

Week 8 Writing Activity: Chapter 6 of the *Scientific Attitude*

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1 The Scientific Attitude and Modern Medicine

1. The Barbarous Past

- (a) Which of the following people is responsible for the theory of the four humours?
 - A: Pasteur
 - B: Rush
 - C: Hippocrates
 - D: Galen
- (b) What are the four humours? Provide several pieces of “evidence” for the theory of the four humours.
- (c) Describe the process of bloodletting, and comment on the effectiveness versus the risk.

2. The Dawn of Scientific Medicine

- (a) Approximately when and where did the Scientific Revolution take place, for physics, astronomy, and chemistry?
- (b) And when did modern science begin to have an influence on medical practice in the United States?
- (c) In the late 1800s (19th Century), Louis Pasteur completed a set of experiments proving that food “goes bad” due to the growth of microscopic organisms called bacteria. Keep in mind, *he could not see them*. Skeptics continued to practice medicine the old way, always asking “Where are the little beasts?” However, in 1879-1900 the bacteria responsible for major diseases were being “discovered at the phenomenal rate of one a year.” What technological breakthrough enabled these discoveries, and who was primarily responsible?

3. The Long Transition to Clinical Practice

- 4. According to Thomas Kuhn, paradigm shifts often occur when “the holdouts die and take their ideas with them.” Give an example of this, or, list a few paradigm shifts where this social factor played a role.