

Phil. 401: Discussion Questions

January 10th, 2017

Readings: T. S. Kuhn. *The Copernican revolution: Planetary astronomy in the development of Western thought*. Harvard University Press, 1957, Chapter 2.

Functions of Conceptual Schemes

Join your groups from last time. For five to ten minutes, discuss the following question:

- What is a conceptual scheme? List all purposes of a conceptual scheme according to Kuhn.

Why astronomy?

Form a new group consisting of at least five students.

1. Why was astronomy important in ancient civilizations in Egypt, Greece, Iraq, and so on? Kuhn implicitly describes some uses of astronomy, but you should brainstorm other possible uses.
2. Review your answer to question one to question two from the reading assignment. Does your answer provide any hint as to what uses of astronomy may have been most important?

The Problem of the Planets

1. Sketch a picture indicating what “retrograde motion” is. The picture need not accurately depict any particular constellations.
2. How did Ptolemaic astronomers explain retrograde motion?
3. Consider question six from the most recent reading assignment. What advantage did Ptolemy’s theory have over Eudoxus’ theory in explaining retrograde motion? [Note: You don’t need to be able to fully use Eudoxus’ theory to answer this question]
4. Review your answers to question five from the reading assignment.