Assessment 2
Observation, Theory-Ladenness, and Objectivity

Guide to Responding

To summarize an experiment is to state, in your own words, the goal of the experiment (what the experiment was designed to test) and the design of the experiment (the procedure for achieving the goal). You can find this information in the “Method” section of any experimental paper.

To summarize the results of an experiment is to state, in your own words, the outcome of the experiment. You can find this information in the “Results” section of any experimental paper.

A general format to follow for summarizing an experiment and its results involves providing the missing information in the following schema:

The goal of this experiment was to determine whether (or the extent to which) __________. To accomplish this goal, __________ [describe design]. After executing the experiment, the experimenters found that __________.

Make sure, when summarizing the results of an experiment, that the results directly address the stated goal of the experiment.

To provide an exposition of an argument for a view involves three elements: first, a statement of the view; second, statements of the main claims given as reason to accept that view; and third, examples that illustrate each of those claims.

There are two possible views on the issue of whether the theory-ladenness of observation compromises the objectivity of scientific inquiry: (1) the theory-ladenness of observation does compromise the objectivity of scientific inquiry; (2) the theory-ladenness of observation does not compromise the objectivity of scientific inquiry. An argument for one of these views identifies some feature of the way in which observation is theory-laden, some requirement for scientific inquiry being objective, and some reason for why the identified feature of observation means that scientific inquiry cannot meet the identified requirement for objectivity.
You should provide two expositions, one for each of the two possible views on the issue of whether the theory-ladenness of observation compromises the objectivity of scientific inquiry. You can find information relevant to arguments for these views in the assigned readings for Unit 2. However, it is not likely you will find the arguments themselves in some particular paragraph. Most likely, you will have to think about what you have read and reconstruct the arguments on your own. (If you pull an idea from someone else’s writing, you should provide a citation to that material in your essay.)

To assess a view in light of a piece of evidence (in your case, the results of an experiment) is to provide an argument regarding whether the piece of evidence implies that the view must be false, or implies that some claim given as reason to accept the view is false, or provides additional evidence for accepting that the view is true. If the evidence implies that the view is false, then the evidence refutes the view; if the evidence implies that some part of an argument for the view is false, then the evidence undermines the view; if the evidence provides additional evidence for a view, then the evidence supports the view; and if the evidence does none of these things, then the evidence is irrelevant to the view.

You should defend a thesis concerning whether the results of Nissani and Hoefler-Nissani’s experiment refutes, undermines, supports, or is irrelevant to the view that the theory-ladenness of observation does compromise the objectivity of scientific inquiry; and you should defend a second thesis concerning whether the results of Nissani and Hoefler-Nissani’s experiment refutes, undermines, supports, or is irrelevant to the view that the theory-ladenness of observation does not compromise the objectivity of scientific inquiry.