THE WHAT

What is Consciousness?

Consciousness is the state of awareness of an external environment or of something within oneself; the ability to experience or feel.

EMERGING TECHNOLOGIES & MEASURING CONSCIOUSNESS

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STATES OF CONSCIOUSNESS

THE HOW

How is it Measured?

- Neuronmodulation (brain stimulation)
  - TMS
  - DBS
  - tDCS
  - ECT
- Neuroimaging
  - fMRI
  - PET
  - EEG
  - MEG

MEANINGFUL RESEARCH HELPS US TO UNDERSTAND THE RELATIONSHIPS BETWEEN MENTAL ACTIVITY & BRAIN ACTIVITY

BRAIN WAVES & THEIR FUNCTIONS

- Alert/Working
  - Beta
  - Alpha
  - Thetas
  - Delta

- Relaxed/Recollecting
  - Beta
  - Alpha
  - Thetas
  - Delta

- Drizzly/Daydreaming
  - Beta
  - Alpha
  - Thetas
  - Delta

- Deep/Dreamless Sleep
  - Delta

DREAMING SLEEP
- Restorative
- Reinvigoration
- Stimulates the mind
- Helps with learning and memory

DEEP SLEEP
- Essential for survival
- Regulates our mind and body

WAKING
- Awake and aware of outside factors
- Presence is temporary and fleeting

UNITY
- Oneness: Everything
- Encompasses the heart
- Inner and outer experiences are connected
- We are alive

COSMIC
- Slows and slows the pace
- Awakens
- Becomes a cosmic state
- Nature takes on a grand
- Transcendental
- Decreases in breathing and heart rate
- Deeply relaxed
- Optimized sights and their senses

YOUR BRAIN ON DRUGS

- Some drugs interact with neural circuits in the brain that use neurotransmitters.
- There are physical and mental short-term effects of these drugs that include increased heart rate, disorientation, feeling of euphoria, and sedation of the senses.

MEDITATION
- Observation: Observing
- Acceptance: Accepting
- Awareness: Being aware
- Non-judgment: Not judging

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NEUROIMAGING

- MRI
- PET
- EEG
- MEG

- Functional magnetic resonance imaging (fMRI)
- Positron emission tomography (PET)
- Electroencephalography (EEG)
- Magnetoencephalography (MEG)