

- Our awareness of ourselves (mental processes, thoughts, feelings, perceptions) AND our environments
- Our experience of a moment as we move through it

States of Consciousness

- Waking consciousness - thoughts, feelings, and sensations are clear and organized
 - o Person is fully present and paying attention to self AND environment
- Altered state of consciousness - a shift in the quality of mental activity
 - o Any state other than waking consciousness
 - o Reduced ability to monitor information from self and/or environment
 - o Many sources of alteration

Conscious Processing

- Awareness: is focused on a particular stimulus while ignoring others (selective attention)
- Conscious processing - Ability to register and react quickly to stimuli we are aware of and paying attention to; requires conscious control
- Selective attention - Conscious awareness is focused on a particular stimulus while ignoring others

Non-conscious processing

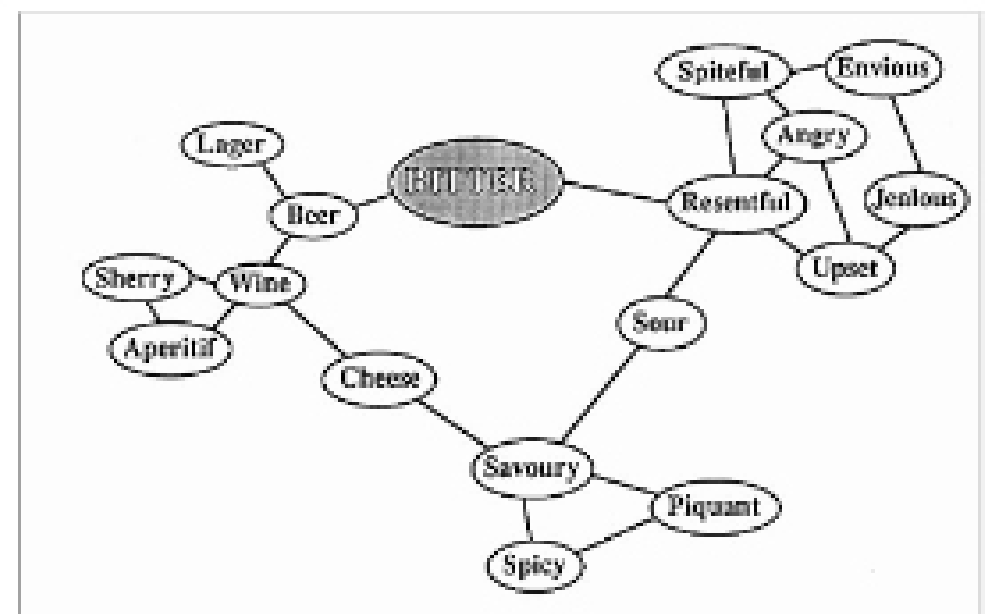
- Non-conscious processing: passive handling of stimuli that are received in the brain, but that we are not selectively attending
 - o 11,000,000 bits of info processed without conscious awareness!
 - Non-threatening sensory stimuli, background noise, colors...
 - o No critical or logical analysis of non-conscious information
 - o BUT, brain can redirect attention to very important stimuli
 - Problem with redirection? slow

Non-conscious processing

- priming: recent exposure causes a temporary and passive activation of information and associations stored in memory
- We respond faster and more accurately to stimuli that are primed
- So “primed” means “familiar”
 - o information you know so well that it is always slightly activated OR
 - o information that is activated because you have recently encountered it

Organization in LTM

- Spreading activation: among connections explains priming AND semantic interference
- Semantic network model: information is stored in connections, so that activating a concept also activates related concepts



Why do we sleep?

- Adaptive theory - animals and humans evolved sleep patterns to avoid predators by sleeping when the predators are most active.
- Restorative theory - the body repairs and maintains itself during sleep
 - o replenishes chemicals and repairs cellular damage.
- Memory consolidation & learning theory: neural pathways for new information are reinforced during sleep
 - o People who get enough sleep are better at remembering what they learned that day!

Biology of sleep

- Circadian Rhythm - a 24-hr internal body cycle
- Age influences your optimal am/pm clock
- suprachiasmatic nucleus - “biological sleep clock” hypothalamus structure that tells your body when to wake up and when to fall asleep.
- Tells pineal gland when to secrete melatonin, which makes a person feel sleepy
- Artificial light delays sleepiness

Sleep happens in stages

- Brain activity changes predictably during sleep
- Waveform shows what stage of sleep the person is in