

Study guide

Dembski, William. *No Free Lunch*. Rowman and Littlefield Publishers, 2007, pp. 1-44. In Chap. 1, titled "The Third Mode of Explanation", Dembski (one of the leaders of the so-called intelligent design movement), argues that design is a legitimate forms of scientific explanation. Read up until page 15 to get a nice overview.

1. What are the three modes of scientific explanation? How did Epicurus, Maimonides, Newton, Laplace, and Darwin employ these modes of explanation? Which of these, according to Dembski, is neglected by most scientists today? What, then, is the aim of Dembski's book?
2. What are Aristotle's four causes? Provide an example of each. How did this lead to the exclusion of design by modern scientists?
3. Provide a few examples of modern industries that rely upon reliably identifying design. Do you think they are able to successfully do so? What is the worry about making a design inference in, for example, biology?
4. What is the complexity-specification criterion, and how is it used?
 - 4.1. Explain how the complexity-specification criterion is employed by the search for extraterrestrial intelligence (SETI).
 - 4.2. What is meant by complexity? By contingency? by specification? What is the difference between a specification and a fabrication?
 - 4.3. How does the complexity-specification criterion provide an explanatory filter for detecting design?
 - 4.4. What are some of the criticisms of the explanatory filter, and how does Dembski address these?