PSYCHOLOGY 3041/6014 SENSATION AND PERCEPTION

Class Notes

(as of January 2, 2020)

Introduction; History & Philosophy; Syllabus

Introduction: Why Study Perception?

The Problem of Knowledge

The Greeks: philosophical giants (?)

Pre-Socratics: The Ionians

Parmenides, Pythagoras, Anaxagoras, Anaximander, Heraclitus

Senses confined to the realm of appearances; what is true occupies a realm beyond the senses Heraclitus: you can't step into the same river twice

Parmenides: whatever is real must be eternal and unchanging; such real existence can never be discovered by the senses

It is contradictory to attribute existence to something that is never the same at different times

Sophists

Meno, Protagoras

"sensationists"

"Man is the measure of all things"

Socratics: reject the senses as routes to the truth

Socrates: "knowledge does not consist in impressions of sense, but in reasoning about them."

Plato:

Cave Illusion: perception and life goals interact

"truth" is subjective

"top-down" slant on perception

"rationalism" (really nativism, elitism): "true knowledge is a knowledge of the permanent principles of reality and not of changing appearances; it is a knowledge conveyed not by the senses but by reason analyzing experience."

"knowledge of the world is of a cognitive, rather than a perceptual nature."

Hippocrates

Reliance on observation and empirical method

Medical and anatomic observations le to knowledge of perception, behavior, health, illness

Aristotle

Student of Plato @ Academy

Moved on, founded Lyceum

Phases: 1. senses respected, but ideas still reign supreme (very Platonic); 2. observation critical for discovery (uniquely his)

Soul derives from, and is understood through, study of the physical body

Sensory deficits of young and old due to "restlessness"—due to a biological/physical change Naturalistic, physiological, empirical, but not radically materialistic

Soul does not equal mind; mind lives in the soul, imperishable

Functions: nutritive, perceptive, locomotor, and (in humans only) "universalizing" function (abstractioning)

Functions vary in level and sophistication based on biological differences between organisms Animals have sensory experiences, since they have the organs

In addition to the 5 senses, there is a "common sense" (sensus communis) that integrates the other perceptions (not "common sense" in modern, Reid-like way)

The sensus communis is not a separate sense, but rather a process common to all the other senses Perceptions set up "vibrations" or movements of the soul that result in memories; the can and do decay

This is very associationistic

Senses do not convey knowledge; rather, they convey that from which the reasoning can extract knowledge

Stoics & Epicureans

Stoics: Zeno, Seneca, Marcus Aurelius

Epicureans: Epicureus, Lucretius, Democritus

Both schools were answering extreme, even absurd teachings of Cynics and Skeptics, who said that nothing can be known about anything

Both taught that the universe consisted of some physical "stuff" (energy, atomic particulates, fire, ether, etc.)

Epicureans: all knowledge originates in sensation; all experience due to physical interaction between matter of the world and matter of sense organ

Stoics: knowledge begins as the mental image of the sensory events

Patristic

Epictetus: "he who has sensations and pretends that he has not is worse than dead"

Transition from Roman to Christian era

Melding of Greek and Christian views

Monotheistic

Origen, Plotinus, Augustine

Christian Era

Augustine: examine nature and human behavior only to confirm the existence of God

Nonsensory inner awareness of truth, error, moral right, personal identity

This inner sense = consciousness, but more than that, it is a moral consciousness... perhaps more like conscience

Tactile-vision theory: perception results from physical interaction between the seen object and the eye.

Perception is an active process

Discouraged scientific examination of humans and human behavior—we are not animals In general, anti-intellectualism

In general, anti-intellectualism

Galen: Scientific Alternative

Curing the sick; a true practical clinician

Experimenting done to improve health care

Middle Ages

Mostly religious; near loss of much of science

("Modern") Empiricism: The Authority of Experience

Scientific scholarship

"Sensory evidence constitutes the primary data of all knowledge"

"origin, validity, and utility of ideas"

sensation and reflection

sensation is an active transaction

Experience affects how sensations are interpreted (e.g., blushing=shame)

Top-down influences on perception Compare to Plato...Plato is more subjectivistic Practical "common sense" (modern definition) Rationalism "we have only understood something when we can supply the reason for its being what it is" back to "final causes" like Aristotle innate ideas: "that which cannot be given by experience" **Rene Descartes Benedict Spinoza** Gottfried Wilhelm von Leibniz Immanuel Kant (antirationalist) Materialism Metaphor of the machine No reliance on spirituality to understand psychology Perception as part of the scientific endeavor; it can also be used to study perception itself Montaigne Galileo Kepler Hobbes (social machine) Voltaire La Mettrie **Modern Science Approaches** Course Syllabus, Style, Outline, Ground Rules