Descartes theory

1. What was Descartes' theory of interactive dualism According to Descartes, what are the essential properties of mind and body Identify strengths and weaknesses of this framework. What were the general implications of interactive dualism for the development of scientific method in psychology Descartes' theory of interactive dualism postulates an interaction between the mind of a human being and some of the matter located in the brain. Descartes maintained that human beings exist in a dual state of both mind and body. He said that the mind is linked to the body through the pineal gland because it appeared to him to be " the only organ in the brain that was not bilaterally duplicated" in both the left and right hemispheres. The essential property of a mind is that it thinks; the essential property of body is that it is " extended." Each thought is a modification of mind; each physical object, a modification of matter. Since mind is different from body (otherwise, they would not be two distinct substances), its essential characteristics must be different from those of body. This means that minds cannot take up space or be extended. If they were, they would be forms of body. Body, in contrast to mind, is that which is extended. Every form in which a material object can exist can be defined or described in forms of its extensional features-size, shape, position, movement.

2. Explain how Descartes' method of doubt was supposed to insure certain knowledge. What is the special role of innate ideas in Descartes' theory of knowledge Which ideas did Descartes considered to be innate How are innate ideas different from other types of ideas

Descartes' method of doubt says that he wishes to examine those things which he thinks to be true and set aside all those beliefs of which there might be some doubt. Descartes method of doubt, then, is to deploy a

skeptical hypothesis, see what can and what cannot be doubted on that hypothesis, and then if there is something which can be doubted, to deploy a still stronger skeptical hypothesis to see if that which could not be doubted on the earlier hypothesis can be called into question by a stronger skeptical hypothesis. Descartes believed that, without innate ideas, no other data could be known. Among the ideas Descartes took to be innate were the existence of the self: cogito ergo sum [I think, therefore I am], the existence of God, and some logical propositions like, from nothing comes nothing. Innate ideas are those that are the very attributes of the human mind, inborn by God.

3. Why was Locke strongly opposed to the concept of innate ideas proposed by Descartes Discuss Locke's criticism of the supposed evidence for innate ideas. What was Locke's alternative explanation to the origins and sources of human knowledge In this scheme, how do we acquire complex or abstract ideas, assuming such ideas are not innate If Locke's theory is correct, what are the limitations on the accuracy of human knowledge

Locke rejects the existence of any innate principles or ideas on at least two independent grounds. He argues that there are no innate ideas because, if there were, they would immediately be known to children, and they are not. Locke also explains that if any idea is innate, the idea of God is innate. However, since there is not a universally agreed upon notion of God, the idea of God cannot be innate. Locke believes that knowledge is not certain, but that extremely probable knowledge can be gathered from experience. One rationalistic response was to point out that they were many concepts widely used in science and mathematics that could not be discovered by experience alone. On Locke's definition, we can achieve genuine knowledge only when

we have clear ideas and can trace the connection between them enough to perceive their agreement or disagreement.

4. Discuss the thought experiment attributed to Mr. Molyneaux and the interpretation of hypothetical results given by Locke and Berkeley. Why did the empiricists believe that this was such an important experiment Would Leibniz predict the same results from this experiment as Locke and Berkeley How might Leibniz criticize the empiricist interpretation of the outcome of this thought experiment

The question framed by Molyneux has been called the central question of eighteenth-century epistemology and psychology. The scenario that Molyneaux drew to Locke's attention concerns a man born blind from birth, but with his tactile sense well developed, who suddenly comes to see. Would he immediately notice that a cube that he feels with his hand and one that he sees with his newly-sighted eyes embody the same specific property Locke and Berkeley both say " no" but for different reasons. Berkeley says no because there are no trans-sense common ideas, including ideas of shape, so any identification of the objects as the same must be from associationist principles of the sort Berkeley develops in A New Theory of Vision. Locke says " no" not for this reason, since he allows for trans-sense common properties, space being a prime example, but because there is a judgment-component to the phenomenology of visual experience, and this component requires learning to be activated. On the other hand, the point of Leibniz's thought experiment is that thinking, feeling, and perceiving cannot be explained by mechanism, by mere parts and movements of parts (as claimed by materialists). In other words, there is more to the mind than the brain (as claimed by dualists). Leibniz's explanation involves a sort of harmonious

orchestration by God of simple elements (monads) that bond together and form composites (matter).

5. Contrast Leibniz' psychophysical parallelism with Descartes' interactive dualism. Why was Leibniz dissatisfied with Descartes' analysis of the relation between the mind and body To what extent does Leibniz' parallelism avoids theoretical problems created by Descartes' interactionism What, if anything, is valuable about Leibniz' theory of monads, on which psychophysical parallelism is based

While Descartes had imagined that the natural world is made out of res extensa, or extended bodies, Leibniz, on the other hand, had imagined that the world is made of monads, or " simple substances" that are all independent of each other. He furthermore staes that all natural changes of the monad come from within, as an external cause can have no influence upon its inner being

But the trouble is that it is now mysterious how the monads, his simple substances, have the disposition to interact with each other at all. Although Leibniz was a strong advocate of the importance of dynamics and forces in physical explanations, in the end he can not explain how these are real features of his ultimate monads, because the monads only appear to interact with each other, and, as just stated, do not really do so.

6. What is psychophysics How did it allow Fechner to solve the mind-body problem How did Fechner's solution of the mind-body problem differ from Leibniz solution Why was the quantitative formulation now referred to as Fechner's Law considered to be such an important accomplishment at the time it was introduced What has been the lasting impact of psychophysics

Psychophysics is a subdiscipline of psychology dealing with the relationship

between physical stimuli and their subjective correlates, or percepts. Fechner demonstrated the unity of mind and body empirically by relating increase in bodily energy to corresponding increase in mental intensity. However, Leibniz said that there is no mind-body interaction strictly speaking, but only a non-causal relationship of harmony, parallelism, or correspondence between mind and body.

Fechner's law is the concept that the magnitude of a subjective sensation increases proportional to the logarithm of the stimulus intensity. The main contribution of Fechner consists of having developed a new way of dealing with measurement

7. What were the assumptions of the mechanistic framework adopted by Zelmholtz What are the virtues of this approach What were some of the specific accomplishments of the program of research inspired by Helmholtz' mechanistic approach to psychology How did he resolve some of the earlier philosophical questions pertaining to innate ideas

Helmholtz opposed the accepted concepts of life processes with nonphysical vital forces. He tried to explain physiological phenomena with chemistry and physics. His first important scientific achievement, an 1847 physics treatise on the conservation of energy was written in the context of his medical studies and philosophical background. He discovered the principle of conservation of energy while studying muscle metabolism. He tried to demonstrate that no energy is lost in muscle movement, motivated by the implication that there were no vital forces necessary to move a muscle. His position was that of an empiricist, denying the doctrine of innate ideas and holding that all knowledge is founded on experience, hereditarily transmitted or acquired.

8. Describe Wundt's contributions to the creation of psychology as an independent academic discipline. According to Wundt, what was the proper method of experimentation in psychology and how was it to be used What topics in psychology did Wundt think could not be studied experimentally What was Wundt's alternative to the method of experimental study Psychology first appeared as a discipline around 1879 when the very first psychology laboratory in the world was established by Wilhelm Wundt in the University of Leipzeg in Germany. He and his colleagues focused serious interest on studying the mind through experimental introspection. Introspection is the detailed mental self-examination of feelings and thoughts as they occurred. The research involved meticulous observation of simple events under controlled conditions-one that could be measured as to quality, intensity, or duration-and recording of the responses to variations of those events. The emphasis on control and measurement in these investigations were what first established psychology as a scientific discipline. Wundt initiated the concept of stating mental events in relation to objectively knowable and measurable stimuli and reactions. Wundt recognised two psychologies. Firstly, an experimetal psychology science, which is concerned with the study of the lower mental processes, and secondly a cultural science which studied the products of the mind rather than the mind itself. He recognised the limitations of experimental methods, thus being that they cannot explain the higher mental processes, however they cannot be studied indircetly by investigation of their products.