The Empirical Stance is a collection of the lectures that Bas van Fraassen delivered at Yale University in the fall of 1999, under the auspices of the Dwight H. Terry Foundation Lectureship on Religion in the Light of Science and Philosophy. In this series of lectures, van Fraassen addresses himself to a general audience and considers what it is to be an empiricist. His provocative thesis is that to be an empiricist is to adopt a certain stance—the empirical stance. Empiricism, says van Fraassen, is not a theory, not a thesis, not a set of beliefs about what the world is like; rather, it is an “attitude, commitment, approach, a cluster of such” (47–8). Each of the five lectures presented in this volume is an exploration of the empiricism-as-stance thesis.

The first lecture is a sustained argument for one of the key components of the empirical stance: the rejection of metaphysics. The lecture begins and ends with a critique of metaphysics in general, but at its center it attacks a variety of metaphysics that van Fraassen finds particularly pernicious: contemporary analytic ontology. According to van Fraassen, the ambitious project of this ontology is “to engage in metaphysics as an extension of science, putatively pursued by the same means and realizing the same values” (11). The problem with this ambition, says van Fraassen, is that analytic ontology is not much like science at all. Setting aside certain undeniable dissimilarities—the degree to which each relies on empirical evidence, for instance—van Fraassen focuses on the notion of “inference to the best explanation” to argue that any similarity between analytic ontology and science is purely superficial. What emerges is a picture of analytic ontology as a gutless, soulless, heartless enterprise that is technically clever and of no use to anyone.

Van Fraassen begins with the ontologist’s contention that both he and the scientist proceed by means of inference to the best explanation. Van Fraassen then notes that to proceed in this way is to take a risk, to get caught in a Pascalian wager. Moreover, to make sense of, or to evaluate, such a wager is
to know what is at stake. Of course, if the wager is on a choice of theories or hypotheses, truth is a potential gain and falsity is a potential risk: so it is in ontology; so it is in science. The crucial difference between the disciplines, says van Fraassen, is that when the scientist makes a wager, truth and falsity are just two stakes among many, but when the ontologist bets, truth is all he has to gain and falsity his only risk.

This difference turns out to be crucial because it means that making an inference to the best explanation is something entirely different for the ontologist than it is for the scientist. When the scientist deems an explanation “best,” she invokes a variety of values, most of which are manifested in an empirically accessible way—food, shelter, communication, the avoidance of mass destruction, and the like. Indeed, there are so many values to consider that truth and falsity are of relatively little significance. Moreover, empirical evidence provides an objective way of assigning probabilities to different potential outcomes. Thus, when the scientist makes an inference to the best explanation, she makes a genuine wager, weighing the value of potential outcomes against their objective likelihood. But the ontologist can do no such thing. Empirical evidence provides no objective way of assigning probabilities to the truth of one ontological theory or another and there are no values other than truth to consider. As such, the ontologist’s so-called inference to the best explanation is nothing more than a playing of hunches. Given that the scientist cannot get away with such hunch-playing, any similarity between the two varieties of inference to the best explanation is merely formal. The ontologist, unlike the scientist, offers nothing but postulation—well-worked out and logically consistent postulation, but postulation nonetheless.

Because of limits of space, I will leave the bulk of van Fraassen’s manuscript critically unengaged. But I would be remiss if I did not pause here to point out that van Fraassen’s harsh treatment of the ontologist is not entirely deserved. In particular, it is not the case that whenever the ontologist makes an inference to the best explanation, truth and falsity are the only values that are at stake. Other values come to light when we consider that at its best, analytic ontology draws out the implications of a metaphysical theory until it reveals an implication that is of crucial significance to the way we live our lives. In these cases, what is at stake is our conception of who we are and how we ought to live; and we bet on one theory rather than another because it is the theory that best allows us to cling to that conception.

The debate over free will and moral responsibility provides an illustrative example. Let us suppose that an analytic ontologist considers the implications of the various theories available—or, at least, the arguments for what their implications are. Let us further suppose that he concludes that moral responsibility is impossible if free action is likewise impossible and that free action is impossible if determinism is true. If so, and if he subsequently bets on the existence of
undetermined free action, there is surely no reason to suppose that this ontologist is merely playing his hunches about what is true. Indeed, it entirely possible that he bets as he does because he cannot or will not abandon his conception of the moral life: he cannot or will not believe that his feelings of guilt are unjustified, that those who wrong him cannot justifiably be blamed, or that those he loves deserve no praise for anything that they do. In short, he may bet on undetermined free action because he does not know how to live or who or what he is if undetermined free action does not exist. He thus concludes that the existence of undetermined free action is the best explanation for the phenomena not merely because this explanation seems most likely true but because it is the only explanation that allows him to carry on with life as he knows it.

Granted, existential considerations such as these are not often invoked in the actual practice of analytic ontology: I concede to van Fraassen that many analytic ontologists infer that a particular theory is the best because this theory is better than all the others at escaping one or another technical difficulty. I further concede that if the analytic ontologist were to proceed by invoking existential concerns of the sort I describe, his enterprise might seem less like a continuation of science than ever; indeed, he would now have to respond to the accusation that his theories are nothing more than elaborate exercises in wishful thinking. For now, my point is only that, contra van Fraassen, much more is at stake in analytic ontology than truth and falsity. The values that come into play when an ontologist (analytic or otherwise) makes an inference to the best explanation can include those values that are at the very core of our day-to-day existence; there is nothing inherent to the discipline of ontology that renders it devoid of viscera, soul or heart.

In any case, van Fraassen continues to emphasize and rejoice in empiricism’s rejection of metaphysics in his second lecture, “What Is Empiricism and What Could It Be.” In the midst of a brief sketch of the empiricist tradition and the history of the word, van Fraassen says that empiricism’s rejection of metaphysics amounts to “the first and second characteristics of empiricism” (37). These are:

(a) a rejection of demands for explanation at certain crucial points; and
(b) a strong dissatisfaction with explanations (even if called for) that proceed by postulation.

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From here, van Fraassen considers what empiricism can not be. He develops an extended argument for the thesis that empiricism cannot be a theory (or a set of beliefs) about what knowledge is or what the foundations of knowledge are. Setting aside the usual foundationalist difficulties, van Fraassen points out that to be an empiricist is to take a certain kind of philosophical position. He then proposes the following metaphilosophical principle:

Principle Zero:

For each philosophical position X there exists a statement X+ such that to have (or take) position X is to believe (or decide to believe) that X+.

where X+ is what “we may then call the dogma or doctrine of position X” (41). Of course, Principle Zero implies:

(NE) To be an empiricist = to believe that E+ (the empiricist dogma),

where (NE), or “Naïve Empiricism,” is nothing other than the thesis that empiricism is a theory (or set of beliefs) about knowledge. Van Fraassen highlights the difficulty with this thesis when he juxtaposes the following corollary to (NE):

Empiricist critique of X = a demonstration that X is incompatible with (contrary to) the empiricist dogma E+;

with the third characteristic of empiricism:

As in science, so in philosophy: disagreement with any admissible factual hypothesis is admissible.

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Van Fraassen notes that the empiricist cannot possibly abandon (c), given that she thinks that no factual claim is a priori. But since (c) is obviously inconsistent with the corollary to (NE), van Fraassen concludes that
At this point, we arrive at the heart of van Fraassen’s lecture. For if being an empiricist cannot consist in holding a set of beliefs, either it consists in something else or it is altogether incoherent. With van Fraassen’s unstated rejection of the latter alternative, the situation is ripe for the proposal of the empiricism-as-stance thesis. And so we find van Fraassen proposing that Principle Zero is false, that a philosophical position could be a stance—an attitude, commitment, approach, or cluster of such—and that in the case of empiricism, this is precisely what it is.

The final three lectures develop the empirical stance, with van Fraassen recasting the perennial problems of epistemology in its light. Throughout the third and fourth lectures, the problem of primary concern is how the empirical stance can be marshaled in response to the problem of scientific revolution/conversion. Because van Fraassen’s treatment of this problem is intricate and painstakingly executed, I cannot possibly do it justice within the confines of this brief review. Indeed, I can do nothing more than paint it in broad strokes, leaving out all the argument and with it, van Fraassen’s masterful presentation.

In the third lecture, van Fraassen argues that epistemology is not a theory-writing project but is—à la James—the project of illuminating the way to epistemic success. Van Fraassen contends that epistemic success is the achievement of (i) the proper balance of (ii) the acquisition of true beliefs and (iii) the avoidance of error (iv) in the context of our interests and values. This conception of epistemology is voluntarist in that reason does not dictate which beliefs we should hold, but presents us with a range of rationally permissible epistemic alternatives between or among which we must choose. The author augments his understanding of epistemology by discussing the transformative power of emotions: taking a cue from Sartre,
be sustained. It thus turns out to be fortunate for both the Jesuit and the empiricist that neither is committed to foundationalism. Van Fraassen argues that because their positions are properly conceived of as stances, neither the Jesuit nor his analogue is hoist by his own petard.

Van Fraassen further argues that once we construe empiricism as a stance, we are able to bring the rule of Sola Experientia into alignment with the claim that every theory has an element of interpretation. It turns out that for those who adopt the empirical stance, the rule of Sola Experientia has two roles: (i) to maintain the orthodox interpretation of what we have experienced and (ii) to devalue any aspect of orthodoxy that can be identified as interpretive. Of course, it would be impossible to construe the rule of Sola Experientia in this way if it were part of a foundationalist theory of knowledge, but van Fraassen insists—and argues—that once we construe Sola Experientia as part of the empirical stance, any potential problem disintegrates. Though there is, as I have already said, far more to his treatment of the problem of revolution/conversion than what I am presenting here, the gist of van Fraassen’s response is this: In the case of revolution/conversion, there is a shift in the role that the rule of Sola Experientia plays; where formerly it supported the status quo, now it exposes the ambiguities and the vagueness, and in turn the interpretive elements, of the original theory. Moreover, the shift in roles is brought on by a shift in emotions: it is here that the transformative power of emotion comes into play. Further, it is because experience now plays the role of exposing the interpretive elements of the original theory that the empiricist’s range of epistemic options widens; rejecting the original theory now becomes a genuine epistemic alternative. With this rejection, the discussion comes full circle, returning to the voluntarist epistemology with which van Fraassen began.

In the final lecture, van Fraassen considers what science is and what it is to be secular. After a careful consideration of what counts as science, he concludes that there is nothing inherently secular about it. He argues that both the secular and the religious are properly construed as stances and that no matter which of the two stances one adopts, one is able to engage in the practice of science.

I will leave it to others to decide how van Fraassen ultimately fares in his argument for and development of the empirical stance. I will simply point out that the matter is well worth considering. Indeed, this manuscript cuts such a wide swath and deals with its topics in such an engaging way that it is difficult to imagine any philosopher who would not find it worthwhile reading. Of course, those who are familiar with the rest of van Fraassen’s work should note that much of the text revisits ideas that van Fraassen has presented elsewhere. Moreover, because his intended audience is relatively general, there are some sacrifices of depth to accessibility. Nevertheless, what we
have in The Empirical Stance is an elegant encapsulation of van Fraassen’s latest thinking on topics of breadth and significance, an encapsulation which offers keen insights and carefully considered arguments and is presented with both passion and lucidity. Clearly, this book is an invaluable piece of philosophy.

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