

Taking in the Good

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Topics

- **Perspectives**
- **Self-directed neuroplasticity**
- **The evolving brain**
- **The negativity bias**
- **Threat reactivity**
- **Implicit memory and inner resources**
- **“Taking in the good” (TIG)**
- **Using TIG to heal emotional pain**
- **Natural happiness**



Perspectives



*When the facts change,
I change my mind, sir.*

What do you do?

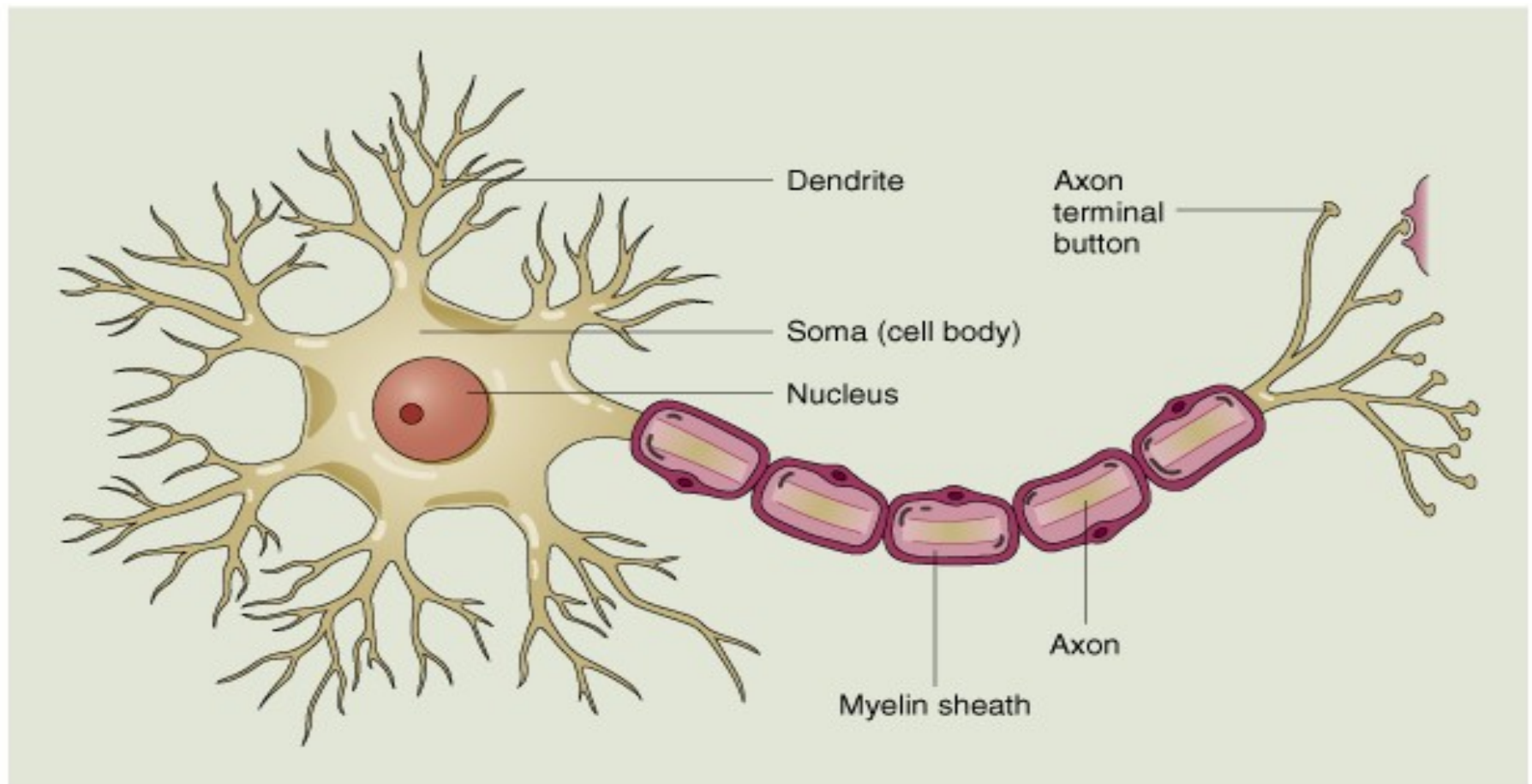
John Maynard Keynes



Self-Directed Neuroplasticity



A Neuron



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Your Brain: The Technical Specs

■ **Size:**

- 3 pounds of tofu-like tissue
- 1.1 trillion brain cells
- 100 billion “gray matter” neurons

■ **Activity:**

- Always on 24/7/365 - Instant access to information on demand
- 20-25% of blood flow, oxygen, and glucose

■ **Speed:**

- Neurons firing around 5 to 50 times a second (or faster)
- Signals crossing your brain in a tenth of a second

■ **Connectivity:**

- Typical neuron makes ~ 5000 connections with other neurons:
~ 500 trillion synapses

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 - A Working Model

- The material nervous system represents immaterial information, including aggregates, dukkha, tanha.
- “Mind” is the information in the nervous system, most of which is unconscious. Mental activity depends upon neural activity.
- Mind is regarded as a natural phenomenon.
- Natural biological processes constrain, condition, and construct mental processes that condition NB processes that . . .



*[People] ought to know that
from nothing else but the brain
come joys, delights, laughter and sports,
and sorrows, griefs, despondency, and lamentations.*

Hippocrates

Fact #1

As your brain changes, your mind changes.



Ways That Brain Can Change Mind

■ For better:

- A little caffeine: more alertness
- Thicker insula: more self-awareness, empathy
- More left prefrontal activation: more happiness

■ For worse:

- Intoxication; imbalances in neurotransmitters
- Concussion, stroke, tumor, Alzheimer's
- Cortisol-based shrinkage of hippocampus: less capacity for contextual memory

Fact #2

As your mind changes, your brain changes.

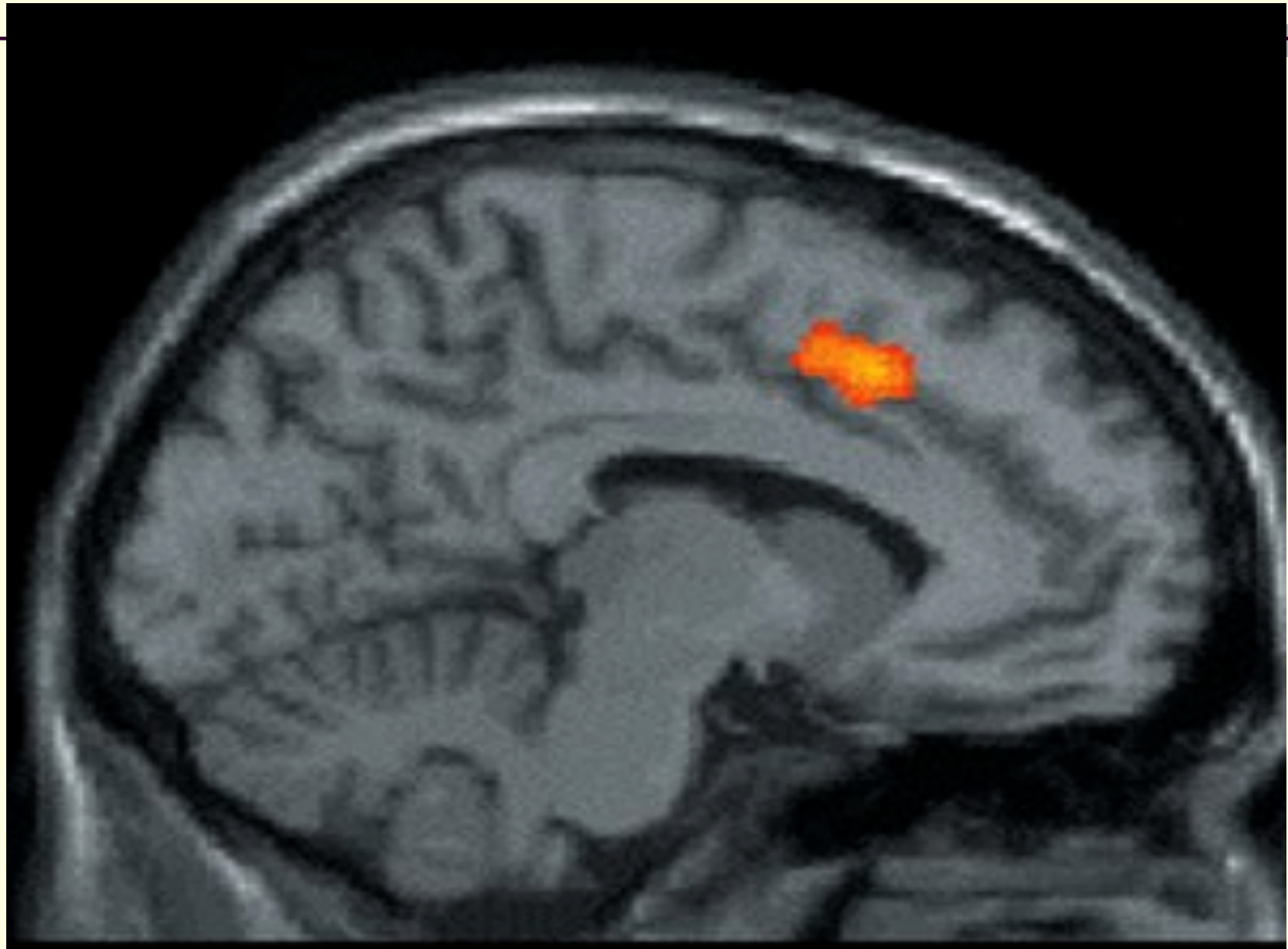
Immaterial mental activity maps to material neural activity.

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

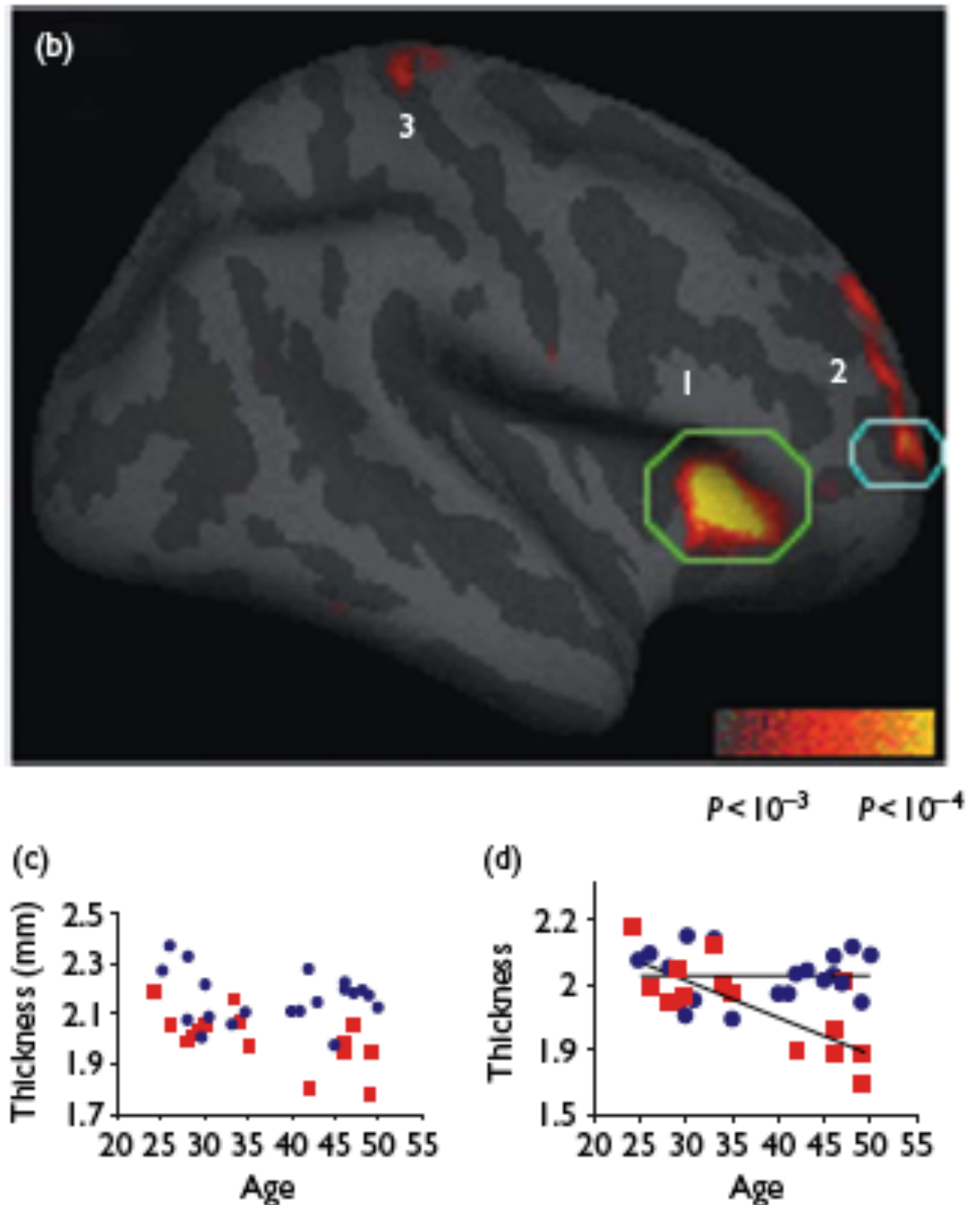
Tibetan Monk, Boundless Compassion



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”

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



Effects of Meditation on Brain - 1

Increased gray matter in the:

- Insula - interoception; self-awareness; empathy for emotions (Holzel et al., 2008; Lazar et al., 2005)
- Hippocampus - visual-spatial memory; establishing context; inhibiting amygdala and cortisol (Holzel et al., 2008; Luders et al., 2009)
- Prefrontal cortex (PFC) - executive functions; attention control (Lazar et al., 2005; Luders et al., 2009)

Reduced cortical thinning with aging in insula and PFC
(Lazar et al., 2005)

Effects of Meditation on Brain - 2

- Increased activation of left frontal regions (Davidson et al., 2003), which lifts mood (Davidson, 2004)
- Increased power and reach of gamma-range brainwaves (Cahn et al., 2010; Lutz et al., 2004) - may be associated with integration, “coming to singleness,” “unitary awareness”
- Preserved telomere length (Epel et al., 2009; Jacobs et al., 2011)

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

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by Nitrozac & Snaggy



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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.”

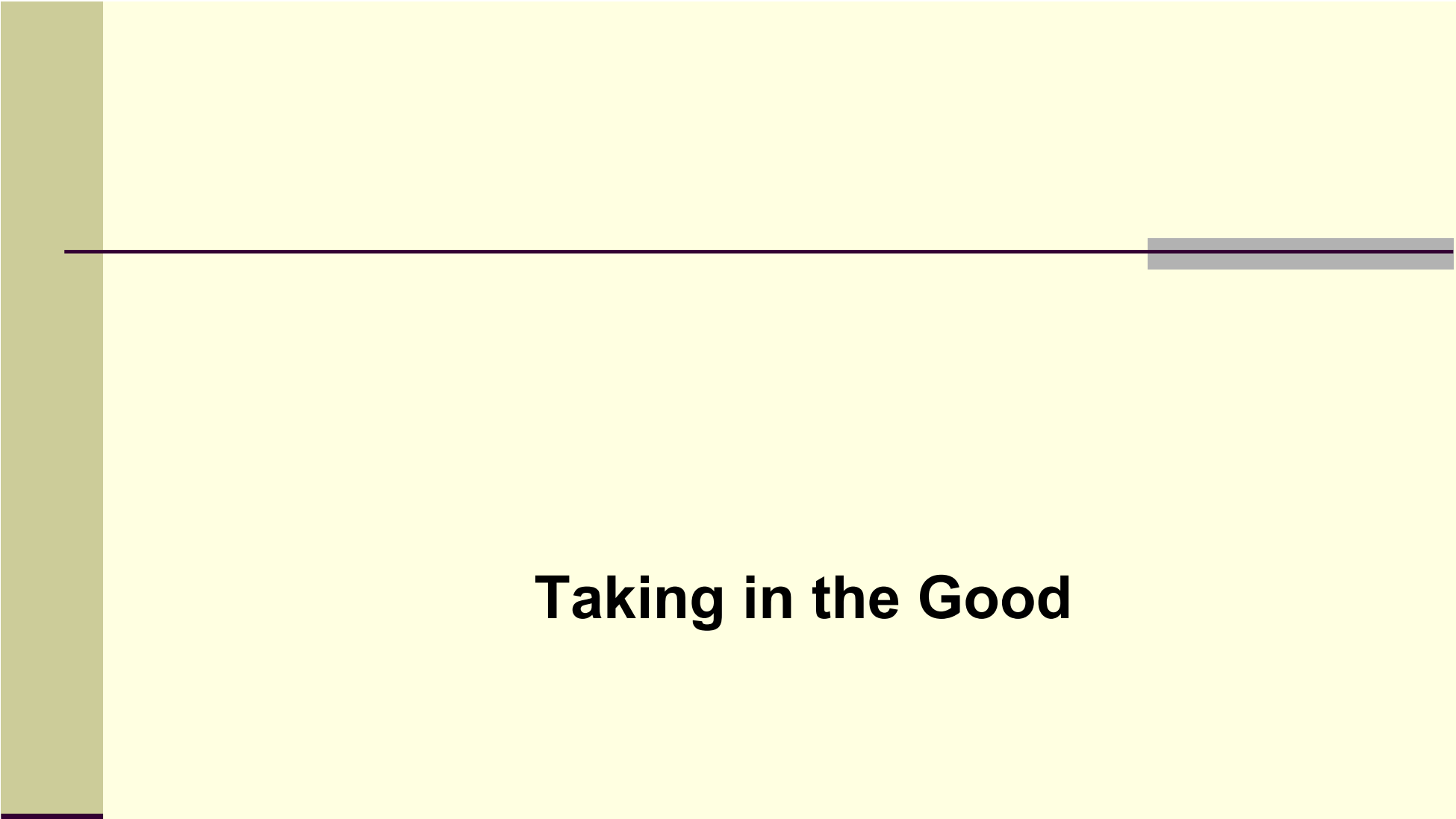
*The good life, as I conceive it, is a happy life.
I do not mean that if you are good you will be happy;
I mean that if you are happy you will be good.*

Bertrand Russell

“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



Taking in the Good



Just having positive experiences is not enough.

They pass through the brain like water through a sieve, while negative experiences are caught.

We need to engage positive experiences actively to weave them into the brain.

Inner Resources Include

- **Virtues** (e.g., patience, energy, generosity, restraint)
- **Executive functions** (e.g., meta-cognition)
- **Attitudes** (e.g., optimism, openness, confidence)
- **Capabilities** (e.g., mindfulness, emotional intelligence, resilience)
- **Positive emotions** (e.g., gratitude, self-compassion)
- **Approach orientation** (e.g., curiosity, exploration)

Cultivating Inner Resources

- Inner resources develop via pleasant and painful experiences, modeling, conceptualization, and practice.
- **Pleasant experiences** are a particularly powerful factor, e.g.:
 - Nurture child development
 - Encourage exploration and skill development
 - Help us endure the unpleasant and convert it to resources
 - Motivate us to continue learning
 - Initiate and sustain the Responsive mode
 - One can value pleasant experiences without craving them.
- The final common pathway of all these processes is the *installation* of the resource in neural structure.

Cultivation in Context

- Three ways to engage the mind:
 - Be with it. Decrease negative. Increase positive.
 - The garden: Observe. Pull weeds. Plant flowers.
 - Let be. Let go. Let in.
 - Mindfulness present in all three ways to engage mind
- While “being with” is primary, it’s often isolated in Buddhist, nondual, mindfulness-based practice.
- Skillful means for decreasing negative and increasing positive have developed over 2500 years. Why not use them?

HEAL by Taking in the Good

1. Have a positive experience. Notice or create it.
2. Enrich the experience through duration, intensity, multimodality, novelty, personal relevance
3. Absorb the experience by intending and sensing that it is sinking into you as you sink into it.
4. Link positive and negative material.

Benefits: Specific contents internalized. Implicit value of being active and treating yourself like you matter. Gradual sensitization of the brain to the positive.

Targets of TG

- Bodily states - healthy arousal; PNS; vitality
- Emotions - both feelings and mood
- Views - expectations; object relations; perspectives on self, world, past and future
- Desires - values, aspirations, passions, wants
- Behaviors - repertoire; inclinations

Instances of Taking in the Good

- You find yourself already having a good experience.
- You self-activate a good experience by:
 - Looking for a good fact
 - Recalling a good fact
 - Creating a good fact
 - Imagining a good fact that has never been
- Situations:
 - On the fly
 - At specific times (e.g., meals, before bed)
 - When prompted (e.g., by a therapist)

Types of Good Facts

- Conditions (e.g., food, shelter, fresh air, have friends, dog loves you, flowers blooming, ain't dead yet)
- Events (e.g., finished a load of laundry, someone was friendly to you, this cookie tastes good)
- Qualities within oneself (e.g., fairness, decency, determination, good at baking, loving toward kids)

Resources for Taking in the Good

- Intention; willing to feel good
- Identified target experience
- Openness to the experience; embodiment
- Mindfulness of the steps of TG to sustain them
- Working through obstructions

Some Types of Resource Experiences

Avoiding Harms

- Feeling basically alright right now
- Feeling protected, strong, safe, at peace
- The sense that awareness itself is untroubled

Approaching Rewards

- Feeling basically full, the enoughness in this moment as it is
- Feeling pleased, glad, grateful, satisfied
- Therapeutic, spiritual, or existential realizations

Attaching to Others

- Feeling basically connected
- Feeling included, seen, liked, appreciated, loved
- Feeling compassionate, kind, generous, loving

Implicit TG in Therapy

- Drawing attention to good facts
- Encouraging a positive response to a good fact
- Drawing attention to key aspects of an experience
- Slowing the client down; not moving on
- Linking rewards to desired thoughts and actions
- Doing TG oneself

Explicit TG in Therapy

- Teaching the method
 - Background helps about brain, negativity bias
 - Emphasizing facts and mild experiences
 - Surfacing obstructions
- Doing TG with client(s) during a session
 - To reinforce a key resource state
 - To link rewards to desired thoughts or actions
- Encouraging TG between sessions
 - Naming occasions
 - Identifying key positive facts and experiences

Doing TG with a Couple

- Basic steps (often informal):
 - Attention to a good fact
 - Evoking and sustaining a good experience
 - Managing obstructions
 - Awareness of the impact on one's partner
 - Debriefing, often from both partners

- Pitfalls to avoid:
 - Seeming to side with one person
 - Unwittingly helping a person overlook real issues
 - Letting the other partner pile on

Obstructions to Taking in the Good

■ General

- Distractibility
- Blocks to self-awareness in general

■ Specific

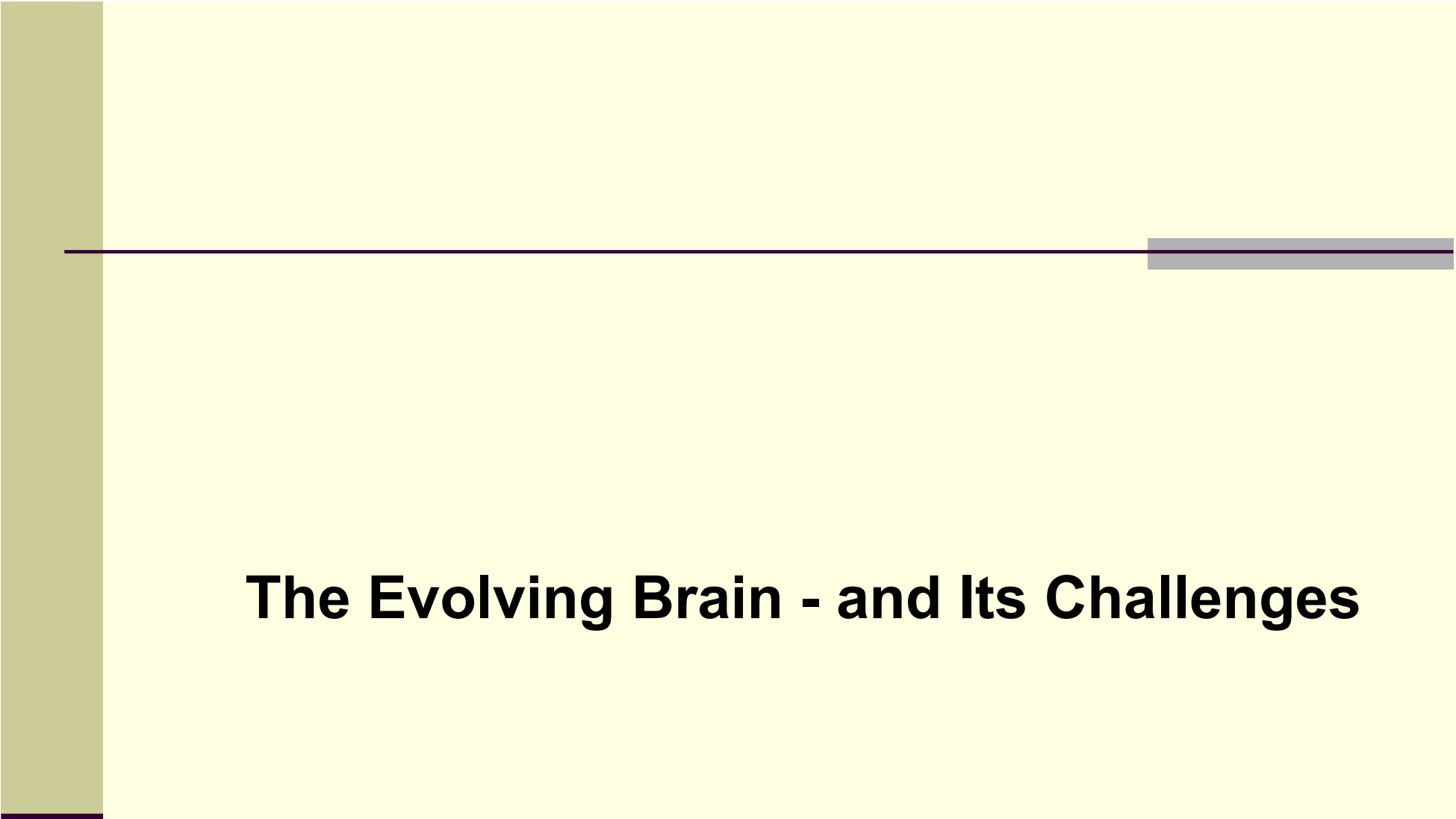
- Fears of losing one's edge or lowering one's guard
- Sense of disloyalty to others (e.g., survivor guilt)
- Culture (e.g., selfish, vain, sinful)
- Gender style
- Associations to painful states
- Secondary gains in feeling bad
- Not wanting to let someone off the hook
- Thoughts that TG is craving that leads to suffering

Promoting Client Motivation

- During therapy, but mainly between sessions, notice:
 - When learning from therapy works well
 - New insights
 - When things happen consistent with therapist's realistic view of you, the world, the future
 - Good qualities in yourself emphasized by therapist
- Then practice three, sometimes four, steps of TIG.
- Can be formalized in daily reflections, journaling
- In general: take appropriate risks of “dreaded experiences,” notice the (usually) good results, and then take those in.

TIG and Children

- All kids benefit from TIG.
- Particular benefits for mistreated, anxious, spirited/ADHD, or LD children.
- Adaptations:
 - Brief
 - Concrete
 - Natural occasions (e.g., bedtimes)

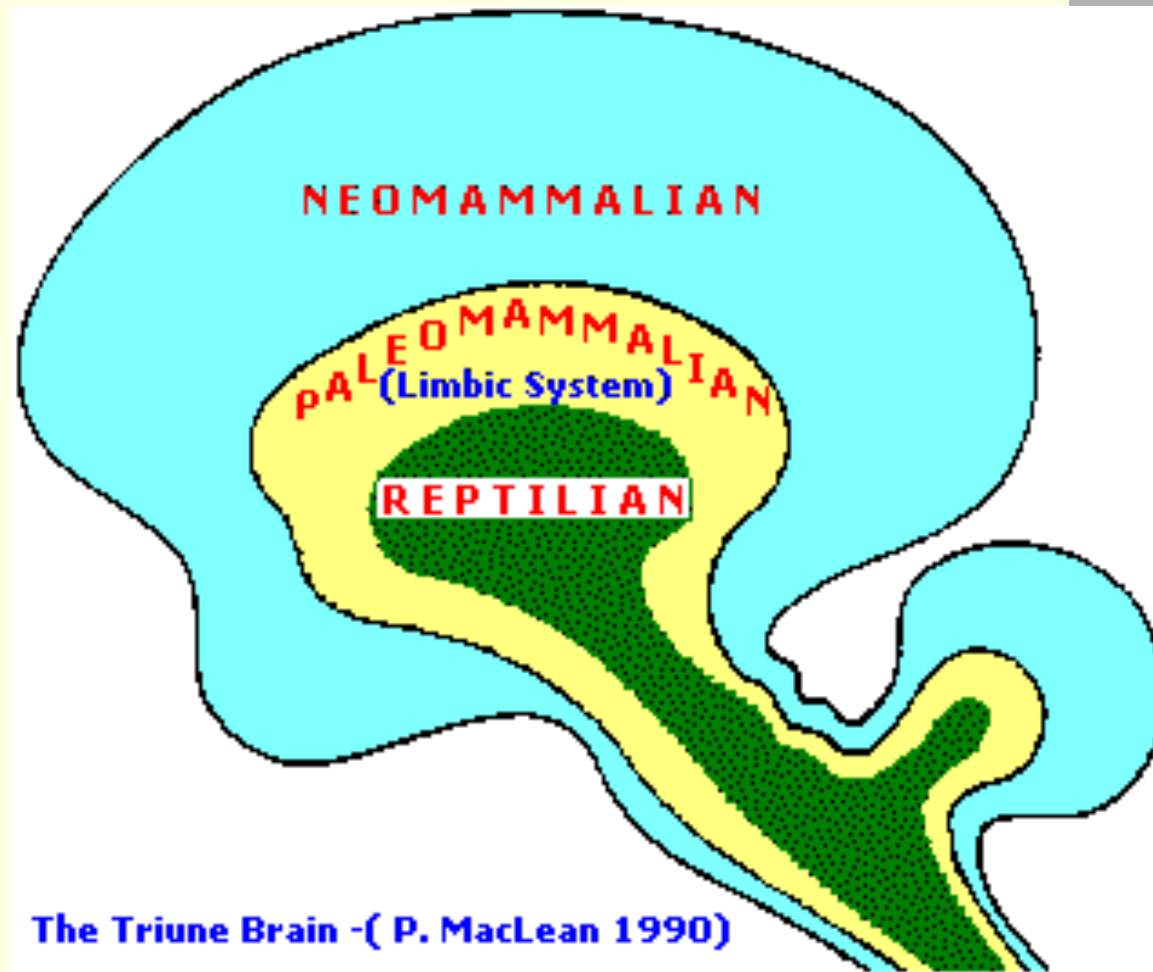


The Evolving Brain - and Its Challenges

Evolution

- ~ 4+ billion years of earth
- 3.5 billion years of life
- 650 million years of multi-celled organisms
- 600 million years of nervous system
- ~ 200 million years of mammals
- ~ 60 million years of primates
- ~ 6 million years ago: last common ancestor with chimpanzees, our closest relative among the “great apes” (gorillas, orangutans, chimpanzees, bonobos, humans)
- 2.5 million years of tool-making (starting with brains 1/3 our size)
- ~ 150,000 years of *homo sapiens*
- ~ 50,000 years of modern humans
- ~ 5000 years of blue, green, hazel eyes

Evolutionary History



The Triune Brain



r Brain
el 3



"With all due respects, I find your disparaging remarks about the 'reptilian brain' unnecessary"

Three Fundamental Motivational and Self-Regulatory Systems

- **Avoid Harms:**

- Primary need, tends to trump all others

- **Approach Rewards:**

- Elaborated via sub-cortex in mammals for emotional valence, sustained pursuit

- **Attach to Others:**

- Very elaborated via cortex in humans for pair bonding, language, empathy, cooperative planning, compassion, altruism, etc.

The Homeostatic Home Base

When not disturbed by threat, loss, or rejection [no deficit of safety, satisfaction, and connection]

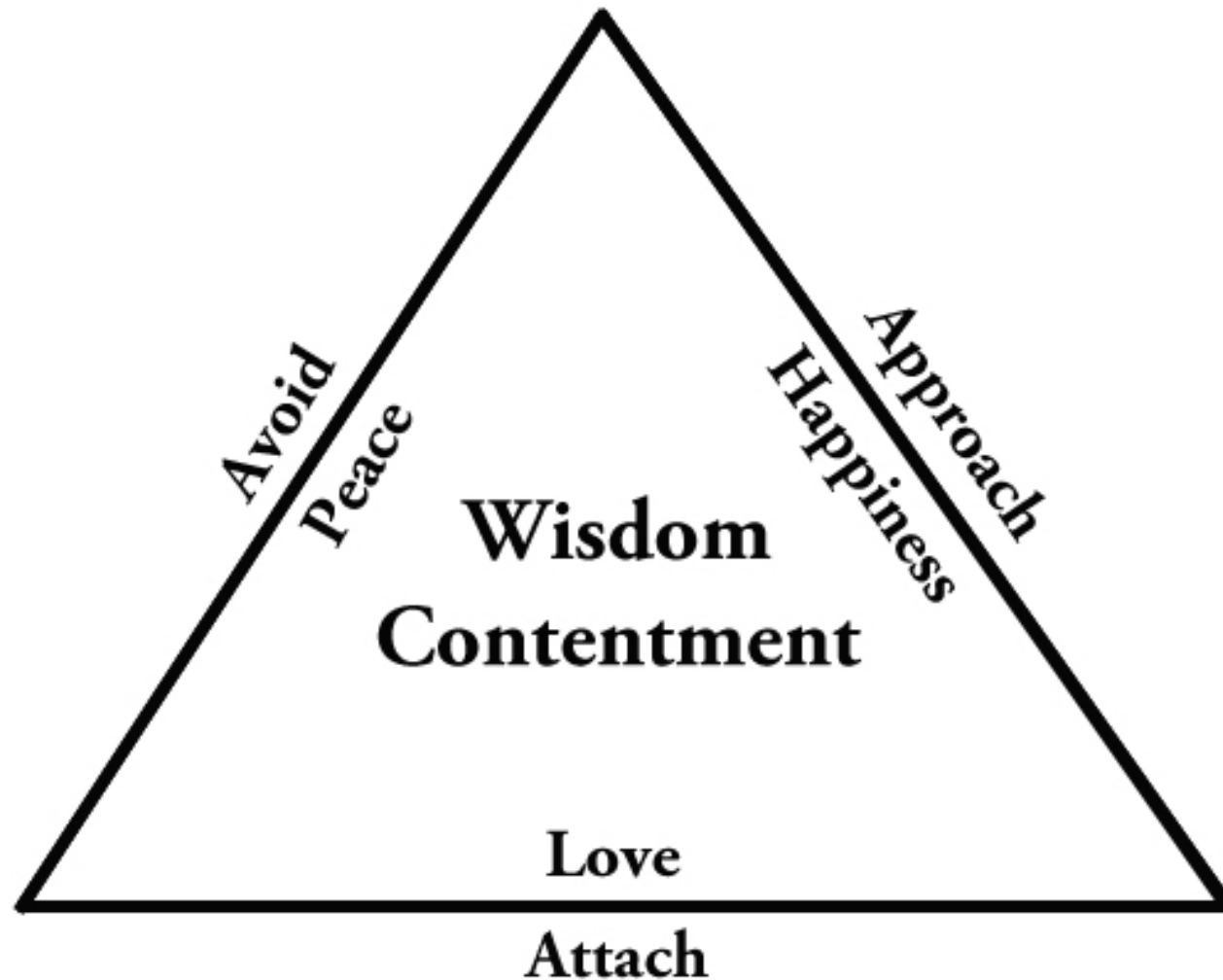
The body defaults to a sustainable equilibrium of refueling, repairing, and pleasant abiding.

The mind defaults to a sustainable equilibrium of:

- **Peace** (the Avoiding system)
- **Contentment** (the Approaching system)
- **Love** (the Attaching system)

This is the brain in its homeostatic ***Responsive,***
minimal craving mode.

The Responsive Mode



Some Benefits of Responsive Mode

- Recovery from “mobilizations” for survival:
 - Refueling after depleting outpourings
 - Restoring equilibrium to perturbed systems
 - Reinterpreting negative events in a positive frame
 - Reconciling after separations and conflicts

- Promotes prosocial behaviors:
 - Experiencing safety decreases aggression.
 - Experiencing sufficiency decreases envy.
 - Experiencing connection decreases jealousy.
 - We're more generous when our own cup runneth over.

But to Cope with Urgent Needs, We Leave Home . . .

When disturbed by threat, loss, or rejection [deficit of safety, satisfaction, or connection]:

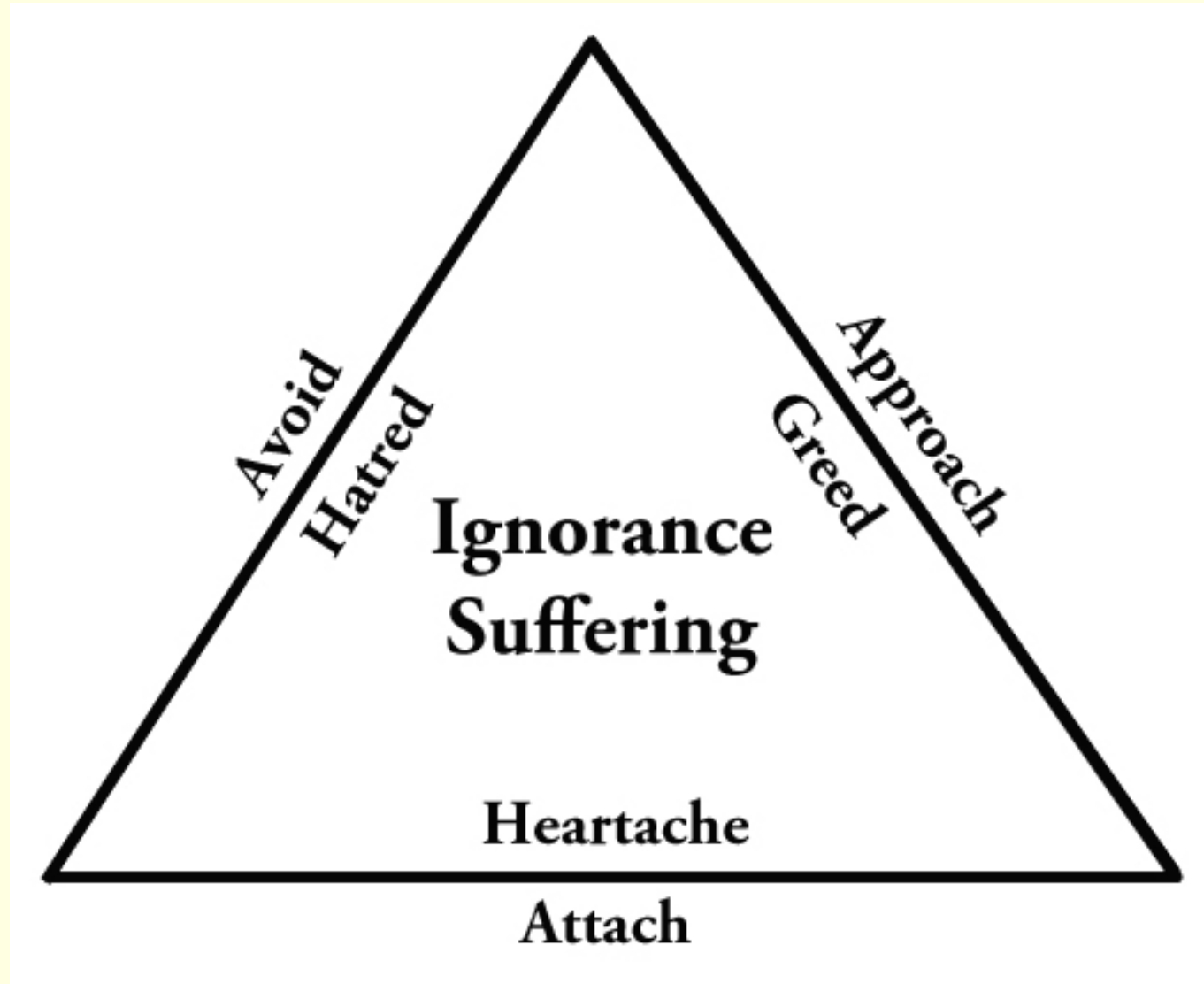
The body fires up into the stress response; outputs exceed inputs; long-term building is deferred.

The mind fires up into:

- **Hatred** (the Avoiding system)
- **Greed** (the Approaching system)
- **Heartache** (the Attaching system)

This is the brain in allostatic, **Reactive**, *craving* mode.⁵⁵

The Reactive Mode



Reactive Dysfunctions in Each System

- **Avoid** - Anxiety disorders; PTSD; panic, terror; rage; violence
- **Approach** - Addiction; over-drinking, -eating, -gambling; compulsion; hoarding; driving for goals at great cost; spiritual materialism
- **Attach** - Borderline, narcissistic, antisocial PD; symbiosis; *folie a deux*; “looking for love in all the wrong places”



The Negativity Bias

Negativity Bias

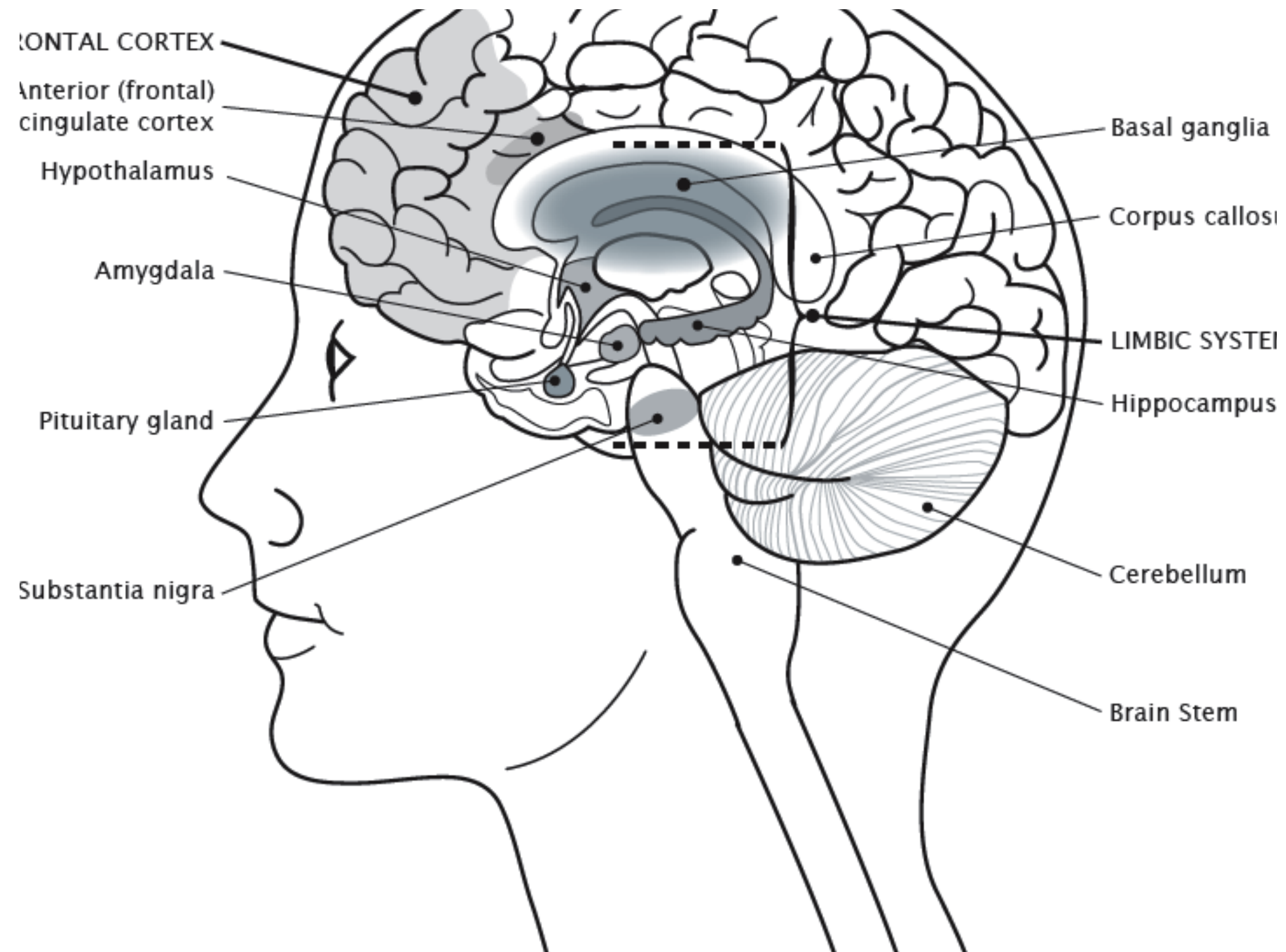
- As our ancestors evolved, not getting hit by “sticks” was more important for survival than getting “carrots.”
- Negative stimuli get more attention and processing. Loss aversion.
- Preferential encoding in implicit memory:
 - Easy to create learned helplessness, hard to undo
 - Negative interactions: more powerful than positive
 - Good at learning from bad, bad at learning from good
 - Most good experiences are wasted on the brain:
lowers both the results of practice and motivation

Negativity Bias: Some Consequences

- Negative stimuli get more attention and processing.
- We generally learn faster from pain than pleasure.
- People work harder to avoid a loss than attain an equal gain (“endowment effect”)
- Easy to create learned helplessness, hard to undo
- Negative interactions: more powerful than positive
- Negative experiences sift into implicit memory.

One Neural Consequence of Negative Experiences

- Amygdala (“alarm bell”) initiates stress response
- Hippocampus:
 - Forms and retrieves contextual memories
 - Inhibits the amygdala
 - Inhibits cortisol production
- Cortisol:
 - Stimulates and sensitizes the amygdala
 - Inhibits and can shrink the hippocampus
- Consequently, chronic negative experiences:
 - Sensitize the amygdala alarm bell
 - Weaken the hippocampus: this reduces memory capacities and the inhibition of amygdala and cortisol production.
 - Thus creating vicious cycles in the NS, behavior, and mind



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A Poignant Truth

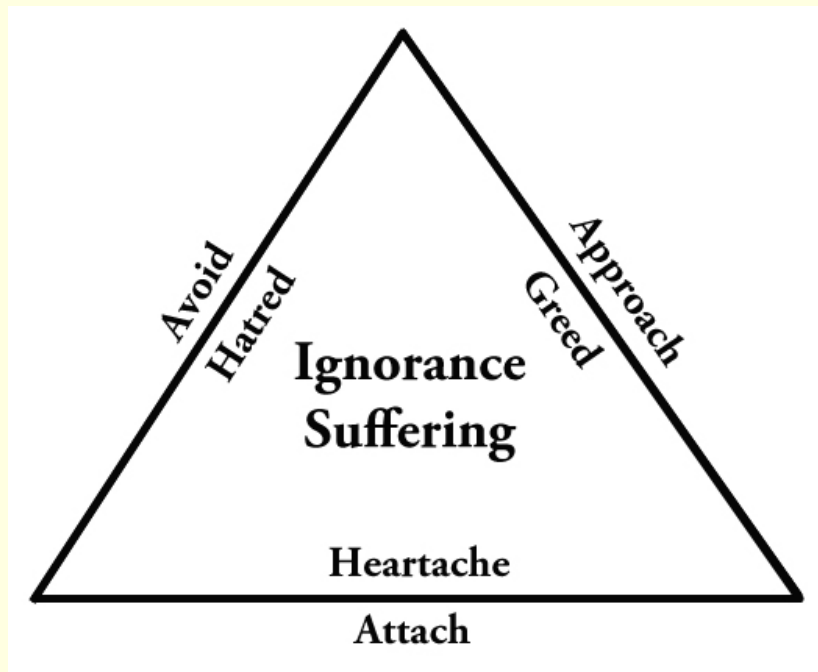
Mother Nature is tilted toward producing gene copies.

But tilted against personal quality of life.

And at the societal level, we have caveman/cavewoman brains armed with nuclear weapons.

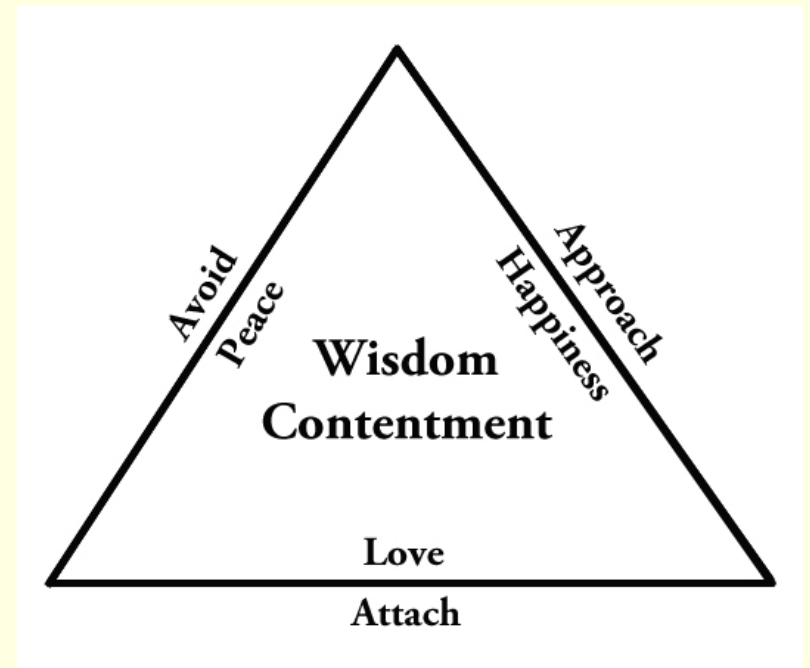
What shall we do?

Choices . . .

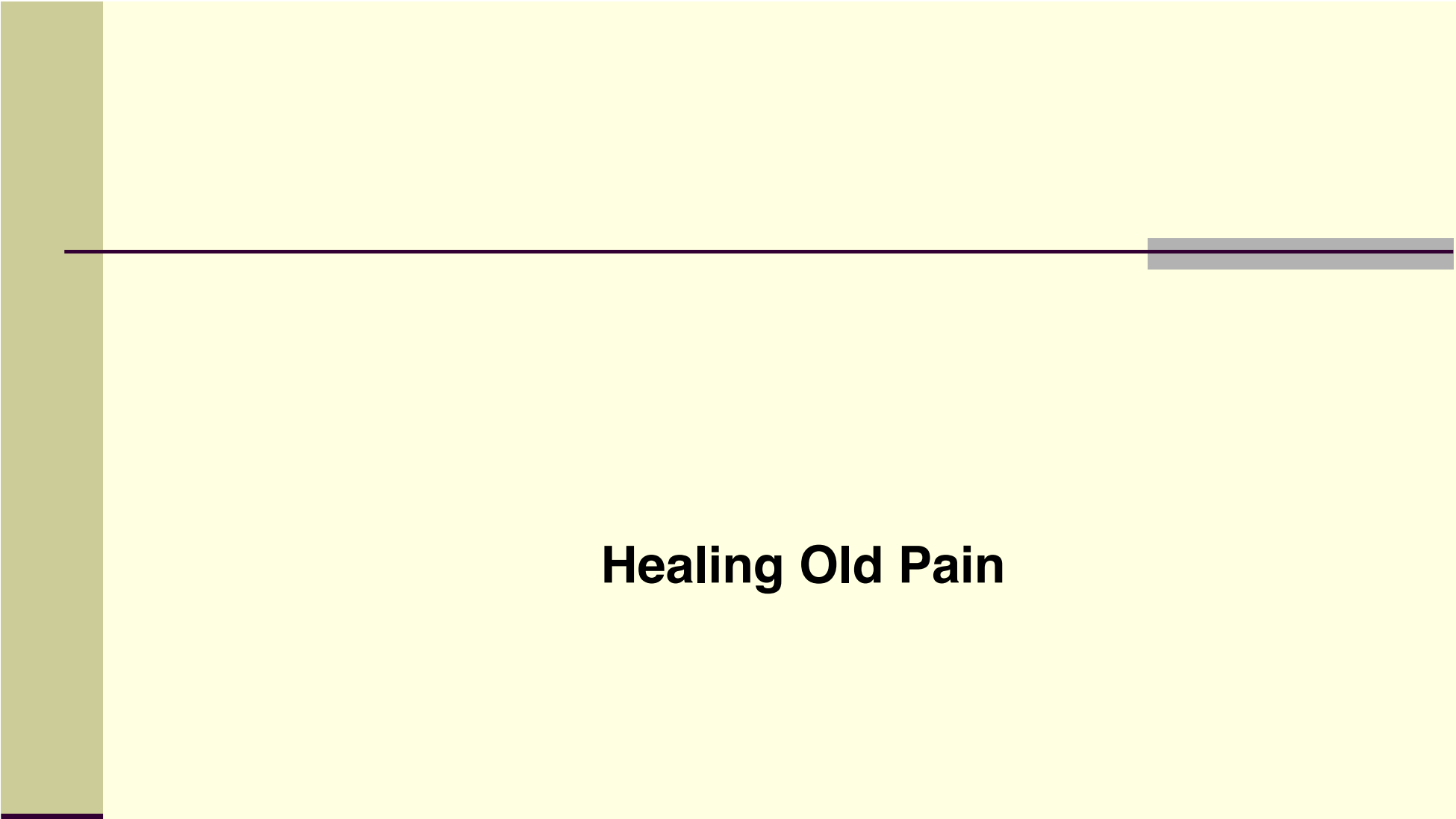


Reactive Mode

Or?



Responsive Mode



Healing Old Pain

Using Memory Mechanisms to Help Heal Painful Experiences

- The machinery of memory:
 - When explicit or implicit memory is re-activated, it is re-built from schematic elements, not retrieved *in toto*.
 - When attention moves on, elements of the memory get re-consolidated.
- The open processes of memory activation and consolidation create a window of opportunity for shaping your internal world.
- Activated memory tends to associate with other things in awareness (e.g., thoughts, sensations), esp. if they are prominent and lasting.
- When memory goes back into storage, it takes associations with it.
- You can imbue implicit and explicit memory with positive associations.

The Fourth Step of TG

- When you are having a positive experience:
 - Sense the current positive experience sinking down into old pain, and soothing and replacing it.
- When you are having a negative experience:
 - Bring to mind a positive experience that is its antidote.
- In both cases, have the positive experience be big and strong, in the forefront of awareness, while the negative experience is small and in the background.
- You are not resisting negative experiences or getting attached to positive ones. You are being kind to yourself and cultivating positive resources in your mind.

Psychological Antidotes

Approaching Opportunities

- Satisfaction, fulfillment --> Frustration, disappointment
- Gladness, gratitude --> Sadness, discontentment, “blues”

Affiliating with “Us”

- Attunement, inclusion --> Not seen, rejected, left out
- Recognition, acknowledgement --> Inadequacy, shame
- Friendship, love --> Abandonment, feeling unloved or unlovable

Avoiding Threats

- Strength, efficacy --> Weakness, helplessness, pessimism
- Safety, security --> Alarm, anxiety
- Compassion for oneself and others --> Resentment, anger

The Tip of the Root

- For the fourth step of TIG, try to get at the youngest, most vulnerable layer of painful material.
- The “tip of the root” is commonly in childhood. In general, the brain is most responsive to negative experiences in early childhood.
- Prerequisites
 - Understanding the need to get at younger layers
 - Compassion and support for the inner child
 - Capacity to “presence” young material without flooding

TIG and Trauma

- General considerations:
 - People vary in their resources and their traumas.
 - Often the major action is with “failed protectors.”
 - Cautions for awareness of internal states, including positive
 - Respect “yellow lights” and the client’s pace.
- The first three steps of TIG are generally safe. Use them to build resources for tackling the trauma directly.
- As indicated, use the fourth step of TIG to address the peripheral features and themes of the trauma.
- Then, with care, use the fourth step to get at the heart of the trauma.

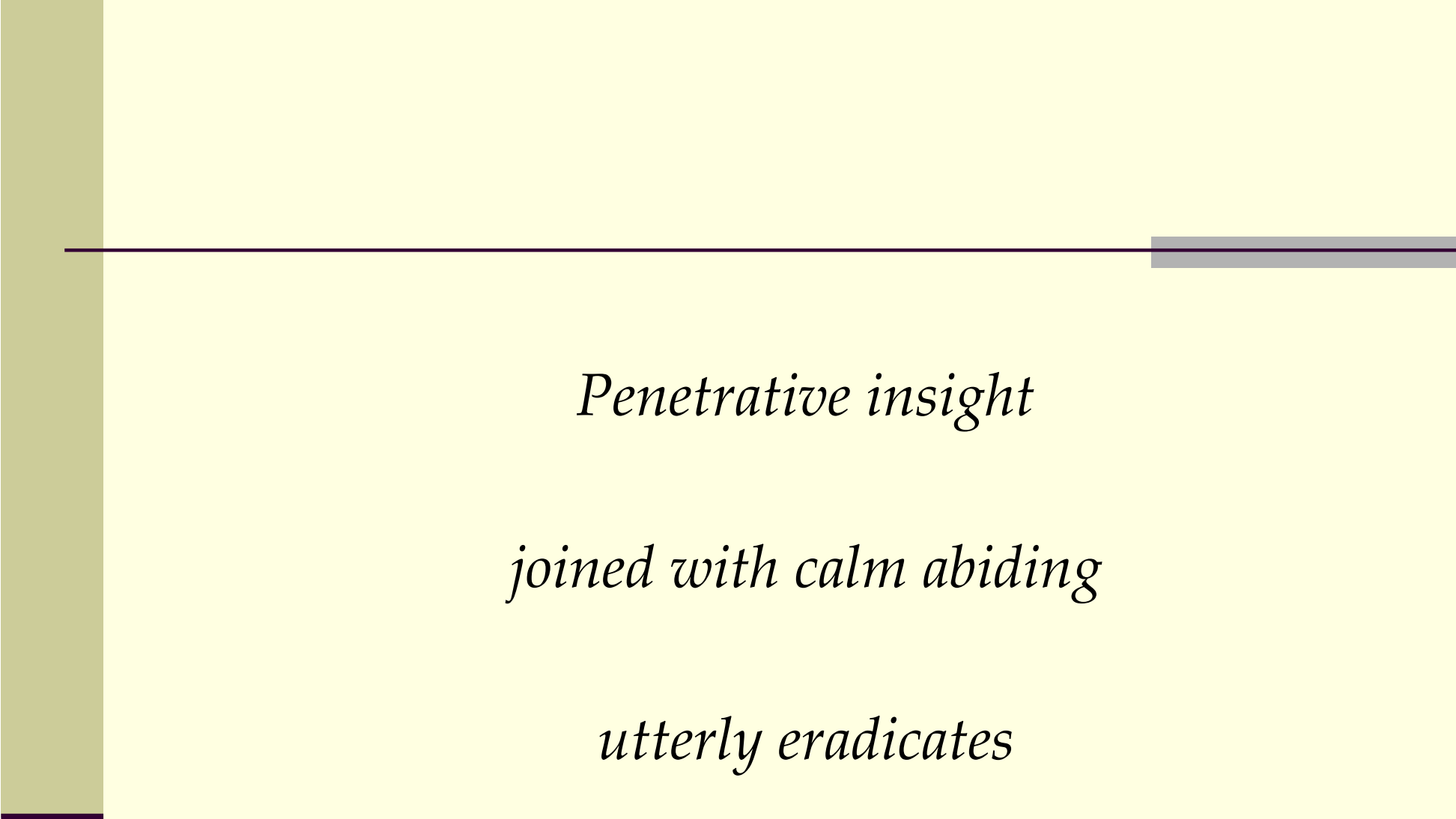
First of all, do no harm.

Coming Home . . .

Peaceful

Happy

Loving



*Penetrative insight
joined with calm abiding
utterly eradicates
afflicted states.*

Shantideva

Great Books

See www.RickHanson.net for other great books.

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See www.RickHanson.net for other scientific papers.

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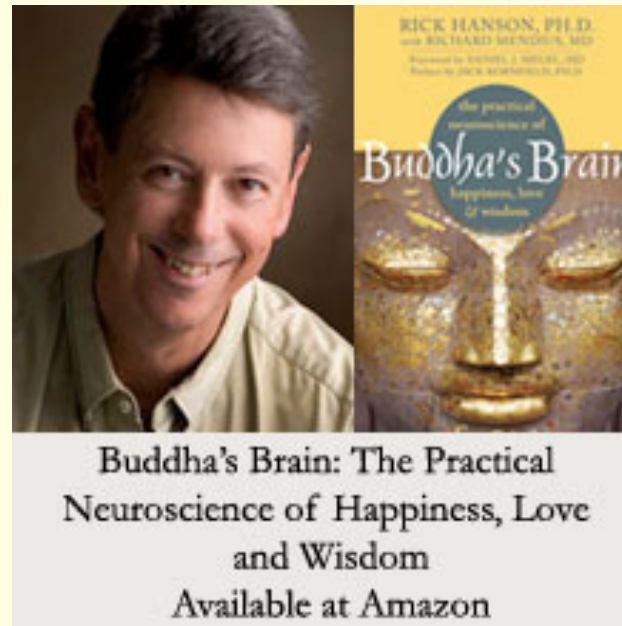
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Where to Find Rick Hanson Online



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