

Reading Assignment 11: Epicurus and Boyle

ASSIGNED READING

- Epicurus. “Letter to Herodotus.” In B. Inwood and L. P. Gerson, eds. *Hellenistic philosophy: Introductory readings*. Hackett Publishing, 1997. Pages 5-19.
- R. Boyle. “The Grounds for and Excellence of the Corpuscular or Mechanical Philosophy”. In: ed. by J. Bennett. 2015

DUE DATE

Please bring a typed, hard copy of your answers to class on Thursday, February 9th, 2017.

TECHNICAL REQUIREMENTS

Answer questions one, four, seven, and eight 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.

QUESTIONS

1. According to Epicurus, can matter be destroyed completely? Why or why not? How is Epicurus’ view about the destruction of matter relevant to his argument for the existence of atoms?
2. How many different worlds are there according to Epicurus and why?
3. According to Epicurus, why do my senses sometimes err? For example, why do I sometimes think an object is circular when it is not, or that an object is blue when it’s purple?
4. According to Epicurus, what properties do atoms have (i.e., what properties do they “bring with them” when we perceive some object), and why?
5. Aristotle claims that, unless resisted by another body, an object will move towards its natural place in the universe. According to Epicurus, how do atoms move if not resisted by other objects? Does his answer depend upon the size or weight of an atom?
6. In no more than a paragraph, explain why Epicurus believes study of the eclipses and other astronomical phenomena may not contribute to feeling “freedom from disturbance,” whereas knowledge of atoms and the void may.
7. Explain the difference between Boyle’s use of the word “principle” and the contemporary meaning of the word by using an example of your own.
8. In no more than a paragraph, explain what Boyle means by “the versatility of mechanism.”
9. Why does Boyle claim that “chemical explanations . . . , are not the most fundamental and satisfactory” and how does the example involving fireworks illustrate this claim?
10. Does Boyle think that the mechanical philosophy is inconsistent with chemists’ desire to explain the properties of an object in terms of its chemical constituents (e.g., sulphur)?
11. How does Boyle explain how the same object (e.g., ice) might be solid at one point and liquid at another?
12. Boyle rejects the claim that, to accept a scientific hypothesis, one must be able to prove it or falsify its main rival. What does Boyle propose instead as sufficient grounds for accepting a hypothesis?