The Not-Craving Brain:
From Greed, Hatred, and Heartache
To Contentment, Peace, and Love

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Topics

- Three evolving neural systems: Avoid, Approach, Attach

- Two modes for each system:
  - Responsive (replenishing)
  - Reactive (expending)

- The negativity bias and threat reactivity

- Stimulating and strengthening Responsive
Three Evolving Neural Systems: Avoid, Approach, Attach
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
- ~ 80 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
The Evolving Brain
Three Stages of Brain Evolution

- **Reptilian:**
  - Brainstem, cerebellum, hypothalamus
  - Reactive and reflexive
  - *Avoid* hazards

- **Mammalian:**
  - Limbic system, cingulate, early cortex
  - Memory, emotion, social behavior
  - *Approach* rewards

- **Human:**
  - Massive cerebral cortex
  - Abstract thought, language, cooperative planning, empathy
  - *Attach* to “us”
CEREBRAL CORTEX STUFF
PLEASURE/PAIN CENTER STUFF
LIZARD BRAIN STUFF

Human Brain
el 3
The Responsive Mode
What is the nature of the brain when a person is:

- Experiencing inner peace?
- Self-actualizing?
- Enlightened (or close to it)?
Home Base of the Human Brain

When not threatened, ill, in pain, hungry, upset, or chemically disturbed, most people settle into being:

- **Calm** (the Avoid system)
- **Contented** (the Approach system)
- **Caring** (the Attach system)
- **Creative** - synergy of all three systems

This is the brain in its *responsive* mode.
Responsive Mode

![Responsive Mode Diagram]

- Approach
- Gratitude
- Peace
- Avoid

- Wisdom
- Contentment
- Love
- Affiliate
Sam sees “peeping among the cloud-wrack . . . a white star twinkle for a while.

The beauty of it smote his heart, as he looked up out of the forsaken land, and hope returned to him.

For like a shaft, clear and cold, the thought pierced him that in the end the Shadow was only a small and passing thing: there was light and high beauty forever beyond its reach.”

Tolkein, The Lord of the Rings
Key Benefits of Responsive Mode

- Fueling for Reactive mobilizations; recovery after
- Positive emotions, cognitions, and behaviors
- Positive cycles
- Promotes virtue and benevolence

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
The Reactive Mode
But To Cope with Urgent Needs, We Leave Home . . .

With activations of the three systems:

- **Avoid**: When we are threatened or harmed
- **Approach**: When we can’t attain important goals
- **Attach**: When we feel isolated, disconnected, unseen, unappreciated, unloved

This is the brain in its **reactive** mode of functioning - a kind of inner homelessness.
The Reactive Triangle

- Approach "Greed"
- Ignorance Suffering
- Avoid "Hatred"
- Heartache
- Affiliate
The urgency of survival needs have made the reactive mode very powerful in the rapidity, intensity, and inflexibility of its activations.
Reactive Dysfunctions in Each System

- **Approach** - Addiction; over-drinking, -eating, -gambling; compulsion; hoarding; driving for goals at great cost; spiritual materialism

- **Avoid** - Anxiety disorders; PTSD; panic, terror; rage; violence

- **Affiliate** - Borderline, narcissistic, antisocial PD; symbiosis; *folie a deux*; “looking for love in all the wrong places”
The Negativity Bias and Threat Reactivity
A key component of the Reactive mode is a focus on scanning for, reacting to, storing, and retrieving negative stimuli: *the negativity bias*. 
Negativity Bias: Causes in Evolution

“Sticks” - Predators, natural hazards, social aggression, pain (physical and psychological)

“Carrots” - Food, sex, shelter, social support, pleasure (physical and psychological)

During evolution, avoiding “sticks” usually had more impact on survival than approaching “carrots.”

Urgency - Usually, sticks must be dealt with immediately, while carrots allow a longer approach.

Impact - Sticks usually determine mortality, carrots not; if you fail to get a carrot today, you’ll likely have a chance at a carrot tomorrow; but if you fail to avoid a stick today - whap! - no more carrots forever.
With the negativity bias, the Avoid system hijacks the Approach and Attach systems, inhibiting them or using them for its ends.
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.
A Major Aspect of the Negativity Bias: Threat Reactivity

- Two mistakes:
  - Thinking there is a tiger in the bushes when there isn’t one.
  - Thinking there is no tiger in the bushes when there is one.

- We evolved to make the first mistake a thousand times to avoid making the second mistake even once.

- This evolutionary tendency is intensified by temperament, personal history, culture, and politics.

- Threat reactivity affects individuals, couples, families, organizations, nations, and the world as a whole.
Results of Threat Reactivity (Personal, Organizational, National)

- Our initial appraisals are mistaken:
  - Overestimating threats
  - Underestimating opportunities
  - Underestimating inner and outer resources

- We update these appraisals with information that confirms them; we ignore, devalue, or alter information that doesn’t.

- Thus we end up with views of ourselves, others, and the world that are ignorant, selective, and distorted.
Costs of Threat Reactivity
(Personal, Organizational, National)

- Feeling threatened feels bad, and triggers stress consequences.
- We over-invest in threat protection.
- The boy who cried tiger: flooding with paper tigers makes it harder to see the real ones.
- Acting while feeling threatened leads to over-reactions, makes others feel threatened, and creates vicious cycles.
- The Approach system is inhibited, so we don’t pursue opportunities, play small, or give up too soon.
- In the Attach system, we bond tighter to “us,” with more fear and anger toward “them.”
Choices . . .

Reactive Mode

Responsive Mode

Or?
Stimulating and Strengthening the Responsive Mode
Let’s explore:
• Parasympathetic activation
• Taking in the good
• Feeling cared about
• Feeling stronger and safer
• Liking, not wanting
Parasympathetic Activation

- Parasympathetic inhibits sympathetic and hormonal arousal.

- Attitude: Regard stressful activation as an affliction.

- Methods for stimulating the parasympathetic nervous system:
  - Multiple, long exhalations
  - Relaxes the tongue
  - Pleasant tastes
  - Relaxing the body

- Get in the habit of rapidly activating a damping cascade when the body gets aroused.

- Regard bodily activation as just another compounded, “meaningless,” and impermanent phenomenon; don’t react to it.
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 Cared About

As we evolved, we increasingly turned to and relied on others to feel safer and less threatened.
- Exile from the band was a death sentence in the Serengeti.
- Attachment: relying on the secure base
- The well-documented power of social support to buffer stress and aid recovery from painful experiences

Methods:
- Recognize it’s kind to others to feel cared about yourself.
- Look for occasions to feel cared about and take them in.
- Deliberately bring to mind the experience of being cared about in challenging situations.
- Be caring yourself.
Feeling Stronger and Safer

- Be mindful of an experience of strength (e.g., physical challenge, standing up for someone).

- Staying grounded in strength, let things come to you without shaking your roots, like a mighty tree in a storm.

- Be mindful of:
  - Protections (e.g., being in a safe place, imagining a shield)
  - People who care about you
  - Resources inside and outside you

- Let yourself feel as safe as you reasonably can:
  - Noticing any anxiety about feeling safer
  - Feeling more relaxed, tranquil, peaceful
  - Releasing bracing, guardedness, vigilance
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.
Practicing with Wanting

- Positive wants (e.g., practice, sobriety, love, aspirations) crowd out negative ones.

- Surround pleasant or unpleasant hedonic tones with spacious awareness - the “shock absorber” - without tipping into craving.

- Regard wants as just more mental content. Investigate them. Watch them come and go. No compulsion, no “must.”

- Be skeptical of predicted rewards - simplistic and inflated, from primitive subcortical regions. Explore healthy disenchantment.

- Pick a key want and just don’t do it.
“Taking the Fruit as the Path”

Gladness

Love

Peace
Where to Find Rick Hanson Online

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