

# ***Being and Doing:***

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## ***Activating Neural Networks Of Mindful Presence***

Rick Hanson, Ph.D.

The Wellspring Institute for Neuroscience and Contemplative Wisdom

[WiseBrain.org](http://WiseBrain.org) [RickHanson.net](http://RickHanson.net)

[drh@comcast.net](mailto:drh@comcast.net)

# Topics

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- **Perspectives**
- **“Doing” and “being”**
- **Spacious awareness**



# Perspectives

# Neuroplasticity in Context

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- Neuroplasticity is not breaking news. It's been long presumed that mental activity changed neural structure: what else is learning?
- The news is in how the mind changes the brain.
- Most neuroplasticity is incremental, not dramatic.
- Neuroplasticity is ethically neutral.

*How to use it for good?*

# Grounding in the Brain - Benefits

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- 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

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- Adding little new meaning
  - Replacing psych terms with neuro (“amygdala made me do it”)
- Over-simplifying
  - Over-localizing function (e.g., empathy = mirror neurons)
  - 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

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## “Doing”

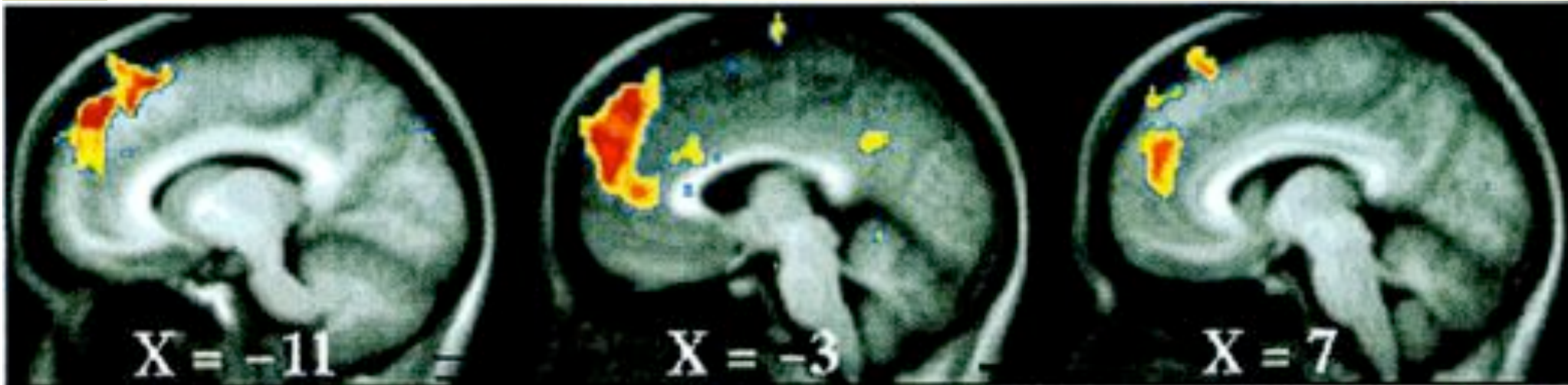
Mainly representational  
Much verbal activity  
Abstract  
Future- or past-focused  
Recursive contents of mind  
Goal-directed  
Sense of craving  
Personal, self-oriented perspective  
Firm beliefs  
Evaluative  
Lost in thought, mind wandering  
Tightly connected experiences  
Focal view  
Prominent self-as-object  
Prominent self-as-subject

## “Being”

Mainly sensory  
Little verbal activity  
Concrete  
Now-focused  
Transient contents of mind  
Nothing to do, nowhere to go  
Sense of peace  
Impersonal, 3<sup>rd</sup> person perspective  
Uncertainty, not-knowing  
Nonjudgmental  
Mindful presence  
Loosely connected experiences  
Panoramic view  
Minimal or no self-as-object  
Minimal or no self-as-subject

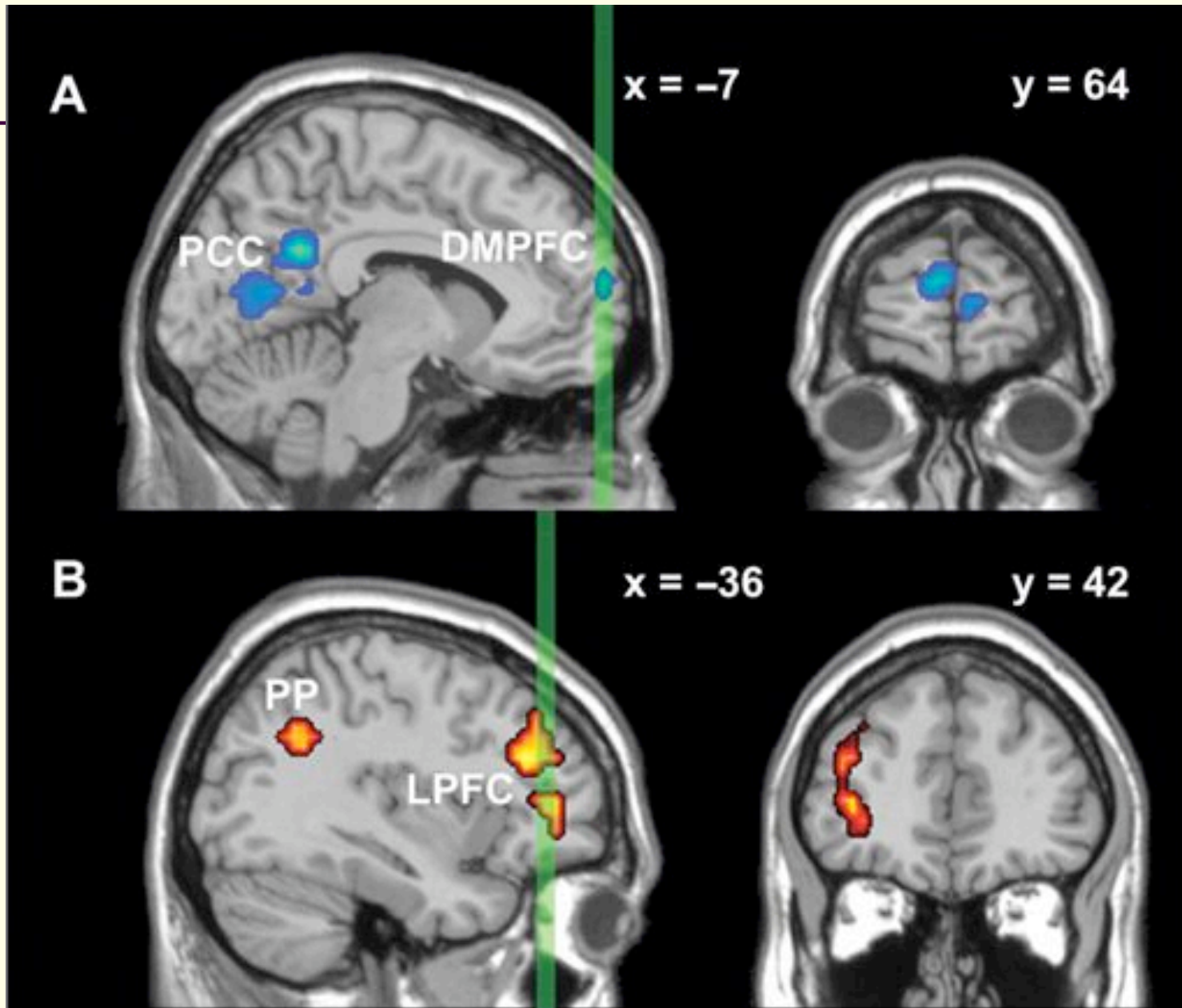
# Increased Medial PFC Activation Related to Self-Referencing Thought

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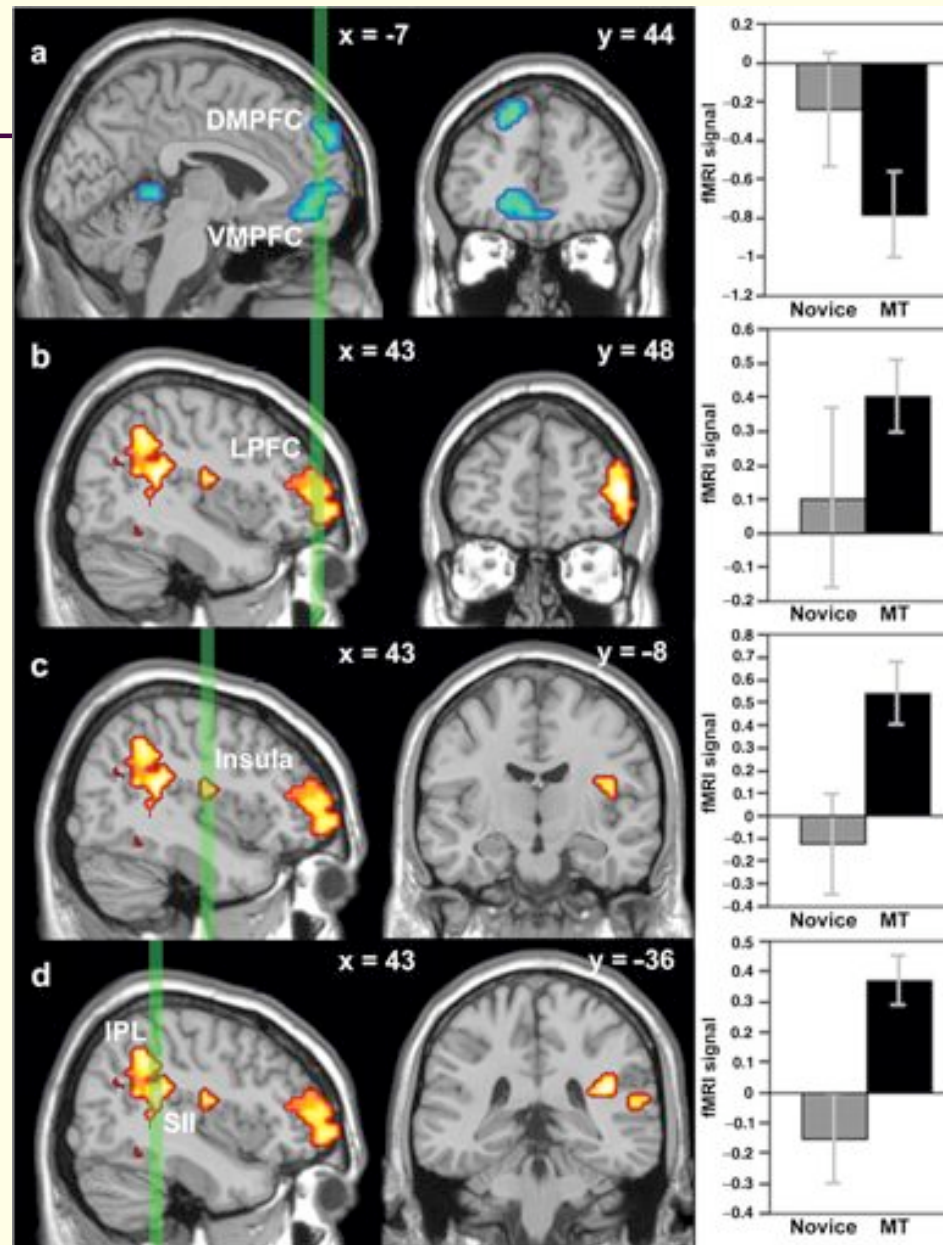
Gusnard D. A., et.al. 2001. *PNAS*, 98:4259-4264

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



Farb, et al. 2007. *Social Cognitive Affective Neuroscience*, 2:313-322

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



# Dual Modes

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## “Doing”

Mainly representational  
Much verbal activity  
Abstract  
Future- or past-focused  
Recursive contents of mind  
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# **Spacious Awareness**

# Ways to Activate “Being” Mode

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- 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

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- 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

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- 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

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*To study the Way is to study the self.*

*To study the self is to forget the self.*

*To forget the self is  
To be enlightened by all things.*

Dogen

# Relaxing the Sense of Self

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- 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.

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*Blissful is passionlessness in the world,  
The overcoming of sensual desires;  
But the abolition of the conceit I am --  
That is truly the supreme bliss.*

The Buddha, Udāna 2.11

# “Bahiya, you should train yourself thus.”

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*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.*

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*Penetrative insight*

*joined with calm abiding*

*utterly eradicates*

*afflicted states.*

Shantideva

# Great Books

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See [www.RickHanson.net](http://www.RickHanson.net) for other great books.

- Austin, J. 2009. *Selfless Insight*. MIT Press.
- Begley, S. 2007. *Train Your Mind, Change Your Brain*. Ballantine.
- Carter, C. 2010. *Raising Happiness*. Ballantine.
- Hanson, R. (with R. Mendius). 2009. *Buddha's Brain: The Practical Neuroscience of Happiness, Love, and Wisdom*. New Harbinger.
- Johnson, S. 2005. *Mind Wide Open*. Scribner.
- Keltner, D. 2009. *Born to Be Good*. Norton.
- Kornfield, J. 2009. *The Wise Heart*. Bantam.
- LeDoux, J. 2003. *Synaptic Self*. Penguin.
- Linden, D. 2008. *The Accidental Mind*. Belknap.
- Sapolsky, R. 2004. *Why Zebras Don't Get Ulcers*. Holt.
- Siegel, D. 2007. *The Mindful Brain*. Norton.
- Thompson, E. 2007. *Mind in Life*. Belknap.

# Key Papers - 1

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See [www.RickHanson.net](http://www.RickHanson.net) for other scientific papers.

- Atmanspacher, H. & Graben, P. 2007. Contextual emergence of mental states from neurodynamics. *Chaos & Complexity Letters*, 2:151-168.
- Baumeister, R., Bratlavsky, E., Finkenauer, C. & Vohs, K. 2001. Bad is stronger than good. *Review of General Psychology*, 5:323-370.
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- Carter, O.L., Callistemon, C., Ungerer, Y., Liu, G.B., & Pettigrew, J.D. 2005. Meditation skills of Buddhist monks yield clues to brain's regulation of attention. *Current Biology*, 15:412-413.

# Key Papers - 2

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- Davidson, R.J. 2004. Well-being and affective style: neural substrates and biobehavioural correlates. *Philosophical Transactions of the Royal Society*, 359:1395-1411.
- Farb, N.A.S., Segal, Z.V., Mayberg, H., Bean, J., McKeon, D., Fatima, Z., and Anderson, A.K. 2007. Attending to the present: Mindfulness meditation reveals distinct neural modes of self-reflection. *SCAN*, 2, 313-322.
- Gillihan, S.J. & Farah, M.J. 2005. Is self special? A critical review of evidence from experimental psychology and cognitive neuroscience. *Psychological Bulletin*, 131:76-97.
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- 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. 24

# Key Papers - 3

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- Lazar, S., Kerr, C., Wasserman, R., Gray, J., Greve, D., Treadway, M., McGarvey, M., Quinn, B., Dusek, J., Benson, H., Rauch, S., Moore, C., & Fischl, B. 2005. Meditation experience is associated with increased cortical thickness. *Neuroreport*, 16:1893-1897.
- Lewis, M.D. & Todd, R.M. 2007. The self-regulating brain: Cortical-subcortical feedback and the development of intelligent action. *Cognitive Development*, 22:406-430.
- Lieberman, M.D. & Eisenberger, N.I. 2009. Pains and pleasures of social life. *Science*, 323:890-891.
- Lutz, A., Greischar, L., Rawlings, N., Ricard, M. and Davidson, R. 2004. Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *PNAS*, 101:16369-16373.
- Lutz, A., Slager, H.A., Dunne, J.D., & Davidson, R. J. 2008. Attention regulation and monitoring in meditation. *Trends in Cognitive Sciences*, 12:163-169.

# Key Papers - 4

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- Rozin, P. & Royzman, E.B. 2001. Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5:296-320.
- Takahashi, H., Kato, M., Matsuura, M., Mobbs, D., Suhara, T., & Okubo, Y. 2009. When your gain is my pain and your pain is my gain: Neural correlates of envy and schadenfreude. *Science*, 323:937-939.
- Tang, Y.-Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., Yu, Q., Sui, D., Rothbart, M.K., Fan, M., & Posner, M. 2007. Short-term meditation training improves attention and self-regulation. *PNAS*, 104:17152-17156.
- Thompson, E. & Varela F.J. 2001. Radical embodiment: Neural dynamics and consciousness. *Trends in Cognitive Sciences*, 5:418-425.
- Walsh, R. & Shapiro, S. L. 2006. The meeting of meditative disciplines and Western psychology: A mutually enriching dialogue. *American Psychologist*, 61:227-239.

## *Where to Find Rick Hanson Online*

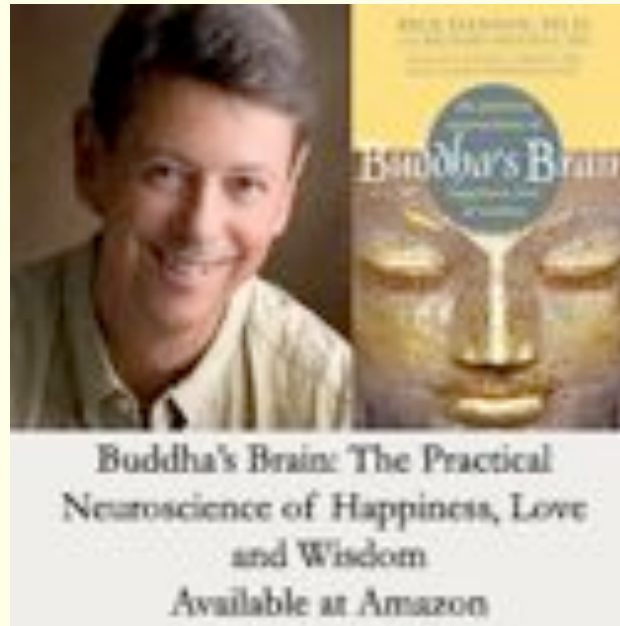
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<http://www.youtube.com/BuddhasBrain>



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