How to place Epicureanism in relation to the modern tool of the scientific method

Post by “Kalosyni” of September 23, 2025 at 1:40 PM

I'd like to compare the tools of the Epicurean canon with the tools of the modern scientific method. Firstly, it is important to understand what the scientific method is.

Here is a good article excerpt on the scientific method (source link posted below):

> Quote
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> Science is an enormously successful human enterprise. The study of scientific method is the attempt to discern the activities by which that success is achieved. Among the activities often identified as characteristic of science are **systematic observation and experimentation, inductive and deductive reasoning, and the formation and testing of hypotheses and theories**. How these are carried out in detail can vary greatly, but characteristics like these have been looked to as a way of demarcating scientific activity from non-science, where only enterprises which employ some canonical form of scientific method or methods should be considered science (see also the entry on science and pseudo-science). Others have questioned whether there is anything like a fixed toolkit of methods which is common across science and only science. Some reject privileging one view of method as part of rejecting broader views about the nature of science, such as naturalism (Dupré 2004); some reject any restriction in principle (pluralism).
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> **Scientific method should be distinguished from the aims and products of science, such as knowledge, predictions, or control. Methods are the means by which those goals are achieved.** Scientific method should also be distinguished from meta-methodology, which includes the values and justifications behind a particular characterization of scientific method (i.e., a methodology) — values such as objectivity, reproducibility, simplicity, or past successes. Methodological rules are proposed to govern method and it is a meta-methodological question whether methods obeying those rules satisfy given values. Finally, method is distinct, to some degree, from the detailed and contextual practices through which methods are implemented. The latter might range over: specific laboratory techniques; mathematical formalisms or other specialized languages used in descriptions and reasoning; technological or other material means; ways of communicating and sharing results, whether with other scientists or with the public at large; or the conventions, habits, enforced customs, and institutional controls over how and what science is carried out.

> While it is important to recognize these distinctions, their boundaries are fuzzy. Hence, accounts of method cannot be entirely divorced from their methodological and meta-methodological motivations or justifications, Moreover, each aspect plays a crucial role in identifying methods. Disputes about method have therefore played out at the detail, rule, and meta-rule levels. Changes in beliefs about the certainty or fallibility of scientific knowledge, for instance (which is a meta-methodological consideration of what we can hope for methods to deliver), have meant different emphases on deductive and inductive reasoning, or on the relative importance attached to reasoning over observation (i.e., differences over particular methods.) Beliefs about the role of science in society will affect the place one gives to values in scientific method.
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> The issue which has shaped debates over scientific method the most in the last half century is the question of how pluralist do we need to be about method? Unificationists continue to hold out for one method essential to science; nihilism is a form of radical pluralism, which considers the effectiveness of any methodological prescription to be so context sensitive as to render it not explanatory on its own. Some middle degree of pluralism regarding the methods embodied in scientific practice seems appropriate. But the details of scientific practice vary with time and place, from institution to institution, across scientists and their subjects of investigation. How significant are the variations for understanding science and its success? How much can method be abstracted from practice? This entry describes some of the attempts to characterize scientific method or methods, as well as arguments for a more context-sensitive approach to methods embedded in actual scientific practices.

You can read the full article over at this website.

My hope for this thread is to compare and contrast... feel free to add to this thread at any time.