

# Boghossian, Bellarmine, and Bayes

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As Paul Boghossian sees it, postmodernist relativists and constructivists are paralyzed by a “fear of knowledge.” For example, they lack the courage to say, in the face of the Lakotas’ claim that their ancestors came from inside the earth, that it is a matter of known fact that their ancestors came across the Bering Strait. To avoid this, they accept the nonconfrontational view Boghossian calls

(Equal Validity) There are many radically different, yet ‘equally valid’ ways of knowing the world, with science being just one of them (2).<sup>1</sup>

Boghossian suggests two sources for the continuing appeal of this view. The first is a postcolonial unwillingness to criticize cultures as inferior. Here, he notes, Equal Validity is a two-edged sword: “for if the powerful can’t criticize the oppressed, because the central epistemological categories are inexorably tied to particular perspectives, it also follows that the oppressed can’t criticize the powerful” (130). But in addition to its political appeal, Boghossian observes, Equal Validity has a philosophical appeal—an appeal he aims to show is merely skin-deep.

Boghossian concedes that if one thinks hard about fundamental epistemic disagreements—in which two parties draw incompatible conclusions from the same evidence because they accept different justificatory frameworks—Equal Validity can seem a natural and even inevitable conclusion. In such disputes, neither party can justify his own framework without presupposing its correctness. So, if there is a fact of the matter as to which framework is correct, it is hard to see how either party could know it. Faced with an unpalatable choice between skepticism, on the one hand, and the chauvinism of assuming that our own framework is correct just because it is our own, on the other, we might be led to the view that there are no “absolute” facts about justification, but only system-relative facts. In the central chapters of *Fear of Knowledge*, Boghossian fleshes out this line of thought with considerable sympathy, only to tear it down again. This is not Boghossian’s only strategy against the relativist—he

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<sup>1</sup> Except as noted, all page references are to Paul Boghossian, *Fear of Knowledge: Against Relativism and Constructivism* (Oxford: Oxford University Press, 2006).

also calls in question the very intelligibility of the relativist’s position—but it is an effective and important one.

In fleshing out the case for epistemic relativism, Boghossian focuses on a concrete example, ripped from the pages of history (and from Richard Rorty’s discussion in *Philosophy and the Mirror of Nature*). The two disputing parties are Galileo, who has just revealed thousands of previously unseen stars, the phases of Venus, and the moons of Jupiter in his telescope, and Cardinal Bellarmine, who warns Galileo not to promote the Copernican theory. Boghossian repeats the apocryphal story that Cardinal Bellarmine refused to look through Galileo’s telescope, “saying that he had a far better source of evidence about the make-up of the heavens, namely the Holy Scripture itself” (60). This claim is belied by Boghossian’s own source.<sup>2</sup> But if Bellarmine *did* look through the telescope, the story is even better for Boghossian’s purposes. For although Bellarmine and Galileo had access to exactly the same evidence, they drew different conclusions. Bellarmine put a great deal of evidential weight on certain passages from scripture, including Solomon’s claim that “the sun also riseth and the sun goeth down, and hasteneth to the place where he ariseth,” and concluded that although the Copernican theory correctly predicted celestial movements, it should not be accepted as *literal* truth on the strength of the evidence Galileo had given. Galileo, by contrast, put a great deal of weight on the testimony of his senses (and his views about the operation of the telescope), dismissing the scriptural interpretations as non-evidential.

About this case, Rorty asks: “What determines that Scripture is not an excellent source of evidence for the way the heavens are set up?”<sup>3</sup> Of course, the scientific standpoint we have inherited from Galileo recommends distinguishing sharply between properly scientific evidence and religious matters. But, Rorty says,

...to proclaim our loyalty to these distinctions is not to say that there are “objective” and “rational” standards for adopting them. Galileo, so to speak, won the argument, and we all stand on the common ground of the “grid” of relevance and irrelevance which “modern philosophy” developed as a consequence of that victory. But what could show that the Bellarmine-Galileo

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<sup>2</sup> Giorgio de Santillana, *The Crime of Galileo* (Chicago: University of Chicago Press, 1955), 28.

<sup>3</sup> *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1981), 328–9.

issue “differs in kind” from the issue between, say, Kerensky and Lenin, or that between the Royal Academy (circa 1910) and Bloomsbury?<sup>4</sup>

What makes Rorty’s claim hard to resist, Boghossian suggests, is that the only justification we can provide for our own epistemic framework is a “norm-circular” one. Galileo (like us) employs the following fundamental epistemic principles:

(Observation) For any observational proposition  $p$ , if it visually seems to  $S$  that  $p$  and circumstantial conditions  $D$  obtain, then  $S$  is prima facie justified in believing  $p$ . (64)

(Deduction) If  $S$  is justified in believing  $p$  and  $p$  fairly obviously entails  $q$ , then  $S$  is justified in believing  $q$ . (66)

(Induction) If  $S$  has often enough observed that an event of type  $A$  has been followed by an event of type  $B$ , then  $S$  is justified in believing that all events of type  $A$  will be followed by events of type  $B$ . (67)

Bellarmino, by contrast, employs

(Revelation) For certain propositions  $p$ , including propositions about the heavens, believing  $p$  is prima facie justified if  $p$  is the revealed word of God as claimed by the Bible. (69)

Suppose Galileo calls on Bellarmine to justify Revelation. Bellarmine could not do so except by invoking Revelation itself: the Bible claims its own reliability as a guide to truth. Galileo would be right, it seems, to reject this blatantly circular justification as no justification at all. But can Galileo do any better in justifying his own fundamental principles? It is a Philosophy 101 commonplace that one cannot justify Deduction without deducing, or Observation without invoking the deliverances of the senses, or Induction without making inductive inferences. So (it seems natural to conclude) neither Galileo nor Bellarmine has any non-circular argument for the objective correctness of his own fundamental epistemic principles:

If the point is to decide which of the two practices is better than the other, self-certification is not going to help. Each side will be able to provide a *norm-circular* justification of its own practice; neither side will be able to

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<sup>4</sup> Ibid., 331.

provide anything more. With what right, then, could either party claim to have a superior conception of rational or justified belief? We seem left with no choice but to say, as Wittgenstein does in his *Philosophical Investigations*: “If I have exhausted the justifications I have reached bedrock, and my spade is turned. Then I am inclined to say: ‘This is simply what I do.’” (79–80)

If this is right, then it seems we can persist in thinking that there is an objective fact of the matter as to whose epistemic principles are correct only at the price of acknowledging that neither party is in a position (even on further reflection) to come to know this fact.<sup>5</sup> This flies in the face of the intuitive assumption (which Boghossian apparently endorses) that fundamental facts about justification, if there are any, should be knowable through a priori reflection (76). The alternative is to drop the assumption that there are absolute, objective facts about what counts as a justification, and take all justification judgements to be implicitly framework-relative. To take this second option is, in effect, to endorse Equal Validity.

So where does this apparently plausible argument go wrong?

Boghossian observes that if an argument like this is to support Equal Validity, it must start from a *real* confrontation between genuinely alternative epistemic systems. In the absence of a legitimate challenge, the fact that we cannot offer non-circular justifications of basic epistemic principles does not undermine our entitlement to believe them. We can be justified in accepting them “by default.” If we could not be, Boghossian points out, the path to skepticism would be short indeed.

What must an alternative epistemic system look like in order to count as a “legitimate challenge” to our own? Boghossian argues that it must be coherent, in the sense of not giving incompatible verdicts about justification, and that it must have a sufficiently impressive track record in the actual world. (Science-fiction scenarios about technologically advanced aliens who reject modus ponens do not count.) Finally, it must be a genuine alternative to our own—a system with different *fundamental* epistemic principles, not just different derived principles.

In assessing the argument for Equal Validity, then, we must ask whether Belarmine’s epistemic system really constitutes a genuine alternative to our own

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<sup>5</sup> Boghossian assumes, at least for purposes of this book, that knowledge requires justification (15).

(Galileo's), and if so whether it is a coherent system. Boghossian argues that if Bellarmine's system is coherent, then it *cannot* be a genuine alternative to our own. For Bellarmine can hardly reject the fundamental principles Galileo employs—Observation, Deduction, and Induction:

Yes, the Cardinal consults his Bible to find out what to believe about the heavens, rather than using the telescope; but he doesn't divine what the Bible itself contains, but rather reads it using his eyes. Nor does he check it every hour to make sure that it still says the same, but rather relies on induction to predict that it will say the same tomorrow as it does today. And, finally, he uses deductive logic to deduce what it implies about the make-up of the heavens. (103)

Given this, Boghossian argues,

If Bellarmine's Vatican were to be a genuine example of a coherent fundamentally different epistemic system, he would have to hold that whereas ordinary epistemic principles apply to propositions about objects in his immediate vicinity, Revelation applies to propositions about the heavens. (104)

But of course Bellarmine applies the other epistemic principles to objects in the heavens, too (using his eyes to see that constellations are visible, for example).<sup>6</sup>

On pain of attributing to Bellarmine an incoherent epistemic system, then, we had better regard his system as differing from ours only in some derived sense, attributing to him the view that there is evidence, of a perfectly ordinary sort, that the Holy Scripture is the revealed word of the Creator of the Universe. (104)

In other words: if Bellarmine accepts Observation, Deduction, and Induction, then he cannot *coherently* accept Revelation as a fundamental epistemic principle (one that cannot be justified on the basis of the others). So either Bellarmine's epistemic system is not a genuine alternative to ours or it is not coherent, and in neither case do we have reason to doubt that our own epistemic system is objectively correct.

But why should we agree with Boghossian that an epistemic system containing Revelation as a fundamental principle alongside Observation, Deduction, and Induction can be coherent only if the verdicts of Revelation are confined

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<sup>6</sup> Boghossian might also have pointed out that Revelation is also supposed to justify beliefs about things on earth.

to a special domain (say, heavenly goings-on) about which the other three principles have nothing to say? Boghossian seems to think that if the principles comprising an epistemic system can have divergent verdicts about the same domain, the resulting epistemic system is incoherent. But if that were so, we could “show” that *Induction* is not a fundamental epistemic principle. After all, its verdicts depart from, and sometimes even conflict with, those of Observation and Deduction alone.

The mistake Boghossian is making here is to suppose that the principles that make up an epistemic system operate in complete isolation from each other. Notice, first, how wide a gap there is between the principles and any definite verdicts about justification. Applying the principles requires making delicate judgement calls—about what circumstances count as defeating conditions for perceptual judgements, what entailments are “fairly obvious,” how many inductive instances are “enough” to support the conclusion—which might be sensitive to the other principles one accepts. One who accepts Revelation, for example, might require many more instances to confirm inductive generalizations that appear to contradict the Bible, and might recognize new conditions under which visual appearances are to be mistrusted.

Second, and crucially, the principles yield only *prima facie* claims of justification. This is explicit in Boghossian’s formulations of Observation and Revelation, and it is hard to see how the verdicts of Induction could be anything other than *prima facie*. (If my inductions contradict what I can see with my own eyes, must my eyes always defer to them?) Even Deduction, if applied stupidly, can take us from justified beliefs to non-justified ones. (My belief of any one ticket that it will not win the lottery may be very well justified on probabilistic grounds, but through simple deductions from many such beliefs, I can arrive at the completely unjustified belief that no ticket will win.) The unqualified justificatory verdicts of a system of such principles are the result of a balancing of competing *prima facie* verdicts, and will therefore depend on the precise mix of principles making up the system.

An epistemic system is incoherent only if its *unqualified* verdicts about justification are incompatible; the fact that its constituent principles yield incompatible *prima facie* verdicts is not enough to make it incoherent. When Induction is in play, the *prima facie* deliverances of Observation are sometimes dismissed as illusory. Conversely, *prima facie* compelling inductive arguments may be dismissed in the face of strong observational evidence against their conclusions. We should expect similar negotiations in a system containing

Revelation. When Revelation is in play, the other principles may be applied differently, and a belief the other principles count as *prima facie* justified may not be justified all things considered.

We have seen no good reason, then, to deny that an epistemic system containing Revelation, Observation, Deduction, and Induction as fundamental epistemic principles could be coherent. Boghossian has not shown that the only real question between Galileo and Bellarmine is whether there is “evidence of a perfectly ordinary sort” for the divine status of the Bible, and Rorty’s diagnosis of the situation as a clash between two different “grids” of inquiry has not been refuted.<sup>7</sup>

These reflections point to a more serious problem with the way Boghossian has set things up—in particular, with his notion of a “fundamental epistemic principle.” Boghossian assumes that fundamental epistemic principles will be knowable *a priori*:

Whenever we confidently judge that some belief is justified on the basis of a given piece of information, we are tacitly assuming that such facts [about justification] are not only knowable but that they are known. And in doing epistemology, we not only assume that they are knowable, we assume that they are knowable *a priori*. (76)<sup>8</sup>

He also assumes that these principles (working together as a system) will give us definite verdicts about which beliefs are justified on the basis of what

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<sup>7</sup> Of course, even if we have here a case of real conflict between genuinely incompatible epistemic frameworks, we could still resist Equal Validity and plump for skepticism instead, claiming that there is an objective fact about which framework is correct—one that we are not in a position to know. Boghossian tries briefly to persuade us that such skepticism is palatable if it is due to some contingent condition, like our recognition of a sufficiently impressive and coherent epistemic framework that competes with our own: “While it is very plausible to claim that, if there are absolutely correct epistemic principles, they ought to be accessible in principle, it is much less plausible to claim that if there are such principles, we must know what they are here and now, in the actual world,” (102). One might worry, however, that skepticism about fundamental epistemic principles would quickly ramify into universal skepticism. Even if being justified in believing that *p* does not require knowing the principles that make this belief justified, genuine doubts about what counts as a justification might lead one to suspend first-order belief. I lack the space to pursue this issue further here.

<sup>8</sup> Though the assumption that fundamental epistemic principles must be *known* is later questioned—see note 7, above—their in-principle *a priori knowability* is not.

evidence. For he understands two epistemic systems to *conflict* just in case they give different such verdicts.

But it is quite implausible that there are any systems of fundamental epistemic principles that meet both these conditions. Principles that give definite verdicts about justification are generally not knowable a priori, and principles that are knowable a priori are generally too schematic to yield definite verdicts.

Consider again Boghossian's principle

(Observation) For any observational proposition  $p$ , if it visually seems to  $S$  that  $p$  and circumstantial conditions  $D$  obtain, then  $S$  is *prima facie* justified in believing  $p$ .

This is knowable a priori only if we can know a priori that visual perception is reliable when conditions  $D$  hold. But surely that is an empirical matter. (Anyone familiar with recent work on change-blindness knows how *surprising* empirical findings about perceptual unreliability can be.) Moreover, Observation gives us only *prima facie* verdicts about justification. To convert these into unqualified verdicts, we need to know how to balance them against the *prima facie* verdicts of other principles. Do we know a priori how to do *that*?

The problems are especially clear in the case of

(Induction) If  $S$  has often enough observed that an event of type  $A$  has been followed by an event of type  $B$ , then  $S$  is justified in believing that all events of type  $A$  will be followed by events of type  $B$ .

Clearly, how many times are "often enough" to justify the inductive inference depends heavily on one's background beliefs, including empirical beliefs. Sometimes one or two instances will suffice, when one can be confident in the uniformity of the sample. On the other hand, no matter how many grue emeralds you show me, I'll refuse to accept the inference to "all emeralds are grue." That the lines we must draw here cannot be drawn on the basis of reflection alone is brought out clearly by I. J. Good's demonstration that there are situations in which the observation of a black raven would *disconfirm* the hypothesis that all ravens are black.<sup>9</sup> Knowing "how many is enough" requires knowing something about the world; it is broadly *empirical* knowledge.

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<sup>9</sup> "The White Shoe is a Red Herring," *British Journal for the Philosophy of Science* 17 (1967), 322.

I hope these examples are enough to show that epistemic principles capable of yielding definite verdicts about when particular beliefs are justified are not, in general, going to be knowable a priori. We can make them knowable a priori only by draining them of determinate content to the point where they could be shared by two parties who applied them in very different ways, yielding incompatible verdicts about justification.

If this is right, then we have two options. One is to embrace a strong kind of externalism about justification, according to which the fundamental principles governing justification are not discoverable simply by a priori reflection. As I have mentioned, there are indications that Boghossian would not be happy with this option. At any rate, no one who *is* happy with it would be gripped for even a second by the argument for epistemic relativism that Boghossian presents as having some prima facie appeal.

The other option is to accept a kind of relativism about justification, saying that whether someone is justified in believing  $p$  in light of evidence  $E$  depends crucially on their background beliefs or credences. This is, of course, exactly what subjective Bayesians say. Since Bellarmine presumably assigns a very high prior probability to the literal truth of the Bible, and to the correctness of a certain construal of its words, a Bayesian updating norm will require him to have stronger evidence than Galileo would need to be justified in giving up his belief in an earth-centered cosmos. And this is so whether his high credence in an interpretation of the Bible is the result of induction from historical evidence or an article of faith. In this way a Bayesian can accept a form of Equal Validity claim: Bellarmine is no less justified, given his starting points, than Galileo is given his.

I am not sure whether this kind of view, which accepts only a very formal kind of objective epistemic norm, falls within Boghossian's target area in *Fear of Knowledge*. In a footnote (94 n. 5), he says that he is not concerned with views on which "the only sorts of absolute epistemic truths there are, are ones which advert to the thinker's starting point," but only with a view that "attempts to evade commitment to any absolute epistemic truths of any kind." But why write about the latter when the former seems equally capable of funding a version of the Equal Validity claim Boghossian is so concerned to reject? Isn't the former just as serious a threat to what he calls "Objectivism about Justification," the view that "Facts of the form—information  $E$  justifies belief  $B$ —are society-independent facts" (22)?

In defense of his choice of focus, Boghossian writes:

It is easy to see what might motivate someone to take seriously the idea that there are *no* absolute epistemic truths of any kind; it is much harder to see what would motivate the moderate view that, while there are some absolute epistemic truths, there are many fewer than we had been inclined to suppose, or that they make essential references to such parameters as a thinker's starting point. (94)

To the contrary—it is easy to motivate the moderate view. All one has to do is to write down some candidate epistemic principles, as Boghossian has done, and then reflect (as we have just done) on what would be required to fill in their escape clauses and adjudicate between the various *prima facie* claims to which they give rise. If you don't know where to start, start with Induction.