-independent object to which it refers. In the non-veridical case, the cognitive object

- refers to what does not exist (*asatkhy*ā*ti*). Thus, a non-veridical awareness event is sufficient to allow the mind to cognitively attend to a non-existent object.
- In order to refute this view, Udayana claims that one's cognition can stand in a relation to a determinable object only if its causal history involves epistemic processes like veridical perception, veridical inference, etc., which link it to that object. Now, in the case of nonveridical cognition including the so-called "cognition of non-existents," the object appears in a manner that is "other than what it is" (anyathākhyāti); for example, when a horned hare appears in cognition, the hare appears as characterized by a feature that in fact is absent from the hare. This phenomenon also received some discussion in Nilanjan Das's paper, "Cognitive Penetrability in Nyaya." According to this view, in order to cognize a particular or a property in a locus from which it is actually absent, we must have cognized that feature before by means of some veridical epistemic process (what Udayana calls an "epistemic instrument") and are now recollecting the object of that previous cognition. So, we never cognitively attend to a non-existent like a horned hare, but only ascribe a previously cognized existent feature, e.g., a pair of horns, to an existent object before us, e.g., the hare. Thus, according to this view, what we have learned through epistemic processes in the past limits the range of objects that we can cognitively attend to now.

We are now in a position to answer our original question: **How can meditation train** attention? In his paper, Kranti Saran presented a response to this question. Saran examined three claims:

A1: Attending to something is always at the expense of attending to something else.

A2: The phenomenology of attention is structured into foreground and background.

A3: Suppose attention were radically dissociated from selection. Then one person in the NSA could snoop in on everything. And that's absurd. Call this "Snoop's World."

Saran's goal is to resist A1 and A2 and yet not end up in "Snoop's World." His claim is that conscious attention is neither conceptually nor structurally tied to selection within consciousness. If this is true, some prominent theories of attention are mistaken (e.g. Smithies (2011), and Watzl (2011)). Moreover, if selection within consciousness is a necessary consequence of a capacity limitation, and there are experiences in which there is no selection, then there are experiences, which are not capacity-limited.

Saran argues that the deployment of attention in insight meditation is an example of an experience that defies A1 and A2, without incurring snoop problems. Here's how it goes. At the first stage, one focuses on the inflow and outflow of your breath, and makes the area that one is focusing on smaller and smaller. At the second stage, one is aware of lots of sensations in one's body that one ordinarily ignores. At the third stage, one sweeps attention serially over (and through) parts of the body while observing the sensations present there. At this stage of the meditation, there are no "dark" areas, and one can feel high-resolution sensations "flowing" over and in all parts of the body. Instead of scanning one's body part by part, one can take in the full three-dimensional array of bodily sensations and bodily boundaries in one take. If Saran were right, it would provide one kind of answer to our original question. Meditation trains attention to be unselective.

One final and related question is this: What are the practical and or moral benefits of meditative training? In the workshop, we encountered two perspectives on this question.

- 1. The Brahminical Perspective. In the Bhagavad Gita, the yogin is presented as a practically ideal agent who is even-minded in success and failure. In her talk, Keya Maitra argued that this practical ideal is tightly connected to the way in which, through continuous meditation, the yogin directs his attention in a non-clingy way toward the world. However, as Nico Silins pointed out, the relevant questions are these: How is clingy attention different from non-clingy attention? Is clingy attention merely diffuse attention, or is it characterized by a lack of control? Is this property of clinginess or non-clinginess sufficient to distinguish the manner of the yogin's attention from that of the non-yogin, or do we need to ascribe to the yogin a different manner of attention altogether? In response, Maitra argued that both the manner and content of the yogin's attention were different.
- 2. The Buddhist Perspective. Within the Buddhist tradition, meditation is often taken as a means of training attention. In his talk, Jake Davis argued that training attention through Mindfulness Meditation can lead to moral expertise. By attending to external and internal stimuli more carefully, subjects become experts at knowing which motives contribute to ease, and which contribute to unease. This, according to the Buddhist, is tantamount to moral expertise. So, the standard of ethical judgment, for the Buddhist, is the agent who is wide awake and attends to all the external and internal stimuli. However, as Sharon Street pointed in her comments, the question is: What makes this expertise moral, rather than merely instrumental? It is not obvious that the causal regularities between motivation and ease or unease ground morality.