COG250H1: Introduction to Cognitive Science

Fall 2018

Lecture 5: Micro Theory (pt.2) and Finishing Cateogrization

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5.1 Concepts

What does categorizaiton do for us? Makes the basic claim of being able to classify objects.

5.1.1 Smith on Categorizaiton

Proponents: P1, P2

Claim: Smith is proposing a causal relationship between similarity judgements and categorization. He says similarity judgements drive categorization

Critique 1: Consider the following experiment: An observer is shown two profile pictures. One of a cat and one of a dog. The observer is then asked whether the two pictures are similar and whether they are in the same category. According to smith, the expected outcome of this experiment is yes to the first implies yes to the second. However, in reality people often report yes to the first and no to the second. This contradicts Smiths' claim. A stronger argument against Smith's claim would involve showing double dissociation between similarity judgements and categorization.

5.1.2 Classical Theory Of Concepts

Proponents: Aristotle (),

Basic Idea: A list of features that are individual necessary and collectively sufficient to represent the concept.

Critiques: - Essences - Family of resemblance

5.1.3 Prototype Theory

Proponents: Elanor Rosch

https://rationalwiki.org/wiki/Prototype theory

- 1. Developed as an alternative to the Classical Theory Of Concepts
 - What is a prototype? A prototype is the central or representative member of a category.

Critiques:

- coined by Elanor Rosch - created as a seponse to the classical Theory

Notice invariance hueristic?????

5.1.4 Sidebar on Gestalt

structural functional organization of something that ensures its causal efficacy

5.1.5 Microtheory of concepts

Claim:

Any theory is 'underdetermined by its data'. For exmaple,

Actually called the theory theory.

Exampels fo problems of certainity 1. Heliocentric -> Geocentric