EXAM 3

3/22/2016

1. Videos- Animal Psychology
   1. Einstein the famous talking parrot
   2. Biggest influence to behaviorism was animal psychology... which grew out of evolution theory
2. The Influence of Animal Psychology on Behaviorism
   1. Jacques Loeb
      1. 1859-1924
      2. **Tropism**: involuntary, forced movement; animal behavior is reflexive, doesn’t have any conscious direction
      3. **Associative memory**: you associate a stimulus and a response (“hey sounds a lot like classical conditioning” yeah.. it does. Basically the same thing!)
   2. Robert Yerkes
      1. His research strengthened idea of comparative psychology.. working with animals and comparing results to human behavior
      2. Started primate lab
   3. Charles Henry Turner
      1. Worked with ants
      2. Watson praised his paper on ant behavior (term ‘behaviorism’ came from this paper)
      3. African-American🡪 main reason we don’t hear a lot about him.
      4. If ever a budget issue, animal psychology was the first thing to go
   4. Oskar Pfungst
      1. On the committee to investigate Clever Hans—he determined that Hans was just well-trained
   5. Side note: Willard Small did research with rats in mazes in the 1900—he discussed the idea of rats having mental imagery
3. Clever Hans
   1. Horse reading cues
4. Edward Lee Thorndike (1874-1939)
   1. Wanted to do research with children but told he shouldn’t because of a scandal going on with Harvard researcher
   2. Made mazes for **chicks** to run through
   3. Was living in boarding house and landlord wasn’t fond of the chicks, so William James took them into his basement- the kids loved em
   4. Left Harvard and went to Columbia University because a girl didn’t return his love at Harvard
   5. Didn’t stick with animal psych very long
   6. **Connectionism**: connection between stimuli and responses; learning to associate various things (go down stairs, cat follows after you)
   7. **Puzzle box**: similar to putting laundry basket on cat. The cat learns a behavior to get out… may have been accidental. Thorndike would put a cat in puzzle box. He’d put a step in to get out. Once the cat figures out the step, he’d add more steps like levers and stuff to get out.
   8. **Law of exercise**: the more you do that response, the more you associate it with that situation
   9. **Law of effect**: if something is likely to occur, you’re more likely to do it again
      1. Acts produce satisfaction in situation become associated with situation- act is likely to occur (pragmatism)
5. Ivan Pavlov
   1. Russian physiologist
   2. Studied
      1. Nerves of the heart
      2. Digestive glands
      3. Conditioned reflexes
   3. He walked to get to his school—super long distances
   4. From very poor family, too educated for his family of peasants, but too much of a hick for the upper class
   5. Didn’t like getting distracted by practical things.. laundry, his house, etc. he was kinda clueless
   6. Brilliant but couldn’t be practical
   7. His family lived in poverty until he was about 41 years old
   8. He’d sleep in his lab sometimes, student would give him pity money a lot.. used money for his lab and dogs for his lab.. his poor family ☹
   9. Hot temper but good sense of humor
   10. So fond of dogs that he erected a dog statue
   11. Also looked at Extinction- how do we extinguish association between CS and CR?
   12. Conditioned reflexes- dogs salivation. Meat powder.
       1. UCS: bowl of food
       2. UCR: salivation
       3. CS: bell
       4. CR: saliva
   13. Example
       1. UCS: ground beef
       2. UCR: nausea
       3. CS: Lysol
       4. CR: nausea
   14. Spontaneous recovery: association shows up again after extinction
   15. Generalization: not only Lysol makes her sick, but Febreze and Renuzit
   16. Discrimination: opposite of generalization. You’re able to tell the difference
   17. Higher order conditioning
   18. Pavlov Tower of Silence: extremely controlled experience (can’t hear researcher’s footsteps, constant temperature, etc.)
6. Poor E.B. Twitmeyer
   1. Knee jerk reflex
      1. Would swing leg before getting tapped
      2. Presented shortly after Pavlov, basically about the same things, but no one knows him because he presented right before lunch and everyone was hangry
7. Vladimir Bekhterev (1857-1927)
   1. Enemy of Pavlov
   2. Died a mysterious death, sent to Moscow to treat Stalin’s depression, Bekhterev said that Stalin was paranoid, he died that afternoon
   3. Focused on humans and motor conditioning
   4. Associated reflexes: same thing Pavlov found with a bell and saliva

3/24/16

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Chapter 10: Beginnings of Behaviorism

1. **Little Albert**
   1. 9 month old
   2. Scared of white rabbits—started generalizing and being scared of other white furry objects
   3. Conditioned fear
   4. Nurse moves away, never deconditioned Albert!
   5. Died at age six, actual name Douglas
2. **John Broadus Watson (1878-1958)**
   1. Spent lots of time with his 21 year old student, Rosalie
   2. Did the little albert study with **Rosalie** (not his wife)
   3. “give me a dozen healthy infants” quote
   4. Greenville, SC
   5. Fuhrman University
   6. University of Chicago
   7. Mom is religious, dad is womanizer and left when John was 13. Rough home-life.
      1. He was bit of a delinquent
      2. Mom wants him to be in the clergy… he applies to theological school, Fuhrman University.. got Master’s here
      3. Brilliant, but lazy nonconformist
   8. Considered good looking
   9. Dropped Fuhrman after mom died and headed to University of Chicago with $50 to his name
   10. Started suffering from panic attacks
   11. Got PhD at 25, youngest at the time!!!
   12. He was a grad student teacher and girl would write love poems with her assignments. He ended up marrying her
   13. Offered a professorship at Johns Hopkins
   14. James Marc Baldwin—resigned because caught at a brothel- so John B Watson took over!!!!!
   15. Has wife and 2 kids, voted handsomest professor, seen as womanizer like his dad
   16. He studied the effects of alcohol and sex education films on students (Rosalie would help…)
   17. Helped with test development, advertising
   18. Home life sucks, **professional life thriving**
   19. Rosalie’s family invite over Watson and wife because prominent families
       1. Wife finds love letters in Rosalie’s drawer
       2. Sends letters to Baltimore newspaper and they publish it
       3. Forced to resign and publicly outcast
   20. Married Rosalie

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1. John B. Watson cont…
   1. Wrote book on **Child Rearing** (the book of the time!!)
      1. Thought parents had no backbone
      2. Children should be raised objectively (Rosalie didn’t agree)
      3. Shouldn’t hug/kiss kids (too much emotion)
      4. 2 of his kids attempted suicide, another had a mental collapse (one succeeded in suicide)
      5. Rosalie dies at 37, only time his kids saw John cry and the only time he hugged them. Then he shipped them off to boarding school and never discussed her again
      6. Sold mansion and became a recluse
      7. 22 years after Rosalie he dies, he doesn’t want to accept a psych award (people think it’s because he didn’t want to show emotion), he burned all his writing/findings and died a year later
      8. Huge impact on behaviorism
   2. Subjects of behaviorism
      1. **Instincts**- he decided they’re not real, they’re socially conditioned
      2. **Emotions**- infants have unlearned emotions—fear, rage, love
         1. **Mary Cover Jones**- you can decondition to get RID of fear (like Peter and the rabbit he was scared of)
      3. **Thoughts**- related to our motor behavior
2. **Criticisms of Watson**
   1. Edwin Holt
      1. 1873-1946
      2. He agrees with Watson that environment influences our behavior
      3. Disagrees with Watson because he thinks people have a purpose, not just conditioned to do something. (he believes in consciousness)
   2. **Karl Lashley**
      1. 1890-1958
      2. **Law of mass action**: the efficiency of learning is a function of the total mass of cortical tissue
         1. All parts of your brain work together when learning
      3. **Equipotentiality**: the idea that one part of the cerebral cortex is essentially equal to another in its contribution to learning
         1. So, if one part of brain is damaged, another part will have to take over that function
   3. **William McDougall**
      1. One of Watson’s more vocal opponents; disliked by many simply because he didn’t like behaviorism
      2. He supported free will (because of that, picture of free willy)
      3. Instinct theories (lost in the shuffle because everyone loved behaviorism so much)
      4. McDougall and Watson debated in the Psychology Club of Washington in 1924 over behaviorism
         1. Observers sided with Watson, but judges said McDougall is the winner
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      3. African-American
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3/31/16

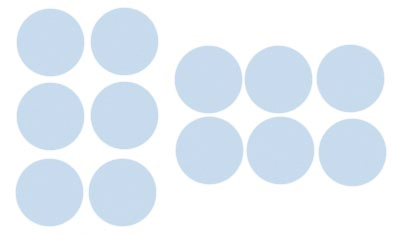
1. Watsonian🡪 neo-behaviorism🡪 neo-neo behaviorism (sociocognitive behaviorism)
2. Breland and Breland
   1. IQ Zoo
      1. Trained animals to do tricks
      2. Instinctive drift- tricks play on the animal’s natural instincts
3. Operationism
   1. The view that the meaning of every scientific term must be specifiable by identifying a definite testing operation that provides a criterion for its application
   2. Main goal: to ensure the objective testability of all scientific statements
   3. Make sure you can test it
4. Edward Chace Tolman
   1. Tried to be a philosopher but thought he wasn’t smart enough, so he went into psychology instead
   2. Led revolt of signing of the anti-communist oath in California. Him and other profs were fired but hired back because they realized it wasn’t fair to force them to sign the oath
   3. **Purposive behaviorism**: your behavior has a purpose (behavior is very goal-directed)
   4. **Intervening variables**: there are things that change our motivation to do things (might run maze faster for food because you’re hungry)
   5. Worked with rats and used the craw-shaped maze
   6. Reinforcement has little influence on learning
      1. The more you do something, the more it gets stamped in
      2. Driven by purpose
      3. Easier to find food if left in the same place and rat starts from different places as opposed to moving food to different spots
5. Clark Leonard Hull
   1. 1884-1952
   2. Thought Watson is too naïve. His behaviorism is too simple and crude
   3. Lots of bad luck in life
   4. He was 34 when he got his PhD
   5. Hypothetico-deductive method: you should observe……….
   6. Drives: a state of bodily need, when you deviate from normal biological conditions
      1. Primary drives (foo, sex, going to bathroom)
      2. Secondary drives are learned (money, getting good grade)
6. Skinner’s Life
   1. Real name: Burrhus Frederick Skinner (B.F. Skinner)
   2. Had lots of animals growing up
   3. Didn’t like college- not good at sports, not frat type, constantly rejected by women; played a lot of practical jokes and openly criticized faculty and staff
   4. Got degree in English and thought he’d be a writer
   5. Studied psych and taught at University of Minnesota
   6. Wrote book The Behavior of Organisms.. now it’s considered CLASSIC, but not at the time
   7. He liked to sleep for 3 hours, work for 3, and so on instead of just sleeping at night

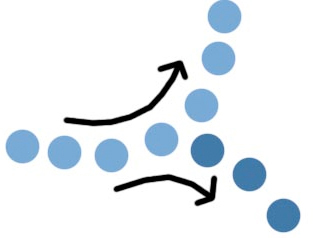
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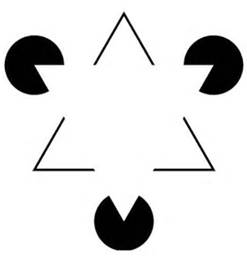
1. B.F. Skinner’s Findings
   1. Differed from Hull’s in that there was no theory testing
   2. Empty organism approach: he didn’t care about the thought process, just the behavior
   3. Operant conditioning: consequences of your behavior
   4. Reinforcement: anything that increases probability of a behavior (positive or negative)—Skinner liked these more than punishers
   5. Punishment: anything that decreases probability of a behavior (positive or negative)
   6. Schedules of reinforcement: found this out accidentally
      1. Fixed ratio- certain amount every time
      2. Fixed interval- paid on an interval
      3. Variable ratio- don’t always get the same amount of food
      4. Variable interval- don’t get your food all the time
   7. Post reinforcement pause: they’d work hard to press lever to get food, but after they’d take a break because they knew it wouldn’t happen for awhile
   8. Hard to get rid of behavior that’s reinforced by variable interval (i.e. slot machine) if I try a little longer…
      1. Baby crying for a half hour and you go check... next time baby cries for an hour because he knows if he keeps crying you’ll come
   9. Successive approximations: start reinforcing generally, then get more specific
      1. Baby talk and reinforce it… then get more specific and say “use your words! What would you like?”
   10. Air crib
       1. His daughter Debbie had an air crib
       2. Temperature-controlled box for baby, so you don’t have to wash blankets and such
       3. Fairly useful but didn’t pick up any popularity—they thought it was “ a Skinner box for babies”
   11. Went to Dad’s Day at the kids’ grade school… he thought the teachers were teaching the kids all wrong... so he created a teaching machine
   12. Favorite animal--pigeon
       1. Made guidance system for missiles using pigeons
   13. Had midlife crisis at age 41 (Walden 2 is a book he wrote at this time)
   14. Instinctive drift: reverting back to behaviors that take precedence over learned ones
2. Albert Bandura
   1. He is still alive!
   2. Vicarious reinforcement: learning can occur by observing the behavior of others rather than directly experiencing reinforcement
   3. Went to University of Iowa for his PhD, then went to Stanford
   4. Idea of social cognitive theory
      1. Don’t need to be reinforced yourself to learn something
   5. Cutest old man ever
   6. Bobo Doll study
      1. Kids observe a woman punching a doll and watching it bounce back.. kids that observe this are more aggressive with the doll when they go to play with it than kids who did not see a woman punching the doll
   7. Self-efficacy: belief you can do something. People with high self-efficacy were more successful in life
   8. Modeling- to model a certain behavior
3. Julian Rotter
   1. Locus of control: perceived source of reinforcement
   2. We learn mostly through social experiences
      1. Internal locus- you are in control of situations
      2. External locus- you think some things are out of your control
      3. People who had more internal tended to do better/be more motivated
4. Fate of Behaviorism
   1. Died out when Skinner died out in the 90s
   2. Skinner’s pigeon lab closed in 1998

4/7/16

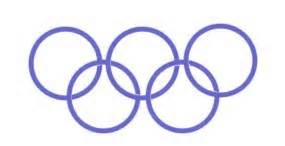
1. Gestalt Psychology
   1. The whole is different than the sum of its parts
   2. Wolfgang Kohler (one of the founders of the Gestalt School)
      1. Went to Canary Islands in Africa and studied Chimps
      2. Tenerife
      3. Chimps in an enclosure with food right out of reach and see them solve problems... next time animal knows immediately what to do.. animals have an AHA moment
      4. (we talk more about this guy in a little bit)
2. Phenomenology- an approach to knowledge based on an unbiased description of immediate experiences as it occurs, not analyzed or reduced to elements
3. Physics
   1. Fields of force: regions or spaces traversed by lines of force, such as a magnet or electric current
   2. Phi phenomenon: the illusion that 2 stationary flashing lights are moving from one place to another (Arby’s sign—it’s not a light that’s moving, it’s a bunch of lights lined up that light up one at a time)
4. Founders of the Gestalt School
   1. Max Wertheimer
      1. Arby’s sign
      2. Fled Nazi Germany
      3. Stumpf Stroboscope—the thing you look through and has pictures of horse, looks like horse is running, but really just multiple pictures lined up—phi phenomenon.
   2. Kurt Koffka (1886-1941)
      1. Published an article Perception: An Intro to Gestalt in 1922
         1. People saw the title and they assumed Gestalt was all about perception instead of behavior, ended up doing more harm than good
   3. Wolfgang Kohler (1887-1967)
      1. Spokesperson for the Gestalt school, pretty social guy, German
      2. He was the one studying **chimpanzees** in Tenerife
      3. He said he wasn’t allowed to leave Tenerife because of the war, but other Germans were allowed to leave… so people thought he might be a spy
      4. Spent next 10 years in Tenerife with his chimpanzees
      5. Wrote *The Mentality of Apes*
      6. Went back to Berlin, Germany in 1920, and he brought the chimps with him. Sold chimps to Berlin Zoo, but they didn’t last long because it was too cold.
      7. Insight
         1. Chimps would wander until they got an idea of how to solve the problem
         2. Chimps were not only able to use tools, but they would start to build tools too. Kohler argued that this was insight! BUT, it wasn’t consistent.
         3. Most famous chimp: Sultan
         4. Kohler told his son Klaus that his chimp Sultan was smarter than him ooouch
         5. Sultan learned by modeling... painted a fence once after seeing a person painting a doorway, spanked Klaus, etc.
5. Perceptual Constancy
   1. Even though you’re seeing something differently, you know it’s the same thing (knowing Ashley is small when across the room and gets bigger when she moves closer. Still same person)
   2. A quality of wholeness or completeness in perceptual experience that does not vary even when the sensory elements change
6. Gestalt Principles
   1. Law of proximity

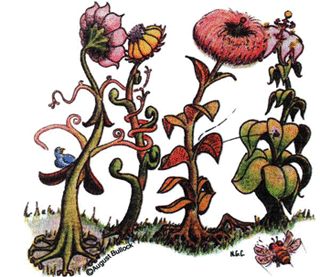


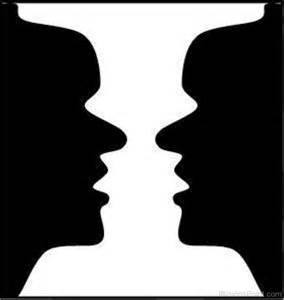
* + 1. Objects near each other tend to be grouped together
    2. The circles on the left appear to be grouped in vertical columns, while those on the right appear to be grouped in horizontal rows
  1. Laws of Continuity
     1. Lines are seen as following the smoothest path
     2. In the image, the top branch is seen as continuing the first segment of the line. This allows us to see things as flowing smoothly without breaking lines up into multiple parts
  2. Law of similarity
     1. Items that are similar tend to be grouped together
     2. In the image above, most people see vertical columns of circles and squares
  3. Law of closure



* + 1. Objects grouped together are seen as a whole
    2. We tend to ignore gaps and complete contour lines. In image above, there are no triangles or circles, but our minds fill in the missing info to create familiar shapes and images
  1. Law of Pragnanz



* + 1. Olympic rings
    2. Reality is organized or reduced to the simplest form possible
    3. For example, we see the image above as a series of circles rather than as many much more complicated shapes
  1. Figure/ground



* + 1. See things in terms of positive and negative space
    2. Subliminal sex example.. can see the word “sex” in between flowers
  1. Gestaltists and Behaviorists fought a lot
  2. Field Theory
     1. Kurt Lewin’s system using the concept of fields of force to explain behavior in terms of one’s field of social influences
        1. People’s behavior is not just a result of conditioning, but all sorts of things that have happened in their life
        2. Known for his icky meat study (if you were in social psych class)
     2. Life space: all influences acting on a person at any given time
     3. Zeigarnik Effect: we have a certain amount of tension before performing a task, and then once that’s released, there’s no reason to hold onto that info
        1. Remember a bunch of stuff right before a test, forget it afterward

1. Criticisms of Gestalt
   1. Vague
   2. All theory and no empirical data whatsoever
   3. Insight experiment could not be replicated
   4. Poorly defined
2. Contributions
   1. Perception
   2. Learning
   3. Thinking
   4. Motivating