

One-Trial Learning & Taste Aversion



- A taste aversion is a conditioned response that results from a person or animal establishing an association between a particular food and being or feeling ill after having consumed it at some time in the past.
- The association is usually the result of a single experience, and the particular food will be avoided in the future.
- One trial learning is like classical conditioning but is not classical conditioning nor a type of classical conditioning.

Taste Aversion & One Trial Learning

- A classically conditioned response - acquired after a number of associations
- *A conditioned response (taste aversion) occurring through one-trial learning - acquired extremely quickly.*
- Importantly, in classical conditioning, the CS and the UCS occur closest together.
- *In one-trial learning however, the CR (the feeling of illness) that becomes mentally associated with food could occur as much as a day or so after the food (CS) was consumed.*
- Generalization is rare in one-trial learning, and it is more resistant to extinction.

Example of taste aversion with a positive outcome



"You Give Me 12 Healthy Infants..."

... John Broadus Watson, 1930

J. B. Watson believed in "nurture" and accepted the proclamation of John Locke "which presented the mind as a blank slate upon which experience writes its message" In what many have said was his most widely quoted and longest sentence, Watson stated:

Give me a dozen healthy infants well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief and yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors (Watson, 1930, p. 104, as cited in LeFrancois, 2000).

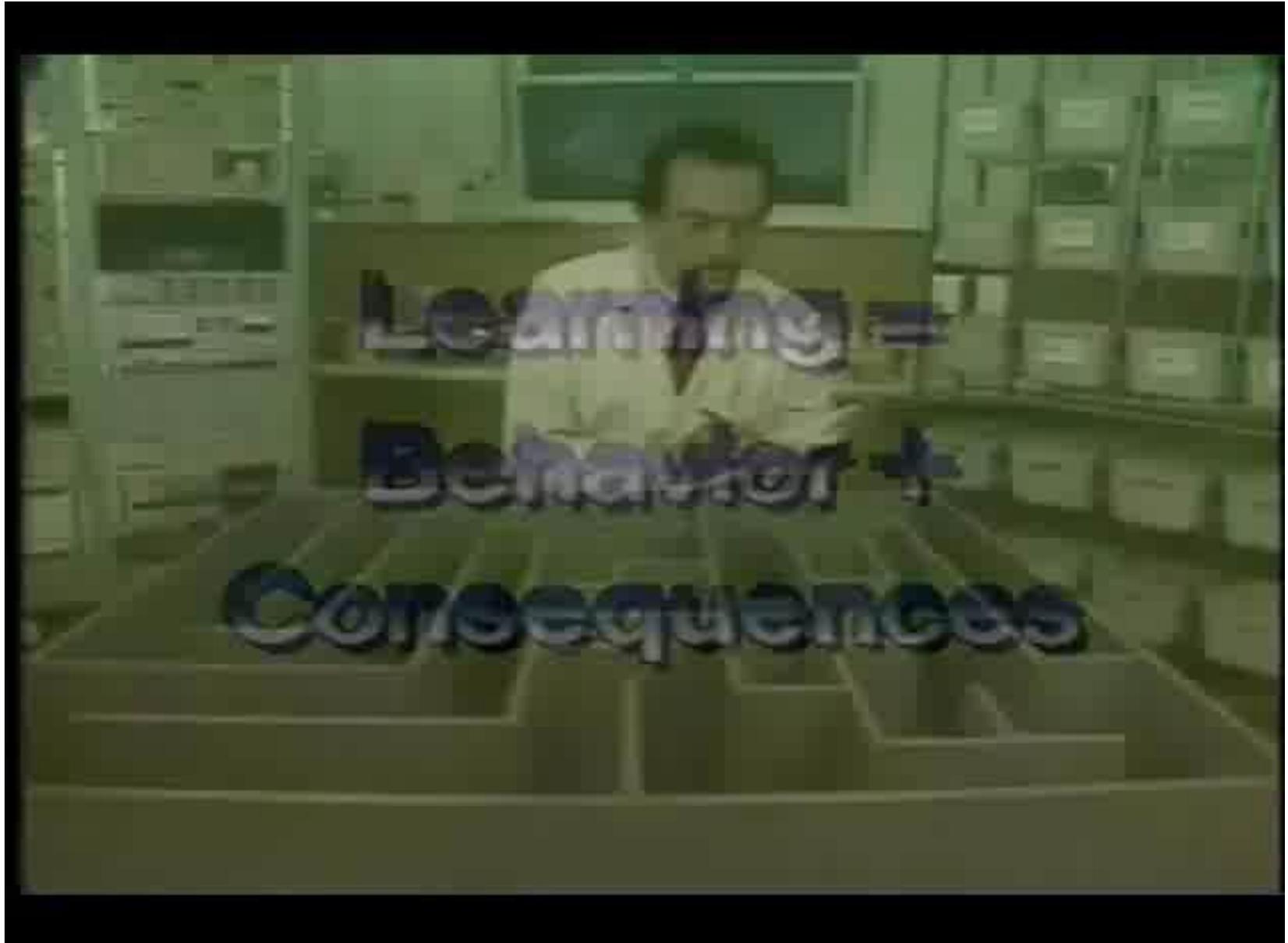
Who was “Little Albert”?

- ◆ “Albert B.” was the subject of John B. Watson’s famous study in which Watson wanted to show how fears could be conditioned.
- ◆ Instead of having to refer to unconscious forces to explain fears (i.e., psychoanalysis), Watson wanted to show that fears and phobias could be explained much more simply by applying the conditioning principles established by Pavlov to humans. *Psychology should measure what is observable and measurable. - behaviorist principle.*



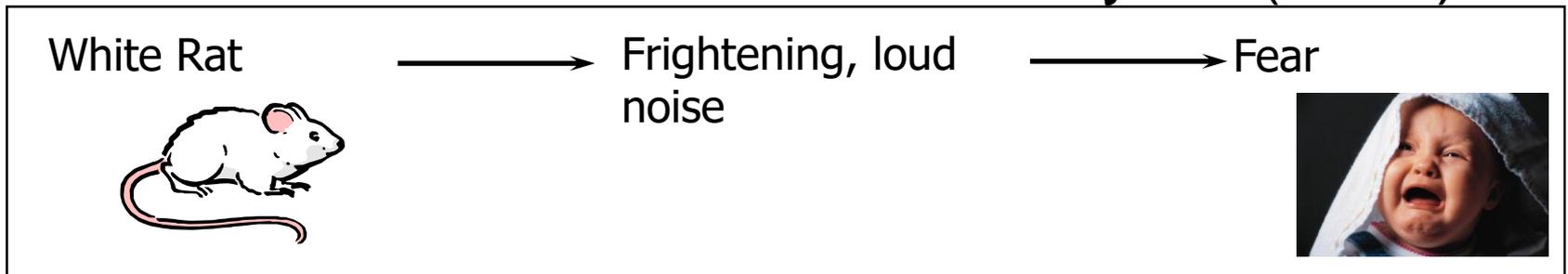
“...remains one of the most frequently cited articles in textbook psychology.” - Beck, Levinson, and Irons (2009)

Watson and Little Albert

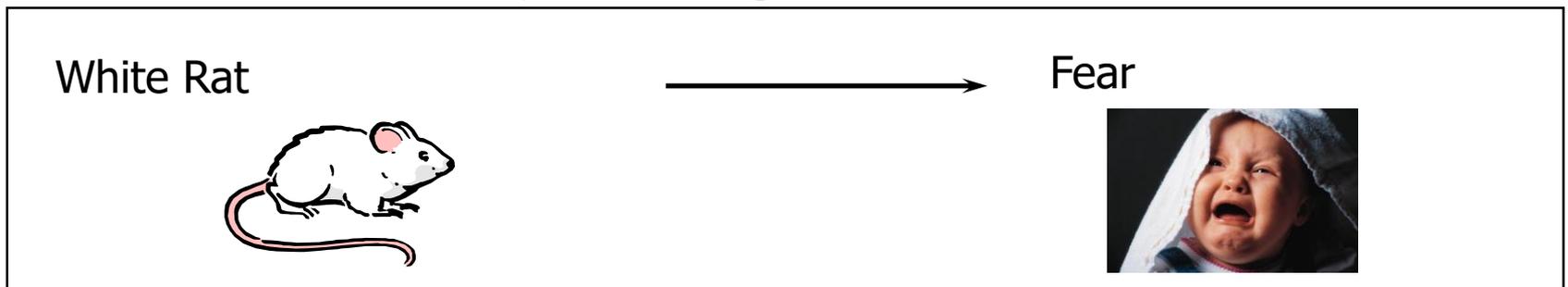


Classical Conditioning in Humans

- Little Albert
 - John Watson and Rosalie Raynor (1920)

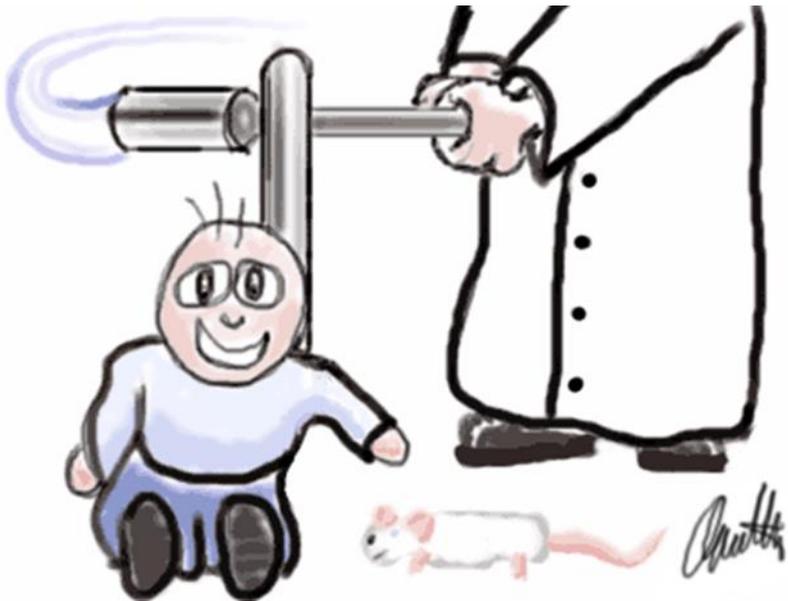


– After many pairings:



Whatever Became of Douglas Merritte?

- ◆ Douglas is buried in Locust Grove Cemetery, in Mt. Airy, MD.



Watson's Contributions

- One of the First American Psychologist to apply Pavlov's work to humans (emotions)
- Brought the study of behavior (Psych) into a more "scientific" and observable discipline
- Little Albert in every Psych Textbook
- Convinced other Psychologist that there was an alternative to Freudian Psychoanalysis
- Neurotic symptoms (Phobias could be controlled via CC)...Major applied significance

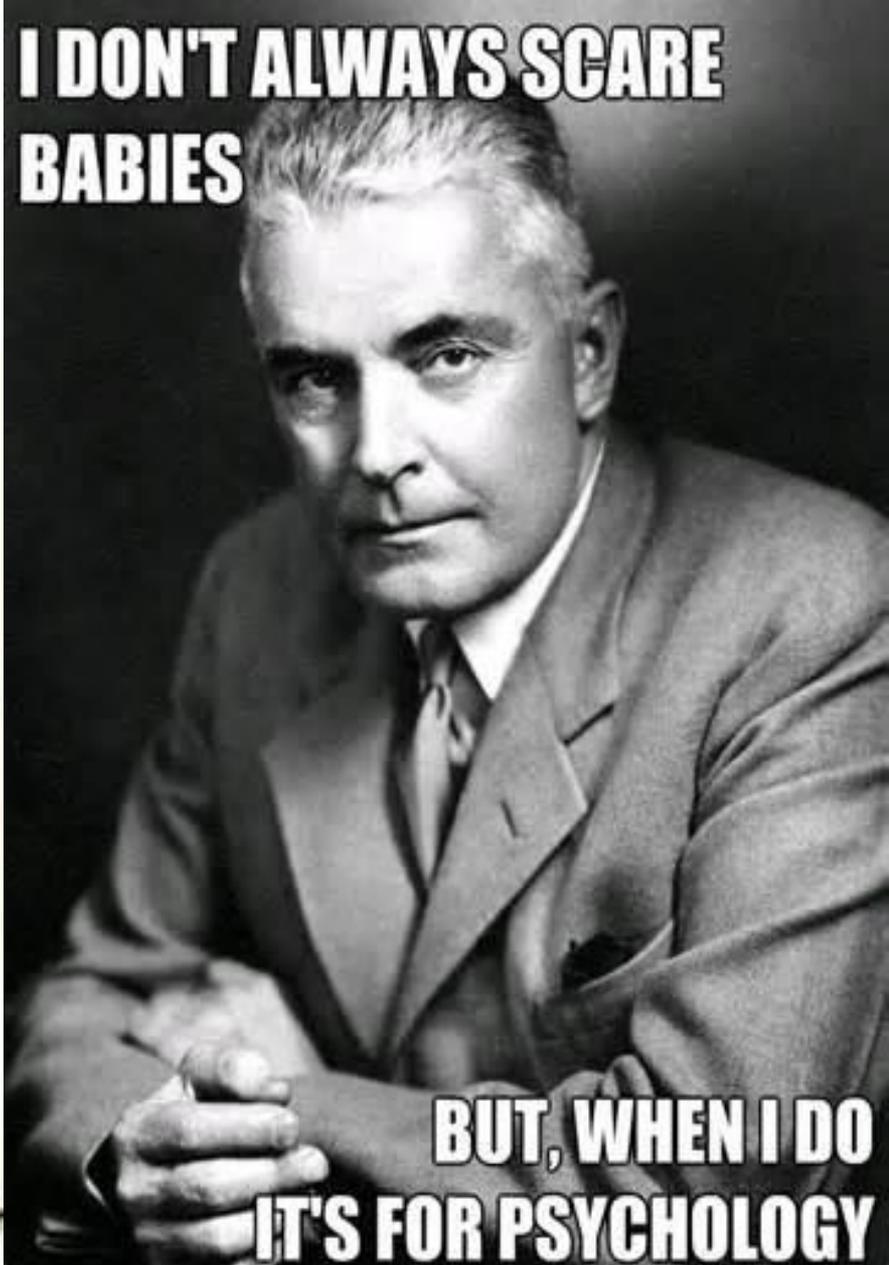


Applications of Classical Conditioning

Watson used classical conditioning procedures to develop advertising campaigns for a number of organizations, including Maxwell House, making the "coffee break" an American custom.



John B. Watson



**I DON'T ALWAYS SCARE
BABIES**

**BUT, WHEN I DO
IT'S FOR PSYCHOLOGY**

Operant Conditioning



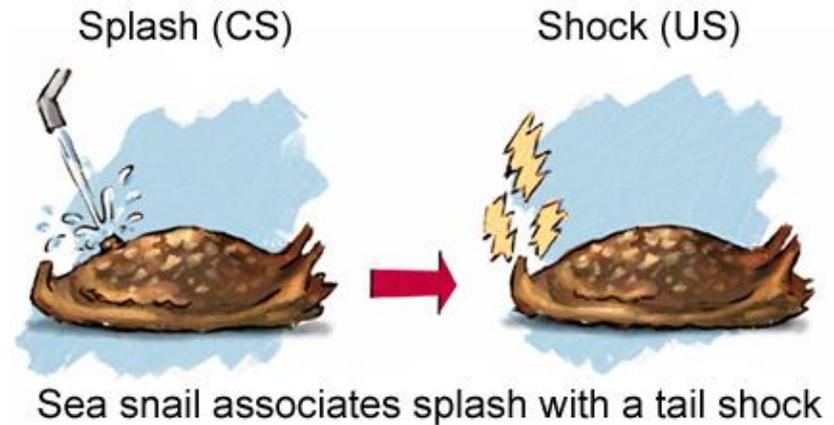
The Learner is NOT passive.

Learning based on consequence!!!

A type of learning in which behavior is strengthened if followed by a reinforcer or diminished if followed by a punisher

Operant & Classical Conditioning

1. Classical conditioning forms associations between stimuli (CS and US). Operant conditioning, on the other hand, forms an association between behaviors and the resulting events.



Classical v. Operant

- They both use acquisition, discrimination, SR, generalization and extinction.
- Classical Conditioning is automatic (**respondent behavior**). Dogs automatically salivate over meat, then bell- no thinking involved.
- Operant Conditioning involves behavior where one can influence their environment with behaviors which have consequences (**operant behavior**).

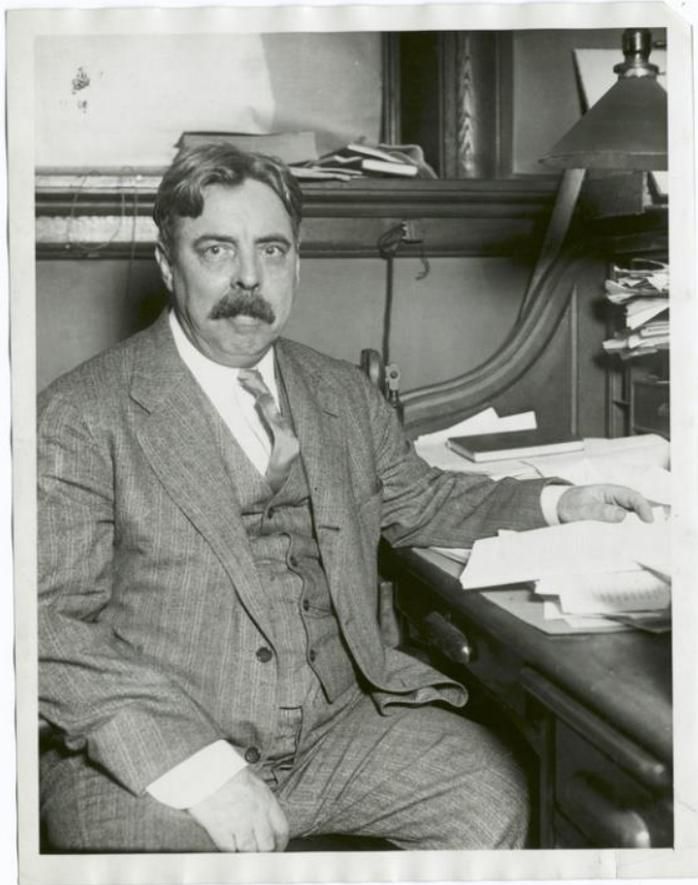
Is the organism learning associations between events that it doesn't control?

Classical Conditioning

Is the organism learning associations between its behavior and resulting events?

Operant Conditioning

The Law of Effect



- Edward Thorndike
- Locked cats in a cage
- Behavior changes because of its consequences.
- Rewards strengthen behavior.
- If consequences are unpleasant, the Stimulus-Reward connection will weaken.
- Called the whole process **instrumental learning**.



Learning = Behavior + Consequences

Thorndike - The Law of Effect

