

# Reading Assignment 17: Butterfield and Koyre on the Scientific Revolution

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## Assigned Reading

- H. Butterfield. *The origins of modern science*. Simon and Schuster, 1997. Chapter 10.
- A. Koyré. *From the closed world to the infinite universe*. Vol. 1. Library of Alexandria, 1957. Introduction and Conclusion.

## Due Date

Please bring a typed, hard copy of your answers to class on Tuesday, March 7th, 2017.

## Technical Requirements

Answer questions one, two, four, and five below. Together, your answers should not be longer than a single typed page. Remember to provide page numbers indicating which passages you are paraphrasing. For the remaining optional questions, please write down the page numbers on which the authors address the question.

## Disclaimer

Butterfield's book is old, and much of the language is out-dated, to put it mildly. I have chosen this chapter because it is representative of a style of European history from the middle of the twentieth century. In the final week of classes, our goal will be to consider the goals of studying the history of ideas, and to this end, I wanted to give you an example chapter in which it might be obvious how narratives of scientific and philosophical history shape people's current national, religious, cultural, etc. identities.

## Questions

1. According to Butterfield, when historians discuss the transmission of "Western civilization" to Asia in the early to mid twentieth century, what ideas and practices are being "carried to" Asia? Which aspects of culture and history does Butterfield think are less central in this transmission?
2. According to Butterfield, which countries and areas were the intellectual centers of Western civilization prior to the 17th century? Which countries and areas were the intellectual centers by the later 17th century? Which religious groups fueled the scientific revolution?
3. According to Butterfield, what equalled "the passion to extend the scientific method to every branch of thought?" Describe one of Butterfield's example, and if you can, provide an example from previous readings.
4. In your own words, describe what Koyre means by the "destruction of the Cosmos." In no more than a paragraph, explain why the destruction of the Cosmos might "imply the discarding by scientific thought of all considerations based upon value-concepts." Give an example from the readings of a value-concept that was "discarded" in the scientific revolution.
5. According to Koyre, Newton conceived of gravity as "proof of the insufficiency of pure mechanism, a demonstration of the existence of higher, non-mechanical powers, the manifestation of God's presence and action in the world." In your own words, explain how this interpretation of gravity changed in the decades following Newton's life. In no more than a paragraph, compare and contrast how changes in the concept of "space" were similar to the changes in the understanding of gravity.