

# [Conceptual behavior language](https://assignbuster.com/conceptual-behaviorlanguage/)

Conceptual BehaviorDefinition: Behavior under the control of generalized or abstract stimulus properties rather than specific attributes
ºList of 12 words, group into 3 categoriesConceptDefinition: Distinct category of objects or events that are all generally related on the basis of certain features
ºPositive vs. Negative instances
Ex. shown picture of a cat= positive instance, shown picture of a bunny= negative instance because category is cats ONCONCEPTUAL BEHAVIOR/LANGUAGE SPECIFICALLY FOR YOUFOR ONLY$13. 90/PAGEOrder NowHow do we learn concepts? 1. Hypothesis Testing Theory
2. Family Resemblances
3. Hierarchical OrganizationHypothesis Testing Theory-Proposed by Bruner, Goodnow, and Austin
1. Wholist Strategy: responding to all attributes of a conceptual class or category
ºMost efficient because you don't have to start over
ºEx. Looking at cards, after correct for one item remembered all characteristics, when told incorrect narrow down list, and so on
2. Partist Strategy: focusing on a single attribute of a conceptual class or category
ºEx. looking at cat, importance is fur, therefore dog is cat because of furConcept Learning-Part of Hypothesis Testing Theory
Definition: hypothesis is testing about a concept by making guesses about which attributes are essential for defining the concept
-Problems:
1. rule of confirmatory and disconfirmatory feedback
2. Participants forget their hypothesis
3. Complex concepts
-Conjunctive Concept: Concept in which members must possess both of two separate attributes (" AND")
-Disjunctive Concept: Concept in which members must possess either one of two separate attributes (" OR")Family Resemblances-Members of a concept share in common family resemblances
ºEx. Bird-- wings, feather, but different colors
-The more resemblance something has the quicker the association is made
-According to Rosch and Mervis (1975) members of a concept share something in common with other members of a concept, although they may not all share the same thingHierarchical Organization1. Superordinate Level: the most generic and inclusive level of a conceptual category
ºEx. Food
2. Basic Level: the most useful level of a concept, characterized by neither too much or too little information
ºEx. Pizza
3. Subordinate Level: the most restrictive, specific level of a conceptual category
ºEx. Papa John's PepperoniWhy are concepts important?-Concepts allow us to categorize stimuli we have never encountered before
-Helps us navigate in an every-changing worldTheories of Concept Representation1. Feature List Theory
2. Prototype Theory
3. Exemplar Theory
4. Neural Network ModelFeature List Theory-Concepts are represented mentally in terms of a list of features
a) Defining features: features necessary for inclusion in a particular concept; MUST HAVE
b) Characteristic feature: aspects of a concept that most instances share in common
-Visually based
-Features of a particular object are compared to the features of the concept stored in memory
-If the object possesses enough relevant features it is recognized as a positive instance of the conceptPrototype TheoryPrototype: member of a conceptual category exhibiting a collection of typical features or attributes
-People abstract the common elements of a particular concept and then store an abstracted prototypical representation in memory
-PROTOTYPE= average of a large number of examples in the concept
-Evidence
1. easier to identify positive instances that closely resemble the prototype
2. Easier to identify a positive instance never encountered before that closely resembles the prototype than positive instances encountered before that do not closely resemble the prototype
-Problems
1. How do members that substantially differ from the prototype become included in the concept? Exemplar Theory-Concepts are represented by a variety of examples
-Each concept is represented by any number of specific members of the concept
-An object is similar to an exisiting exemplar it is considered a positive instance of the concept
-Evidence
1. People can learn poorly defined categories
-Problems
1. How are concepts formed in the first place? Neural Network Model-Concepts are represented as nodes
-Networks connects various nodes
-SPREADING ACTIVATION: one node stimulates other nodes
Degree of activation dissipates as it spreads out across the networkAre nonhuman animals capable of conceptual behavior?-No, concepts require language
-Not really, performance in experiments are similar to performance on discrimination tasks
-Maybe, results from some experiments suggest that animals may have concepts
-Yes, animals have concepts same way as humans doWhat is the evidence? 1. Harry Harlow
2. Kohler
3. Perceptual Concept Learning
4. Relational Concept Learning
5. Associative Concept LearningHarry Harlowº1940s-1950s
-Results: improvement in rate of learning
-Apparatus with monkey, tray in middle with 2 objects, monkey had to select one object, experimenter defined one as correct, if monkey selected correct one monkey got a reward
-LEARNING SET: application of previously learned rules or responses to novel circumstances
º" Learning to learn" Kohler (1939)-Results= responding to the lighter shade
-TRANSPOSITION EFFECT: responding to a relationship between 2 stimuli rather than to discrete characteristics of either stimulus
-Pecking at the lighter one because learned relationship of lighter shade, not specific shadeHernnstein, Loveland and Copeland-Perceptual Conceptual Learning
-Took pictures of 40 trees, then 40 pictures of anything else but a tree, projected pictures for pigeons tree was S+ and received food, showed pictures in random order
-Alternative Explanations:
a) Pigeons memorized each picture?
Vaughn and Greene, categories vs. pseudocategories, novel stimulus
b) Natural categories-- innate categories? already known for survival? Bhatt, Wasserman, Reynolds and Khauss-1988
-Presented box with 4 response keys to pigeons, like a multiple choice test
-2 natural, 2 man made categories
-Perceptual Conceptual LearningRelational Concept Learning-Depends on identifying common perceptual relationships among different sets of stimuli
-Objects share a common relationship
-Same/different concept
-Nonhuman primates-- learn the same/different concept rapidly
ºOden, Thompson and Premack (1988)
-Absolute number discriminationAssociative Concept Learning-Depends on identifying common associations
ºNo physical similarities
-Associative concepts based on a common response
ºVaughan
-Associative concepts based on a common outcomeLanguageDefinition: Highly structured symbol system that allows for creative and meaningful communication between organismsUniversalsDefinition: Features of language that appear to be true of all language users, regardless of the language one speaks or the culture in which one livesLanguage Development: NewbornsAuditory Discrimination
1. Ability to recognize human speech
2. Ability to discriminate different languages
3. Preference for mother's voice
4. Preference for native language
5. Ability to distinguish all of the basic sounds that constitute human languages
-When babies are born babies can tell difference among all languages, but as grow lose this ability
ºOkay, because it helps person effectively and accurately learn own language
ºThis is why it is easier to learn language at a younger ageLanguage Development: End of First YearHOLOPHRASE: single word utterances ordinarily referring to important objects or events in an infant's environmentLanguage Development: 18-24 MonthsTELEGRAPHIC SPEECH: 2-3 word utterances that include only truly necessary wordsLanguage Development: Preschoolers-Longer utterances
-Still miss some vocabulary
-Using prepositions and verb tenses, even if its not accurate
-Just pick up language, no training neededPreparedness of Language-Formal training is not necessary
-Minimum environmental inputSensitive Period-Limited time period during which a developmental milestone can be most readily achieved
-Idea of being fluent and bilingual are different, hard to be bilingualPsycholinguistic ApproachPSYCHOLINGUISTICS: Discipline devoted to understanding the properties of human language and the mechanisms responsible for language acquistionPhonemes vs. MorphemesPHONEMES: w/o meaning
-Sound of " p"
-Can't differentiate vowel sounds (brazil vs. spanish)
MOPHEMES: actual meaning