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Part 2: The Backdrop of Learning and Teaching Theories

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Chapter 6: Theories of Learning

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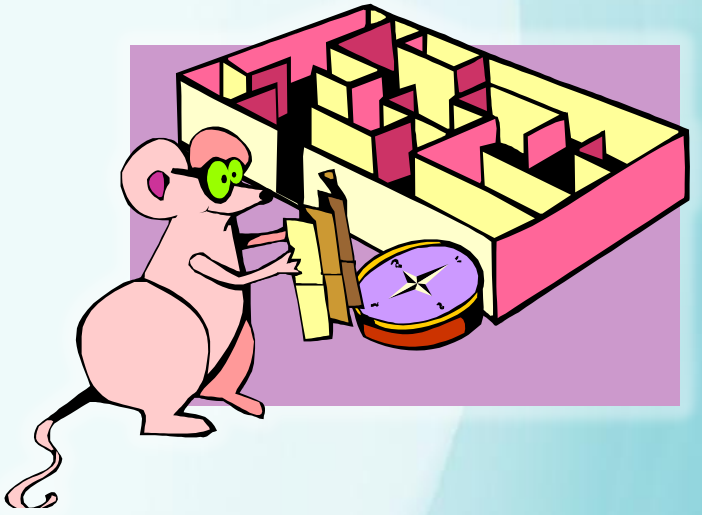
History of Learning

- **Learning in Animals**
  - Experiments are easier to control than with children

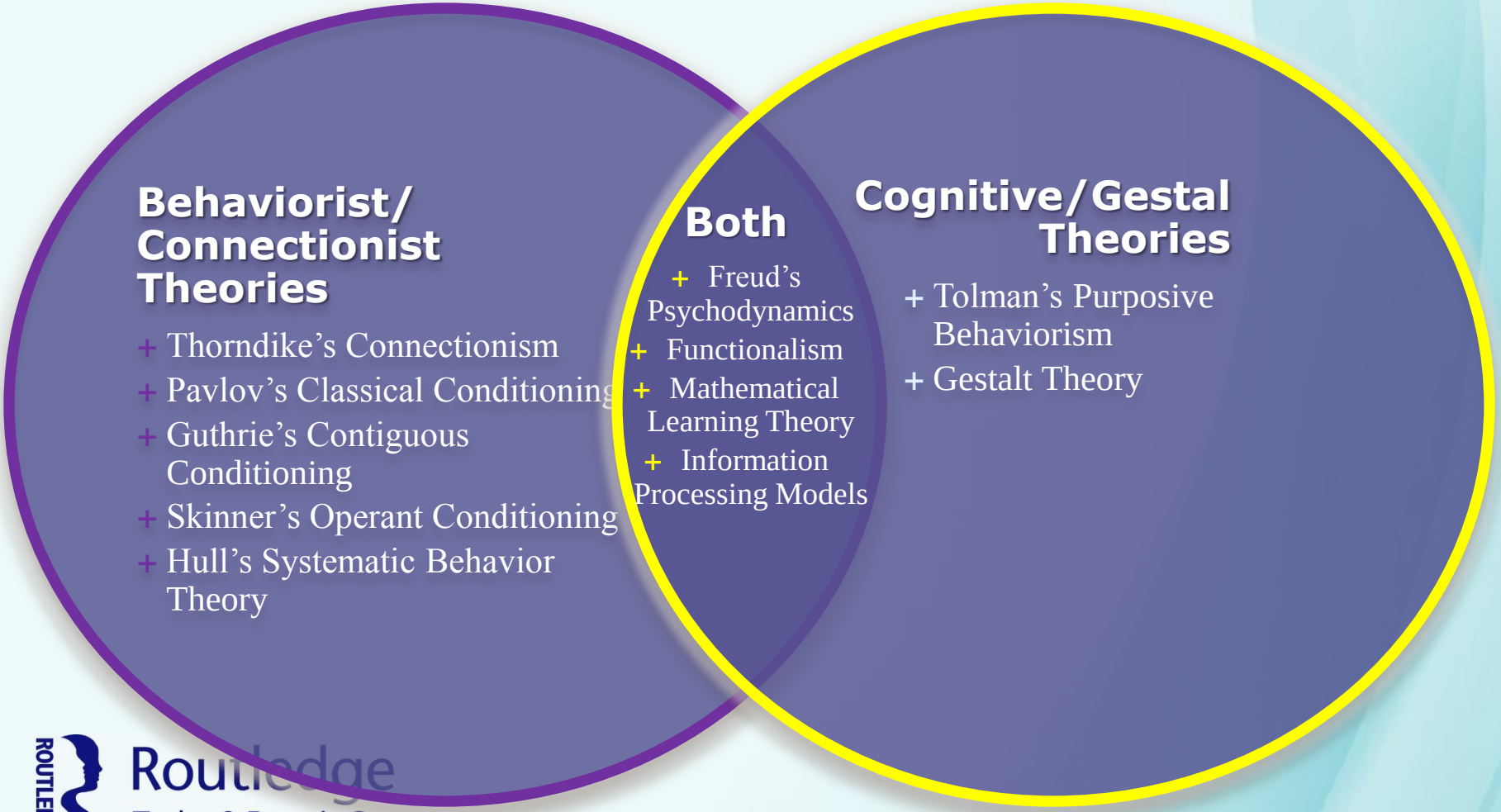


- **Learning in Children**
  - Experiments are easier to control than with adults

Learning Theorists

- **Propounders**
  - Single-minded
- **Interpreters**
  - Reconciliatory

Hilgard & Bower's 2 Learning Theory Classifications

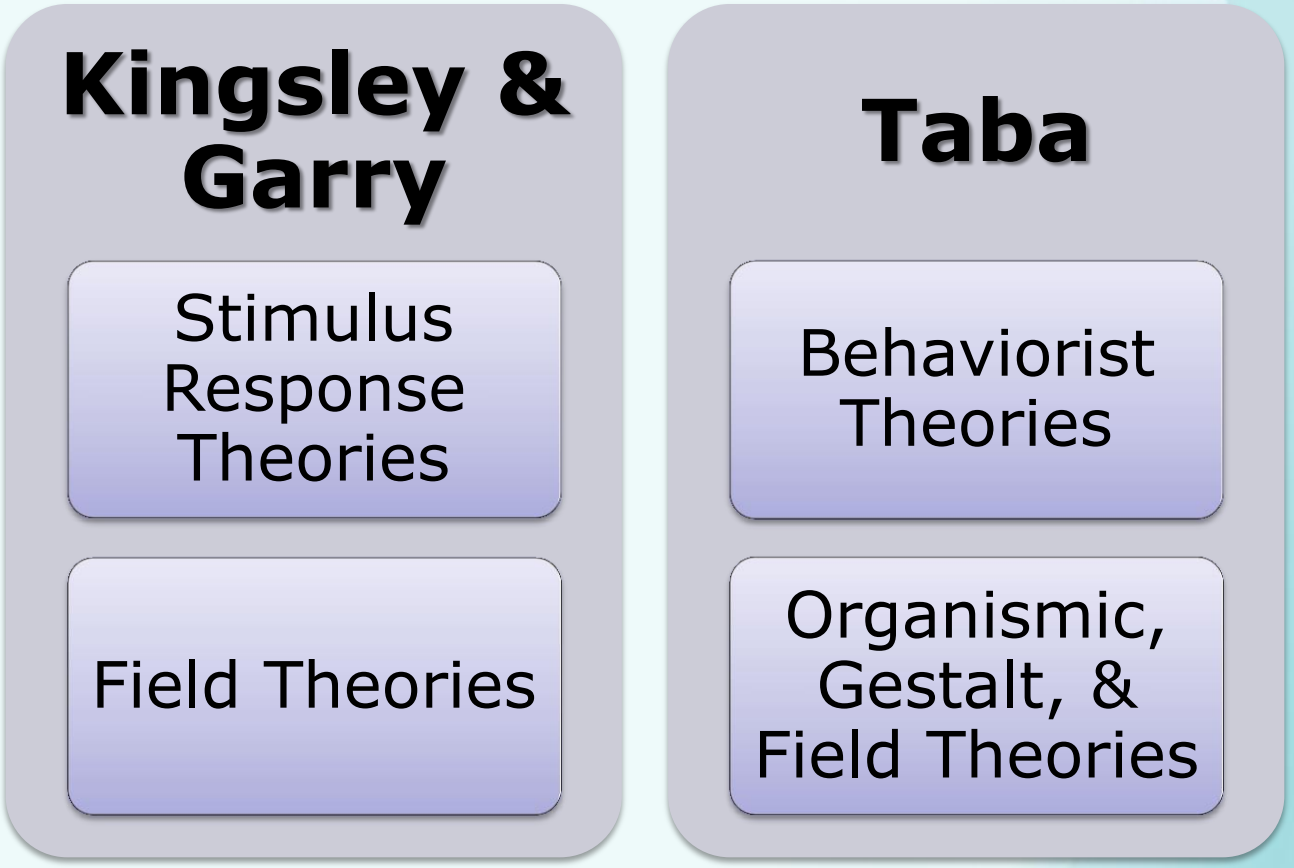


McDonald's 6 Categories of Learning Theories

Gage's 3 Families of Learning Theories

- Conditioning
- Modeling
- Cognitive

2 Classification Learning Theories

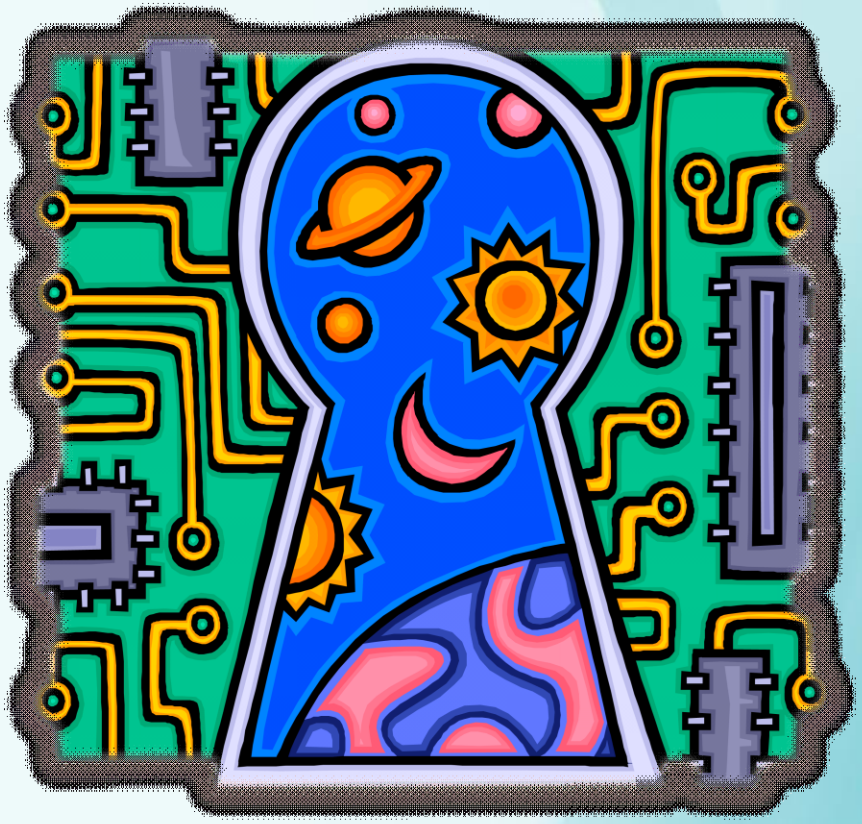


Elemental vs. Holistic Models

Elemental Model	Holistic Model
Represents the universe as a machine Composed of discrete pieces operating in a spatio-temporal field: reactive and adaptive model of man.	Represents the world as a unitary, interactive, developing organism: active and adaptive model of man.

Defined:

- Represents the universe as a machine composed of discrete pieces operating in a spatio-temporal field
- Reactive and adaptive model of man



Elemental Model World View

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Theories of Elemental Model

Connectionism (Thorndike)

- Laws Governing Animals and Human Beings
  - The law of readiness
  - The law of exercise
  - The law of effect

Systematic Behavior Theory (Hull)

- Mathematico-Deductive Theory

Theories of Elemental Model (cont.)

Principle of Contiguity of Cue & Response (Guthrie)

- "A combination of stimuli which has accompanied a movement will on its recurrence tend to be followed by that movement."

Classical Conditioning (Pavlov)

- Concepts
  - Reinforcement
  - Extinction
  - Generalization
  - Differentiation

Defined:

- Represents the world as a unitary, interactive, developing organism
- Active and adaptive model of man

Holistic Model World View

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Theories of Holistic Models

Functionalism (Dewey)

- The functionalist is tolerant but critical.
- The functionalist prefers continuities over discontinuities or typologies.
- The functionalist is an experimentalist.
- The functionalist is biased toward associationism and environmentalism.

Purposive Behaviorism (Tolman)

- Organisms are capable of recognizing and learning the relationship between signs and desired goals

Theories of Holistic Models (cont.)

Field Theories

- Propose that the total pattern or field of forces, stimuli, or events determine learning (Emphasis on motivation)
- Gestalt Theories
  - Laws of Learner's Perceptual Field Organization
    - The law of proximity
    - The law of similarity and familiarity
    - The law of closure
    - The law of continuation
  - 2 Forces that Produce Learning
    - Change in the structure of the cognitive field itself
    - Change in the internal needs or motivation of the individual
- Theory of Instruction (Bruner)
  - 3 Processes of Learning
    - Acquisition of new information
    - Transformation
    - Evaluation

Reflection Questions

1. Speculate as to why many learning theories have been created.

2. What is the value of thinking of wholes and parts as they relate to learning?

3. What are some of the important points derived from elemental learning theories?

4. What are some of the important points derived from holistic model learning theories?