

## Assessment 2 Observation, Theory-Ladenness, and Objectivity

*Note: For this assessment, you will refer to the previous reading, M. Nissani and D.M. Hoefler-Nissani's "When Theory Fails."*

Nissani and Hoefler-Nissani's "When Theory Fails" reports the results of an experiment about the dependence of volume measurements upon the beliefs of those who take the measurements. The experiment is relevant to the philosophical issues of whether observations are theory-laden and whether, if they are theory-laden, those observations are nonetheless objective. Indeed, the authors use the results of their experiment to discuss the extent to which theories conform to observations or vice versa.

Summarize the experiment and the results described in Nissani and Hoefler-Nissani's "When Theory Fails." Then provide an exposition of the arguments for two competing views on the issue of whether the theory-ladenness of observation compromises the objectivity of scientific inquiry, and assess each view in light of the results of Nissani and Hoefler-Nissani's experiment. The views you discuss should come from the reading materials for Unit 2. (The readings from Hanson, Scheffler, and Lashchuk are especially relevant.)

