Being and Doing: Activating Neural Networks Of Mindful Presence

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Topics

- Perspectives
- Self-directed neuroplasticity
- “Doing” and “being”
- Spacious awareness
Self-Directed Neuroplasticity
A Neuron
All cells have specialized functions. Brain cells have particular ways of processing information and communicating with each other. Nerve cells form complete circuits that carry and transform information.

Electrical signaling represents the language of mind, the means whereby nerve cells, the building blocks of the brain, communicate with one another over great distances. Nerve cells generate electricity as a means of producing messages.

All animals have some form of mental life that reflects the architecture of their nervous system.

Eric R. Kandel
The Mind/Brain System

- “Mind” = flow of information within the nervous system:
  - Information is represented by the nervous system.
  - Most mind is unconscious; awareness is an aspect of mind.
  - The headquarters of the nervous system is the brain.

- In essence then, apart from hypothetical transcendental factors, the mind is what the brain does.

- Brain = necessary, proximally sufficient condition for mind:
  - The brain depends on the nervous system, other bodily systems, nature, and culture.
  - As we’ll see, the brain also depends on the mind.

- Therefore, the brain and mind are two aspects of one system, interdependently arising.
Evolution is a tinkerer. In living organisms, new capabilities are achieved by modifying existing molecules slightly and adjusting their interaction with other existing molecules.

Science has found surprisingly few proteins that are truly unique to the human brain and no signaling systems that are unique to it.

All life, including the substrate of our thoughts and memories, is composed of the same building blocks.

Eric R. Kandel
Fact #1

As your brain changes, your mind changes.
Fact #2

As your mind changes, your brain changes.

Immaterial mental activity maps to material neural activity.

This produces temporary changes in your brain and lasting ones.

Temporary changes include:

- Alterations in brainwaves (= changes in the firing patterns of synchronized neurons)
- Increased or decreased use of oxygen and glucose
- Ebbs and flows of neurochemicals
Tibetan Monk, Boundless Compassion
Mind Changes Brain in Lasting Ways

- What flows through the mind sculpts your brain. Immaterial experience leaves material traces behind.

- Increased blood/nutrient flow to active regions

- Altered epigenetics (gene expression)

- “Neurons that fire together wire together.”
  - Increasing excitability of active neurons
  - Strengthening existing synapses
  - Building new synapses; thickening cortex
  - Neuronal “pruning” - “use it or lose it”
Honoring Experience

One’s experience *matters*. 

Both for how it feels in the moment and for the lasting residues it leaves behind, woven into the fabric of a person’s brain and being.
Fact #3

You can use your mind to change your brain to change your mind for the better.

This is self-directed neuroplasticity.

*How to do this, in skillful ways?*
The Power of Mindfulness

- **Attention** is like a spotlight, illuminating what it rests upon.

- Because neuroplasticity is heightened for what’s in the field of focused awareness, attention is also like a vacuum cleaner, sucking its contents into the brain.

- Directing attention skillfully is therefore a fundamental way to shape the brain - and one’s life over time.

*The education of attention would be an education par excellence.*

William James
Grounding in the Brain - Benefits

- **Organizing** framework
  - Evolutionary neuropsychology
  - Common ground across theories and methods
- **Motivating** to clients, clinicians, policy-makers
  - Concrete, in the body, *physical*
  - Status of medicine, hard science
- **Highlighting** key principles and practices
  - Implicit memory
  - Nonverbal processes
- **Innovating** with truly new methods
  - Neurofeedback
  - Fear extinction
Grounding in the Brain - Pitfalls

- **Adding little new meaning**
  - Replacing psych terms with neuro (“amygdala made me do it”)

- **Over-simplifying**
  - Over-localizing function (e.g., empathy = mirror neurons)
  - Over-emphasizing one factor (e.g., attachment experiences)
  - Exaggerated terms (“God-gene,” “female brain”)
  - Materialistic reductionism, though brain and mind co-arise

- **Claiming authority**
  - Using neuro data to argue a political or cultural case
  - Using the secular religion of science to elevate status

- **Underestimating the mind**
  - Most big changes in psyche involve tiny changes in soma; mental plasticity holds more promise than neural plasticity.
  - Overlooking the insights and effectiveness of psychology
  - Ducking existential choices in values
“Doing” and “Being”
## Dual Modes

<table>
<thead>
<tr>
<th>“Doing”</th>
<th>“Being”</th>
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<tbody>
<tr>
<td>Mainly representational</td>
<td>Mainly sensory</td>
</tr>
<tr>
<td>Much verbal activity</td>
<td>Little verbal activity</td>
</tr>
<tr>
<td>Abstract</td>
<td>Concrete</td>
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<tr>
<td>Future- or past-focused</td>
<td>Now-focused</td>
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<tr>
<td>Recursive contents of mind</td>
<td>Transient contents of mind</td>
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<tr>
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<td>Nothing to do, nowhere to go</td>
</tr>
<tr>
<td>Sense of craving</td>
<td>Sense of peace</td>
</tr>
<tr>
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<tr>
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<td>Uncertainty, not-knowing</td>
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<tr>
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<td>Nonjudgmental</td>
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<tr>
<td>Lost in thought, mind wandering</td>
<td>Mindful presence</td>
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<tr>
<td>Tightly connected experiences</td>
<td>Loosely connected experiences</td>
</tr>
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<td>Focal view</td>
<td>Panoramic view</td>
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Increased **Medial** PFC Activation Related to Self-Referencing Thought

Self-Focused (blue) and Open Awareness (red) Conditions (in the novice, pre MT group)

Self-Focused (blue) and Open Awareness (red) Conditions (following 8 weeks of MT)

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Being with, Releasing, Replacing

There are three phases of psychological healing and personal growth (and spiritual practice):
- Be mindful of, release, replace.
- Let be, let go, let in.

Mindfulness is key to the second and third phase, sometimes curative on its own, and always beneficial in strengthening its neural substrates. But often it is not enough by itself.

And sometimes you need to skip to the third phase to build resources for mindfulness.
Spacious Awareness
Ways to Activate “Being” Mode

- Relax
- Focus on bare sensations and perceptions
- Sense the body as a whole
- Take a panoramic, “bird’s-eye” view
- Engage “don’t-know mind”; release judgments
- Don’t try to connect mental contents together
- Let experience flow, staying here now
- Relax the sense of “I, me, and mine”
Whole Body Awareness

- Sense the breath in one area (e.g., chest, upper lip)
- Sense the breath as a whole: one gestalt, percept
- Sense the body as a whole, a whole body breathing
- Sense experience as a whole: sensations, sounds, thoughts . . . all arising together as one unified thing
- It’s natural for this sense of the whole to be present for a second or two, then crumble; just open up to it again and again.
Panoramic Awareness

- Recall a bird’s-eye view (e.g., mountain, airplane)

- Be aware of sounds coming and going in an open space of awareness, without any edges: boundless

- Open to other contents of mind, coming and going like clouds moving across the sky.

- Pleasant or unpleasant, no matter: just more clouds

- No cloud ever harms or taints the sky.

*Trust in awareness, in being awake, rather than in transient and unstable conditions.*

Ajahn Sumedho
Relaxing the Sense of Self

- Cautions: dissociative disorders, borderline PD

- Distinguish between the person (the body-mind as a whole) and the apparent self (the supposedly unified, stable, and independent owner of experiences and agent of actions).

- Notice that many activities need little if any sense of “I” (e.g., reaching for salt, cuddling).

- Notice how “I” changes; see how it grows in response to threats, opportunities, and contact with others; consider the apparent “I” as a process rather than as an entity: “selfing.”

- Focus on present moment experience itself, continually dropping any story of “I, me, and mine.”

- Enjoy the peace of less selfing.
“Bahiya, you should train yourself thus.”

In reference to the seen, there will be only the seen. To the heard, only the heard. To the sensed, only the sensed. To the cognized, only the cognized.

When for you there will be only the seen in reference to the seen, only the heard in the heard, only the sensed in the sensed, only the cognized in the cognized, then, Bahiya, there’s no you in that.

When there’s no you in that, there’s no you there. When there’s no you there, you are neither here nor yonder nor between the two.

This, just this, is the end of all suffering.

The Buddha
Penetrative insight

joined with calm abiding

utterly eradicates

afflicted states.

Shantideva
Great Books

See www.RickHanson.net for other great books.

Key Papers - 1

See www.RickHanson.net for other scientific papers.


Key Papers - 2


- Hanson, R. 2008. Seven facts about the brain that incline the mind to joy. In *Measuring the immeasurable: The scientific case for spirituality*. Sounds True.


Key Papers - 4


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