

BODY/BRAIN—MIND/CONSCIOUSNESS PROBLEM: A CONCEPT MAP OUTLINE
By Jay Gould (11/09/04)--based partly on Bownds, M.D. (1999) *The Biology of Mind*

MIND--is

What our Brain-Body Does--*i.e.*

Activities of the Nervous System in Total--*with*

Interaction Operations--*involving*

A Society/Ensemble--*of*

Distributed Neural Networks (i.e., Multiple Minds)--*consisting of*

Localized Specialized Modules--*with*

Hierarchical Organization

Serial & Parallel, Concurrent Processing, Pathways

Feedback & Feedforward Processes

Binding Mechanism(s)

Other Body Systems (e.g., Motor, Endocrine, & Immune)

The World (i.e., External Environment)--*together generating*

Motivations (related to needs)--*influencing & influenced by*

Emotions (related to satisfaction vs. frustration of motivational needs)--*producing*

Cognitive Feelings--*acting as*

Somatic Markers & Rapid Filters--*influencing*

Behaviors & Rational Thoughts (Cognitions)

Cognitions--*which are*

Neural Representations/Images--*of the*

External Environment--*interacting with the*

Body & internal Environment--*leading to*

Expectations & Biases--*causing*

Filtering--*of*

Perceptions & Thoughts

Mental Processes of Knowing--*incorporating successively*

Episodic Intelligence and Memory--*involving*

Attention, Encoding, & Perception--*followed by*

Storing, Recalling, & Reworking Events--*with*

Present Centeredness & No Internal Reflective Narrative Chatter

Mimetic Intelligence and Memory--*involving*

Nonverbal Language & Imitation (Kinesic Mime Communication)

Mythic Intelligence and Memory--*involving*

Symbolic Representations & Language--*with*

Integrated Myth Participation, Ideas, & Culture

Theoretic Intelligence and Memory--*involving*

External Storage of Symbolic Memory Representations

Unconscious Activity--*which is*

Unawareness (in the sense of consciousness)

Consciousness--*which is*

Awareness--*of that part of*

The Content of one's Mental Activity (i.e., one's Mind/Minds)

in--Working Memory--due to--Attention--and involving

Stimulus Sensations/Perceptions (Qualia=raw sensations & feelings)

Feelings--*i.e.*--the affect of emotions

Thought--*including--foresight, hindsight, insight &*

Metacognition--*which is--thinking about thinking*

Self--*i.e.*

Self-Awareness--*which is*

Consciousness of Self--*involving e.g.*

Self-Recognition (e.g., with mirrors)

Concept/Theory of Mind--*which means*

Awareness of Minds/Consciousnesses of Others

Emergent Property--*mainly in--The Limbic System & Anterior Cingulate Gyrus--of*

Certain Level of Complexity & Organization of the Nervous System--*for*

Focusing Awareness--*by linking--Motivation, Emotion, & Sensing--leading to*

Flexible Action--*via--Working Memory (which interfaces inputs & outputs)*

A Product of Gene-Environment Interactions--*which are*

Ultimately all in the Service of Adaptive Motor Behavior--*for--Survival & Reproductive Success*