

ICS 464

09/25/06

Introduction to Cognitive Science

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Today's Activities

Quiz
Review Chapters 5 and 6

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Quiz

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Question #1

- Are the heuristics used by people always right? Why?
- No, "What they have instead is a collection of simpler rules, or "heuristics," that may often get the right answer, though it is also the case that often they do not." pg84

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Question #1

- “What the studies show, according to this interpretation, is that ordinary people lack the underlying competence to handle a wide array of reasoning tasks, and thus that they must exploit a collection of simple heuristics which often lead to seriously counter-normative conclusions” pg 75

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Question #2

- Make up a set of three questions like that of the “conjunction fallacy” of Tversky and Kahneman. According to Tversky and Kahneman experiments, which of your three questions would you expect people to select the most.

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Question #2

Conjunction Fallacy Example

- (A) Reagan will cut federal support to local government.
- (B) Reagan will provide federal support for unwed mothers.
- (C) Reagan will provide federal support for unwed mothers and cut federal support to local governments.

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Question #2

Conjunction Fallacy Example

- (A) Linda is active in the feminist movement.
- (B) Linda is a bank teller.
- (C) Linda is a bank teller and is active in the feminist movement.

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Question #3

- What did Chomsky hypothesize about a speaker's language that is considered by the authors among the most important contributions to cognitive science?
- "Chomsky and his followers proposed what has become one of the most important hypotheses about the mind in the history of cognitive science. What this hypothesis claims is that a speaker of a language has an internally represented grammar of that language - an integrated set of generative rules and principles that entail an infinite number of claims about the language."

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Question #4

- Describe the Massive Modularity Hypothesis.
- "Evolutionary psychologists reject the claim that the mind is only peripherally modular in favor of the view that the mind is largely or even entirely composed of Darwinian modules."
p91

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Question #4

- Modules either individually or as a group perform the many cognitive tasks we do.
- "The human mind . . . [is] . . . not a general purpose computer but a collection of instincts adapted for solving evolutionary significant problems - the mind as a Swiss Army knife" (Pinker 1994)" p92

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Question #5

- What is the difference between performance errors and competence errors?
- Performance error is the one that is due to the reasoning processes interaction with such mechanisms as attention and motivation or non-reasoning factors such as fatigue, alcohol, or emotional stress.
- Competence error is the one that is due to innate irrational reasoning competence.

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	Review Chapters 5 and 6

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