

9.01 Study Questions, Introductory Lectures

Session 1:

1. How did Descartes' encounter with a toy in the French Royal Gardens influence the history of science?
2. What is the "law of roots"? Explain how it applies to the human species. Is it the same in fish?
3. How did the Spanish neuroanatomist Ramon y Cajal specify the first complete neural circuit underlying behavior? What kind of behavior?
4. What did the British neurophysiologist Charles Scott Sherrington add to this picture? What was the word he coined that is so important in modern neuroscience?
5. We "believe in" reflexes, but most modern neuroscientists are not "reflexologists". What is a reflexologist? In their view, what gives rise to human uniqueness?
6. What major factor did Sechenov, and more especially Pavlov, add to human knowledge about reflexes that made reflexology a much more adequate theory?