

## Lecture 4: Prototype Theory + Micro Theory

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## 4.1 Concepts

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

### 4.1.1 Smith on Categorization

**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 Smith's claim. A stronger argument against Smith's claim would involve showing **double dissociation** between similarity judgements and categorization.

### 4.1.2 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

### 4.1.3 Prototype Theory

**Proponents:** Eleanor Rosch

[https://rationalwiki.org/wiki/Prototype\\_theory](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.

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Critiques:

- coined by Eleanor Rosch - created as a response to the classical Theory

Notice invariance heuristic????

#### **4.1.4 Sidebar on Gestalt**

structural functional organization of something that ensures its causal efficacy

#### **4.1.5 Microtheory of concepts**

Claim:

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

Actually called the theory theory.

Examples of problems of certainty 1. Heliocentric -> Geocentric