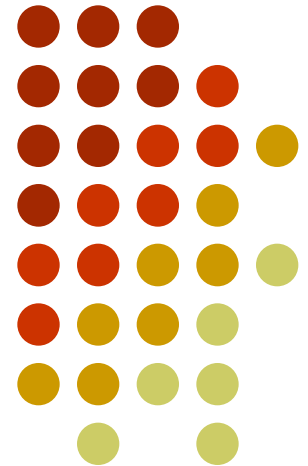


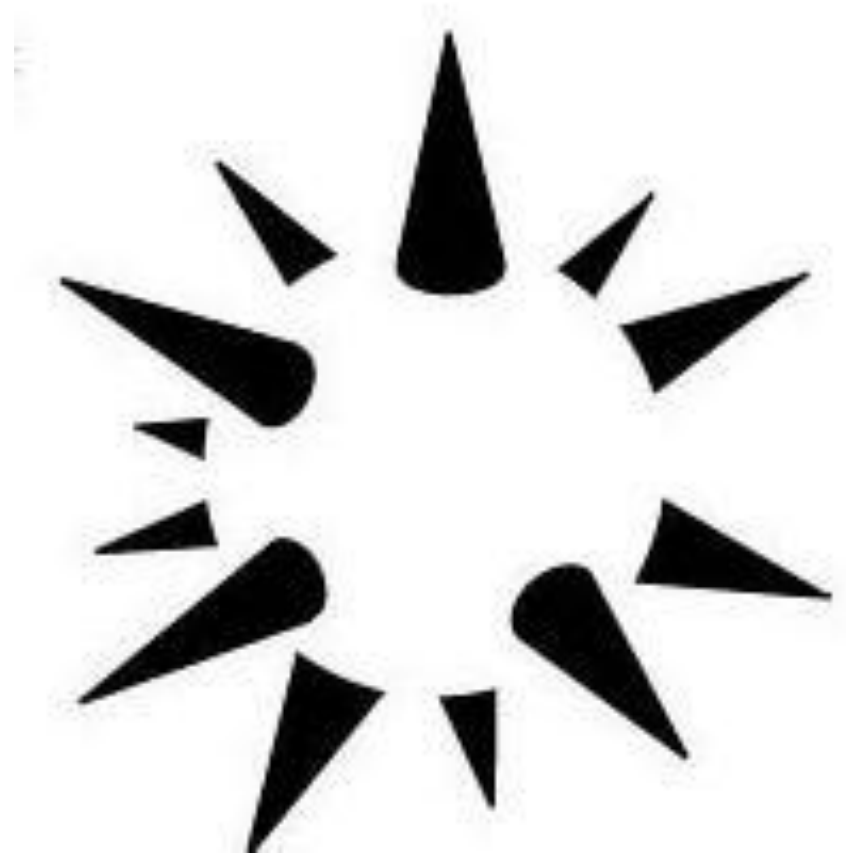
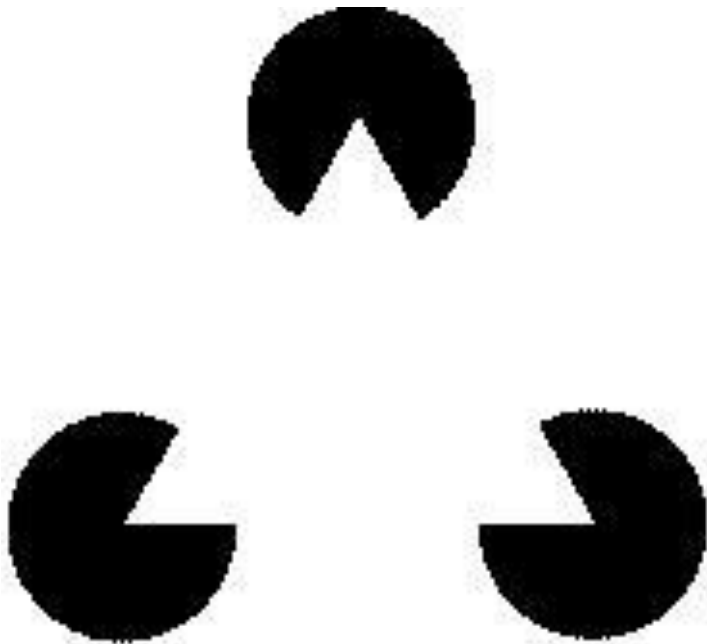
Introduction to Cognitive Science

Amitabha Mukerjee
Department of Computer Science,
IIT Kanpur



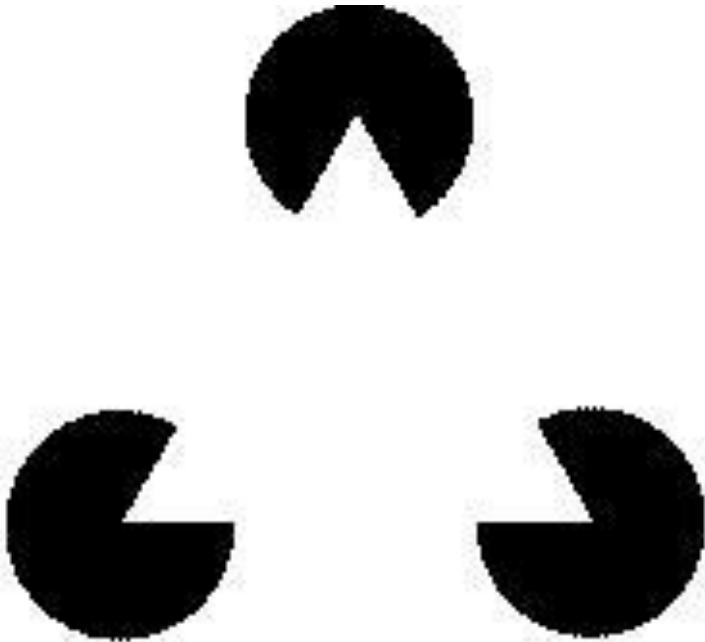
What is cognition

Perception of Wholes

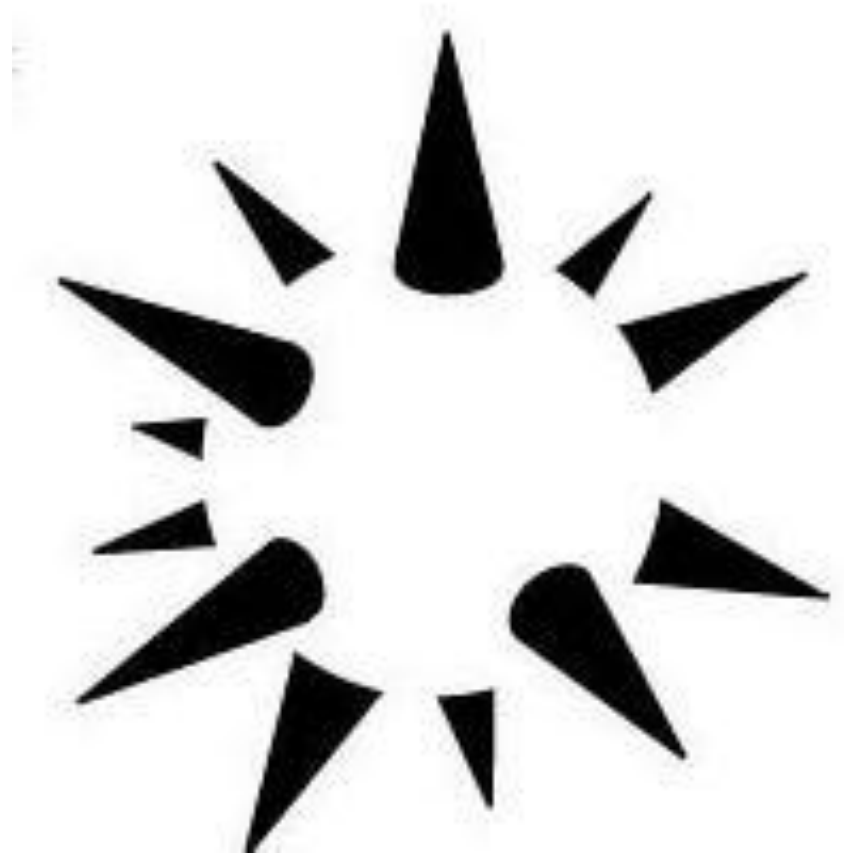




Perception : Figure / Ground



Kanisza triangle



Spiky Sphere (Idesawa)

Language

The horse raced past the barn fell

Bever (1970)

The prime number few

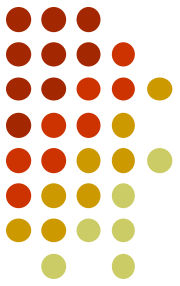
Milne (1982)

gardenpath sentences

Topics

- Processes
 - Perception
 - Reasoning,
 - Memory
 - Language
 - Consciousness
- Development since infancy (Ontogeny)
- Biological basis (Phylogeny)

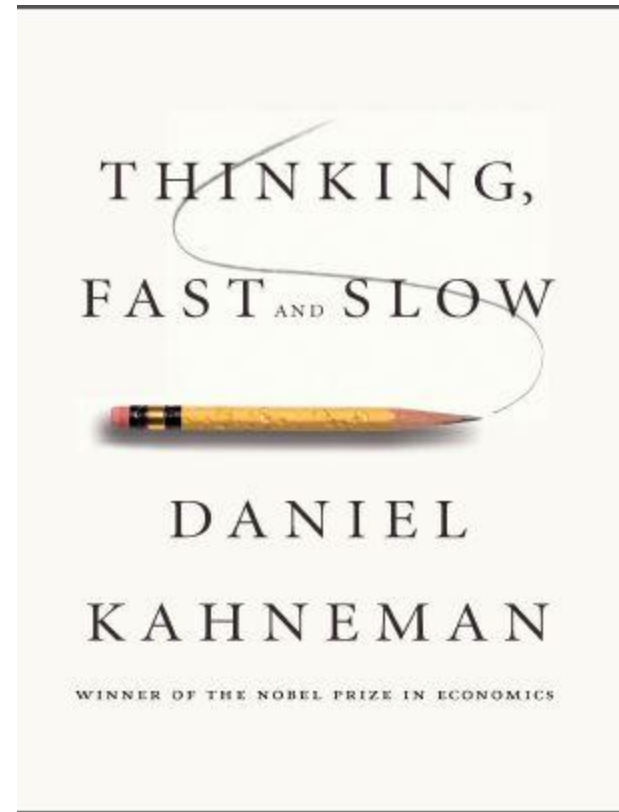
Thinking Fast and Slow



An individual has been described by a neighbor as follows:

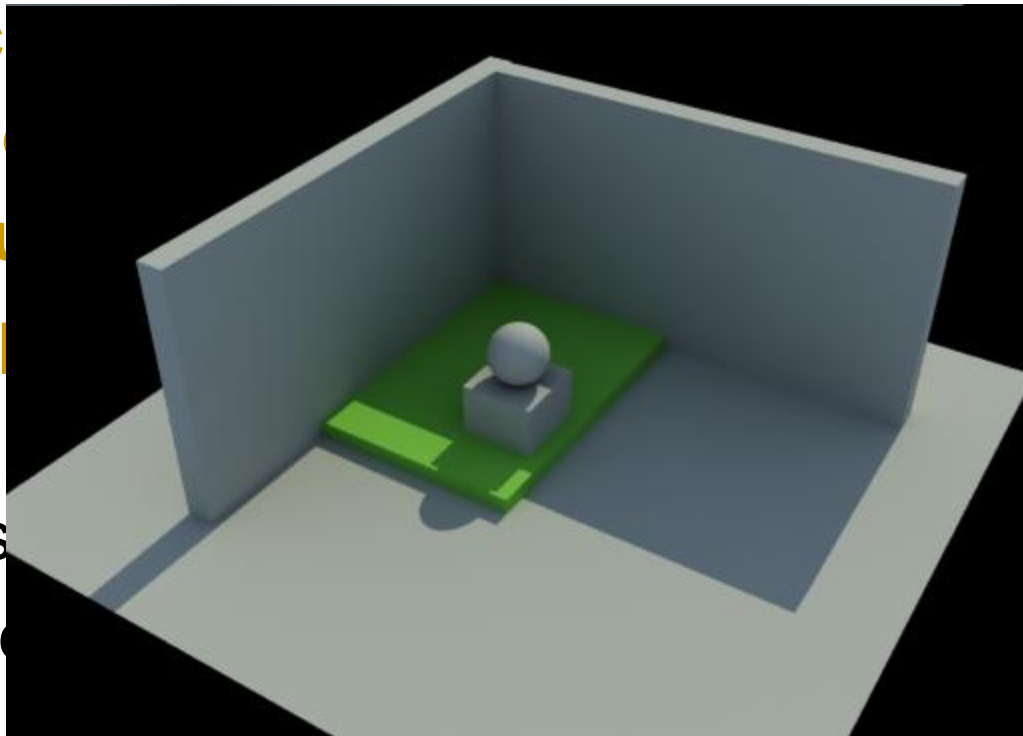
“Steve is very shy and withdrawn, invariably helpful but with little interest in people or in the world of reality. A meek and tidy soul, he has a need for order and and structure, and a passion for detail.”

Is Steve more likely to be a librarian or a farmer?



Approaches

- Differing views of Cognition
 - **Philosophy** : Reasoning about it; introspection
 - **Psych**
 - **Neur**
 - **Lingu**
 - **Comp**
- Each dis
- Cognitive



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“views”