

The Anatomy of Heart Coherence

Classical-, Yogic- and Wave Matrix analysis

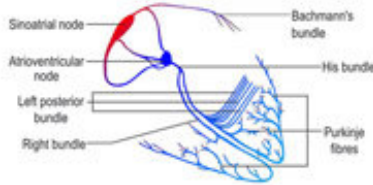


Parasympathetic

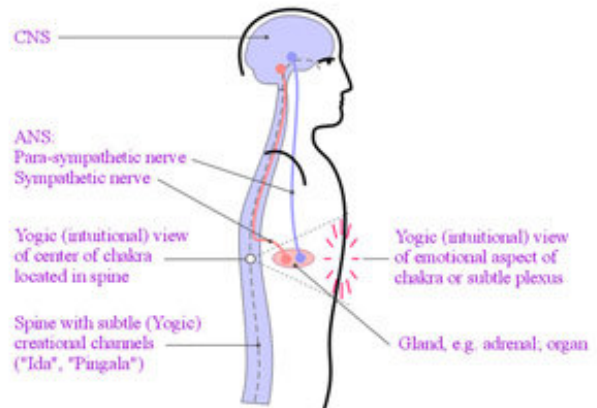
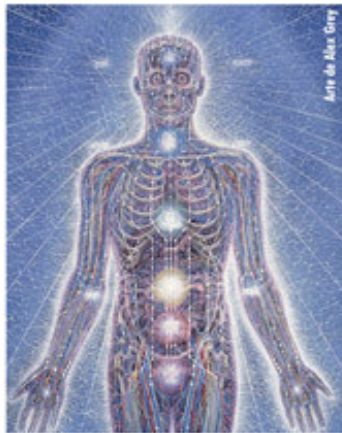
- mostly inhibitory
- emerges from brain stem and lower spine
- supports evolved individual and synergetic psycho-physiology

Sympathetic

- mostly excitatory
- emerges from spine
- supports basic physiology

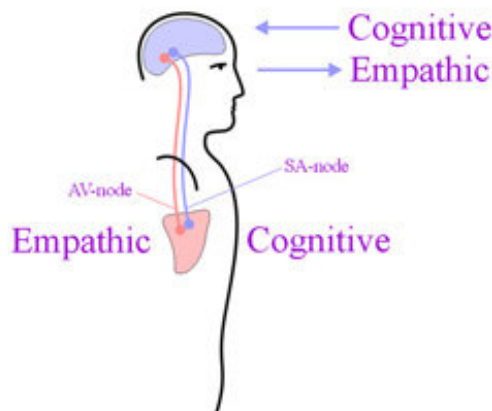


The Autonomic Nervous System (ANS)



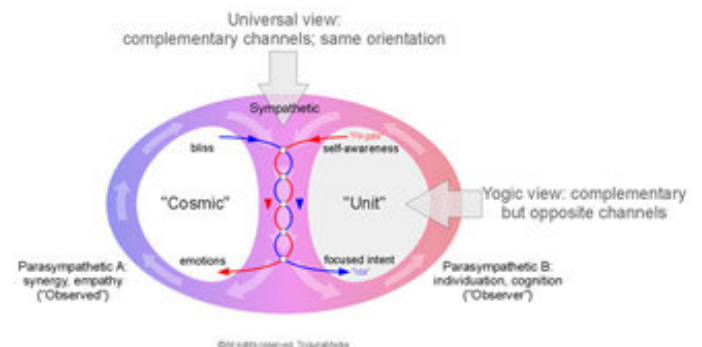
The Yogic perception of subtle channels: "Ida" and "Pingala"

The subtle channels are anatomically associated with the sympathetic branch and spine, and para-sympathetically relate to the glands and organs. The ANS branches are correlated in the form of a chakra.



The Mind and the Causal Matrix

Universal vs. Yogic view



The Wave Matrix of Heart Coherence

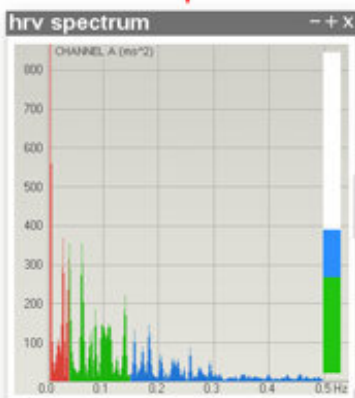
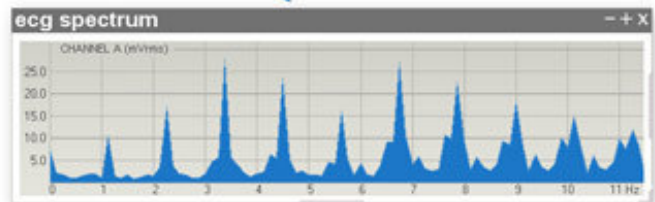
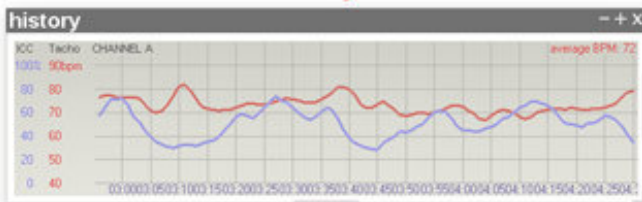
A causal analysis shows that the parasympathetic differentiation is implied in the sympathetic control but not actualized.

The Human Heartbeat

Measuring and Entraining Internal Cardiac Coherence



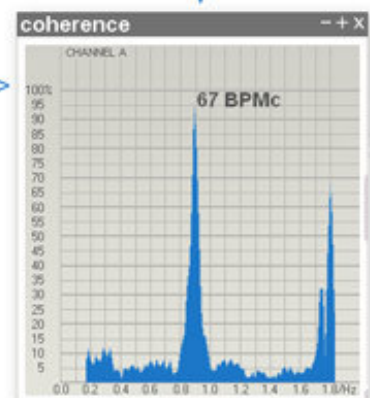
The heartbeat is "the most complex signal" in the universe, containing various layers of information, about our physical health, psycho-physiological balance, and innermost resources



High (momentary) Internal Cardiac Coherence >



< Healthy all over HRV level; rich spectrum



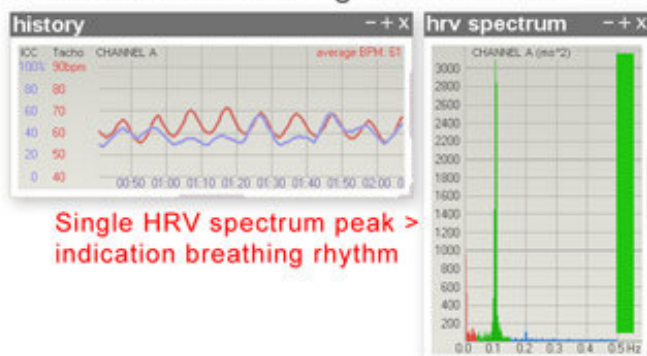
Harmonic Inclusiveness of the HRV spectrum, optimized by fractality and Golden Ratio:

- INVOLVEMENT
- EMPATHY, COMMUNICATION
- HARMONY, "STILLNESS OUTSIDE"
- AUTHENTICITY,
- INSPIRATION, MOTIVATION
- "THE WHOLE IS MORE THAN THE SUM OF THE PARTS"

Internal Cardiac Coherence of the ECG Spectrum, optimized by octave geometry / periodicity:

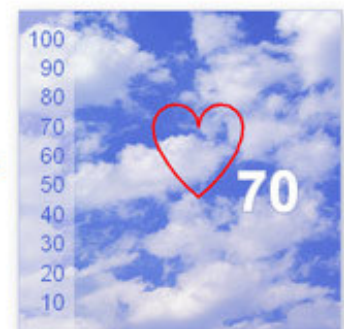
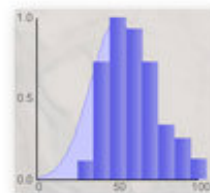
- INDIVIDUAL FOCUS, COMMITMENT, STRENGTH
- MENTAL CLARITY, COMPETENCE
- PRESENCE, "STILLNESS INSIDE"
- JOY, FULFILMENT
- "I AM MORE THAN THE SUM OF ALL THAT I RELATE TO"

Monotonic breathing to release stress



Single HRV spectrum peak > indication breathing rhythm

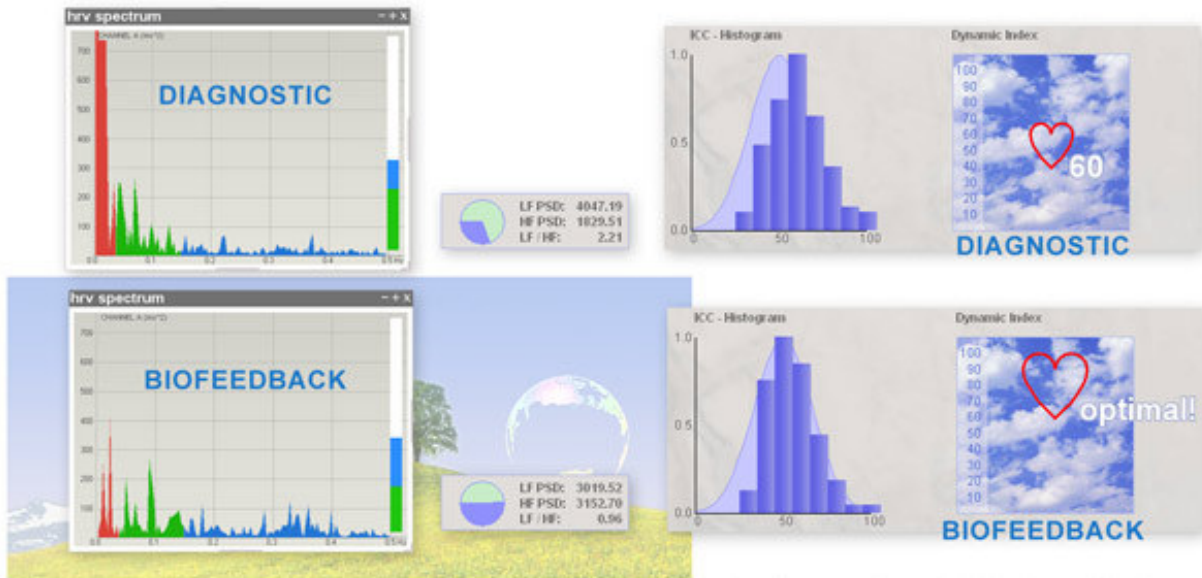
Dynamic Index of ICC: HOW SMART DO I LIVE?



The Human Heartbeat (2)

Measuring and Entraining Internal Cardiac Coherence

ICC Biofeedback (Harmonic Entrainment) with the Cardiogem



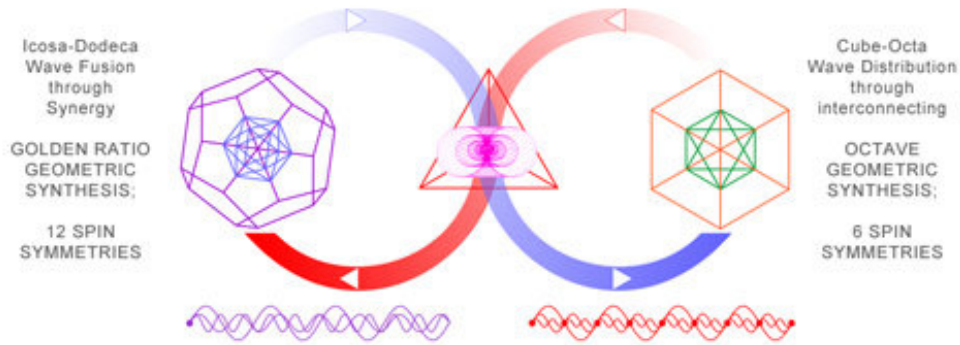
HRV spectrum, HRV histogram and Dynamic Index during diagnostics only (top) and during biofeedback. Both are the same person, in subsequent sessions. In this somewhat ideal example, the biofeedback immediately resulted in a much more balanced HRV spectrum, and thus also histogram, as well as a much increased Dynamic Index.

The heart as a bi-stable free oscillator, controlled by one sympathetic and two parasympathetic branches of the Autonomic Nervous System

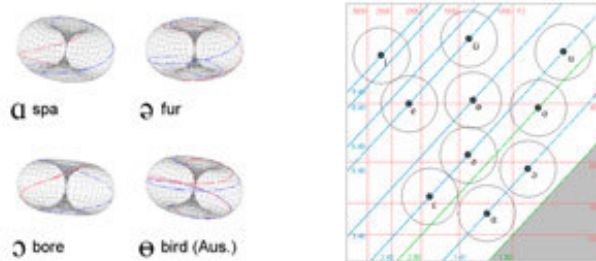
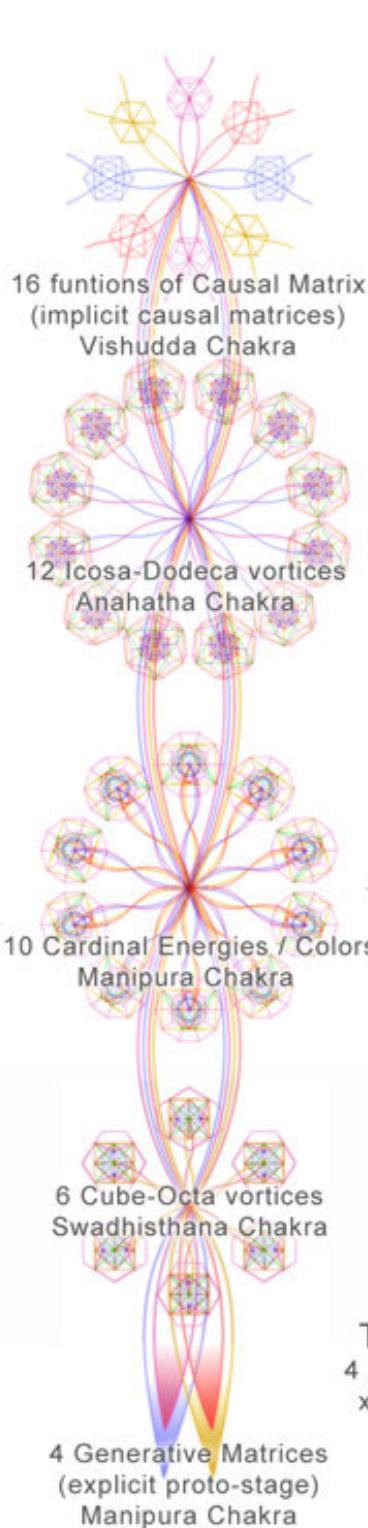
AUTONOMIC NERVOUS SYSTEM	LEFT PARASYMPATHETIC (AV)	PARASYMPATHETIC	RIGHT PARAS. (SA)
	STRONG	WEAK	STRONG
	SUBJECTIVE PSYCHOLOGY - (HIGHER) MENTAL FACULTIES		
SYMPATHETIC WEAK	Low HRV, fixed mood	Total indifference; (withdrawal, coma, death..)	Bradycardia, random moods
SYMPATHETIC NORMAL	Stress	Indifference	COGNITIVE ATTRACTOR:
	High stress		INTERNAL CARDIAC COHERENCE
SYMPATHETIC STRONG	Random HRV, uncontrolled emotions	Indecisiveness	Individual focus cognition, competence fulfillment
			Strong isolation
	OBJECTIVE PSYCHOLOGY - PHYSICAL PREDISPOSITION		
		Chance of arrhythmia >> << Chance of tachycardia (uncontrolled complex oscillation, no coherent experience)	Fixed rhythm, fixed perceptions

Whereas vagus action is normally explained as "inhibitory", from a subjective viewpoint it is in a way "excitatory", as it pulls the mind out of chaos into higher states. Thus the dual parasympathetic actions provide two paths out of chaos, one through synergetic / empathic synthesis, the other through individual / cognitive synthesis. These actions are referred to as the internal synthesis phases of the heart matrix. Excessive vagus action however pulls the heart out of equilibrium, and the mind gets either stuck in uncontrolled emotions, or emotional detachment.

The Wave Matrix of Psycho-physiology

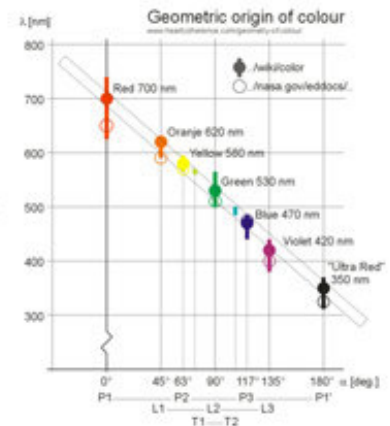
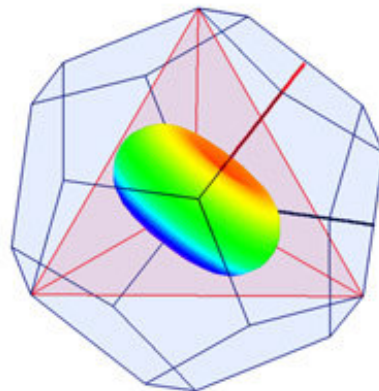


The Cycle of Geometric Projection and Synthesis



The Geometric Origin of Sound

Angle and orbital ratio of toroidal spin (projective geometry) accurately predicts the formants of the vowels of human speech



The Geometric Origin of Color

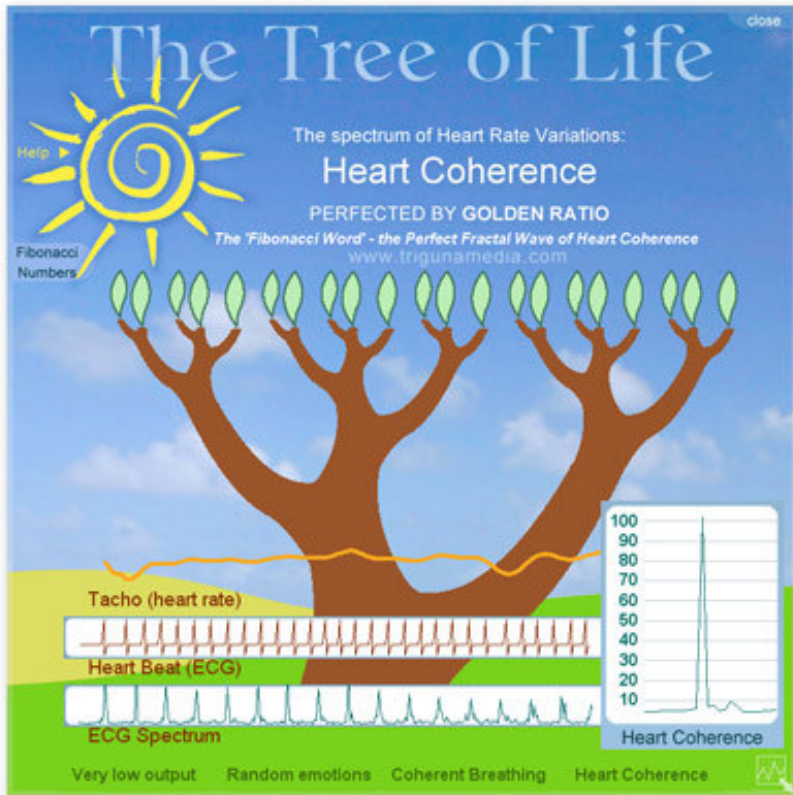
Angle and interdigitation of creative matrices (synthetic geometry) exactly predict the wavelengths of the primary colors

The Geometric Origin of the Chakra's

4 creative matrices x 2 psycho-physiological phases
x 2 causal phases = 16 functions of Causal Matrix

The "Tree of Life"

Visualizing Harmonic Inclusiveness of the Heart Rate Variability (HRV) - spectrum, optimized by fractality and Golden Ratio



The "Tree of Life" is a visualization of the HRV spectrum and it's meaning for Internal Cardiac Coherence.

The positions of the leaves or the tips of the reeds correspond to actual peaks in the HRV spectrum. From this, the tachogram and ECG spectrum are created, and finally the Internal Cardiac Coherence level is calculated.

The main types of HRV spectrum, and their corresponding states of mental and emotional coherence are summarized below.

FREE DOWNLOAD
<http://science.trigunamedia.com/treeoflife>



A. Very low output of the ANS. In most cases this points at an unhealthy condition.



B. Random emotions. This indicates lack of emotional control and thus coherence, and possibly stress.



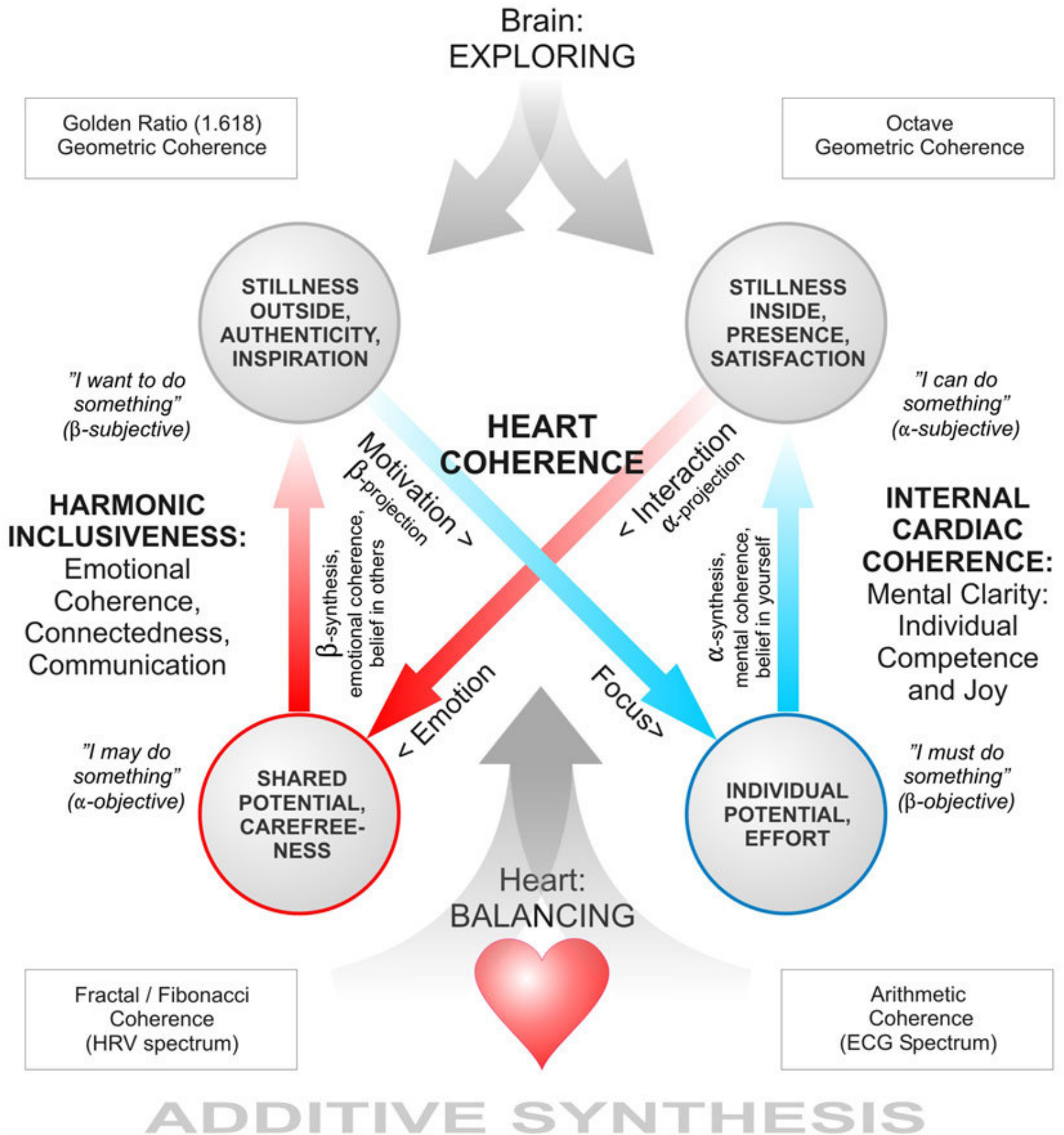
C. Monotonic breathing. This is a good exercise to release stress. It helps to reduce emotional chaos but does not create emotional coherence.



D. True Internal Cardiac Coherence. The ANS output is strong, but the emotional waves have fused together, creating true feeling, empathy and authentic communication. The harmonic spectrum creates a flat tacho, indicating mental focus and emotional coherence.

Internal Coherence

HETERODYNE SYNTHESIS



MATRIX PSYCHO-PHYSIOLOGY

Archetypes related to measurable biological spectra

