Who Am I Really?

Insights from Neuropsychology about Not Taking Life Personally

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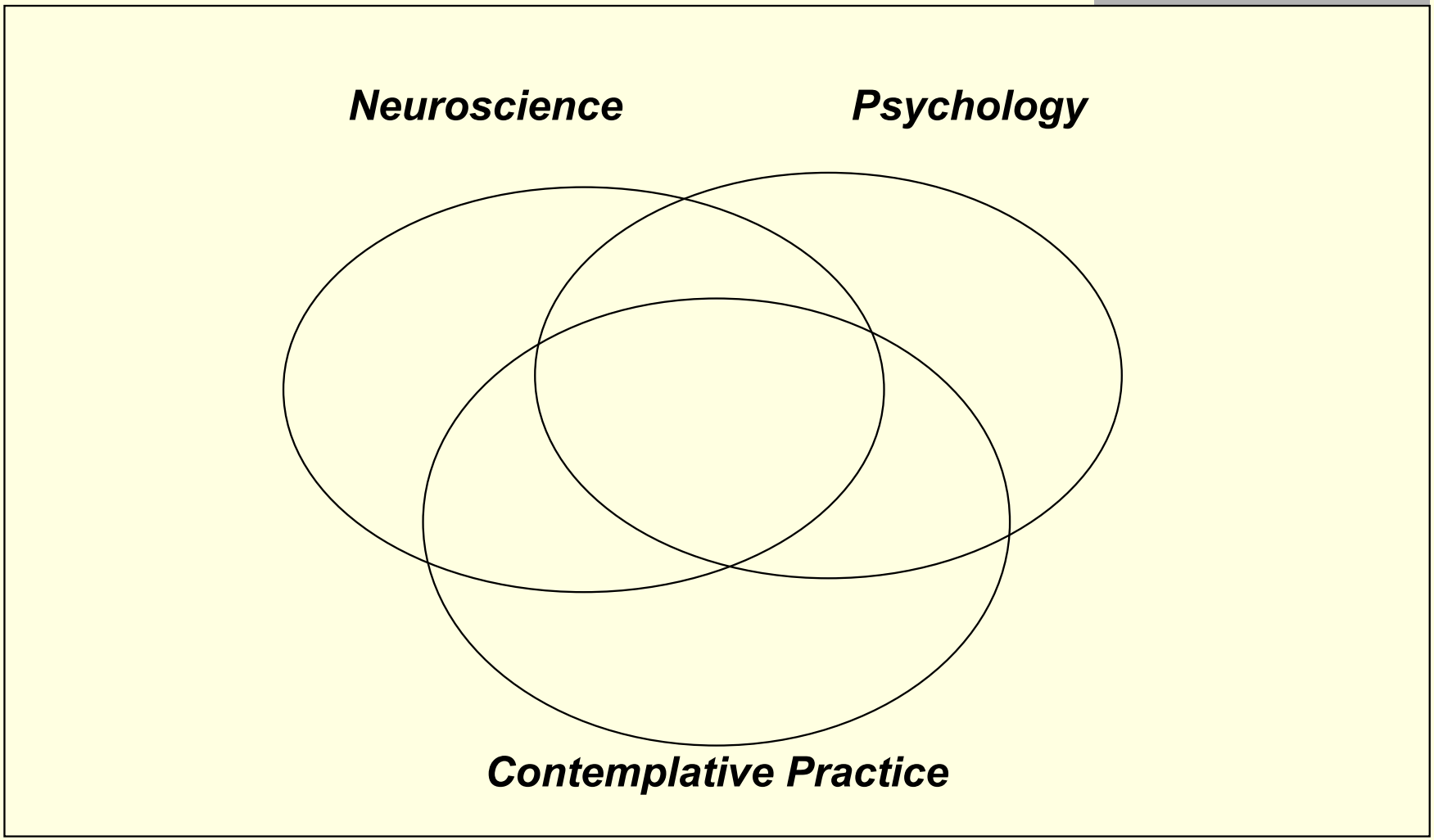
Topics

- Self-directed neuroplasticity
- Dual modes
- Egocentric and allocentric
- Self in the mind
- Self in the brain
- Healthy narcissistic supplies
- Taking life less personally
- “Only the seen in the seen”

Self-Directed Neuroplasticity

Common - and Fertile - Ground



"We ask, 'What is a thought?'

We don't know,

yet we are thinking continually."

Venerable Ani Tenzin Palmo

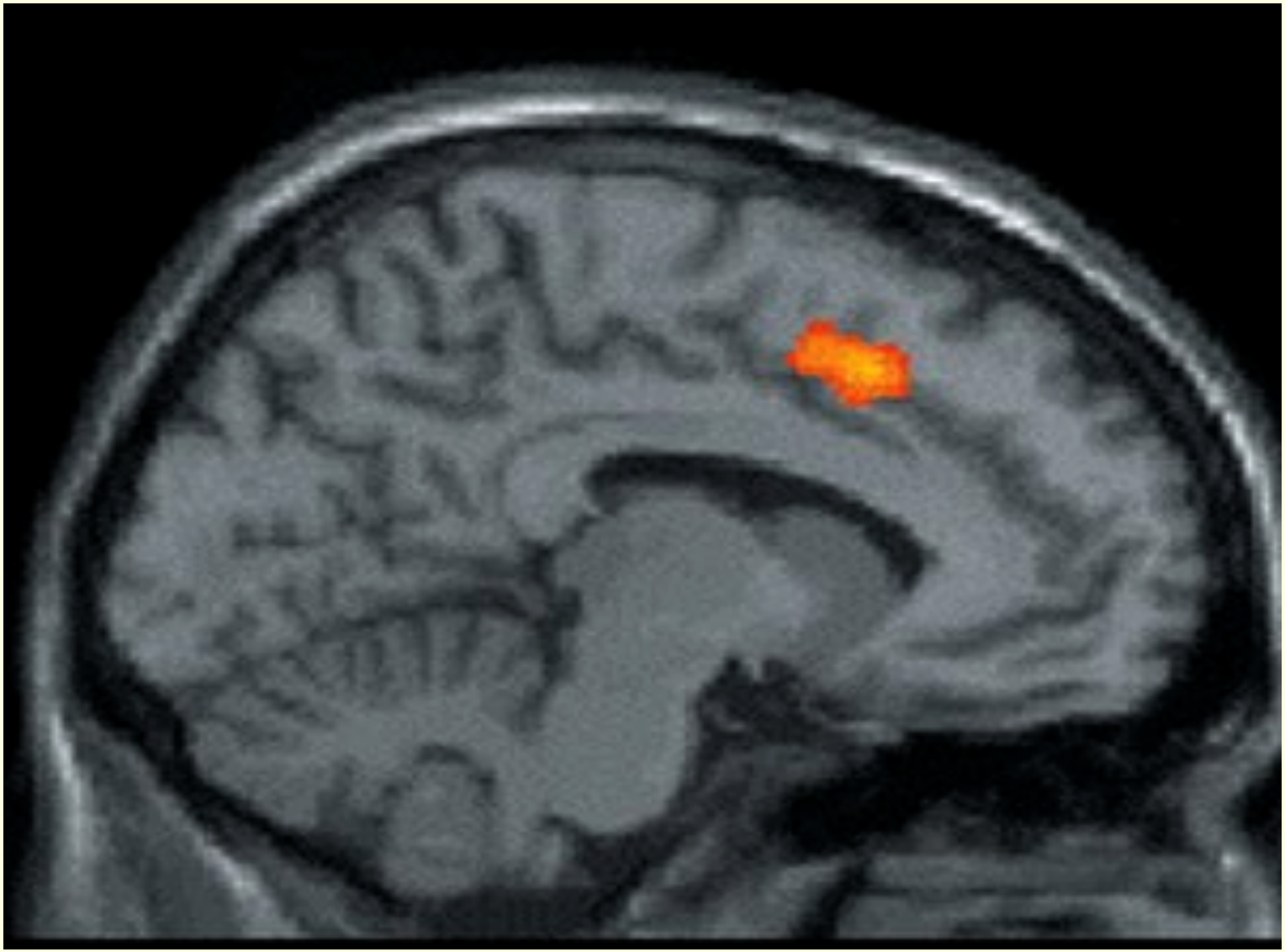
All cells have specialized functions. Brain cells have particular ways of processing information and communicating with each other. Nerve cells form complete circuits that carry and transform information.

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.

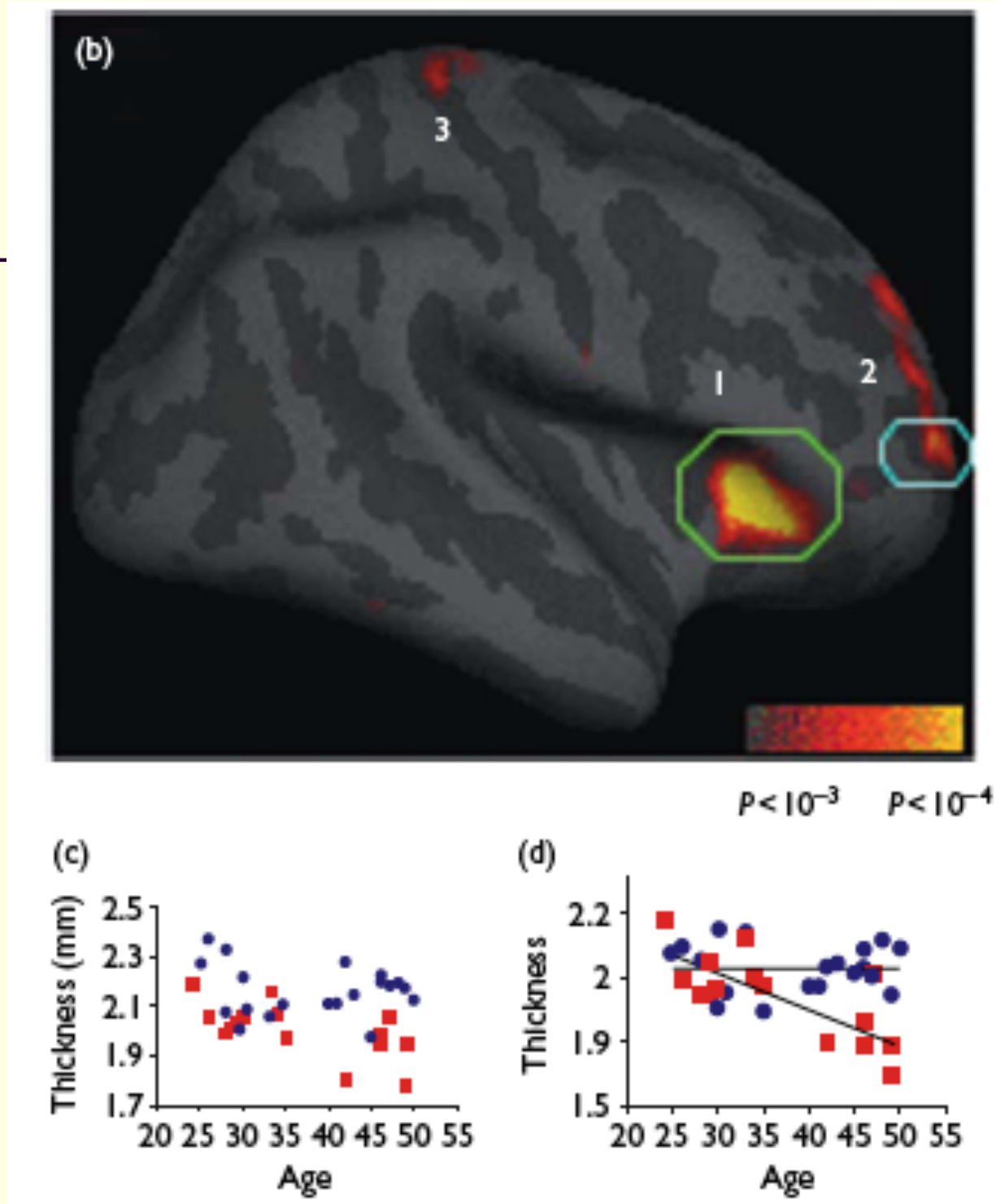
All animals have some form of mental life that reflects the architecture of their nervous system.

Eric R. Kandel

Tibetan Monk, Boundless Compassion



Lazar, et al. 2005. Meditation experience is associated with increased cortical thickness. *Neuroreport*, 16, 1893-1897.



Effects of Meditation on the Brain

- Increased gray matter in the:
  - Insula - interoception; self-awareness; empathy for emotions
  - Hippocampus - visual-spatial memory; establishing context; inhibiting amygdala and cortisol
  - Prefrontal cortext (PFC) - executive functions; attention control
- Reduced cortical thinning with aging in insula and PFC
- Increased activation of left frontal regions, which lifts mood
- Increased gamma-range brainwaves - may be associated with integration, “coming to singleness,” “unitary awareness”
- Preserved telomere length

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.

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.

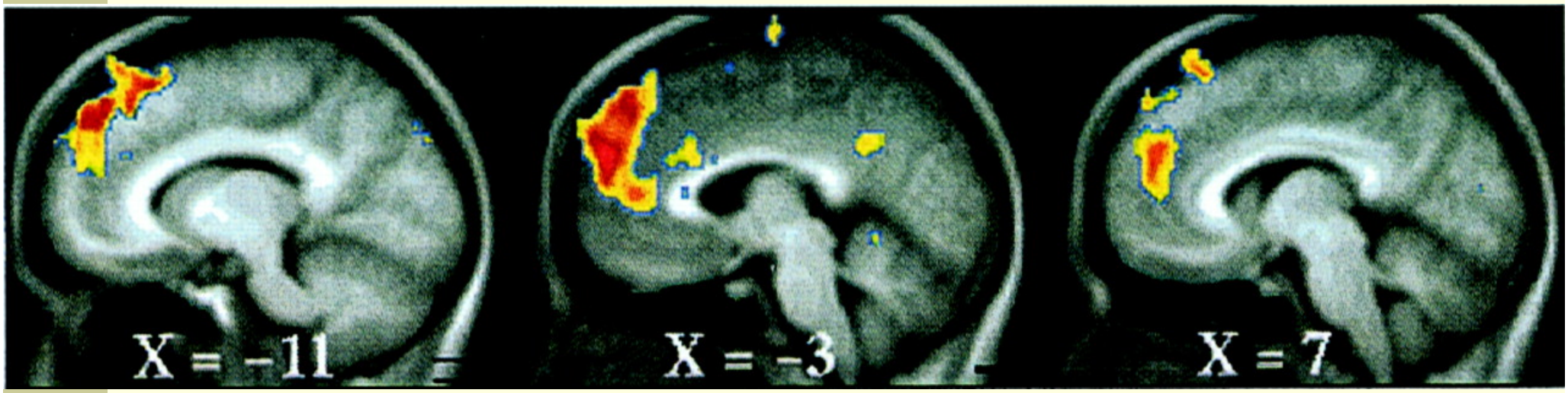
- And sometimes you need to skip to the third phase to build resources for mindfulness.

Dual Modes

Dual Modes

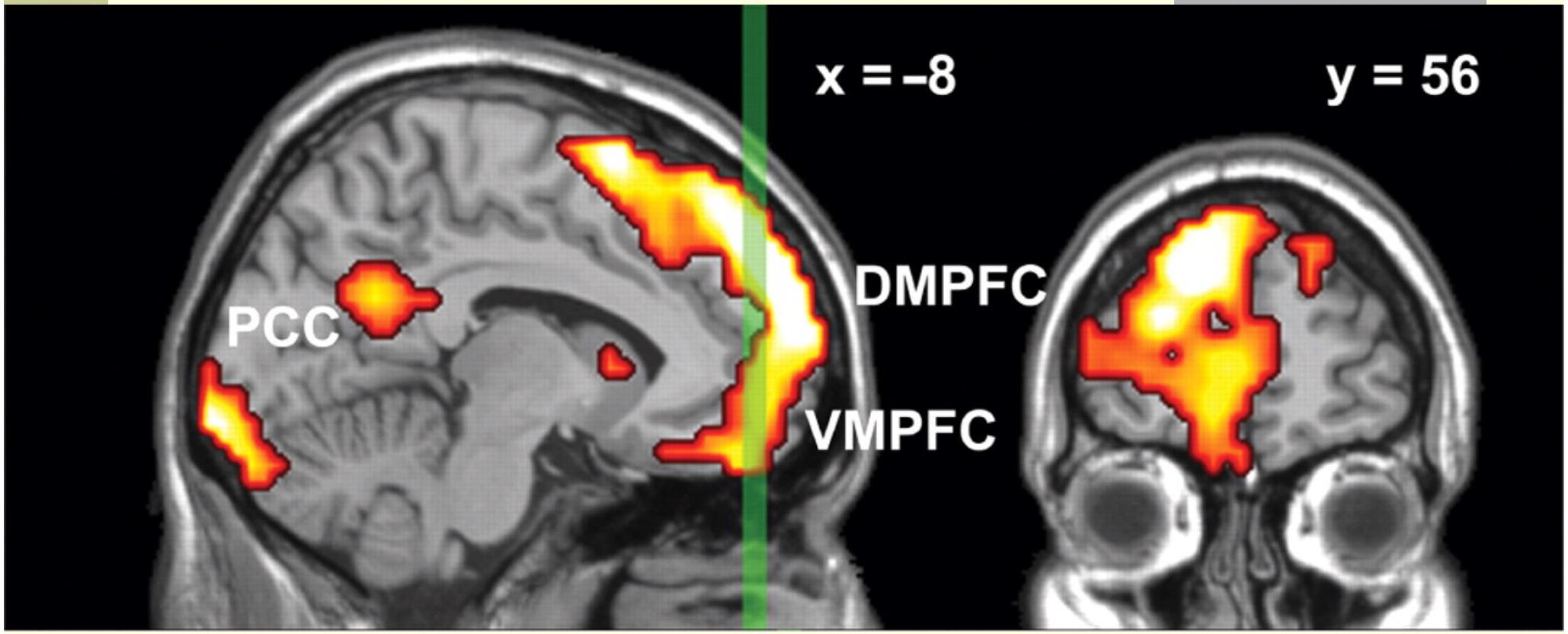
"Doing"	"Being"
Mainly representational	Mainly sensory
Much verbal activity	Little verbal activity
Abstract	Concrete
Future- or past-focused	Now-focused
Goal-directed	Nothing to do, nowhere to go
Sense of craving	Sense of peace
Personal, self-oriented perspective	Impersonal, 3rd person perspective
Focal view	Panoramic view
Firm beliefs	Uncertainty, not-knowing
Evaluative	Nonjudgmental
Lost in thought, mind wandering	Mindful presence
Reverberation and recursion	Immediate and transient;
Tightly connected experiences	Loosely connected experiences
Prominent self-as-object	Minimal or no self-as-object
Prominent self-as-subject	Minimal or no self-as-subject

Increased Medial PFC Activation Related to Self-Referencing Thought



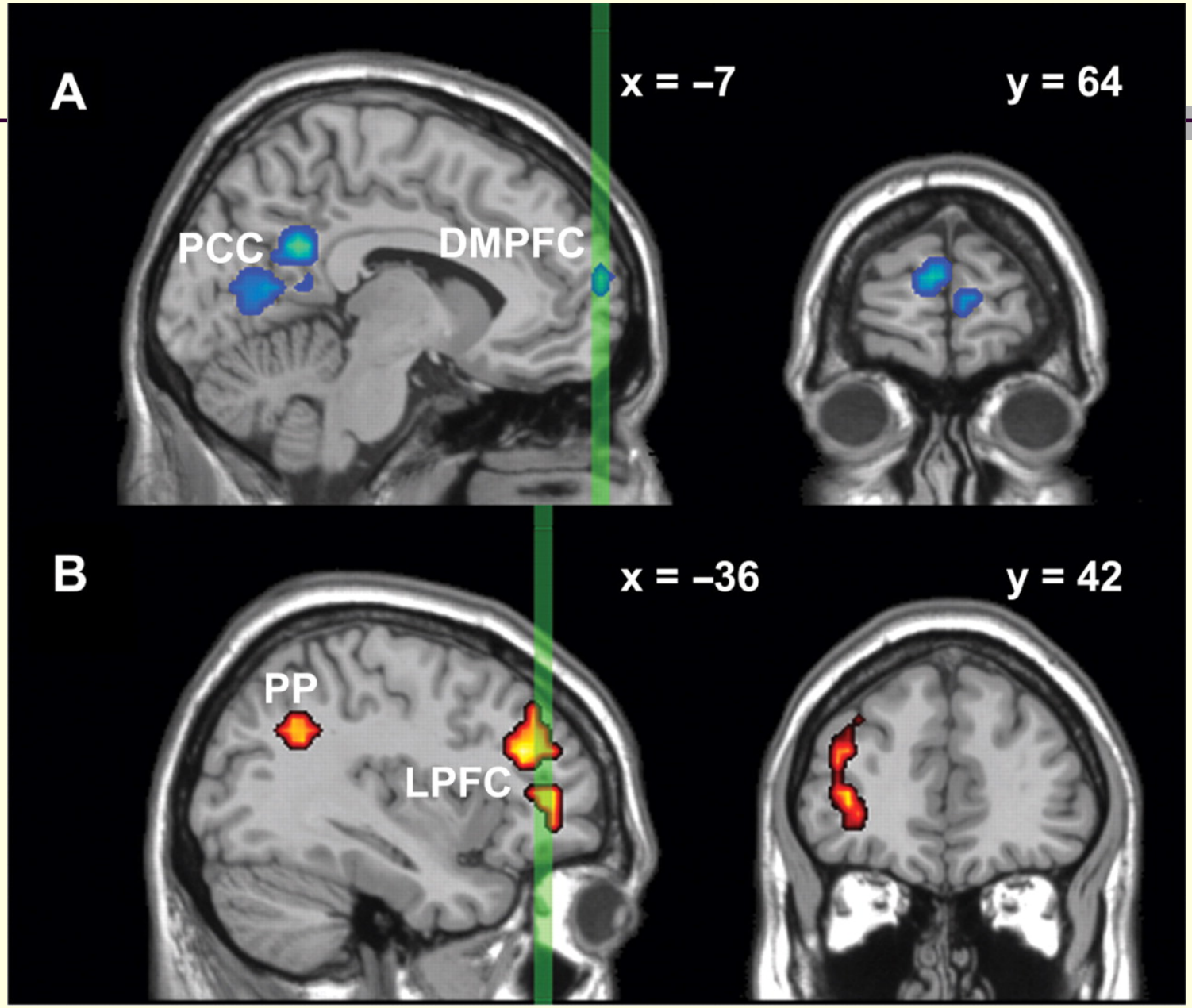
Gusnard D. A., et.al. 2001. *PNAS*, 98:4259-4264

Cortical Midline Areas for Self-Referencing Thought



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

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



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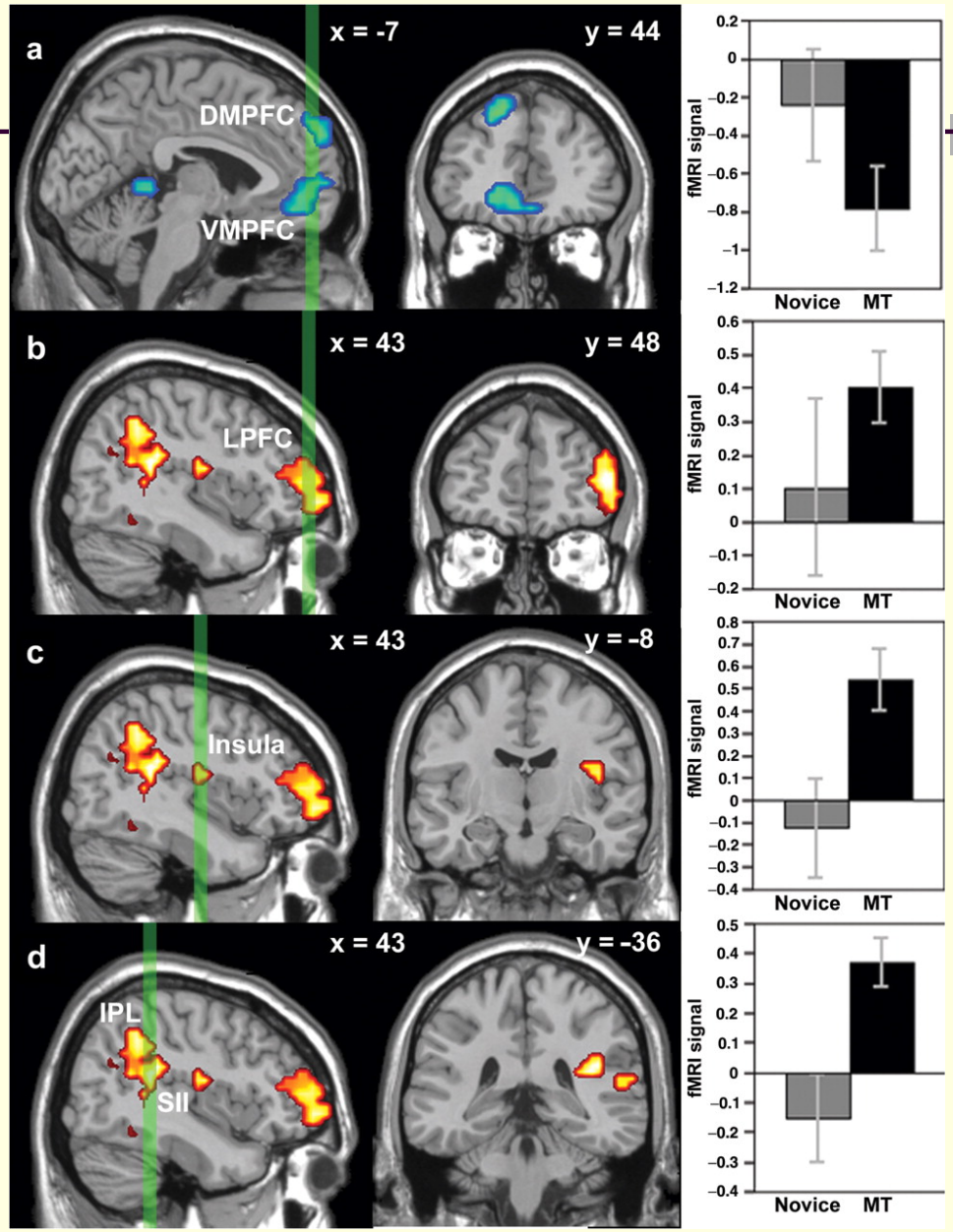
Self-Focused (blue) vs Open Awareness (red) Conditions (following 8 weeks of MT)



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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.

“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

Egocentric and Allocentric

Egocentric Perspective

- Based on upper processing streams in the brain: upper portions of the thalamus that confer “self” salience; rear regions of the “default network” (e.g., precuneus, posterior cingulate cortex); parietal regions that construct an enduring and unified sense of “my body in space”
- Establishes “where it is in relation to me”; lower visual field
- Develops earliest in childhood
- “Subjective” - Things exist in relation to me.
- Action-oriented - Focus on reacting to carrots and sticks

Allocentric Perspective

- Based on lower processing streams in the brain that involve: lower regions of the thalamus that confer “world” salience;
- Establishes “what it is independent of me”; upper visual field
- Begins developing around age four
- “Objective” - Things exist in a physical space in which their location is impersonal, not in reference to an observer.
- This perspective pervades *kensho* and other forms of non-dual awareness. It is strengthened in open awareness meditations that draw heavily on the alerting, lower attentional system.

- Being-oriented

Strengthening Allocentric Processing

- As one perspective increases, the other decreases. Normal ego/allo fluctuations occur ~ 3-4/minute.
- With “contact,” allocentric processing increases briefly as the new stimulus is considered in its own right; then egocentric processing surges forward as one figures out what to do about the “feeling tone” (pleasant, unpleasant, neutral) of the stimulus.
- Open awareness practices in which there are many moments of new contact could incline the brain toward allocentric modes.
- Lower regions of the thalamus and its reticular cap - with concentrations of GABA neurons - inhibit egocentric processing.
- Reducing wanting reduces egocentric processing.

Liking and Wanting

- Distinct neural systems for liking and wanting
- In the brain: feeling tone --> enjoying (liking) --> wanting --> pursuing
  - Wanting without liking is hell.
  - Liking without wanting is heaven.
- The distinction between *chandha* (wholesome wishes and aspirations) and *tanha* (craving)
- But beware: the brain usually wants (craves) and pursues (clings) to what it likes.

“Self” in the Mind

Definitions

- **Person** - The body-mind as a whole
  - Contains knowledge, personal memories, skills, temperament, personality tendencies, mood, etc.
  - Has considerable consistency over time
  - Deserves kindness and justice; is morally culpable

- **Self** - "I, me, and mine"
  - Psychological self; the "I" in "I am happy, I want a cookie, I know 2+2=4, I am for justice"; the "me" in "Do you love me?"
  - The apparent owner of experiences and agent of actions

- **Awareness** - The field in which the mind (as yet mysteriously) represents aspects of the mind to itself
  - "Global workspace" in which representations of the person, self-related functions, and subjectivity arise and pass away

Conventional Notions of "Self"

- **Unified -** coherent; just one; a being, an entity; some one looking out through your eyes.
- **Stable -** unchanging in its fundamentals; the core self as a child still feels present in you today
- **Independent -** things happen to the self, but it remains free of their effects in its essence.
- **Identity -** That which one is; that with which there is the greatest identification

Actual Experience of "Self"

- **Compounded** – Made up of many parts; one self vows to exercise early, another self turns off the alarm clock
- **Impermanent** – More or less present at different times; different aspects come forward at different times
- **Dependent** – Developed in interactions with caregivers and peers and encounters with the world; grounded in evolution; activating and deactivating as a means to the ends of the organism; especially responsive to opportunities and threats; self organizes around clinging; there is a process of *selfing* rather than a static, fixed, unchanging entity.
- **Part of the person** – There is awareness of aspects of self as contents within awareness like any others.

The dualistic ego-mind is essentially a survival mechanism, on a par with the fangs, claws, stingers, scales, shells, and quills that other animals use to protect themselves.

By maintaining a separate self-sense, it attempts to provide a haven of security.

Yet the very boundaries that create a sense of safety also leave us feeling cut off and disconnected.

John Welwood

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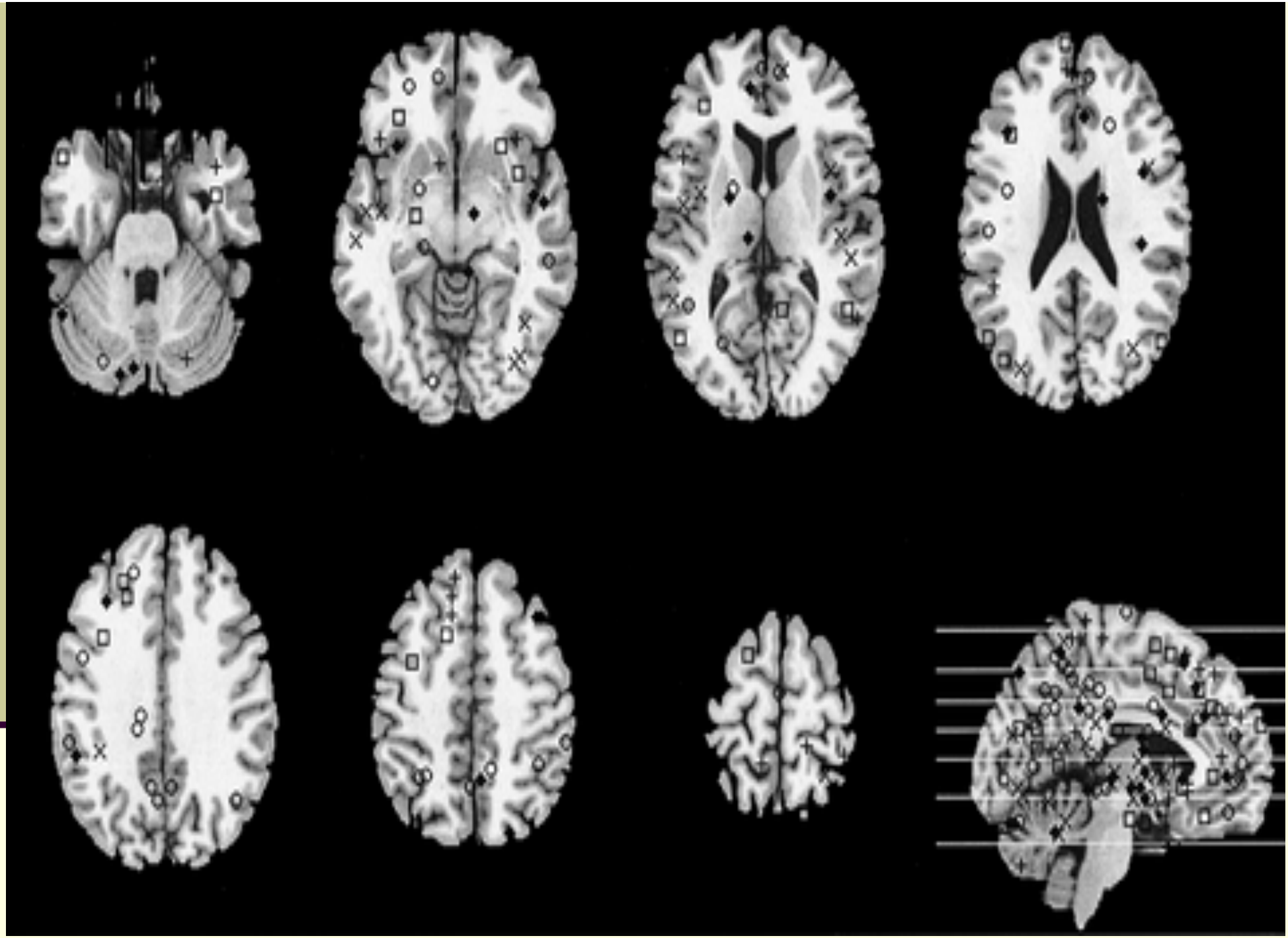
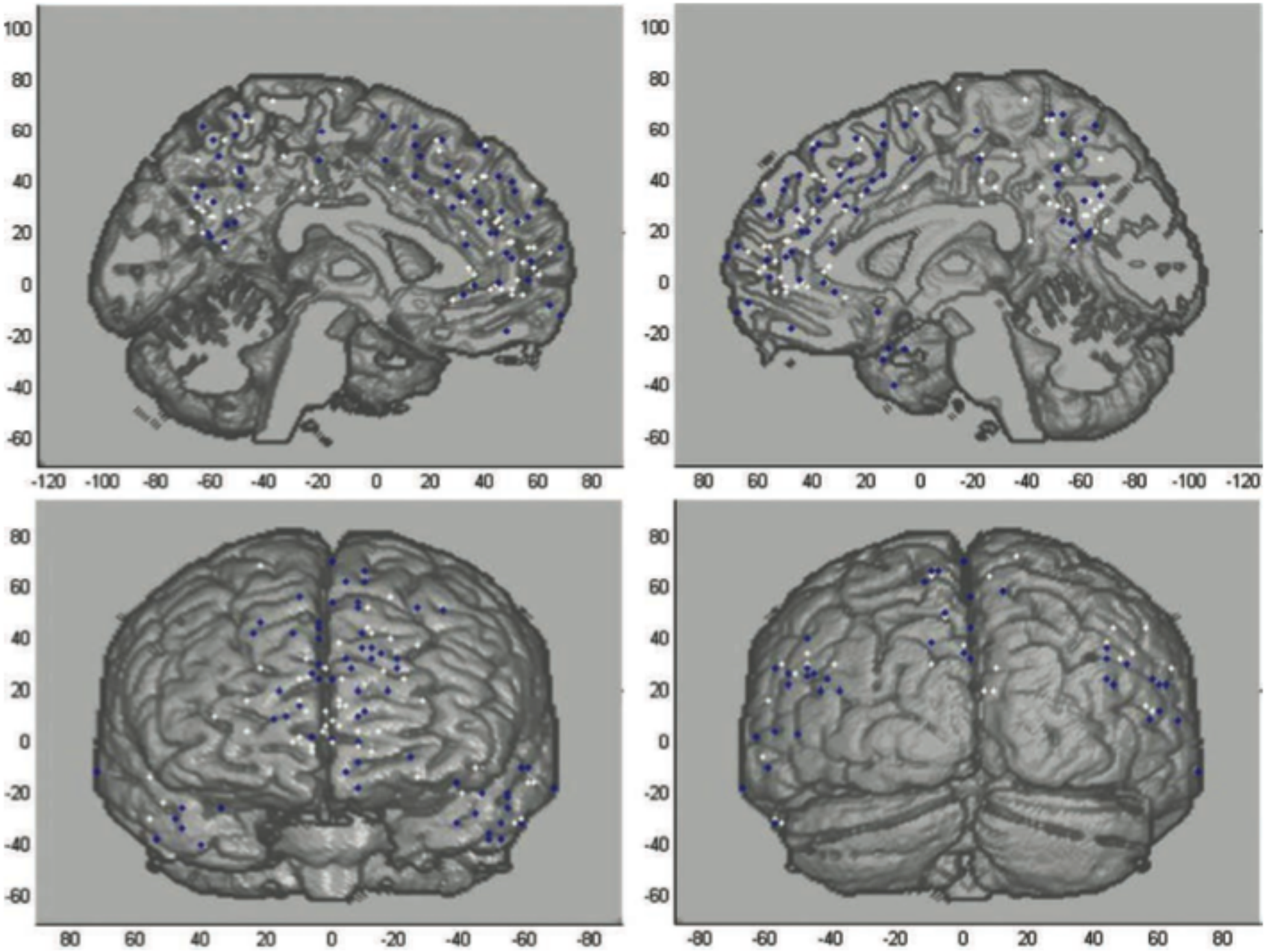
“Self” in the Brain



Brain activations of "selfing" - Gillihan, et al., *Psych Bulletin,* 1/2005



Legrand and Ruby, 2009. What is self-specific? [White = self; blue = other]

Properties of Self in Your Brain

- **Compounded** – Distributed systems and sub-systems; no homunculus looking through your eyes
- **Impermanent** – Circuits light up and deactivate; fluid, transient
- **Dependent** – Dependent on neural structures and processes; dependent on the evolution of specialized neural tissues (e.g., spindle cells); responsive to stimuli;
- **Part of the person** – Self-related activations in neural circuitry are just a tiny fraction of the total activations in the brain
  - The neural circuitry associated with self representations or functions also performs many other activities unrelated to self.
  - In the brain, self is not special.

Subjectivity Doesn't Equal a Subject

- Ordinary awareness has an inherent subjectivity, a localization to a particular perspective (e.g., to my body, not yours).
- The brain indexes across experiences of subjectivity to create an apparent subject.
- That apparent subject is elaborated and layered through the maturation of the brain, notably regions of the prefrontal cortex.
- But there is no subject *inherent* in subjectivity!

- Awareness requires subjectivity, but not a subject.

What Self?

In sum, from a neurological standpoint, the everyday feeling of being a unified self is an utter illusion:

- The apparently coherent and solid “I” is actually built from many neural subsystems, with no fixed center.
- The apparently stable “I” is is produced by variable and transient activations of neural circuits.
- The apparently independent “I” depends on neural circuitry, the evolutionary processes that built them, critical interactions with others to shape those circuits, and the stimuli of the moment.

Neurologically, self is “empty” - without absolute, inherent existence.

Self Is Like a Unicorn

- Self-related patterns of information and neural activity are as real as those that underlie the smell of roses.
- But that which they point to – a unified, enduring, independent "I" – just doesn't exist.
- Just because we have a sense of self does not mean that we are a self. The brain strings together heterogenous moments of self-ing and subjectivity into an illusion of homogenous coherence and continuity.
- Real representations in the brain of a horse point to something that is also real. But the real representations of a unicorn in the brain point to something that is not real.
- The real representations of the self in the brain point to another mythical creature: the apparent self.

“Self” Has Its Uses

- A convenient way to distinguish one person from another
- Brings a sense of continuity to life’s experiences
- Adds verve and commitment to relationships
- People without self structures have impaired relationships.
- Self-related processes helped our ancestors succeed in increasingly social hunter-gatherer bands in which interpersonal dynamics played a strong role in survival.
- The evolution of relationships fostered the evolution of self and vice versa; the benefits of self have thus been a factor in the evolution of the brain.
- Self has been stitched into human DNA by reproductive advantages slowly accumulating across a hundred thousand generations.

Selfing Leads to Suffering

- When “I, me, and mine” are mental objects like any other, there’s no problem.
  - For example, the Buddha routinely used “I” and “you.”
- But when we privilege self-representations through identifiying with them or defending or glorifying them . . . Then we suffer, and create suffering for others.
- The key is to be able to move dextrously into and back out of self-representations; that’s skillful means.

No self,
no problem

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

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

Healthy “Narcissistic Supplies”

Feeding the Hungry Heart

- Healthy development requires caregivers to give a child extensive mirroring, attunement, and prizing; healthy adult relationships require much the same.
- These are normal “narcissistic supplies.” Deficits in them lead to:
  - Feelings of inadequacy, worthlessness, and shame
  - Tendencies toward extremes of clinging or distance
- As an adult, you can take in narcissistic supplies, gradually weaving them into your brain and your being.
- This is not clinging to praise, etc. It is filling the hole in your heart so your happiness is increasingly unconditional - not dependent on external events.

Self-Goodwill

- All the great teachers have told us to be compassionate and kind toward all beings. And that whatever we do to the world affects us, and whatever we do to ourselves affects the world.

- You are one of the “all beings!” And kindness to yourself benefits the world, while hurting yourself harms the world.

- It’s a general moral principle that the more power you have over someone, the greater your duty is to use that power wisely. Well, who is the one person in the world you have the greatest power over? It’s your future self. You hold that life in your hands, and what it will be depends on how you care for it.

- Consider yourself as an innocent child, as deserving of care and happiness as any other.

The root of Buddhism is compassion,

and the root of compassion is compassion for oneself.

Pema Chodron

The good life, as I conceive it, is a happy life.

I do not mean that if you are good you will be happy;
I mean that if you are happy you will be good.

Bertrand Russell

If one going down into a river,
swollen and swiftly flowing,
is carried away by the current --
how can one help others across?

The Buddha

Self-Compassion

- Compassion is the wish that a being not suffer, combined with sympathetic concern. Self-compassion simply applies that to oneself. It is not self-pity, complaining, or wallowing in pain.

- Studies show that self-compassion buffers stress and increases resilience and self-worth.

- But self-compassion is hard for many people, due to feelings of unworthiness, self-criticism, or “internalized oppression.” To encourage the neural substrates of self-compassion:
  - Get the sense of being cared about by someone else.
  - Bring to mind someone you naturally feel compassion for
  - Sink into the experience of compassion in your body
  - Then shift the compassion to yourself, perhaps with phrases like: “May I not suffer. May the pain of this moment pass.”

“Anthem”

Ring the bells that still can ring
Forget your perfect offering
There is a crack in everything
That’s how the light gets in
That’s how the light gets in

Leonard Cohen

How to Take in the Good

1. Look for positive **facts,** and let them become positive experiences.

2. Savor the positive experience:
   - Sustain it for 10-20-30 seconds.
   - Feel it in your body and emotions.
   - Intensify it.

3. Sense and intend that the positive experience is soaking into your brain and body - registering deeply in emotional memory.

Feeling Prized

- It is natural and important to feel that your person is special to others: appreciated, acknowledged, respected, cherished, prized.

- Bring to mind experiences of:
  - Being praised, complimented, acknowledged
  - A time you knew you were appreciated, perhaps after some contribution or generosity
  - Being wanted by someone; wanted by a group
  - Feeling cherished by someone

- In daily life, look for experiences of being prized, including in small ways, and then savor them so they sink in.

Feeling Like a Good Person

- Everyone has good qualities. No halo is required to have patience, determination, fairness, curiousity, kindness, etc.

- Recognizing these qualities in yourself is simply seeing reality with clear eyes, just like recognizing good food in your cupboard or good qualities in another person.

- Methods:
  - Pick a good quality that you know you have.
  - Pay attention to any obstructions to recognizing and appreciating this good quality. Let them be . . . then let them go and return attention to the good quality.
  - Gather evidence for this good quality in you (e.g., examples).
  - Be mindful of what the good quality feels like in your body and mind; let it sink in.
  - Consider how this good quality contributes to others.
  - Open to a simple gladness for this good quality; let it sink in.

Takng Life Less Personally

Relaxing Selfing: Perspectives

- You need a coherence of person to relax selfing.
- Cautions: dissociative disorders; borderline personality disorder; “spacey, airy” people
- 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).
- Enjoy the peace of less selfing.

Using Mindfulness to Relax Selfing

- Notice how little “I” there is in many activities (e.g., reaching for salt, cuddling); take in that sense of minimal selfing combined with life being OK.
- 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 being.
- Focus on present moment experience as a process.
- Be mindful of yourself as the protagonist in the “mini-movies” running in the mind.
- Beware presuming that others are intentionally targeting you.

“Only the Seen in the Seen . . .”

“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.

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The Buddha

Penetrative insight

joined with calm abiding

utterly eradicates

afflicted states.

Shantideva

Be still
Listen to the stones of the wall
Be silent, they try
To speak your

Name.
Listen to the living walls.
Who are you?
Who
Are you? Whose
Silence are you?

Thomas Merton

Great Books

See www.RickHanson.net for other great books.

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Where to Find Rick Hanson Online

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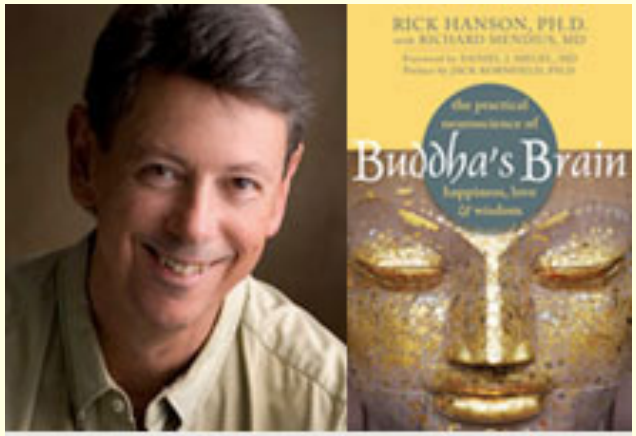

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