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- ways of looking determining brain functions/treating mental disorders:

- Prefrontal lobotomy
- Malaria, coma, diabetic shock (disrupt the system to get it back on track)
- Moniz: chimpanzees (removal of frontal lobe made them more docile)
- Lobotomies (killed white matter with alcohol/ethanol or use scalpel/hammer)
 - Freeman: transorbital psychology
 - 40,000 lobotomies between 1936-1966
 - patients showed no initiation of behavior/inhibited/ detached from society (no theory of mind)
 - 1967 ban on lobotomies in most states

Brain asymmetry

- Lashley: localization of engram (neural memory trace)

- Rats: couldn't find where memory was stored (removed sections of brain).
- Memories stored in holographic measure

- Roger Sperry

- Monkeys: cut optic chiasm, taught one hemisphere, cut corpus collosum, test other hemisphere.
 - Info hemispheres share is mirror imaged (moving hands, opposite motions is easier)
 - Dyslexia, could be caused by mirror imaged language (language bilateral)
- Commissurotomy (split brain operation)
 - Wegener epilepsy: section corpus collosum should confine seizure one hemisphere
 - Akelaitis: no problems of sensory function/cognition after surgery

- 1960 Commissurotomy

- Corpus collosum not full sections needed to fully retract hemispheres
- Methods testing split brain patients were inadequate
 - Gazzangia and Sperry: present info to only one side of the brain
 - Find language: wada test (anesthesia on each side of hemisphere) speech usually in L hemisphere.