# Conclusion

Lecture 43

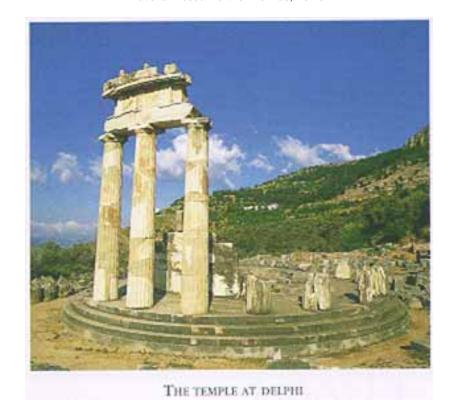
## "Know Thyself"

Pausanias, Description of Greece (X, 24.1)

In the fore-temple at Delphi are written maxims useful for the life of men, inscribed by those whom the Greeks say were sages [who] came to Delphi and dedicated to Apollo the celebrated maxims, "Know thyself," and "Nothing in excess."

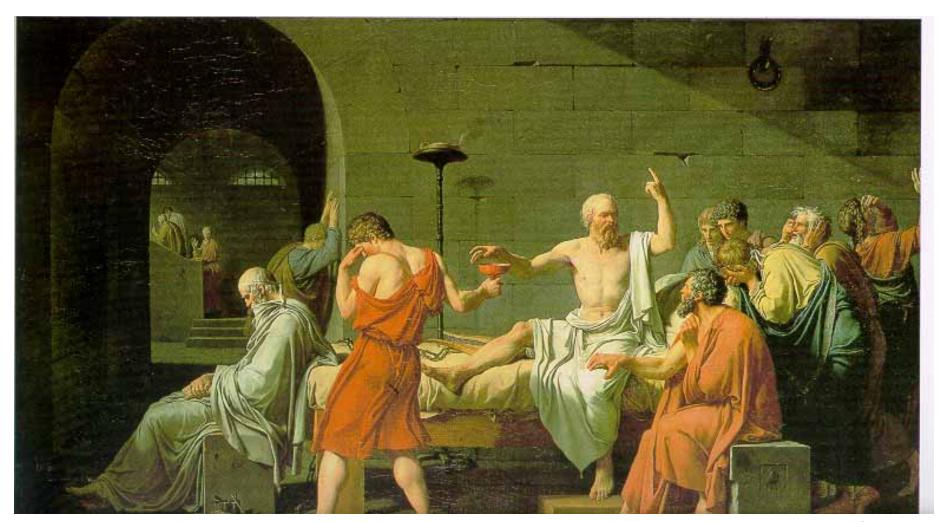


National Museum of the Thermae. Rome



# "The Unexamined Life Is Not Worth Living"

Socrates (399 BCE), as quoted in Plato's Apology (38a, 5-6)



# "Cogito, Ergo Sum" "I Think, Therefore I Am"

Descartes, Discourse on Method (1637)



**Rene Descartes (1596-1650)** 

# Questions for Psychology

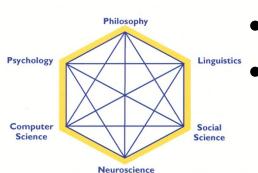
- How Does the Mind Work?
- How Do We Use Our Minds to...
  - Solve Problems?
  - Create New Things?
  - Negotiate Our Relations with Other People?
- How Is the Mind Related to the Body?



# From "Impossible Science" to a Science of Mind and Behavior



- 17<sup>th</sup>-18<sup>th</sup> Centuries
  - Descartes
  - Kant
- 19<sup>th</sup> Century
  - Psychophysics
  - Physiological Psychology
- "Higher" Mental Processes
  - Memory
  - Learning
  - Thinking



- Beyond Cognition
  - Emotion
  - Motivation
- Individual Differences
  - Intelligence
  - Personality
  - Attitudes
- Social Interaction
- Psychopathology
  - Psychotherapy

#### Mind as the Basis for Action

# We Behave In Accordance With Our Mental Representation of the Stimulus Situation

#### Cognitions

- Perception of Present
- Memory of Past
- Expectations of Future
- Inferences, Beliefs, Judgments

#### Emotions

- Affects, Feelings, and Moods
- Motives
  - Goals, Needs, and Desires

## Cognition as an Active Process

- Learning
  - Information about Prediction, Control
- Sensation
  - Signal-Detection as Judgment
- Perception
  - Constructive Problem-Solving
- Memory
  - Reconstructive Problem-Solving
- Thought
  - Judgment Under Uncertainty

## Interactions Among the Trilogy of Mind

- Cognitive Construction of...
  - Emotions
  - Motives
- Emotional and Motivational Influences on...
  - Perception
  - Memory
  - Thought
- Emotion and Motivation

#### Interaction of Person, Situation

- People Create Their Own Environments
  - Evocation
  - Selection
  - Behavioral Manipulation
  - Cognitive Transformation
- Reciprocal Determinism
  - Persons
  - Environments
  - Behavior

## Interaction in Development

- Interaction of Genes and Environments
  - Genotypes not Decisive for Phenotypes
- Interaction of Child with Environment
  - Child as Agent of His/Her Own Development
  - Across the Lifespan, from Birth to Death
- Importance of Non-Shared Environment
  - Key to Uniqueness of the Individual

#### Interaction in Mental Illness

- Interaction of Diathesis and Stress
  - Biological and Psychosocial
- Genotypes not Decisive for Phenotypes
  - Importance of Nonshared Environment
- Drugs Useful, but Far from Cures
  - Magnified, Complemented by Psychotherapy
- Cognitive-Behavioral Psychotherapy
  - Focus on "Here and Now"
  - Acquire New, More Adaptive Knowledge, Beliefs
    - Behavior Change Flows from Cognitive Change

# Dual Nature of Psychology

- Biological Science
  - Biological Substrates of Mental Life
- Social Science
  - Sociocultural Context of Mental Life

# Mind in the Context of Biology

- Brain as the Physical Basis of Mind
  - Biological Substrate of Cognition
  - Specialized Neural Structures
- Legacy of Biological Evolution
  - Intelligence
    - Capacity for Learning, Understanding
  - Consciousness
    - Awareness, Reflection
  - Language
    - Symbolic Representation, Flexible Communication

#### Mind in the Context of Culture

- Assumptions About Ourselves, Universe
- Categories for Understanding Experience
- History of Previous Generations
- Cultural Institutions
- Social Rewards and Punishments
- Philosophy, Literature, Art

#### The Paradox of Evolution

#### Mind Creates the Possibility of Culture

- Conscious Awareness of What We Are Thinking
- Linguistic Communication
- Learning, Cultural Evolution Faster than Biological Evolution
  - Transcendent Mind
  - Biology is not Destiny

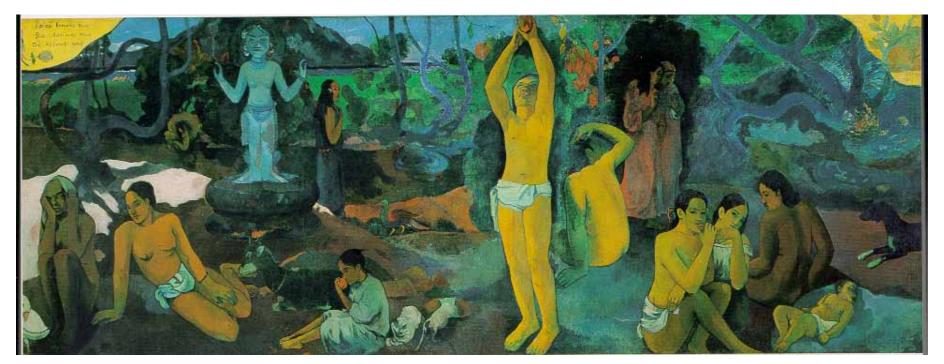
We Evolved in the Pleistocene. But We Live in the Anthropocene.

#### Mind as the Basis of Human Freedom

- Transcend the Past
- Transform the Present
  - Make the Future

# Where Do We Come From? What Are We? Where are We Going?

Paul Gauguin (1897-1898)



Museum of Fine Arts, Boston