
*By Otávio Bueno*

Empiricism has a complex and intricate history. It is a multifarious tradition that, for centuries, has been reformulated, reshaped, and re-invented. It may seem that there is little in common between the way in which Sextus Empiricus, Ockham, Locke, Reichenbach and Sartre were all empiricists. But often to be part of a tradition is to devise strategies to respond and re-conceptualise that tradition, while still preserving crucial features of the latter. Ultimately, it’s this process of re-examination and change that allows one to identify a tradition through time, despite the fuzziness that will always remain.

For many years, Bas van Fraassen has been developing a novel and ingenious framework to defend empiricism. In his hands, empiricism has certainly changed. In *The Scientific Image* (Oxford, 1980), constructive empiricism was first formulated as a claim about the aim of science (empirical adequacy rather than truth), along with a new theory of the pragmatics of explanation, the formulation of the modal interpretation of probability, and a thorough critical assessment of scientific realism (pointing out limits to the inference to the best explanation and using the underdetermination argument in ingenious ways).

But constructive empiricism would be a much less interesting view if it didn’t also provide a framework to understand particular aspects of science. To address this need, and to develop the view further, are the main goals of van Fraassen’s *Laws and Symmetry* (Oxford, 1989) and *Quantum Mechanics: An Empiricist View* (Oxford, 1991). The former contains a detailed critique of philosophical notions of laws of nature, and an explanation of why there’s no defensible account of that notion. The book also examines the role of symmetry in science and metaphysics, indicating that symmetry replaces, at least in part, the goals that were once aspired to with the notion of law. Along the way, a new, more lenient theory of rationality is developed; a theory that insists that rationality is
only bridled irrationality. In *Quantum Mechanics*, this particular understanding of symmetry and empiricism are then applied to make sense of quantum theory, addressing a host of interpretation issues that the theory raises (from the measurement problem to the issue of identity and indistinguishability of quantum particles).

In all of these works, van Fraassen developed an empiricist view about science, without ever having to address the question of what it is to be an empiricist. To answer this question, and to develop the empiricist program further, is the main goal of *The Empirical Stance*. The book, which is based on the Terry Lectures given at Yale University, has five chapters (or ‘lectures’) and three appendices.

The first lecture provides, as one would expect from any good empiricist, a critique of (analytic) metaphysics. But the critique doesn’t come, as has so often happened in the history of philosophy, in terms of some criteria of meaning or content (criteria that, ultimately, empiricism itself couldn’t then meet). The criticism is internal to the very project of doing analytic metaphysics, and it aims at opening the way for philosophy to be something other than metaphysics (p. 30).

This paves the way to the second lecture, which, more positively, develops a new account of empiricism. Van Fraassen first argues that the traditional way of conceptualising empiricism doesn’t work. In his view, to conceive of empiricism as a doctrine to be believed (e.g. as the claim that experience is the only source of information about the world) is fundamentally incoherent. Empiricism should not be thought of as a doctrine, but rather as a stance, an attitude toward science and research (more on this below). It is one of the main challenges of the book to show the benefits (besides lack of incoherence) that emerge from this way of thinking about empiricism. The rest of the book takes this on.

As van Fraassen elegantly argues, there are three main benefits. First, he shows how the celebrated problem of scientific revolution/conversion can be reconsidered from the new perspective of the empirical stance, indicating, in particular, the role played by emotion in this context. (This issue is addressed in the third lecture.) Second, van Fraassen explores how epistemic life is possible without foundations; the rejection of the latter is one of the consequences of the empirical stance (fourth lecture). Finally, the problem of thinking about the relation between science and religion also acquires a new significance once empiricism is thought of as a stance. As van Fraassen points out, the crucial distinction between the secular and the religious “is not the theories they hold, or beliefs about what the world is like”. Rather “the crucial distinction lies in a certain attitude, in how we approach the world and relate to our own experience” (p. 194). The book