

# Mindsight in Children and Adolescence: Strategies and Techniques to Help Kids Thrive

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How does  
*Interpersonal Neurobiology*  
*inform us*  
about  
the process of change in  
development?

What is the Mind?

What is a Healthy Mind?

How can we Cultivate a Healthy  
Mind and a Healthy World?

# The Developing Mind:

Memory

States of Mind

Attachment

Emotion

Representation

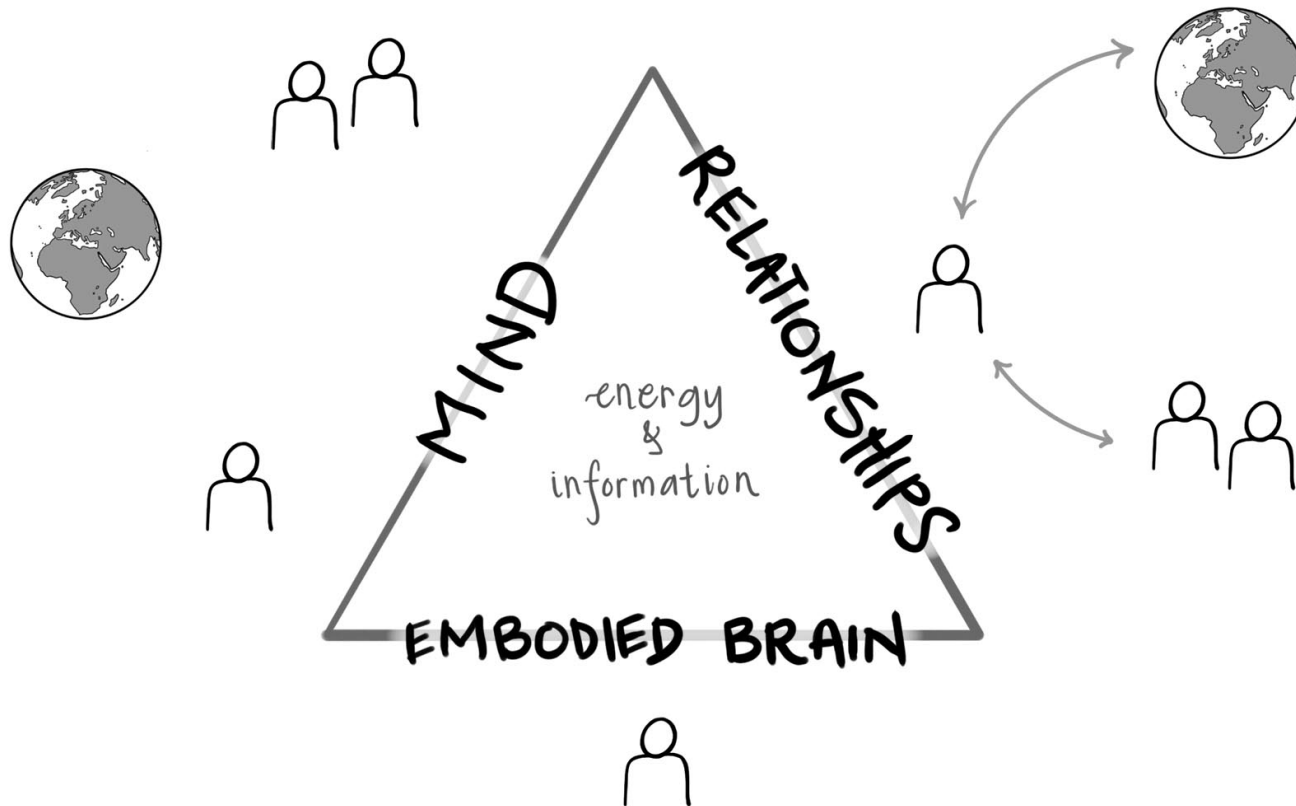
Regulation

Integration

# A Surprising Notion

- An often not discussed process is at the heart of both *neural function* and *relationships*. What do you think this might be?
- In other words, what is the shared element between relationships and the brain?
- And what does the “mind” have to do with these?

# Triangle of Human Experience



# An Overarching View:

- *Energy and Information Flow* is the basic “element” of the system of our lives
- When this flow happens “inside of us” we are looking at the embodied brain
- When this flow happens “between us” we are looking at our relationships
- The Mind may emerge from this flow—and also regulate it!

# What is EMERGENCE?

- (It is REAL, but not an emergency!)
- A process that arises from the interaction of elements of a complex system that is greater than the individual elements alone
- One possibility: The FACETS of mind are each emergent phenomena of ENERGY FLOW



# ASPECTS of ENERGY

- CLIFF features:

Contours

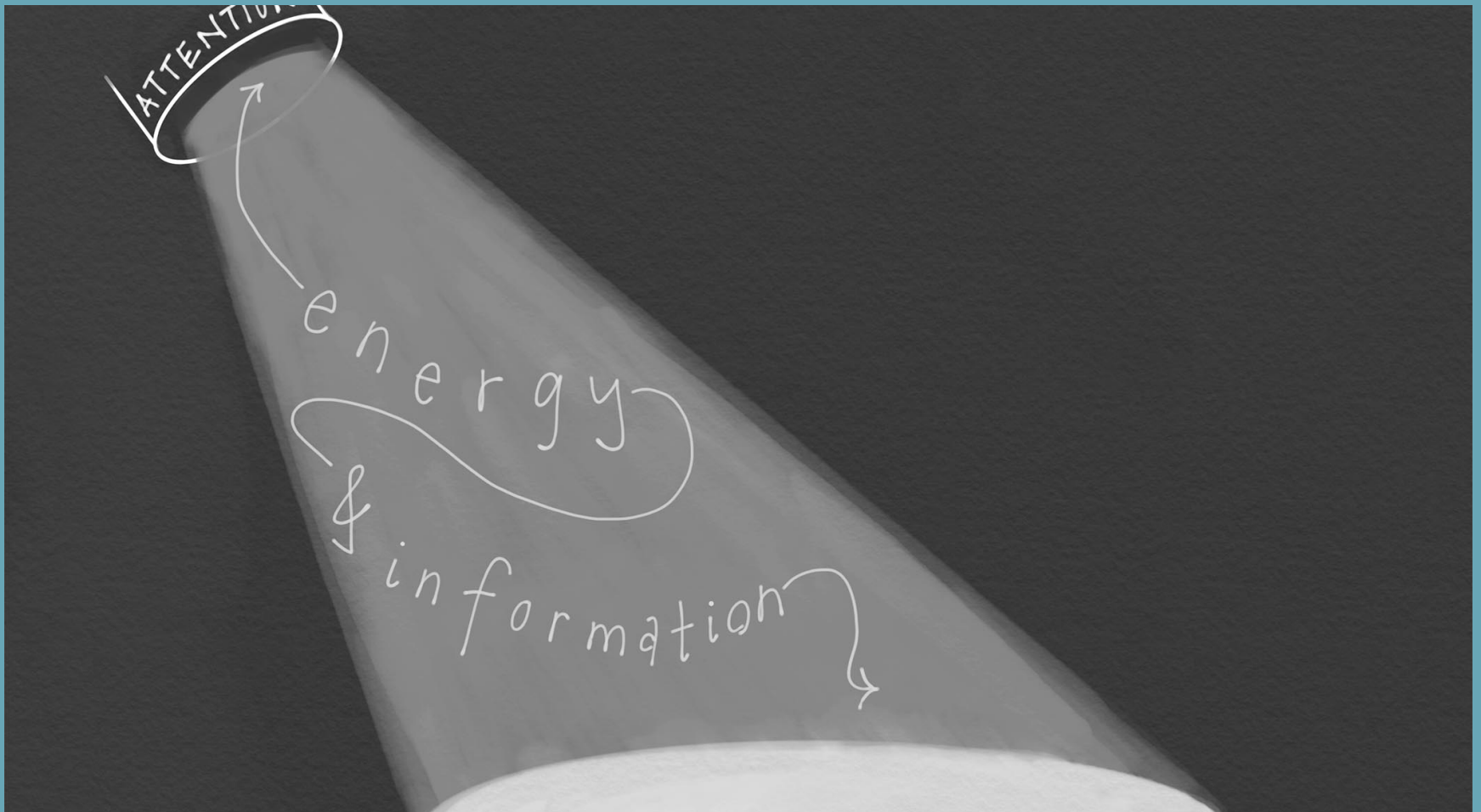
Location

Intensity

Frequency

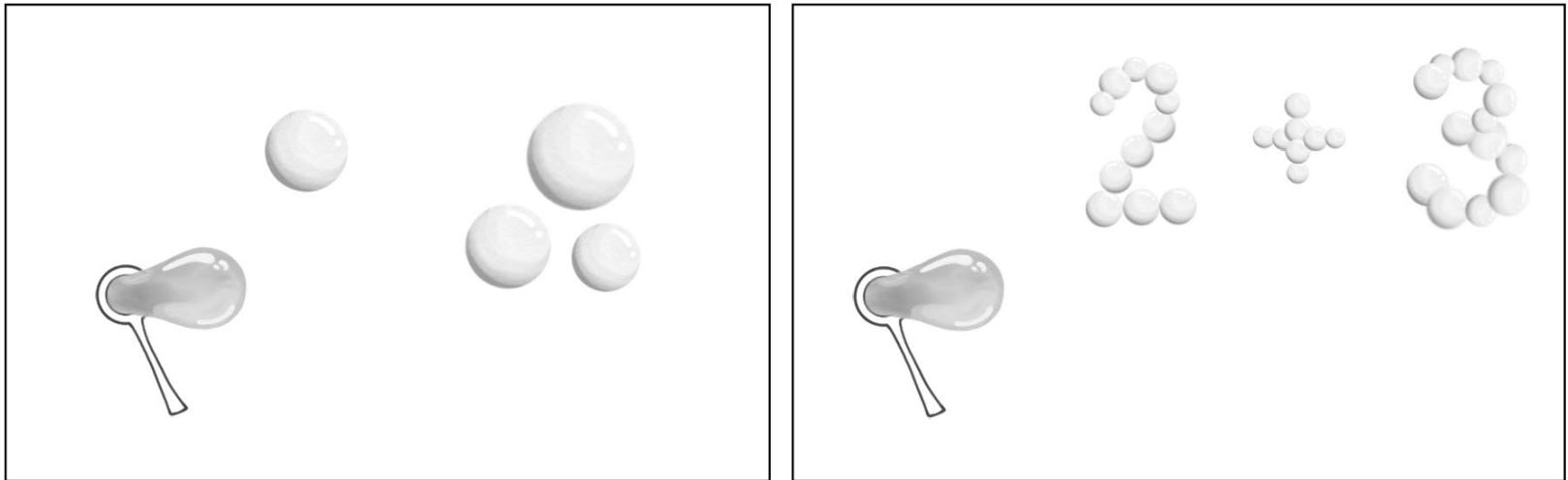
Form

# Attention and the Mind



# Mind as Energy and Information Flow

## Conduit & Constructor



# A common sequence:

- (Presumed) Categories  $\leftrightarrow$
- (Mental) Concepts  $\leftrightarrow$
- (Shared) Symbols

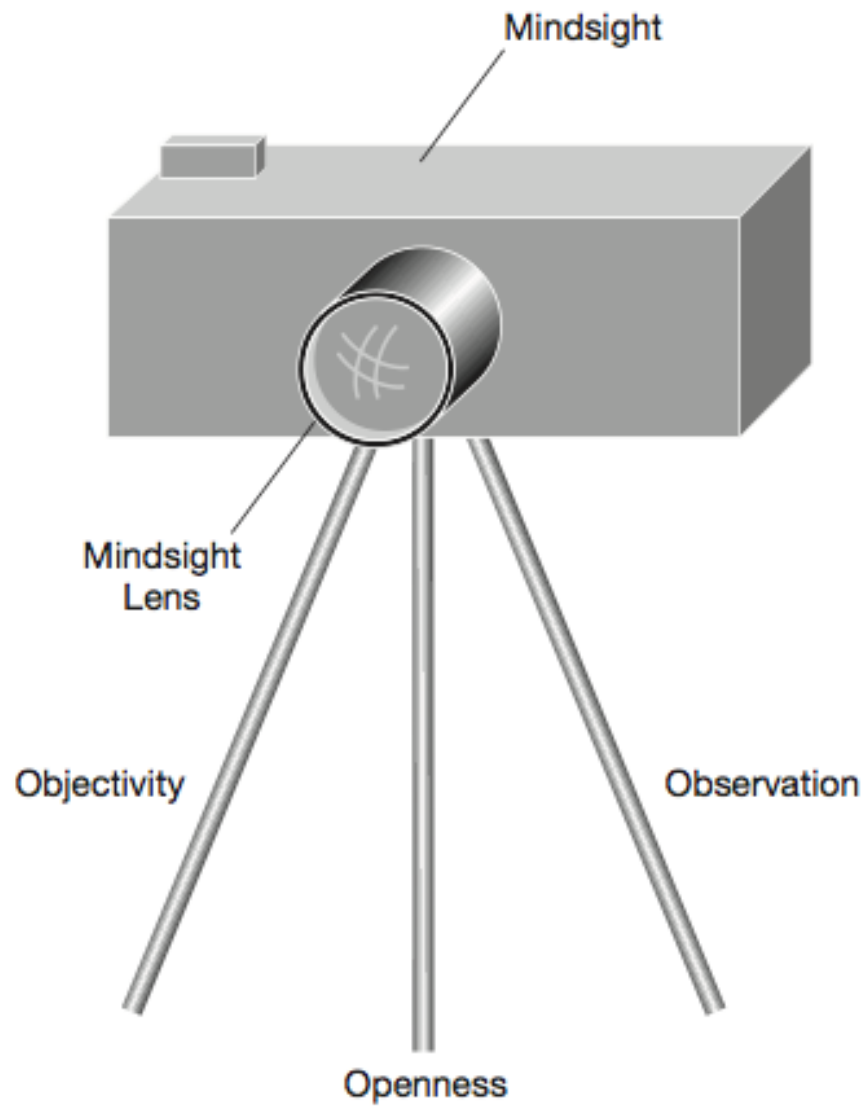
# MINDSIGHT is:

## Seeing the MIND of “SELF” and “Other”

1. Insight

2. Empathy

3. Integration → Kindness and Compassion



# HOW TO MODULATE Toward Optimal Self-Organization?

- Mental Health may be when the embodied and relational emergent, self-organizing process we are proposing is one facet of mind optimizes its flow.
- HOW? WITH MINDSIGHT

***OPTIMAL SELF-ORGANIZATION***

emerges with the

**Linkage of**

**Differentiated Parts**

**= “INTEGRATION”**



# Integration and Health : From a *FACES* Flow

Flexible

Adaptive

Coherent

Energized

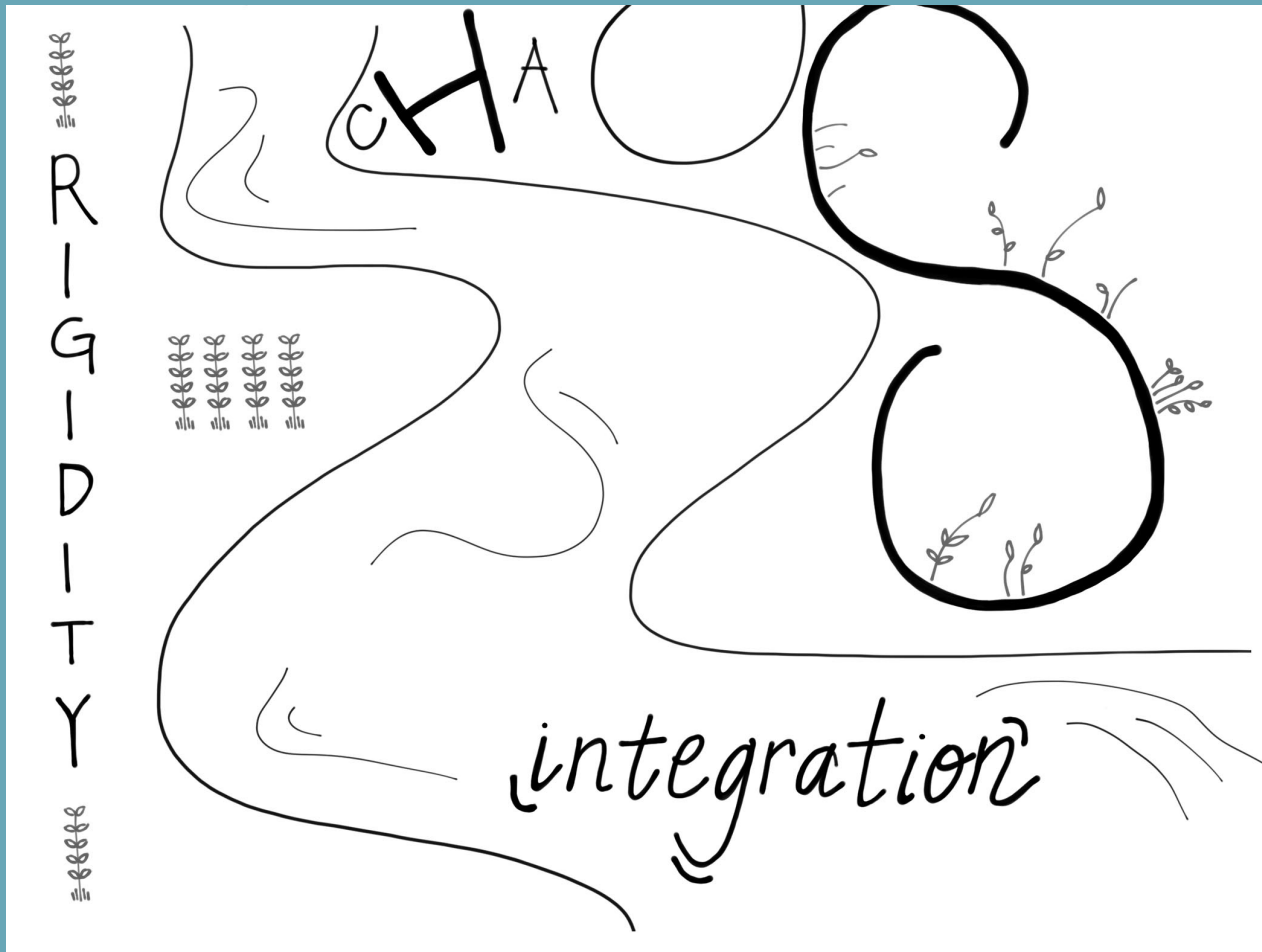
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table

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# The River of Integration

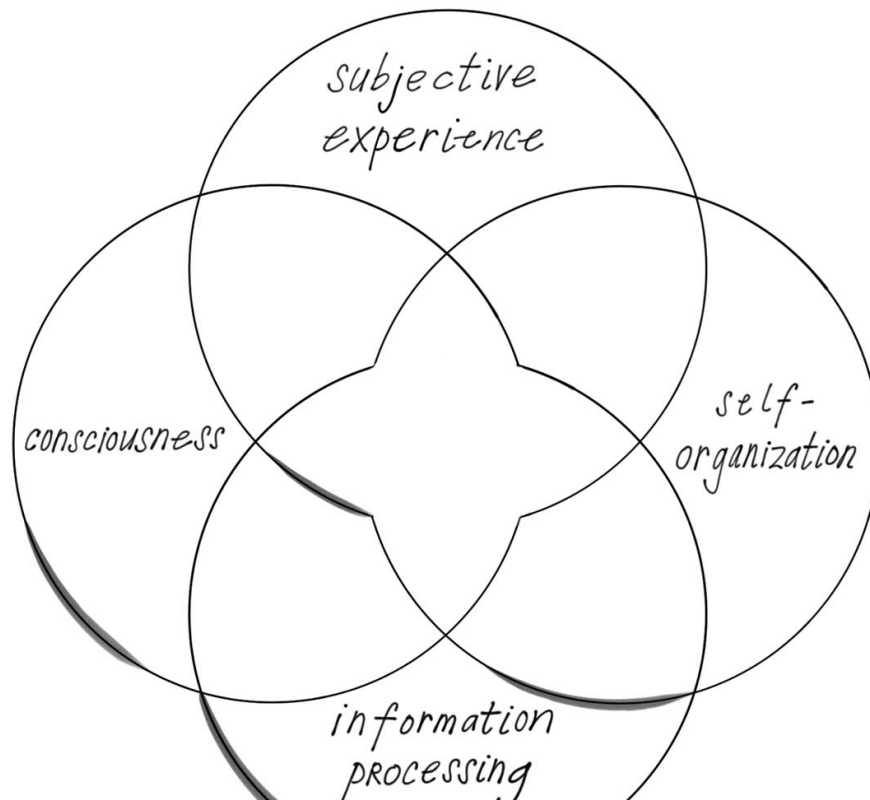


# SEEING the Mind—Involves *Sensing Energy and Information Flow Within and Between:*

- **1. Information Processing** (Feelings, Thoughts, Memories ...)
- **Subjective Experience** we feel in **Awareness**
- AND an...
- “Embodied and relational, emergent **self-organizing process** that regulates the flow of energy and information”

# The Mind's Many Facets

## FOUR FACETS of MIND



# Parent-Child Relationships

- How an “attachment figure” interacts with a child or adolescent is how they *share* energy and information.
- This E and I flow exchange shapes the activity and growth of the brain.
- How does this happen, and what do we know from science about how to optimize that neural growth?

# Fundamental Principle

- Where attention GOES...
- Neural firing FLOWS...and
- Neural Connection GROWS

# The Brain is a Social Organ

- The function of the brain is to engage with other people, other brains, in the shaping of its development over time and in shaping its activity in the present
- Humans can have more than one attachment figure="Alloparenting"
- We "see" each others' minds with reflective function, mentalization, "mindsight" and theory of mind

# Impact of Parental Presence on

- *Sense of Self*: Security of Attachment
- *Mindsight*: Insight, Empathy and Integration
- *Epistemic Trust*: How we know about the nature of reality
- *Capacity for Connection*: Becoming a WE



# A simple but profound pattern

- Integration (the LINKAGE of DIFFERENTIATED PARTS) may be the heart of well-being
- Integration in Relationships is the basis for SECURE ATTACHMENT...and leads to:
- Integration in the Brain, the basis for optimal SELF-REGULATION

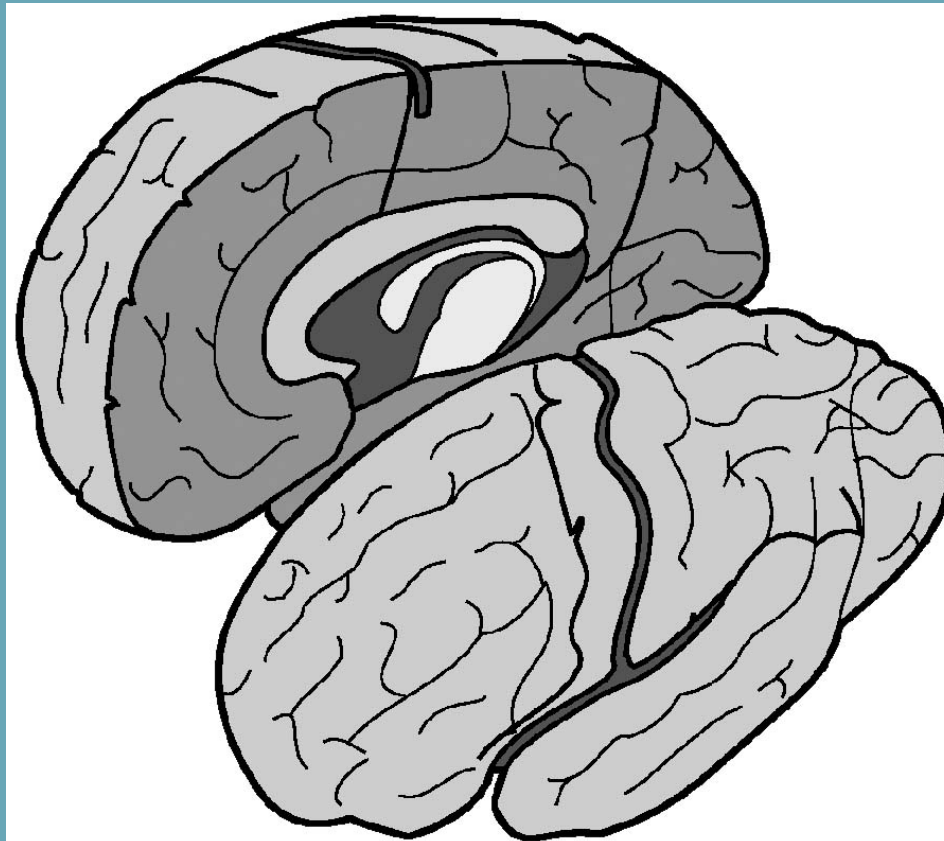
# Human Connectome Project

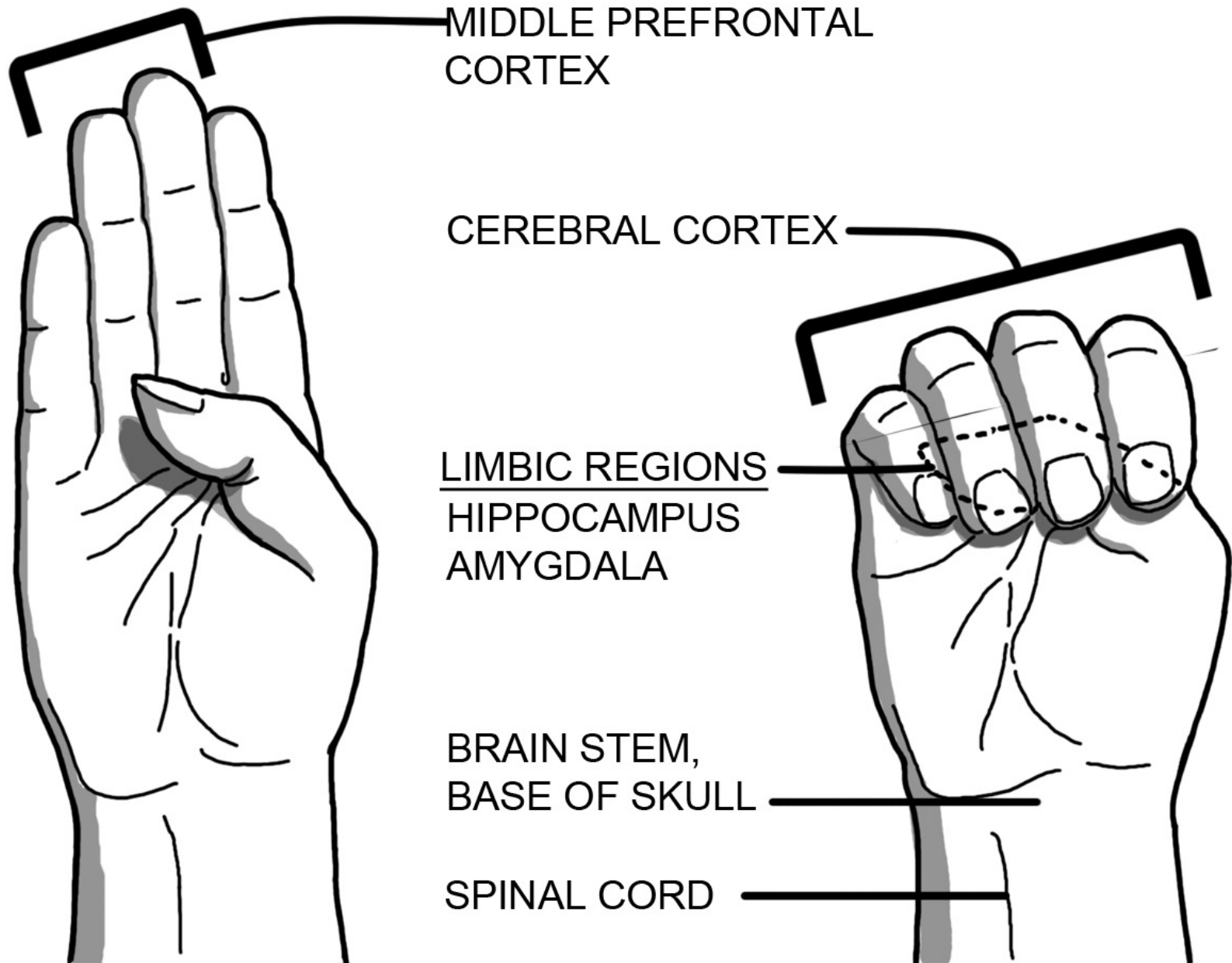
- What is the number one factor associated with Positive Traits in Life?
- A highly interconnected Connectome!  
(Smith, et al, 2015)

# Integrative Brain Growth

- 1. Corpus Callosum
- 2. Hippocampus
- 3. Prefrontal Cortex
- 4. Interconnections of the Connectome

# The Brain: A Systems View of Brain Anatomy, Function, and The Mind





# An Example: The Low Road

- Temporarily Disengaging the Middle Aspect of the Prefrontal Cortex dissolves the nine functions of the middle PFC including Body Regulation, Attunement, Emotional Balance, Response Flexibility, Fear Modulation, Insight, Empathy, Morality, and Intuition

## Cingulate

Left Cingulate Cortex

Right Cingulate Cortex

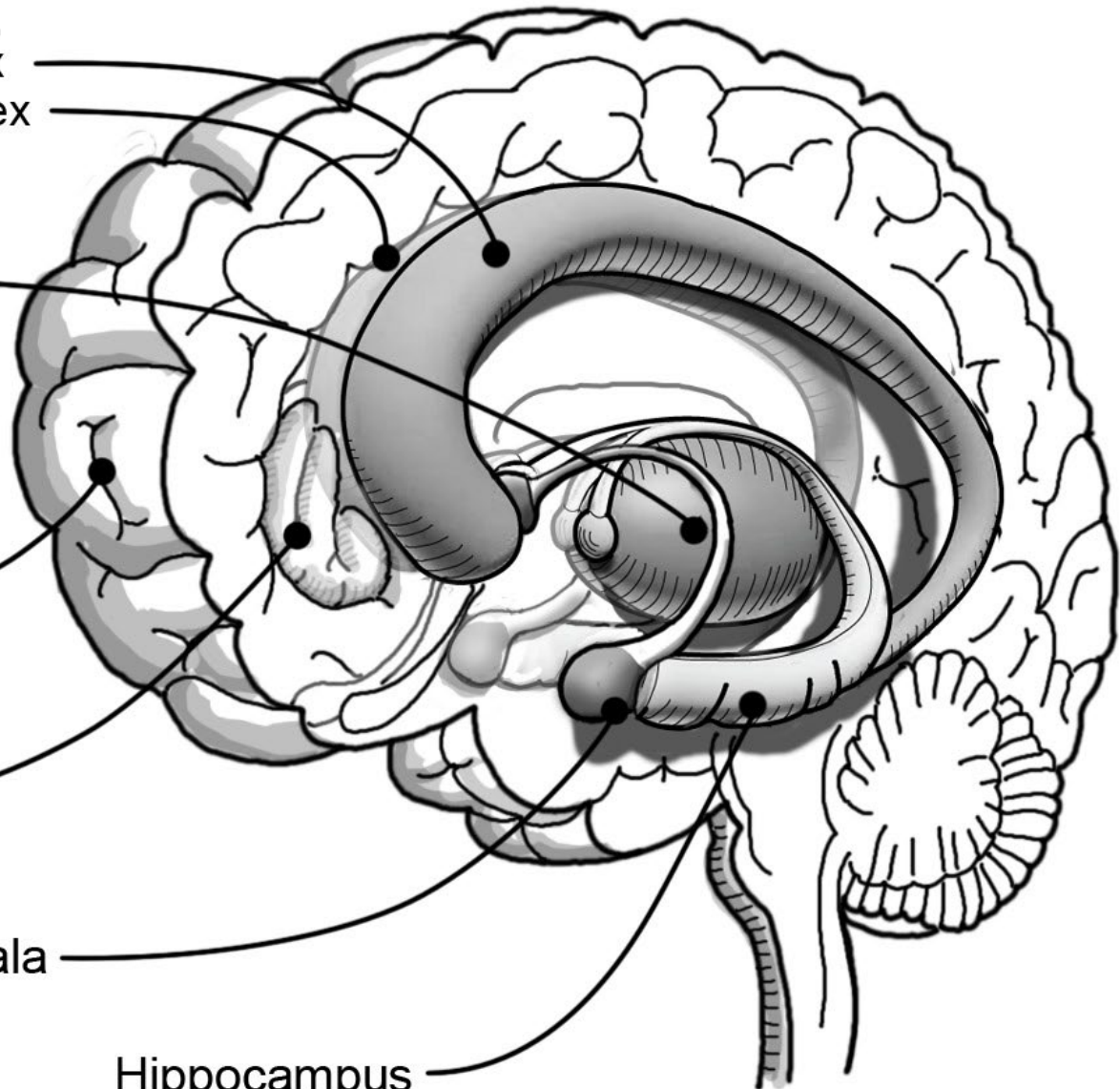
Thalamus

Middle  
Prefrontal  
Cortex

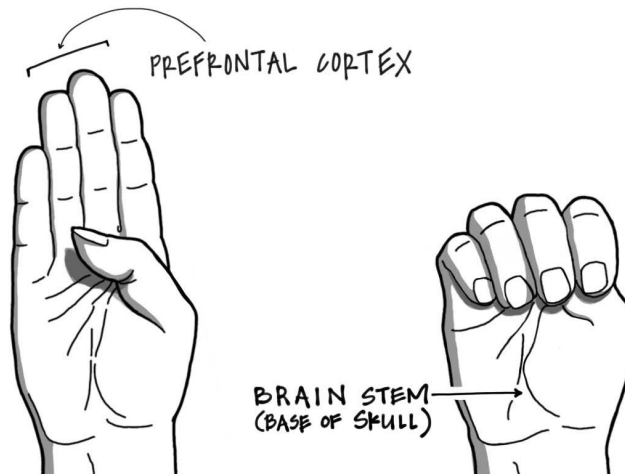
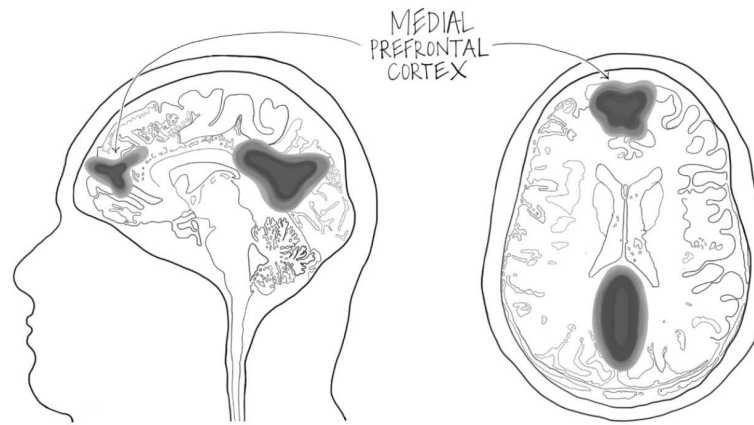
Insula

Amygdala

Hippocampus

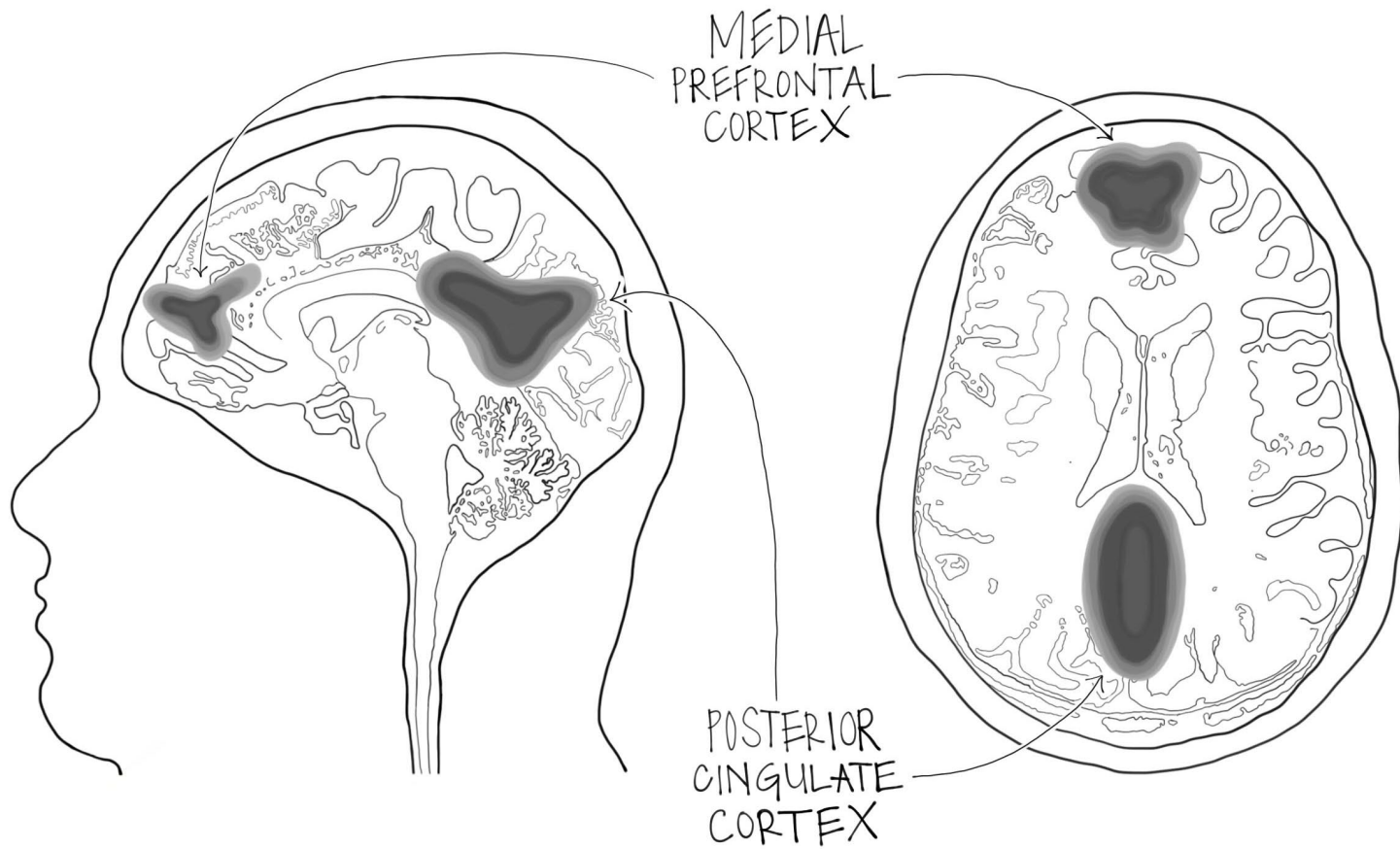


# Brain & Hand Model





# Midline Areas of the Default Mode Network



# A primer on brain development I

- 1. Genetic influences
- 2. Epigenetic influences
- 3. Experiential influences
- 4. Environmental influences

# The “Four S’s” of Attachment: Children Need to be:

- Seen
  - Safe
  - Soothed
  - In order to develop “Secure Attachment”
- 
- Remembering REPAIR is essential, as ruptures may be common!

# A primer on brain development II

- In utero
- Infancy
- Toddlerhood
- Preschool
- School age
- Adolescence

# A primer on brain development III

- Not so much “where” but “how”
- Neuroplasticity
- Inner and Inter influences on Attention
- The essential role of relationships
- The brain as a “social organ”

# A primer on brain development IV

- “The Social Brain:”
- Three interwoven networks
  - 1. Reward circuitry
  - 2. Body sensing and shaping networks
  - 3. Mentalizing regions

# A primer on brain development V

- Adolescence and Adolescents:
  - ESSENCE of adolescence:
  - Emotional Spark
  - Social Engagement
  - Novelty-seeking
  - Creative Exploration

# Impaired Attachment: Developmental Trauma

- Impaired growth of:
- Corpus Callosum
- Hippocampus
- Prefrontal Cortex
- The interconnections of the Connectome



THERE IS  
NO SUCH  
THING  
AS  
PERFECT  
PARENTING!!!

# Temperament and Attachment

## Temperament

- An inborn feature of the child (not only genetic)
- Inborn predisposition of the nervous system
- May have lifelong impact that is influenced by experience – especially with caregivers

## Attachment

- The relationship of the child to the caregiver over time
- Research has shown attachment shapes the developing mind
- Attachment impacts self-regulatory circuits

# The **PART** we play as parents

- Presence & Protection
- Attention & Attunement
- Resonance & Recognition
- Time & Trust

# The Basics of Attachment I

- “**Sensitive Caregiving**” is the basis of secure attachment. This means parents tune in to the signals sent by a child and make sense of what the child is feeling and needing.
- A **signal for a baby** is often a non-verbal cue such as crying, facial expressions, gestures, and states of alertness or sleepiness.

# The Basics of Attachment II:

- When a child has a consistent experience of being seen, of “feeling felt” by the caregiver, the child develops well in their emotions, thinking, and relationships.
- Research suggests that these attuned, sensitive communications shape the healthy development of the brain in ways that support future functioning: Early Relationships Matter!

# Making Sense: The Central Importance of Coherent Narratives

- “Earned Autonomous” State of Mind
- How one has come to make sense of life experiences determines “adult state of mind with respect to attachment.”
- “Coherent Self-Knowledge” involves an integration of past-present-future.
- Coherent Autonoetic State vs. “Cohesive Narratives.”

# What is a robust predictor of a child's security of attachment?

- How a parent has MADE SENSE of his or her life...
- In other words, it's not what has happened to a parent, but how that parent has taken the time to make sense of how the past has influenced his or her development.

# Relationships in Research Studies

## □ Relationship Type

- B - Secure .....
- A - Avoidant.....
- C - Ambivalent .....
- D - Disorganized.....

## F Parenting Behavior

- Responsive, Consistent
- Rejecting, Distant
- Inconsistent, Intrusive
- Frightening, Confusing, Fearful



# Adults Making Sense of Their Lives: What Science Reveals (Adult Attachment Interview)

## Adult Story

- Free/Secure-----
- Dismissing-----
- Preoccupied-----
- Unresolved-----  
Trauma or Grief

→ Child Attachment

-----Secure

-----Avoidant

-----Ambivalent

-----Disorganized

# What do the different types of adult stories sound like?

- *Free* - flexible, coherent, *self-reflective*, balanced perspective
- *Dismissing* - incoherent, inflexible, minimize emotional significance, insist on *lack of recall*
- *Preoccupied*- preoccupation with past *intrudes* on present, intense idealization
- *Unresolved* - *disorganization*, disorientation around issues of grief or trauma

# Brain Development: Inspire to Rewire

- Repeated Activation Creates, Strengthens and Maintains Connections:
  - “Neurons which FIRE together WIRE together”
  - Where Attention Goes, Neural Firing Flows and Neural Connection Grows
- Development across the lifespan: plasticity AND self-organization:
- A simple idea: “Human connections shape neural connections”

# Secure Attachment Promotes:

- Flexible self-regulation
- Prosocial behavior
- Empathy
- Positive sense of emotional well-being and self-esteem
- Coherent life-story

# The Central Role of the Integrating Prefrontal Cortex:

- Bodily Regulation
- Attuned Communication
- Emotion Regulation
- Response Flexibility
- Fear Modulation
- Insight
- Empathy
- Morality
- Intuition

# Ruptures in Our Parenting and Flipping Our Lid: The Low Road and the Vital Importance of Repair

- Temporarily Disengaging the Aspect of the Prefrontal Cortex.....

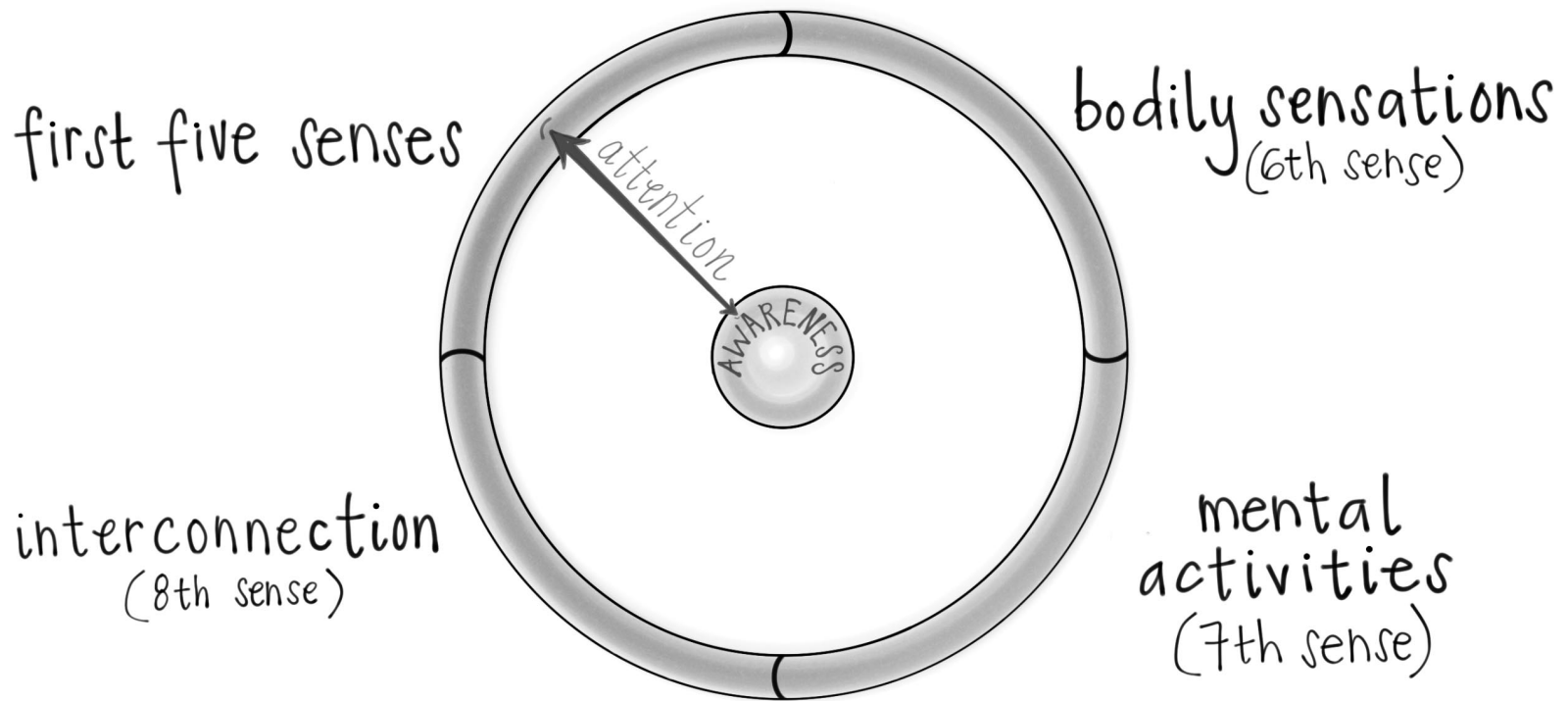
dissolves one or more of the nine integrative functions of the PFC including:

*Body Regulation, Attunement, Emotional Balance, Response Flexibility, Fear Modulation, Insight, Empathy, Morality, and Intuition*

# Secure Attachment and Compassionate Connections

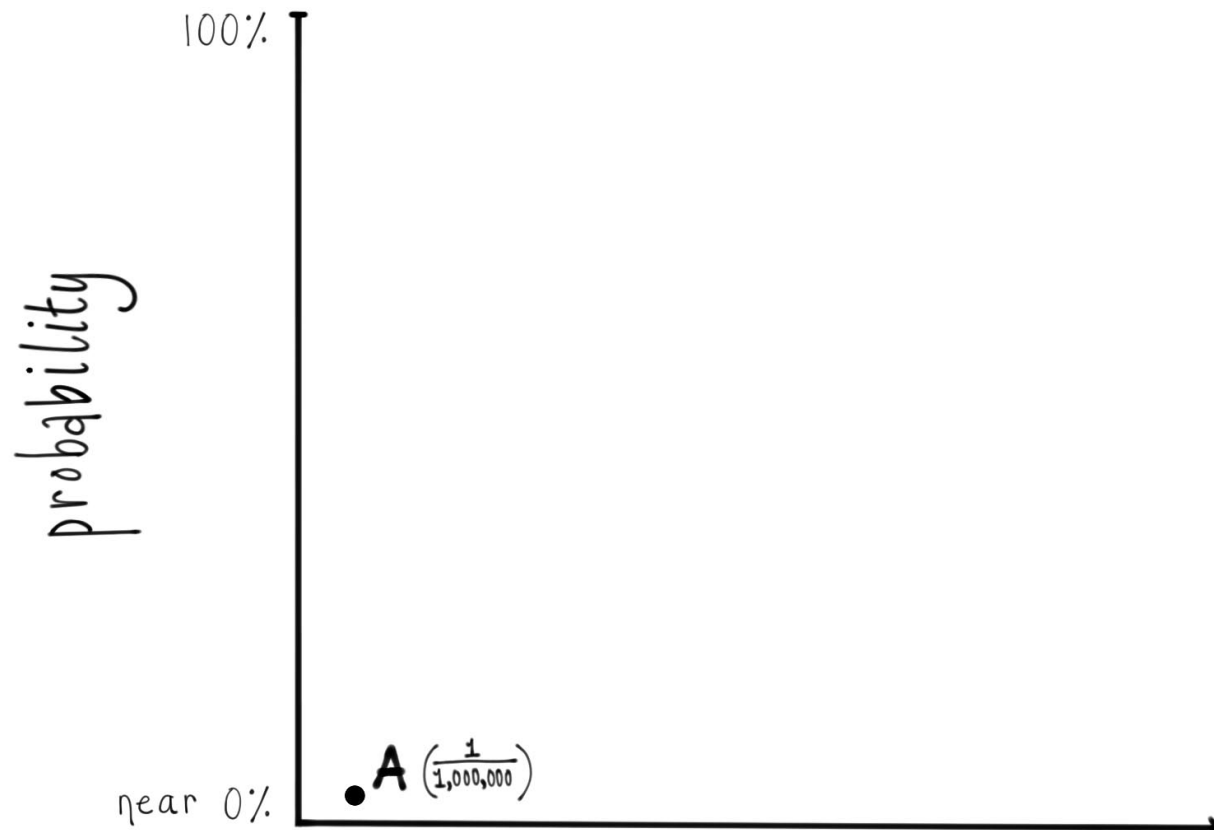
- Integration and Self-awareness allow us to meet life's challenges with more resilience flexibility, and joy in our internal and interpersonal worlds...
- And a bonus realization:
- We are ultimately connected to each other as part of a larger whole

# Integrating Consciousness

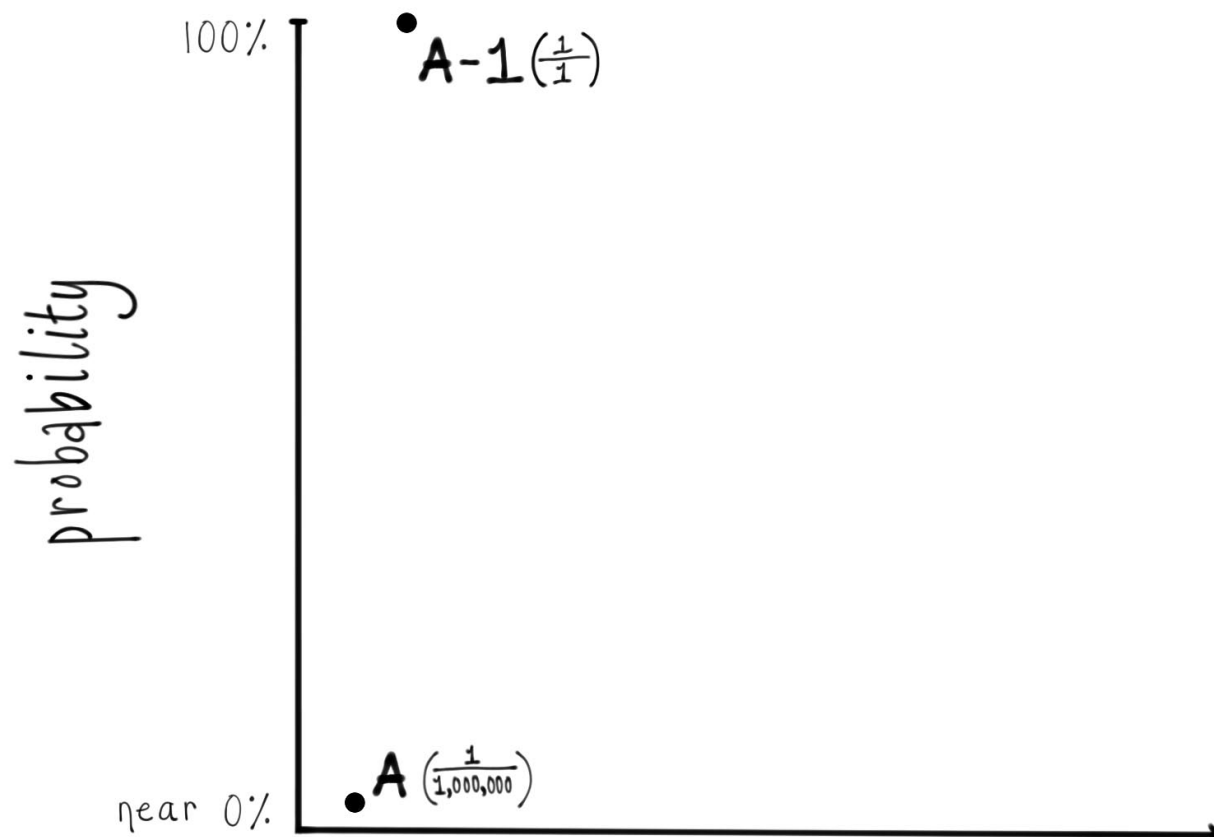




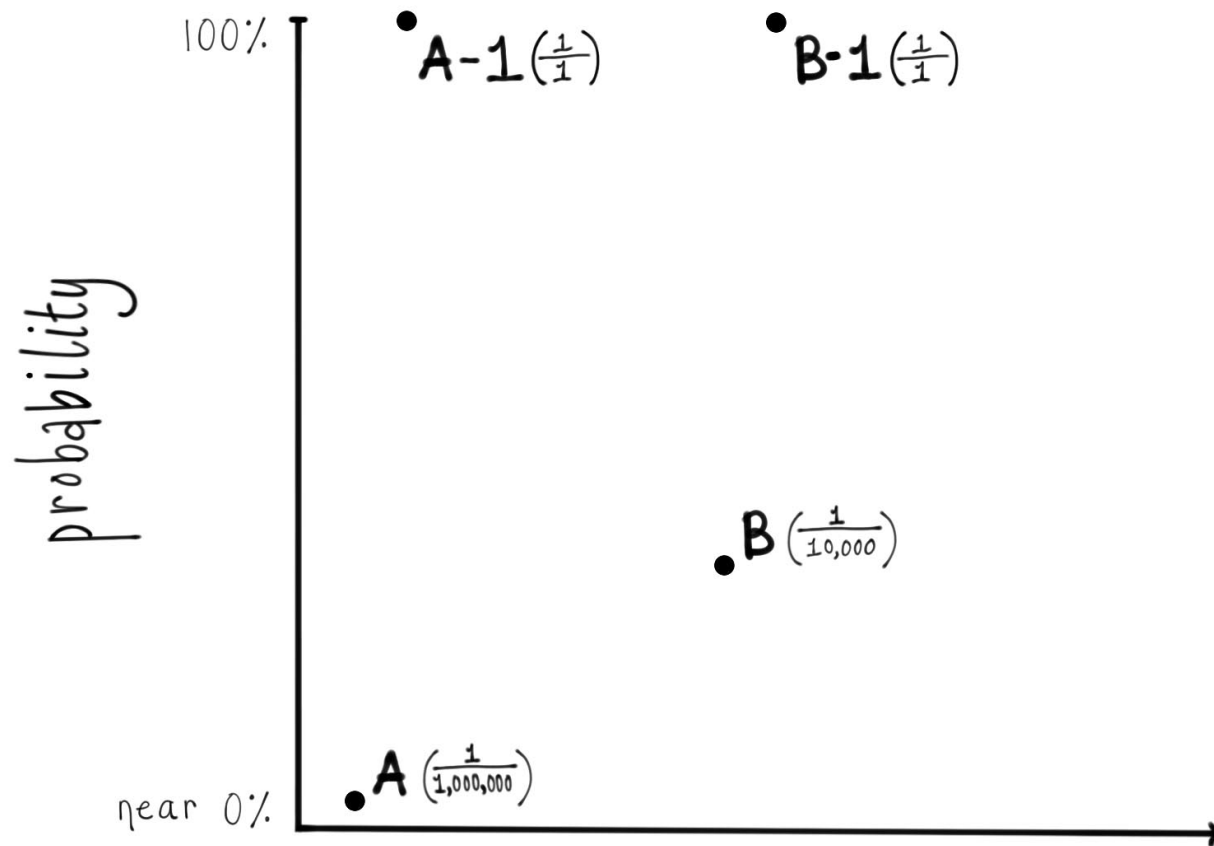
# Energy and Probability



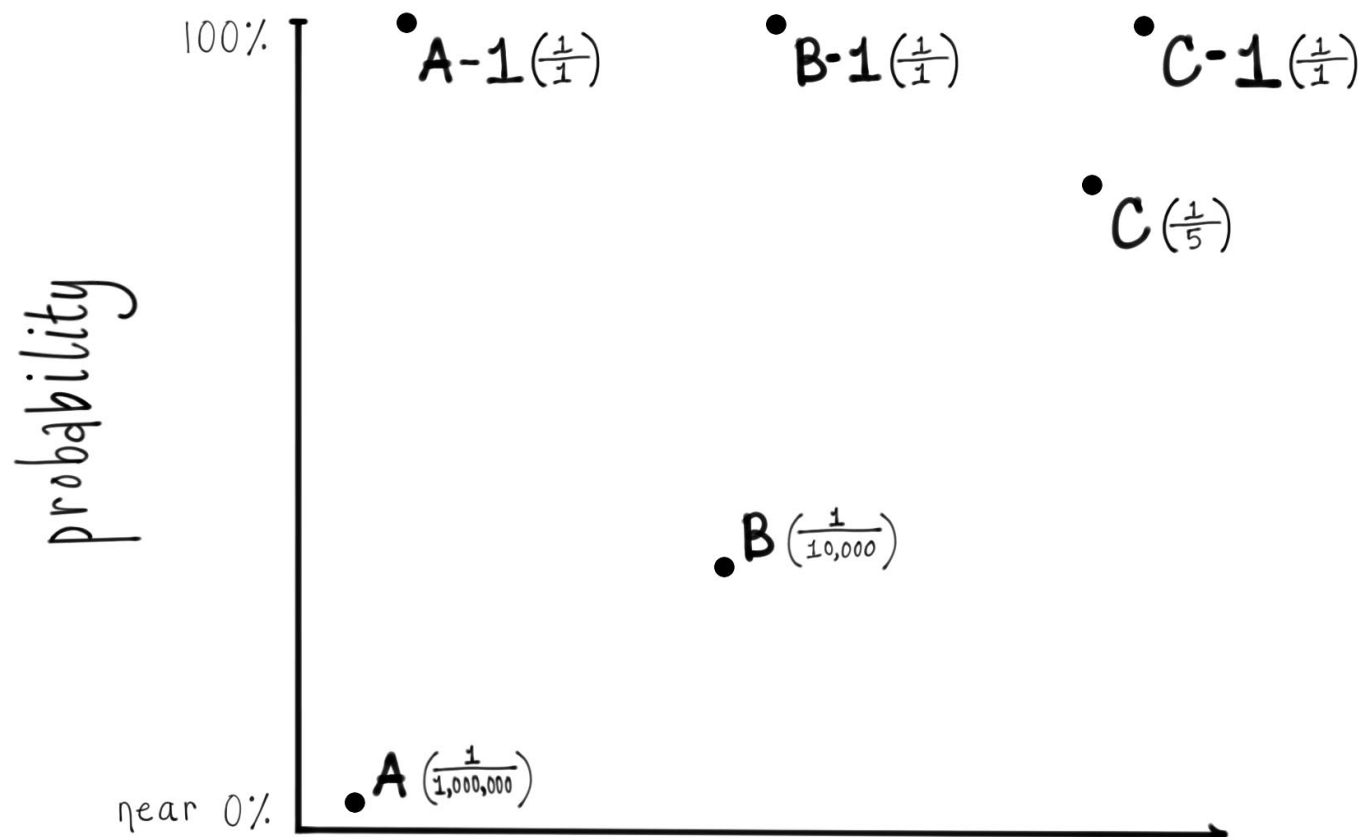
# Mapping Probability



# From Potential to Actual

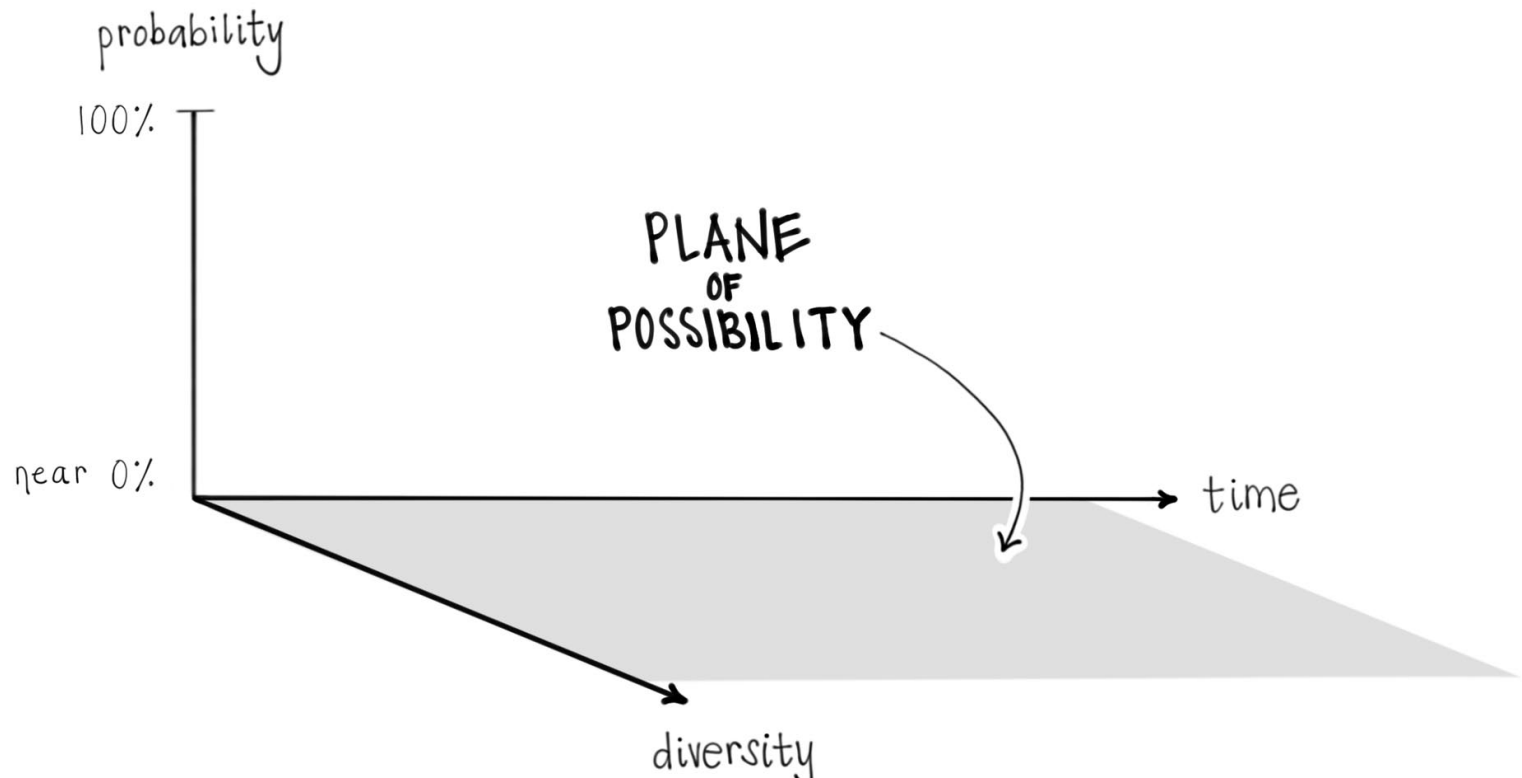


# From Possibility to Actuality



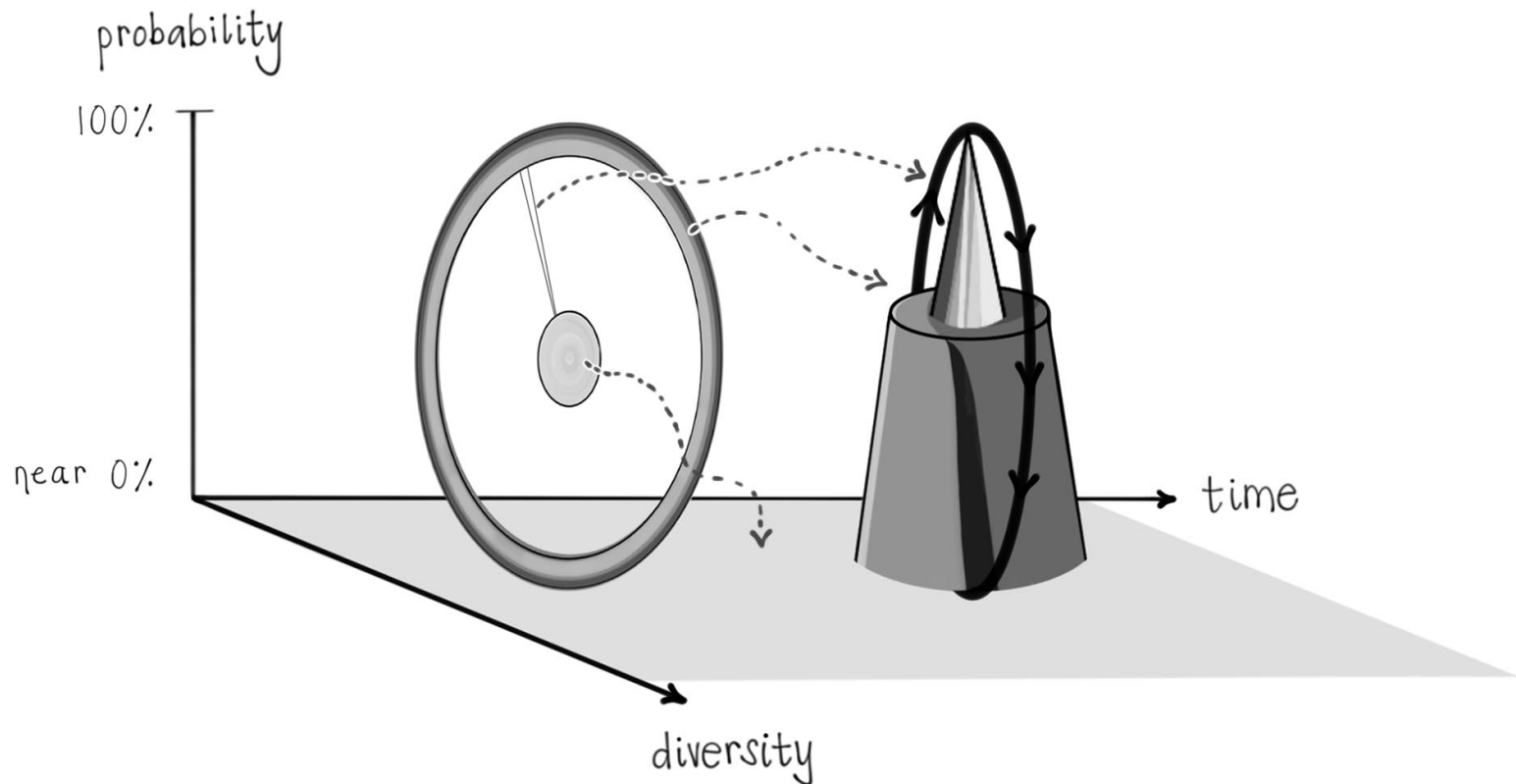
# A Plane of Possibility

## 3P Diagram



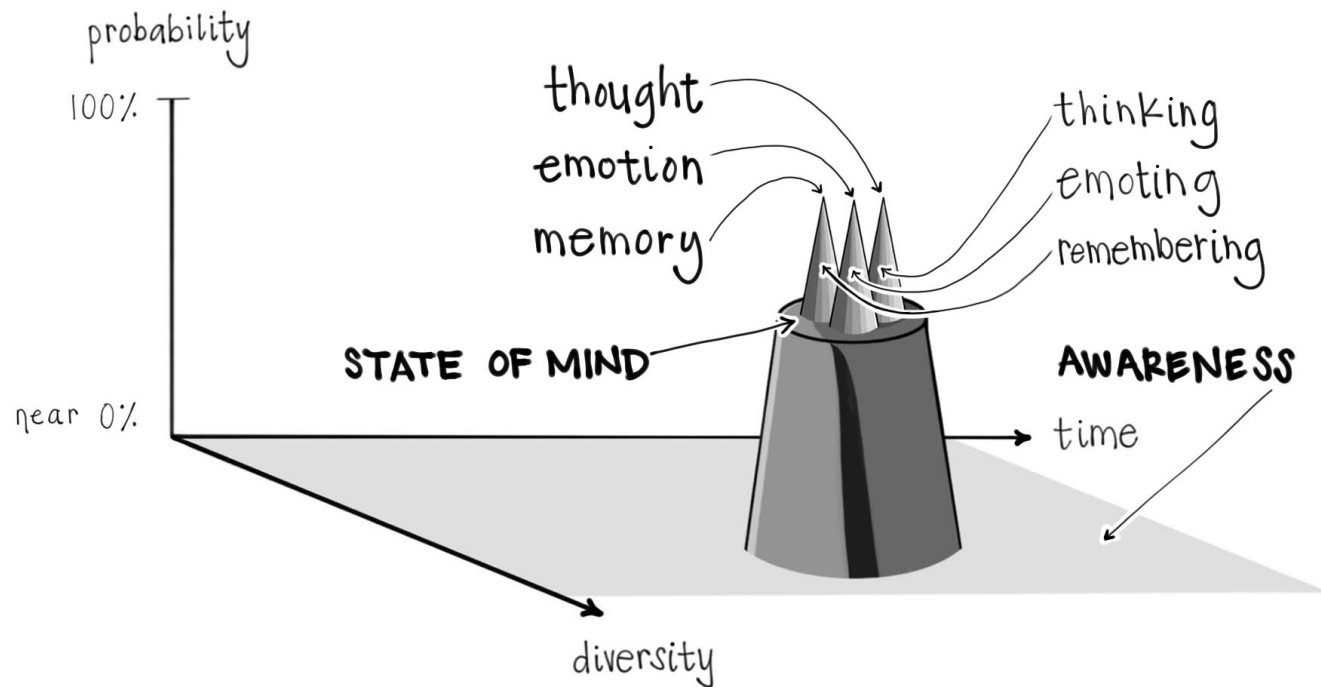
# The Wheel and the 3P Diagram

## 3P Diagram Meets the Wheel of Awareness



# Mental Processes from a 3P Perspective

## 3P Diagram with State of Mind



# Exploring the Wheel of Awareness: 10,000 person study

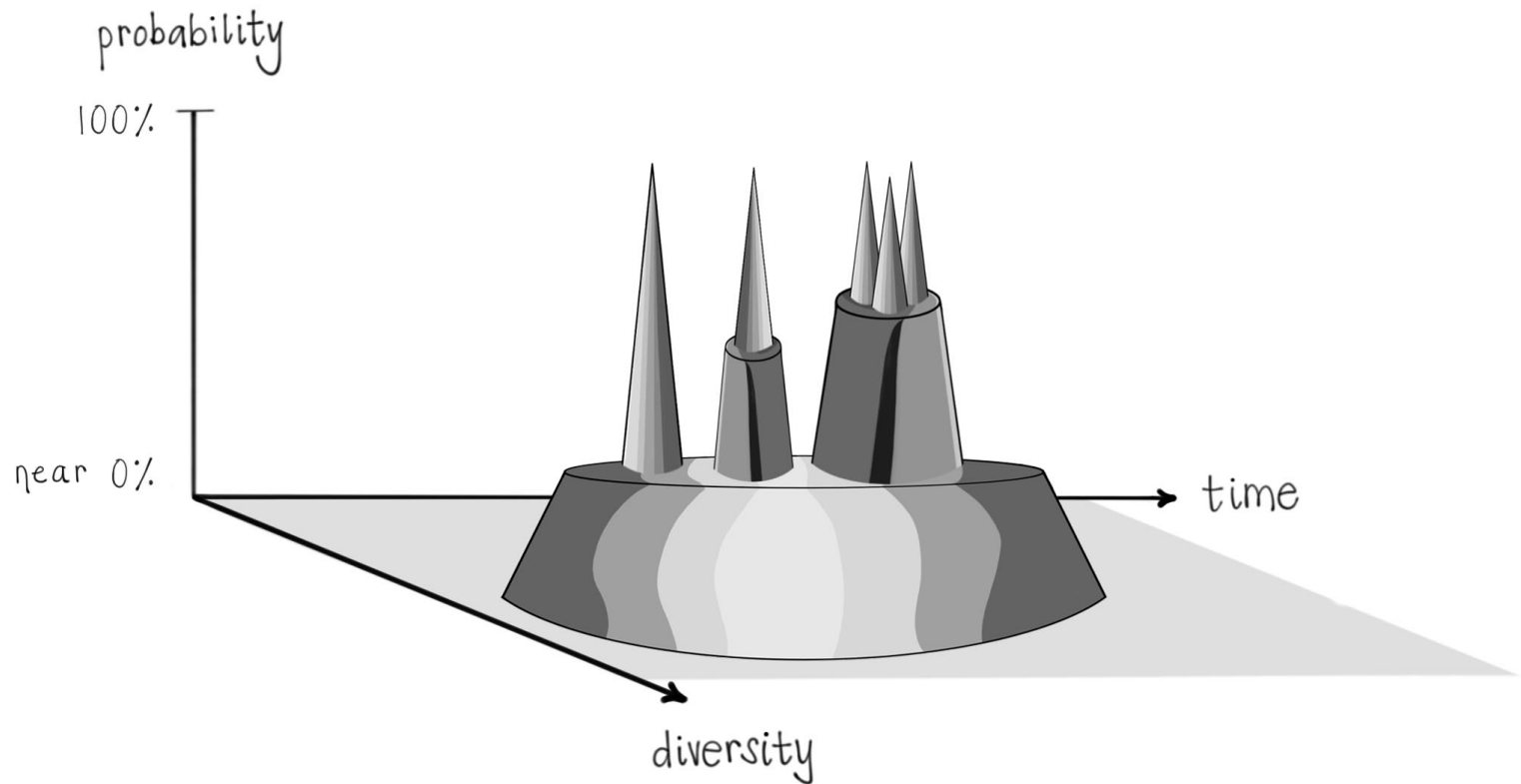
- Universal findings across wide range of backgrounds;
- Shift in relationships with others and self;
- Reduction in Chaos and Rigidity;
- Illumination of Nature of Awareness itself:
  - Quotes: “Clarity, Joy, Empty-Yet-Full, Expansive, Infinite, Eternity, God, Love, Peace, Sense of Belonging as a fundamental part of the whole, Connected to others, the world, the universe”



# Implications of the Plane of Possibility

- Mental experience arises from an **energy probability distribution curve**
- Mental representations and activities as **Peaks**
- Mental processes of Mood, Intention and Modes as **Plateaus**
- Awareness arises from the **Open Plane** where certainty is near zero and possibility is infinite

# 3-P Diagram



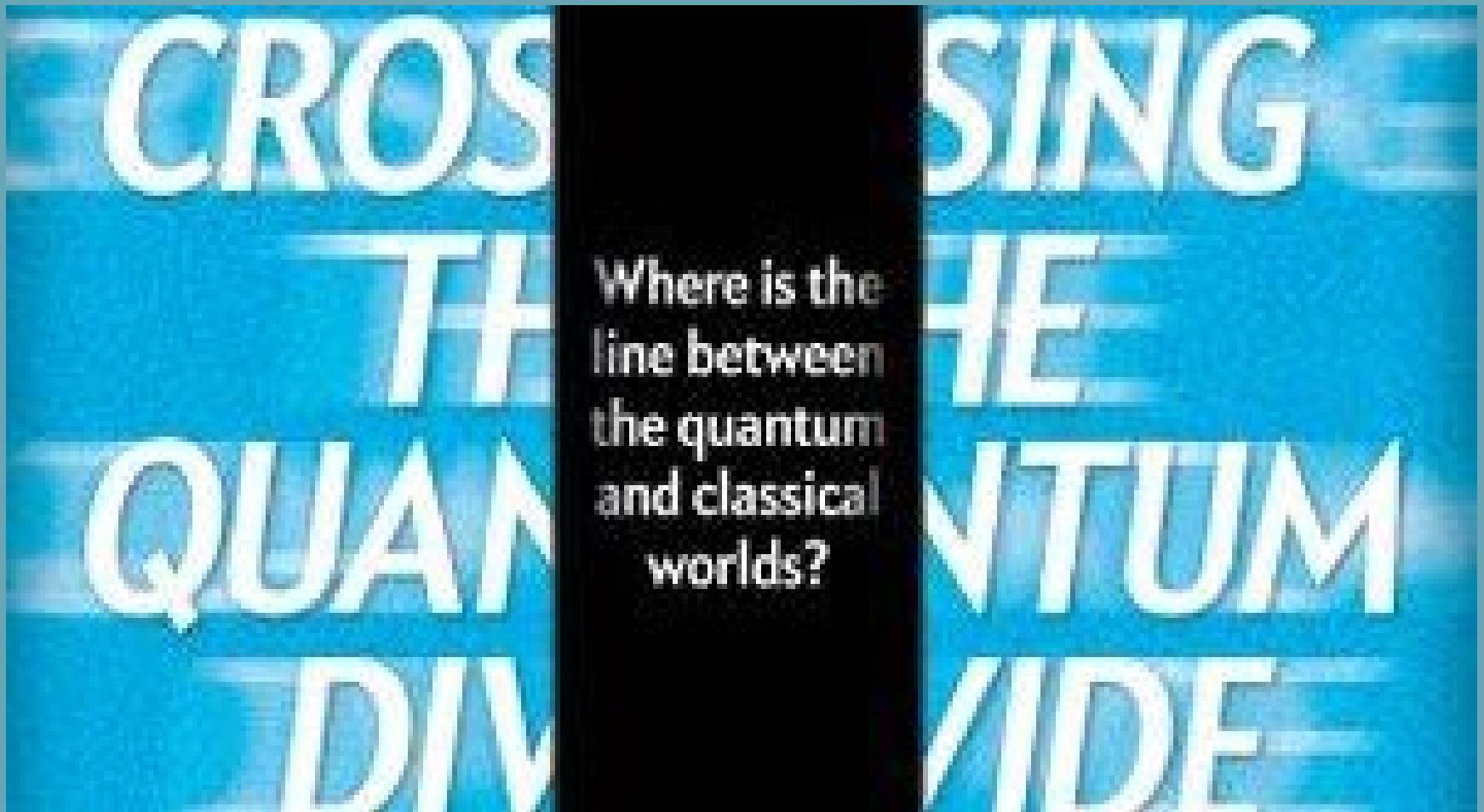
# Implications of 3-P Framework

- 1. PLANE is source of presence & awareness
- 2. Rigid Plateaus → Enduring problems
- 3. Infinity is Infinity=We Connect in the Plane
- 4. Befriending the Uncertainty of the Plane
- 5. Plane is “formless source of all form”=Mathematical space of other options
- 6. “Quantum Realm” has no Arrow of Time
- 7. Verb-like events deeply interconnected (versus Noun-like entities with separation)

# Integration Made Visible is...

- Kindness and Compassion
- PRESENCE is the natural portal for integration to arise...from the Plane of Possibility

# Two Realms of One Reality



# Swimming in Reality

- Imagine the breast stroke, swimming in a pool or lake or ocean...
  - SOMETIMES WE ARE BENEATH THE SURFACE OF THE WATER...
  - Sometimes we are above the surface...
  - TWO “Realms” in swimming: The water and the air realms
  - In Physical Reality: Two REALMS—The Macrostate, Newtonian Classical AND the Microstate , Quantum Realm

# One Reality, Two Realms

- **Classical/Newtonian Macrostate Realm:**
  - Noun-like Entities
  - Arrow-Bound Unfolding of Time
  - Appearance of Temporo-Spatial Separation
- **Quantum Microstate Realm:**
  - Verb-like Events
  - Arrow-Free Unfolding of Change
  - Interconnected Nature of Reality

# Integrating the Self: Who are MWe?

- **Me: *Singular Noun?***
  - The *inner* aspect of the body, an arrow-bound set of features, appearance as a *noun-like entity* with separation across time and space — “I-Me-Mine”
- **We: *Plural Verb?***
  - The *inter* aspect of our lives, arrow-free, *verb-like events* emerging with deep interconnections across time and space – “Us—We—Our”
- **MWe: *An Integrated Identity***
  - An integrated life weaving Me + We → MWe