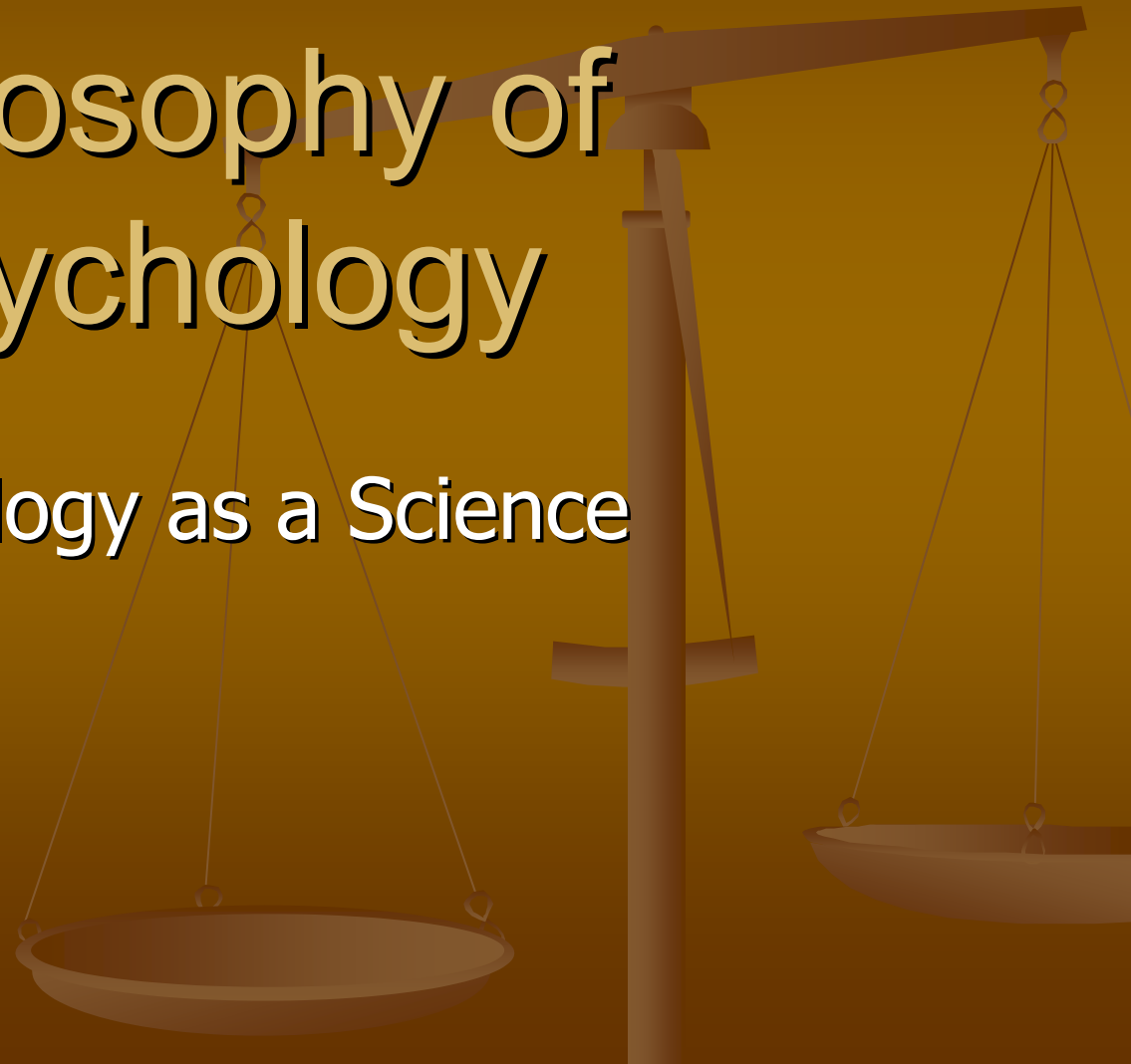


Philosophy of Psychology

Psychology as a Science



What is a science?

Root of *science* is *scio*—to know

But there are many domains of knowledge that are not considered sciences (although they may make use of science):

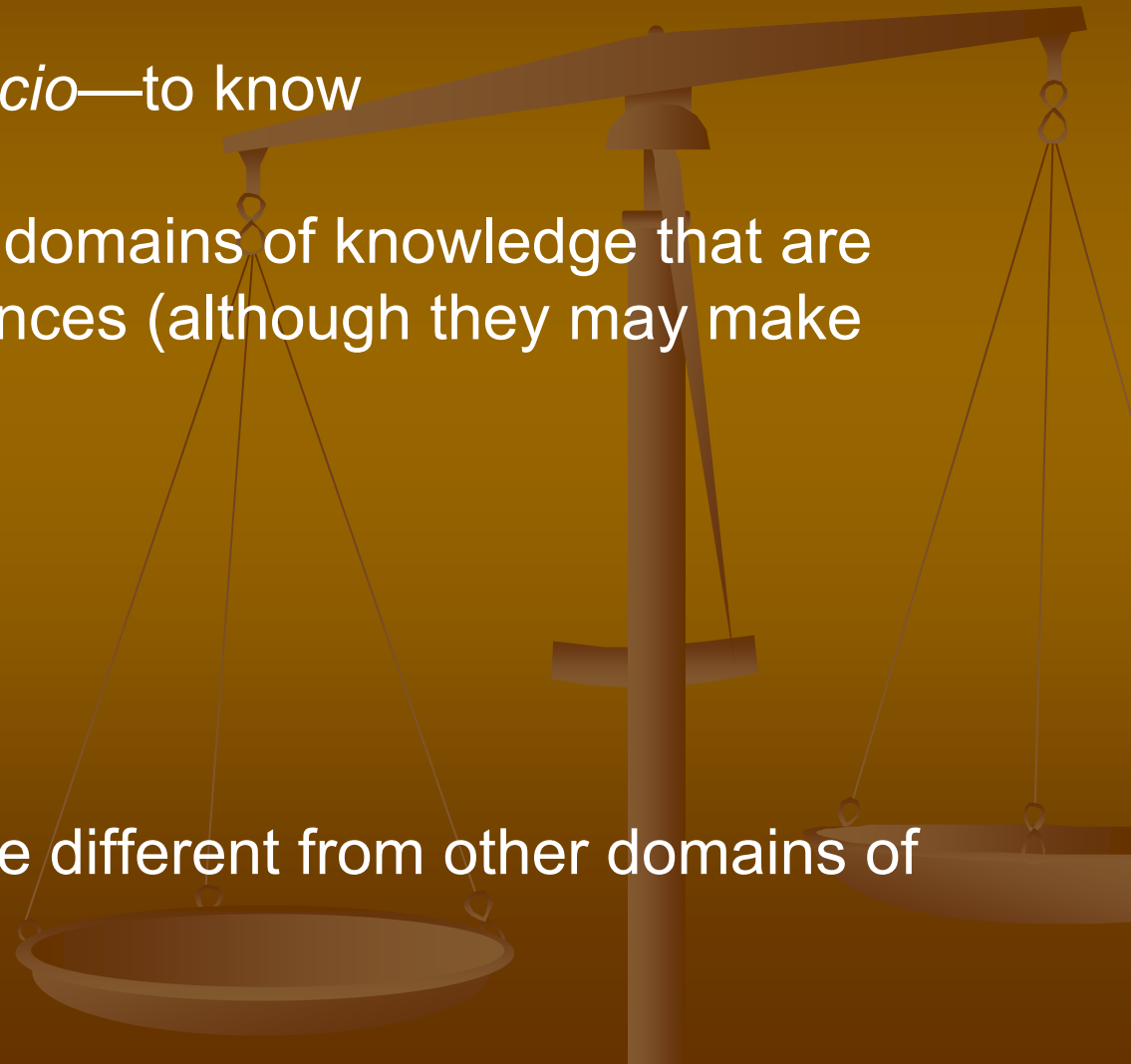
theology

law

engineering

medicine

What makes science different from other domains of knowledge?



What is Science? 2



The Futility of Definition



Goal of a definition:

To specify the conditions needed and that suffice to make something an instance of the kind in question

Test of a definition:

Are there any counterexamples?

- Items that meet the definition by are not instances of the kind in question
- Items that are instances of the kind in question but that fail to meet the definition

Defining *GAME*

Two definitions from *The American Heritage Dictionary*

“A way of amusing oneself; diversion”

“A sport or other competitive activity governing by specific rules”

Are there ways of amusing oneself that don't count as games?

Are there games that lack competition or specific rules?

Defining *Human Being*



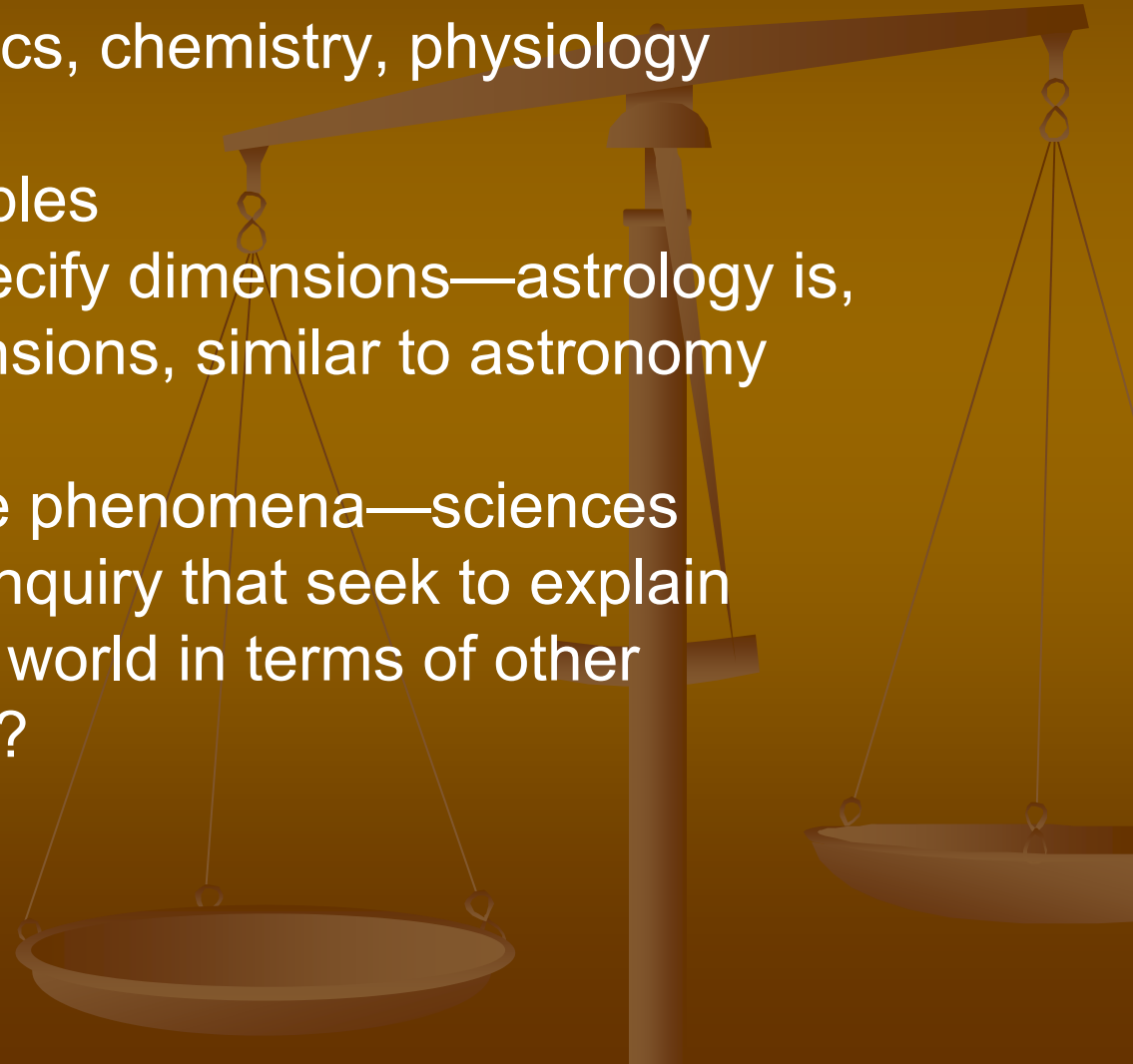
If not a definition, what?

Exemplars—Physics, chemistry, physiology

Similarity to examples

but need to specify dimensions—astrology is,
on some dimensions, similar to astronomy

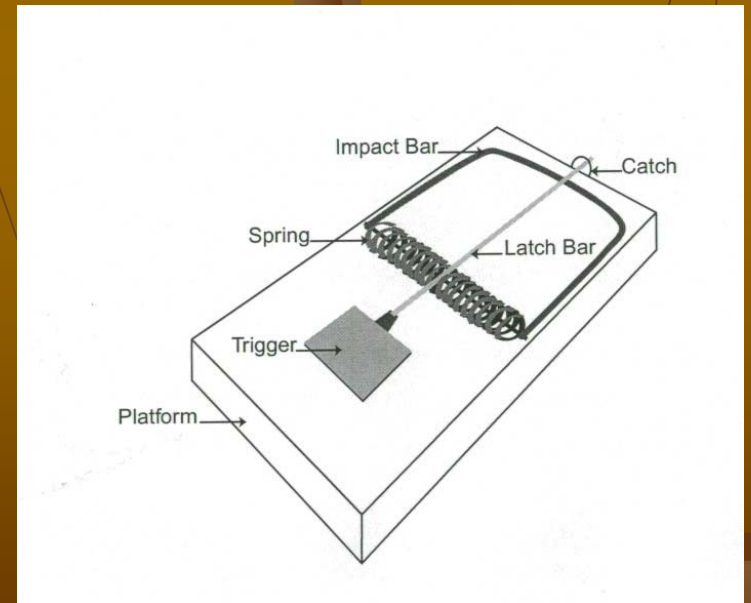
Theories about the phenomena—sciences
involve modes of inquiry that seek to explain
phenomena in the world in terms of other
phenomena and ??



What is Explanation?

Two (sometimes agreeing, sometimes conflicting) traditions:

- To explain is to bring under a law
 $f=ma$
 $f=k (m_1m_2/d^2)$
 $PV=nRT$
- To explain is to characterize the causal mechanism that brought the phenomenon about



What is Psychology to Explain?



What modes of inquiry does psychology have available?



Research Traditions



Scientific inquiry has a historical dimension

New investigations build upon previous ones

The successive investigations frequently share some things

Assumptions about what the goals of inquiry are

Views about what counts as evidence

Assumptions about what an explanation should look like

But sometimes there are radical disagreements about how to proceed—different research traditions

Research Traditions in Psychology



17th-19th centuries: ideas, how they are formed, manipulated, etc.

Rationalism—Descartes

Empiricism/Associationism—Locke, Hume, Reid, Mill

Analyses of conscious mental states: Wundt, James

Introduction of a dynamic unconscious: Freud

Repudiation of the Mental—Behaviorism: Watson, Hull, Skinner

Cognitive psychology and Cognitive neuroscience