

**PSY 3360 Historical Perspectives on Psychology
CGS 3325 Minds and Machines Since 1600**

Midterm Study Guide – Summer 2009

Final version

Key Terms: (identify key individual responsible and provide a brief definition of the concept)

Zeitgeist	principle of association	double aspect monism
interactionist dualism	pineal gland	categorical imperative
psychophysical parallelism	monads	psychic determinism
reductionism	hedonism	Hobbes' Leviathan
epistemology	nativism	unconscious inference
introspection	Weber's Law	action potentials
kinesthesia	place theory of hearing	trichromatic theory of color vision
psychophysics	equipotentiality	pitch perception
teleological explanation	localization of function	doctrine of specific nerve energies
paradox of the basins	voluntarism	just noticeable difference
tabula rasa	speed of nerve transmission	

Major figures: (describe the major contributions of each individual)

Descartes	Locke	Berkeley	Hume	Kant
Helmholtz	Fechner	Wundt	Spinoza	Leibniz

People to associate with one concept / discovery / theory:

Willis	Flourens	Wernicke	Müller	Fourier
Bell	Broca	Gall	Donders	Molyneux

Compare and contrast:

monism vs. dualism	rationalism vs. empiricism
primary and secondary qualities	idealism vs. realism
Descartes vs. Berkeley on distance perception	analytic vs. synthetic truths
afferent and efferent nerves	<i>a priori</i> vs. <i>a posteriori</i> truths
absolute and differential threshold	Locke vs. Descartes on Molyneux's question
pitch/frequency of sine wave and complex wave	inductive and deductive method
simple and choice reaction time	noumena and phenomena
vitalism and mechanism	Hume vs. Kant on causality
deduction and induction	

Medium-length answers:

- 1) What were four reasons why Kant believed mental phenomena could not be studied using the scientific method? Describe 19th century developments that called each one into question.

- 2) What is unconscious inference? What are some of the sources of evidence (list at least four) that led Helmholtz to postulate that unconscious inference plays an important role in human perception?
- 3) What was Molyneux's question? How would Locke and Descartes differ in their answers to the question?
- 4) What is causality? How did Hume's view of causality differ from that of Kant? Present arguments in support of each position.
- 5) Choose one rationalist thinker (e.g., Descartes, Leibniz, or Kant) and one empiricist (e.g., Locke, Berkeley or Hume). Compare and contrast their theories of perception, using examples to illustrate each position. Summarize the strengths and weaknesses of each approach.
- 6) What is the *just noticeable difference* (jnd)? What was the important experimental finding made by Weber concerning the jnd? Why did Fechner regard this discovery as important?
- 7) Describe how each of the following scientists used reaction time to contribute to the study of human psychology, and summarize what they found:
 - 1) Helmholtz
 - 2) Donders
 - 3) Wundt