

2017-01-10

## Consciousness

### What is Consciousness?

- Damn, that's a complicated question
- **Consciousness** = a living thing's capacity to know of things happening outside and inside of the *self*
  - What is *self*?
- **Subconsciousness** = a level of awareness that is not available to the conscious mind
  - Contains thoughts and feelings and ideas *just* like the conscious mind
  - Can be seen, but rather elusively
- **Unconscious** = a region of thought that cannot be known by the conscious mind
  - Ambitions and desires
  - Freud said that it also held unresolved conflicts
    - \* Dreams can be indicative of what is happening in the unconscious

### Fantasy-prone Personality

- **Fantasy-prone Personality** = a personality type that lends it self to fantasizing in excess
  - Can generate vivid imagery on the fly
  - Frequency of fantasy is drastically higher

### Biological Clocks

- **Biological clock** = an internal mechanism that directs body systems on their own cycle
- **Entrainment** = a method of training biological clocks to a different rhythm
- **Circadian Rhythm** = a biological clock that regulates desire to sleep
  - Cycle is generally around 25 hours
    - \* Not congruent with 24-hour light/dark cycle
  - Through **entrainment**, the body can gradually adopt a 24-hour schedule
  - Highs and lows

- \* Most people feel most tired between 3:00AM and 5:00AM
- \* Most people feel most awake between 3:00PM and 5:00PM
- \* Generally based on blood pressure, body temperature, and fatigue

## Sleep and Dreams

- **Rapid Eye Movement(REM) Sleep** = a stage of the sleep cycle that is characterized by darting, random eye movements
  - Typicall happens several times throughout the night
  - Dreams are generally most vivid in this period
  - **Sleep paralysis**
    - \* Also called “paradoxical sleep”
    - \* When falling asleep, a hormone is released to inhibit motor neurons from allowing the brain to move body parts
- **Sleep** = a behavior where organisms lose consciousness at the behest of certain brain systems

## REM vs NREM

REM SLEEP	NREM SLEEP
Rapid eye movement	Non-rapid eye movement
Grow in duration with sleep duration	Grow in duration with sleep duration
Vivid dreams	Vague, dull dreams
Nightmares	Incubus attacks(night terrors)
Sleep paralysis	Sleepwalking & talking in sleep
Essential for body function	Not as essential for body function

## Brain Waves and Sleep

- Different types of brain waves = acronym – **BAD**
  - **Beta** = brain activity indicative of fully awake people
  - **Alpha** = brain activity indicative of relaxed but awake brain
    - \* Slower, less erratic
  - **Delta** = brain activity indicative of deep sleep
    - \* Slower, longer pulses of activity
- **Hallucinations** = false sensory experiences
- **Sleep Spindles** = small bursts of brain activity
  - Occurs in **stage 2** of the sleep cycle
  - Grow in magnitude with duration of sleep