

Good example of essay on problematic characterization

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The statement that the goal of science is to increase the number of truths known is in itself problematic. Science aims primarily at enhancing understanding regardless of future applications of the understanding of the phenomena in question. Thus, even if a phenomenon is known to be true or rather considered true this does not suffice as far as science is concerned. Even factors considered truths are still subject to stringent scrutiny by science in order to ascertain the degree to which their assumption of being true holds. Therefore, the goal of science is not just to increase the number of truths known, but also to increase human understanding. This statement leaves the impression that once a factor is known to be true it is not subjected to any other scientific study or scrutiny. This statement is therefore incorrect. Science scrutinizes even known truths with an aim at enhancing understanding on these truths and revealing previously unknown information about this truth (Hann, p. 71). Some things may also be considered truths yet science steps in and completely discredits their validity hence in essence reducing the number of truths known but in fact enhancing human understanding of the phenomena in question and any other related phenomena.

The statement that science generates a hypothesis about a given phenomenon and then tests these hypotheses against the world is a problematic statement. This is because once a hypothesis has been generated all the tests performed thereafter in relation to the particular hypothesis are performed on the hypothesis in question (Hann, p. 88). These tests are aimed at establishing the validity of the hypothesis in question and thus establishing whether the hypothesis holds or not. Thus carrying out

tests against the world holds absolutely no merit at all. Tests are carried out against the hypothesis in question since it is the phenomena whose validity is currently in question. It is the hypothesis that is tested and not the world around the hypothesis that is tested.

The statement that tests entails isolating the thing to be studied from all other variables and then observing the results is also very problematic. This is because once the thing to be studied has been isolated from all other variables this statement suggests that all the relevant information about the study matter will automatically be available. An example is the study of rocks. Isolating a given rock alone and observing it will give minimal information about key aspects of the rock such as its chemical composition and its texture. In order to get all the information needed about the rock mere isolation is not enough. Tests have to be carried out on the rock in order to ascertain certain key aspects of the rock (Hann, p. 108). Thus, the statement in question is thus shallow as it suggests that isolation and observation are the only research paradigms that science employs to get information.

The statement that once a hypothesis is adequately tested it is known to be true and is called a law also has errors. This is because this statement leaves out the possibility that once the hypothesis is adequately tested it might be established that it was false in the first place. In this case, the hypothesis loses its validity and will never become a law. This statement creates an impression that once a hypothesis is tested it is automatic that it will hold up to the test parameters hence be established as a truth.

Works Cited

Hann, Judith. How science works. Pleasantville, N. Y.: Reader's Digest Association, 2007. Print.