

10/28 ATTENTION continued

- Divided attention
 - dorsal/lateral prefrontal areas
 - verbal memory load task and dowel balancing task
 - o with L hand balancing= no effect
 - o with R hand balancing= worse performance
 - o each hemisphere has its own pool of resources (L hemisphere resources over taxed)
 - Driving (RH) and talking (LH): drawing on different hemispheres
 - o handheld: 3x more likely of accident
 - o hands free: 8x more likely accident
- Network models (4)
 1. Reticular activating system- alertness
 2. Posterior parietal- sensory map (feature integration- shape and color)
 3. Cingulate cortex- motivation (avoid distractors)
 4. Frontal lobe circuit- motor, search
 - default network: inferior, parietal (inhibited when need a specific network)
 - o Attention to internal states
 - R parietal lobe damage = hemineglect: inability to attend to one side of space (usually L side)
 - o Multi-modal: neglect visual, auditory, and olfactory
 - o L parietal lobe: makes sensorymap of space (right side)
 - o R parietal lobe: sensory map of both sides
 - o Internal mental image: all info exists in semantic memory, spatial neglect still exists (cathedral, naming shops task)
 - o Caloric stimulation (treatment): drip cold water into ear induces vertigo, hyperactivates damaged R hemisphere.
 - o Anosognosia: denial of deficit
 - o Burning house: info is making into processing/unconscious

LANGUAGE

- Broca's aphasia: (patient tan) speech production disorder
- Wernicke's aphasia: disorder speech comprehension
- No specific language center = loss of grammar or loss of semantics (defined in psychology)