

Aware: The Science and Practice of Presence

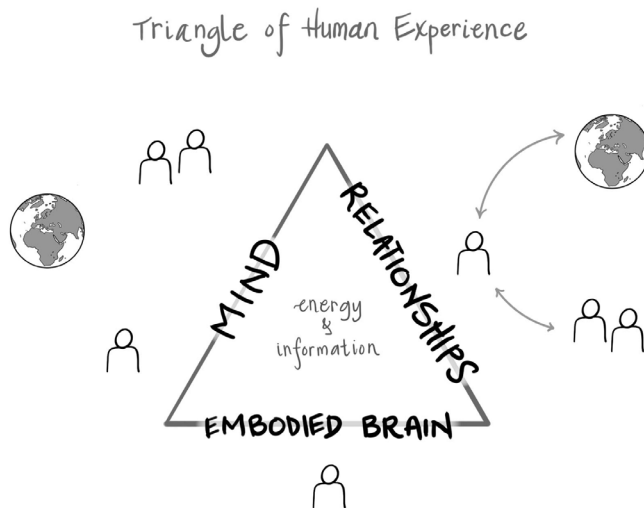
Outline & Resources Cited

Part I: Reducing Stress and Cultivating a Healthy Mind

- *Mindsight* = the ability to see the mind
- *Interpersonal Neurobiology (IPNB)* = a framework that explores the various disciplines of science to see if there is a consistent understanding of reality

Basic Questions:

- What is the Mind?
- What is a Healthy Mind?
- How can we Cultivate a Healthy Mind & a Healthy World?



4 Facets of Mind:

1. Subjective Experience – the felt texture of life; not observable by others
2. Consciousness – includes what we are aware of as well as awareness itself
3. Information Processing
 - "Where attention goes, neural firing flows, & neural connection grows"
 - Through the process of *attention* (directing energy flow), we can change the structure of the brain
 - *Focal attention* occurs within awareness & *non-focal attention* occurs outside of awareness
4. Self-Organization
 - Optimal self-organization emerges with *integration*: the linkage of differentiated parts

Mindsight Lens

- Using focal attention, we can build a tripod to strengthen our mindsight lens:
 - Objectivity
 - Openness
 - Observation (witnessing the mind)

Consilient Ideas

- *Mind* is an emergent phenomena of a complex system of energy flow
- Sometimes that energy has symbolic value, and it is "energy-in-formation" known simply as *information*
- Emergence arises from the interactions of elements of a complex system, i.e., from the flow of energy within *embodied* activity and *relational* communication

Two Consilient Ideas Combined

1. Integration is the basis of HEALTH
2. Consciousness is needed for CHANGE
 - 1 + 2 = 3 Integration of Consciousness

Three Pillars of Mind Training

- A. Focused attention
- B. Open awareness
- C. Kind intention

The Wheel of Awareness

- A practice for integrating consciousness (differentiating and linking the "knowns" and "knowing")
 - Moving the "spoke" of attention
 - Rim ("knowns") – first 5 senses; bodily sensations (6th sense); mental activities (7th sense); interconnection (8th sense)
 - Hub ("knowing") – awareness
- *Meditation* = a reflective practice that trains the mind

Part II – The 3 Pillars of Mind Training – Focused Attention, Open Awareness, and Kind Intention

Integration: the linkage of differentiated parts

Empathy and Compassion

- Empathy circuits include:
 - Resonating with another person; Perspective-taking; Cognitive empathy; Empathic joy; Empathic concern
- *Compassion* involves:

- Sensing the suffering of another, imagining what could help the suffering (whether inner, inter, or intra), & thinking about what one could do to reduce the suffering

Energy and Information Flow in the Brain:

1. Categories
2. Concept
3. Symbol
 - The symbol then reinforces the concept and category (i.e., implicit biases)

A Complex System is:

- Open to influence
- Chaos-capable
- Nonlinear

A Working Definition of a Facet of Mind

- An embodied and relational emergent, self-organizing process that regulates the flow of energy and information flow

Mind as Regulation

- Monitoring + Modifying = Regulating

Integration and Health

- Creates a "*FACES* Flow":
 - Flexible
 - Adaptive
 - Coherent (resilient over time)
 - Energized (sense of vitality)
 - Stable
- When a system is not optimally self-organizing, the system moves towards chaos and/or rigidity

Science of Integration, Presence and Health

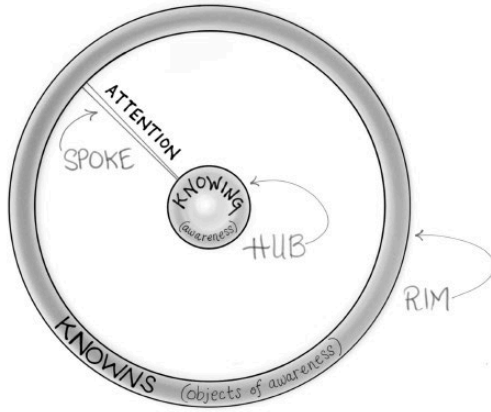
1. Well-being correlates with an interconnected connectome
2. Impaired well-being correlates with impaired integration in relationships and the brain
3. Neural integration is the mechanism beneath regulation (mood, emotion, thought, attention, behavior, relationships, morality)
4. Integrated relationships → embodied integration → personal & relational health

Integration and Three Pillar Practice

- Three Pillar mind training integrates the structure and function of the brain
 - Growth in integrative areas of the brain: corpus callosum, hippocampus, prefrontal cortex, interconnections of the connectome

Part III – The Many Everyday Benefits of the Wheel of Awareness Practice

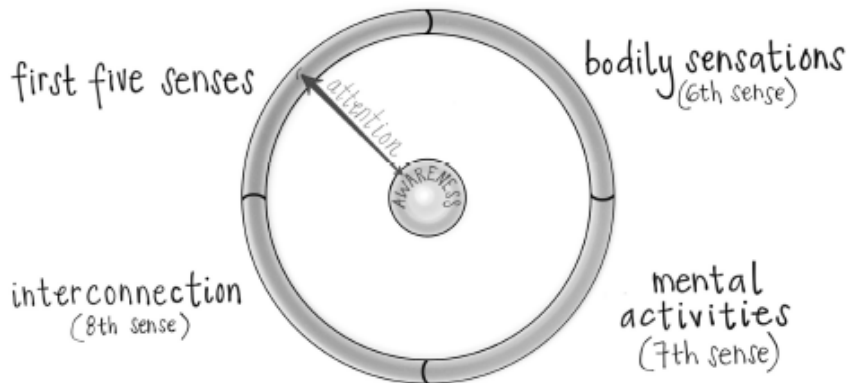
Basic Wheel



Hub-in-Hub



WHEEL OF AWARENESS



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 the 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"

Part IV – How Experiences Affect the brain’s Growth

Notes on the Wheel of Awareness experience

- When describing our experience and the nature of reality, it's important to acknowledge the limitations of words/language
- Every person is on a different part of their journey (notice, don't judge or compare)

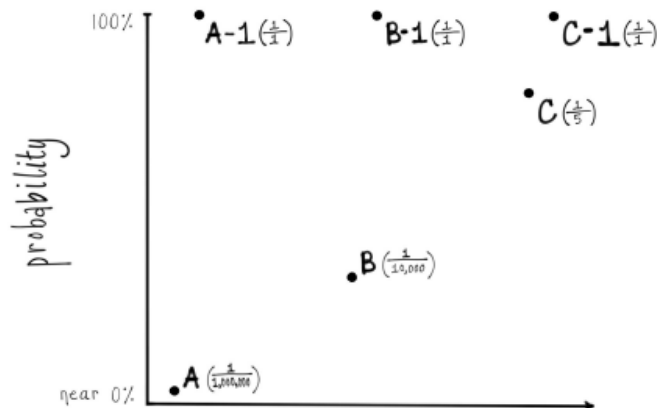
People's Experiences in Life Affect the Brain's Growth in 2 Ways:

1. Direct effects
2. How a person adapts to what's happening to survive and thrive (allostasis)

Energy and Probability

- If the mind is an emergent property of energy flow... what is energy?
 - **Energy** = the movement from possibility to actuality

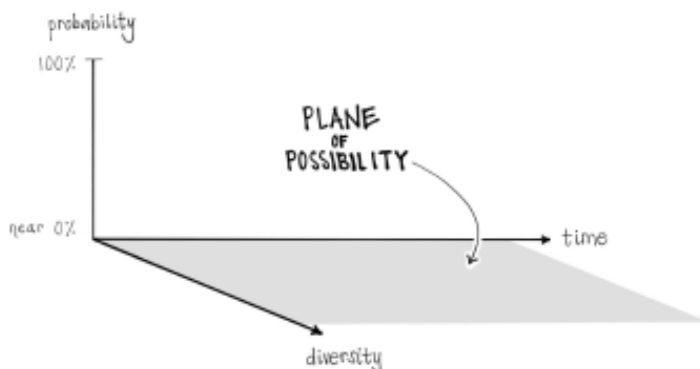
Mapping Probability



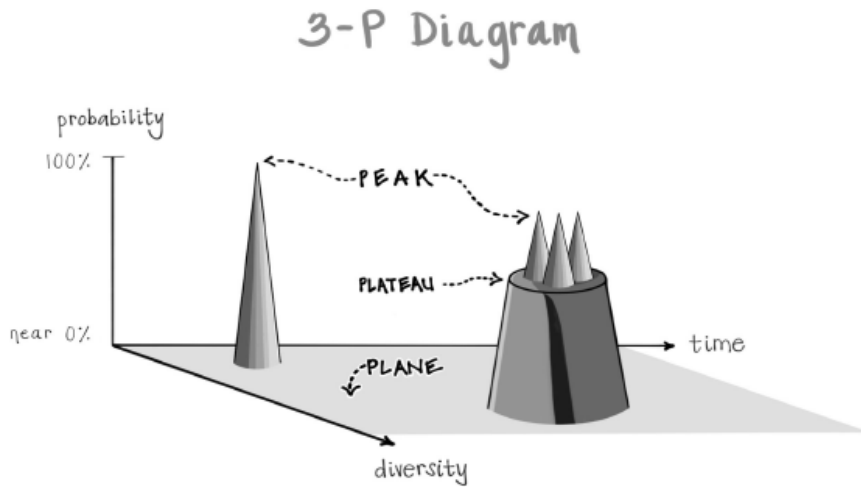
- 100% probability = certainty; *peaks* of actualization
- Near 0% = uncertainty, or the *plane* of infinite possibility
- Between 0-100% = *plateau*

A Plane of Possibility

3P Diagram

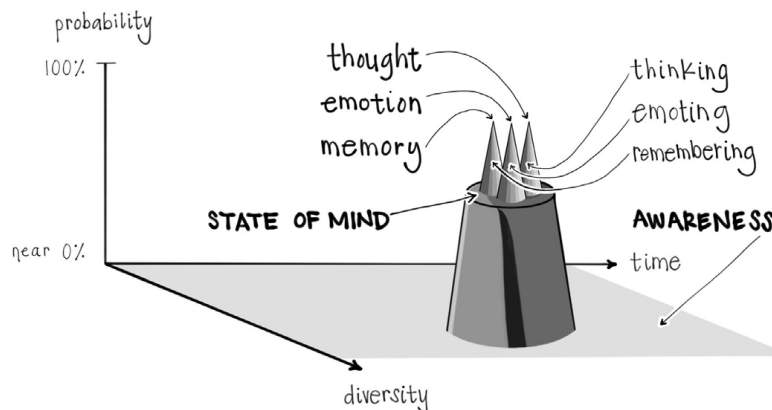


3-P Diagram



Mental Processes from a 3-P Perspective

3-P Diagram with State of Mind



The Wheel of Awareness and 3-P Framework

- Rim "stuff" = peaks and plateaus (above-plane values)
 - A plateau represents priming, which makes certain peaks more likely to arise
- Hub = the plane of possibility

7 Implications of the 3-P Framework:

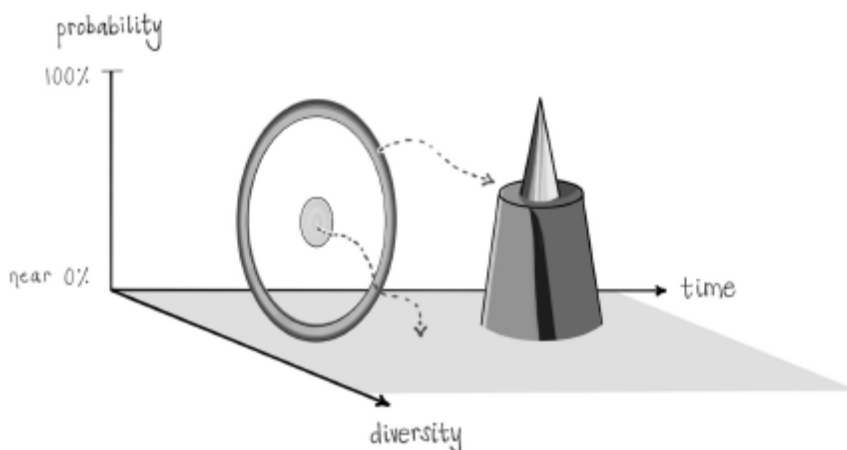
1. PLANE (HUB) is source of presence & awareness
 - Awareness arises when energy's probability position has dropped into the plane of possibility (all potential energy, boundary-less)
2. Plane = "Love, Interconnection, Awareness"
 - "Between impulse and action there is a space, in that space is the opportunity for growth, change, and choice"
 - The plane of possibility is the source of the pause (before reacting)

3. Plane is “formless source of all form” = Mathematical *space of other options*
 - The plane of possibility is the source of all other choices
4. Infinity is Infinity = We Connect from the Plane: *Presence of Awareness—Interconnection—Love*
 - The plane of possibility is the source of presence, & presence is the natural portal for integration to arise
5. Plane is Uncertainty = *Freedom and Possibility*
 - We are all differentiated on our plateaus and peaks, but we find each other through the plane of possibility
 - Let go of defining self as a noun/entity, feel the verb-like aspects of self (open to possibility, uncertainty, and freedom)
6. Plane may be in the “Quantum Realm” with no Arrow of Time (Directionality of Change) = “*Timeless*”
 - Time exists in the macro-state classical realm, but the quantum realm (the plane of possibility) is timeless
 - Above-plane values may be features of the macro-state
7. Verb-like events deeply *interconnected* (versus Noun-like entities with “separation” of Classical Realm)

Part V – The Plane of Possibility, at the Heart of Well-being and Resilience

Linking the Wheel of Awareness to the 3-P Framework

3P Diagram Meets the Wheel of Awareness



- Plane of possibility = G.O.D. (generator of diversity)
 - Often, we are living on plateaus (of certainty) that limit our possibilities → the goal of the Wheel of Awareness practice is to dissolve the rigidity of these plateaus, embrace uncertainty, & create more well-being

Quantum vs. Classical Realms

- 2 levels of reality we become aware of in our consciousness:
 - **1 - Newtonian (Classical) laws** – the realm of physics that governs large-level objects and reality (i.e., how planets and bodies move)
 - **2 - Quantum laws** – exists most prominently when things are much smaller; smaller levels of reality are all about energy flow
 - More about probabilities, rather than certainties
 - Properties of quantum physics:
 - Probability
 - Observation
 - Time (not existing as we know it)
 - Space
 - We may have mental experience and awareness that is *Quantum*, as well as mental experience/thought/memory that is more *Newtonian (Classical)*
 - The Wheel of Awareness practice allows us to explore distinct senses of reality & gain access to the plane of possibility

Part VI – Transforming and Growing from Trauma

Three Pillar Mind Training Findings:

1. Integration of the structure & function of the brain
2. Reduction in the stress hormone, cortisol
3. Enhancement of immune function
4. Improvement in cardiovascular risk factors
5. Reduction in inflammation via epigenetic changes
6. Optimization of telomerase - repairs and maintains ends of chromosomes - slows aging

Oscillations, Attention, and Mind

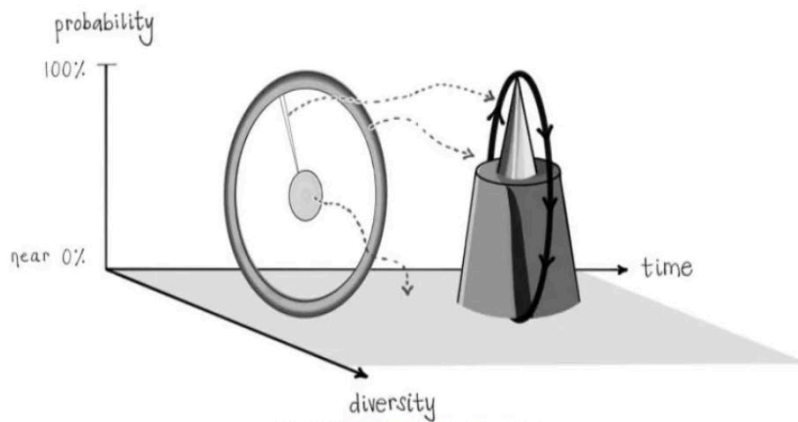
3P Diagram with Attentional Sweep



- Sweep correlates with the mechanism of the *spoke*
 - "Sweep up" in the oscillatory loop to focus attention more closely on something

Metaphor of Wheel of Awareness Within the 3-P Diagram

3P Diagram Meets the Wheel of Awareness

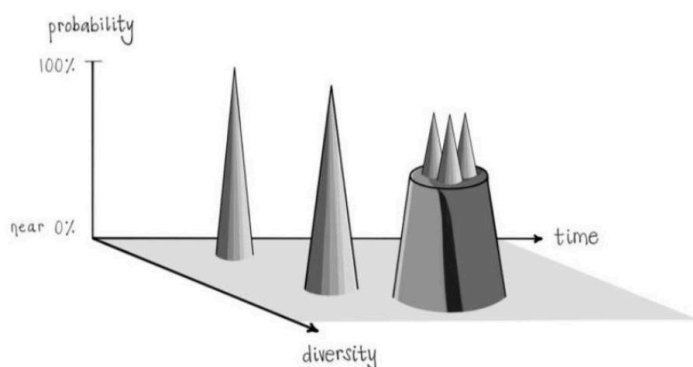


Developmental Trauma

- When a child experiences abuse or neglect, their circuits of integration in the brain get impaired in their growth
 - All regulation (attention, emotion, mood, thought, behavior, impulsivity, memory) depends on integrative networks in the brain
- *Neuroplasticity* - our mind and relationships can be used to reorganize and grow new synaptic connections
 - Psychotherapy, practices like the Wheel of Awareness, & other interventions can help us transform and grow from trauma
- Attachment 4 S's: Seen, Soothed, Safe, Secure
 - Disorganized attachment lacks safety & security; often involves developmental trauma
 - *Dissociation* - a clinical symptom related to a fragmentation of consciousness
 - Coping strategy is to avoid uncertainty (inherent challenge to accessing the plane of possibility)

Living, Loving, and Leading from the Plane

3P Diagram



- We are all a multitude of self states/aspects/parts representing various plateaus
 - Opportunity to dissolve imprisoning plateaus (i.e., from developmental traumas & societal conditioning)
- Living at the plane level, you enter the quantum state where things are more like verbs/events & all things are deeply interconnected
 - Compassion & kindness are natural outcomes of living in the plane

Resources Cited

Part I – Researchers & Works Cited:

- Wheel of Awareness practice links – <https://drdansiegel.com/wheel-of-awareness/>
- Human Connectome Project (best predictor of well-being is how integrated your brain is)
 - <http://www.humanconnectomeproject.org/>
- Jon Kabat Zinn (work on mindfulness in clinical practice)

Part II – Researchers & Works Cited:

- *Brainstorm: The Power and Purpose of the Teenage Brain* by Dan Siegel
- Tania Singer (neuroscientist and psychologist, work on compassion)
- *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming* by Paul Hawken
- *This Is Your Brain on Music: The Science of a Human Obsession* by Daniel Levitin
- “Far from the Tree” (2017 documentary)
- Martin Teicher (work on trauma & its impact on integration in the brain)
- Judson Brewer (work on the default mode network during meditation)

Part III – Researchers & Works Cited:

- Giulio Tononi & Christof Koh [Integrated information theory (IIT) of consciousness]
- *Man’s Search for Meaning* by Viktor Frankl

Part IV – Researchers & Works Cited:

- *Crossing the Quantum Divide* (Scientific American, July 2018 – two realms of one reality)
- *Closing the Final Loophole* (Scientific American – showing the reality of entanglement)

Part VI – Researchers & Works Cited:

- Rudolfo Lemis (work on oscillations/frequency that correlates with awareness)
- Morten Kringelbach & Selen Atasoy (connectome-harmonics & the sweeping resonance of pleasure vs. pain)
- Adverse Childhood Experiences (ACEs)
 - <https://www.cdc.gov/violenceprevention/aces/index.html>

- *The Deepest Well: Healing the Long-Term Effects of Childhood Adversity* by Nadine Burke Harris
- <https://drdansiegel.com/resources/> (resources & articles on drdansiegel.com)
- Richard Schwartz (work on “parts” and the “Self” in Internal Family Systems therapy)
- *Betrayal Trauma: The Logic of Forgetting Childhood Abuse* by Jennifer Freyd
- *The Mindful Way Workbook: An 8-Week Program to Free Yourself from Depression and Emotional Distress* by John Teasdale, Mark Williams, and Zindel Segal
- *The Mindful Therapist: A Clinician’s Guide to Mindsight and Neural Integration* by Dan Siegel