

## 1 Introduction

There are, and have been, many debates around relativism in the philosophy of science. It is impossible to do justice to this volume of work in 30,000 words. I had to choose between a shallow bird’s-eye view of the whole terrain and a narrow focus on a small number of positions. In opting for the narrow focus, I was moved by the thought that some other Elements in this series will discuss topics I am setting aside.<sup>1</sup>

Section 2 gives thumbnail sketches both of the spectrum of positions falling under “epistemic relativism” and of influential arguments for and against relativism. Section 3 presents background from the philosophy of science: Thomas Kuhn’s work and its reception, Paul Feyerabend’s “anarchism,” as well as “pluralism” and “perspectivism.” Section 4 offers a relativist interpretation of one of the most influential positions in the philosophy of science of recent decades: Bas van Fraassen’s “epistemic voluntarism.” van Fraassen combines twenty-first-century interests in pluralism and perspectivism with late-twentieth-century preoccupations with Kuhn’s and Feyerabend’s relativistic ideas. Section 5 presents and defends the relativism of the “Sociology of Scientific Knowledge” (SSK), especially in the version advocated by Barry Barnes and David Bloor. Finally, Section 6 briefly discusses the relationship between relativism and “post-truth” politics.

“Relativism versus absolutism” is one of those fundamental oppositions that have dominated philosophy, religion and science, North and South, East and West, past and present.<sup>2</sup> Despite its omnipresence, the dichotomy “relativism versus absolutism” has not, however, attracted as much historical and philosophical attention as other oppositions. Much work thus remains to be done.

## 2 What Is Relativism?

This section introduces ways of understanding, motivating, and attacking relativism.

### “x Is Relative to y”

One way to categorize different forms of relativism involves the scheme “x is relative to y.” Its most important instantiations are the following:<sup>3</sup>

“x” stands for . . .	forms of relativism by subject matter
objects, properties, facts, worlds	. . . ontological

<sup>1</sup> See also the relevant papers in Kusch, *Handbook*. <sup>2</sup> Cf. Kusch, *Handbook*.

<sup>3</sup> Haack, *Manifesto*, p. 149.

truth(s)	... alethic
classifications, concepts, meanings	... semantic
moral values, norms, justifications	... moral
knowledge or epistemic justification	... epistemic
tastes	... gustatory
“y” stands for ...	forms of relativism by context
<hr/>	
individuals	... Protagorean
cultures	... cultural
scientific paradigms	... Kuhnian
classes, religions, genders	... standpoint

It is also customary to distinguish between *descriptive*, *normative*, and *methodological relativisms*. Descriptive relativism makes the empirical claim that there are fundamentally different standards in different contexts. Forms of methodological relativism hold that we should investigate different contexts *as if* they were of equal value. Finally, normative relativism demands that we regard the idea of absolute truths or absolute standards as flawed, absurd, or incoherent.

### Ingredients of Epistemic Relativism

Throughout this Element, “relativism” and “absolutism” refer to *epistemic relativism* and *epistemic absolutism*, respectively. Defenders and critics of relativism have put forward various lists of ideas they regard as characteristic of relativism. These tenets should not be understood as necessary and sufficient conditions.<sup>4</sup> Indeed, it is important to keep in mind that none of these elements, on its own, is sufficient as a definition of relativism; it’s their various combinations or interpretations that define what one might call “the relativist spectrum.”

(DEPENDENCE) A belief has an epistemic status (e.g. “epistemically justified” or “knowledge”) only relative to epistemic standards.

<sup>4</sup> Elsewhere I have explained in more detail to whom the different elements might be attributed; see Kusch, “Primer.” For different attempts to characterize relativism, see Baghramian and Carter, “Relativism”; Carter, *Metaepistemology*; Baghramian and Coliva, *Relativism*; Seidel, *Epistemic Relativism*.

Different commentators interpret such standards in different ways. “Regularists” think of standards as *rules, principles, or norms*.<sup>5</sup> For example, Paul Boghossian claims that we are committed to the following principle:

(*Observation*) For any observational proposition *p*, if it visually seems to [subject] *X* that *p* and circumstantial conditions *D* obtain, then *X* is *prima facie* justified in believing *p*.<sup>6</sup>

“Particularists” take our standards to be primarily *particular exemplary epistemic achievements of the past*. For instance, many sixteenth-century astronomers accepted Galileo’s telescopic observations of the Moon as work to be emulated.

(*PLURALITY*) There is (has been, or could be) more than one set of standards in the same domain; the standards of different sets can conflict. (I shall write “*S*” for such sets.)

Relativism is thus compatible with the thought that our own *S* is without an *existing* alternative. It is also worth mentioning that different versions of relativism might have different criteria for deciding how many alternative *S* there are, or could be.

(*CONFLICT*) Epistemic verdicts, based on different *S*, sometimes exclude one another. This can happen either . . .

- (a) because the two *S* license incompatible answers to the same question, or
- (b) because the advocates of one *S* find the answers suggested by the advocates of another *S* unintelligible.

(a) is an “ordinary” disagreement; (b) captures, as we shall see later, the cases of Kuhnian “incommensurability.”<sup>7</sup>

(*CONVERSION*) In some cases, switching from one *S* to another has the character of a “conversion”: that is, the switch is underdetermined by *S*, evidence, or prior beliefs, and is experienced by the converting *X* as something of a leap of faith.

*CONVERSION* plays an important role in Kuhn, too. (I shall return to this topic in Section 3.)

(*SYMMETRY*) Different *S* are symmetrical in that they all are:

- (a) based on nothing but local, contingent, and varying causes of credibility (*LOCALITY*);
- (b) impossible to rank except on the basis of a specific *S* (*NONNEUTRALITY*);

<sup>5</sup> I take the terminology of “regularism” and “particularism” from Dancy, “Particularism.”

<sup>6</sup> Boghossian, *Fear*, p. 84. <sup>7</sup> Kuhn, *Structure*.

- (c) impossible to rank since the evaluative terms of one S are inapplicable to another S (NONAPPRAISABILITY);
- (d) equally true or valid (EQUAL VALIDITY).

SYMMETRY is, in many ways, the heart of relativism.<sup>8</sup> It takes different forms, formulated by (a) to (d). LOCALITY runs directly counter to absolutist suggestions according to which there is a unique S that . . .

- ought to be accepted by every rational being;
- enables us to capture truths that “are there anyway”; or
- would be accepted by an ultimate, final science.

LOCALITY allows that the proponents of the standards of one S may (legitimately) criticize the standards of another S. LOCALITY is naturally combined with NONNEUTRALITY: when we rank different S, we must always rely on, or take our starting point from, some other S. A much stronger claim is advanced by NONAPPRAISABILITY.<sup>9</sup> It insists that evaluative terms can only operate *within* an epistemic practice (as defined by a given S). This precludes the option of legitimately evaluating epistemic practices other than one’s own. EQUAL VALIDITY goes further still in declaring all S to be equally correct or valid.

Depending on one’s selection from, and interpretations of, the five elements, one ends up with different versions of relativism. “Vulgar relativism” results from prioritizing NONAPPRAISABILITY and EQUAL VALIDITY. Most card-carrying relativists therefore reject these elements<sup>10</sup> and thereby allow themselves to criticize other cultures, learn from them, and allow for piecemeal intellectual epistemic change and progress.

### Relativist Stances

In the preceding text, relativism was interpreted as a *doctrine* concerning the epistemic status of *beliefs*. Alternatively, we can replace either of the two italicized items with “stances.”<sup>11</sup> A stance consists primarily of values, virtues, emotions, policies, and preferences (“VVEPPs”) and only secondarily of beliefs. There are three ways to bring the stance-idea to bear on relativism:

<sup>8</sup> I take the term “symmetry” from SSK but use it in a wider sense. See Section 5. My LOCALITY aims to capture the position of Barnes and Bloor, “Relativism,” 27.

<sup>9</sup> I take this idea from Williams, “Relativism,” 132–43.

<sup>10</sup> Barnes and Bloor, “Relativism”; Code, *Rhetorical Spaces*; Field, “Epistemology”; Herrnstein Smith, *Practicing Relativism*; Herbert, *Victorian Relativity*; Feyereabend, *Against Method*.

<sup>11</sup> van Fraassen, *Empirical Stance*.

- relativism may be treated as a *doctrine* about how to conceive of the relation between different epistemic *stances*; VVEPPs then play the role of standards;
- relativism may itself be thought of as a *stance* concerning the relationship between different sets of standards (in the sense of the last section); or
- relativism may be conceived of as a “second-order” stance concerning a set of “first-order” epistemic stances.

What would first-order epistemic stances look like? Consider the conflict between Galileo Galilei and Cardinal Bellarmine.<sup>12</sup> It seems plausible to say that, for Bellarmine, ethical and religious values and virtues interacted closely with epistemic values and made him give special weight to the epistemic virtue of intellectual humility in astronomical and biblical matters. Galileo was also deeply religious, but in studying the natural world he put great emphasis on the epistemic virtues of curiosity, originality, and courage. These differences in virtues and values were entangled with differences in emotions, epistemic policies, and preferences. Of course, Bellarmine and Galileo ultimately also disagreed in their beliefs about the heavens, but perhaps these incompatible beliefs were the result of the exercise of their conflicting virtues and policies.

Why might one conceptualize relativism itself as a stance? It would, for instance, allow one to say that what unites many authors accused of, or happily embracing, forms of relativism is first and foremost a rebellion against absolutist forms of metaphysics, epistemology, or ethics. Many relativists also share further values or virtues: they oppose intellectual imperialism and value epistemic humility or tolerance. Perhaps focusing on these sentiments allows us to identify a tradition of relativist thought that remains invisible for as long as we concentrate on doctrines. Of course, in order for these stances to qualify as relativism, they would have to embody commitments akin to the five elements introduced in the last section.

### Why Relativism?

There are more arguments for and against relativism than I can cover here. What follows are no more than quick reminders. I begin with a list of motivations for relativism.

#### *Disagreements – Faultless, Fundamental, Peer*

One important way of providing a rationale for relativism centers on disagreements. Some relativists focus on “faultless” disagreements. The paradigmatic examples are gustatory disputes in which two parties differ concerning a “basic

<sup>12</sup> Kusch, “Relativist Stances, Virtues and Vices,” 282.

taste.” In such cases, some relativists insist, both sides may well be *equally right*. If this is correct, then one might go on to ask whether there are other disagreements, in other realms, that trigger the same intuition of faultlessness.<sup>13</sup>

Other relativists look for “fundamental” disagreements in the epistemic realm.<sup>14</sup> Think of two parties differing on whether souls are immortal. The contra-side refers to science; the pro-side draws on the Bible. Assume that both sets of beliefs are consistent and/or in line with their respective standards, and neither side can rationally compel the other to change their beliefs. Some philosophers maintain that relativism is the most charitable response to such a scenario.

Still other relativists draw support from “peer disagreement.” Your peers are people who – with respect to a given problem – are as well informed and intelligent as you are yourself. How should you respond when a peer disagrees with you? Suspend judgement? Stick to your own view? Lessen your degree of belief? Count both beliefs relatively justified – in line with relativism? In other words, is it permissible for two peers to arrive at different conclusions even when they have the same evidence? If you opt for “yes,” then you are committed to a relativist “permissivism.”<sup>15</sup>

### *Incommensurability*

This motivation relates to situations where two parties are unable to fully grasp the meaning of each other’s words or thoughts; where – as Kuhn put it – the languages of the two sides are “incommensurable.” This limits the reach of argument and threatens the unity of reason. And, if reason is not one but many, relativism looms.<sup>16</sup>

### *Relativism as a Remedy against Skepticism*

A third strategy exploits the fact that absolutism’s standards for knowledge or justified belief are hard to meet. This invites skepticism. Shifting from absolutism to relativism lowers the hurdle and thus “saves” our pre-philosophical conviction that we do have many epistemically justified beliefs.<sup>17</sup>

### *Attacking Absolutist Metaphysics, Semantics, and Philosophy of Science*

Relativists have also attacked absolutism by challenging its metaphysical, semantic, or scientific underpinnings. Can we make sense of “truths that are

<sup>13</sup> See e.g. Kölbel, “Faultless Disagreement”; MacFarlane, “Relativism”; Wright, “New Age.”

<sup>14</sup> Hales, “Motivations.” <sup>15</sup> Hazlett, “Entitlement”; S. Goldberg, pers. conv.

<sup>16</sup> Scheffler, *Science and Subjectivity*. <sup>17</sup> Sankey, “Witchcraft.”

there anyway?” Would creatures shaped by evolution be likely to track absolute truths? Do un-relativized uses of “true” prove that we are implicitly committed to truth-absolutism? Does the notion of an “ultimate science,” reaching absolute truth, even make sense?<sup>18</sup> Relativists defend negative answers to all these questions.

### Boghossian’s Relativist Arguments

Although Paul Boghossian is currently the most influential anti-relativist, he has also suggested *prima facie* arguments in support of relativism. One argument attacks absolutism head-on. Assume we encounter a group using an S very different from ours. Imagine further that we are not inclined to switch our allegiance from our S to theirs. This inclination needs to be justified based on some S. Which one? Obviously, the only one we have got: ours. But can we really use our S to justify our S? Doesn’t this make the justification circular? The relativist urges us to answer “no” to the first question and “yes” to the second. She draws two conclusions. First, we are unable to justify our S. And, second, since every other group of inquirers would find themselves in the same situation, there is no ultimate, absolute justification of any S.<sup>19</sup>

Boghossian’s second important relativist argument concerns PLURALITY and consists of offering a historical case of a genuine alternative to our S. The argument presupposes that S consist of more or less fundamental epistemic principles and that we have a genuine alternative to our S if there is a difference *in at least one fundamental principle*. Consider Cardinal Bellarmine.<sup>20</sup> Bellarmine’s S included the fundamental epistemic principle “*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.”<sup>21</sup> Boghossian takes it that many of us today do not accept *Revelation* as an epistemic principle – fundamental or derived. It therefore seems natural to say, given Boghossian’s relativist’s criteria, that “we” and Bellarmine differ in our epistemic systems: his was a genuine alternative to ours. Furthermore, because of the fundamental position of *Revelation* in Bellarmine’s S, we cannot easily – if at all – convince him to drop *Revelation*. We cannot show him that *Revelation* fails to follow from principles that we share with him. Boghossian’s relativist concludes that Bellarmine’s S is as valid as our own.<sup>22</sup>

<sup>18</sup> Bloor, “Epistemic Grace”; Bloor, “Relativism”; Field, “Epistemology”; Street, “Evolution.”

<sup>19</sup> Boghossian, *Fear*, pp. 76–7. <sup>20</sup> Feyerabend, *Against Method*; Rorty, *Philosophy*.

<sup>21</sup> Boghossian, *Fear*, p. 69. <sup>22</sup> *Ibid.*

### Some Arguments against Relativism

I do not have the space here to introduce rejoinders to all the relativist arguments sketched earlier. Given their influence, it seems appropriate to give prominence to Boghossian's criticisms.

#### *Boghossian versus Boghossian*

Boghossian has two objections to the circularity argument. First, there is no onus on us to defend sticking to our S when we encounter an alternative. We must do so only when the alternative is "impressive enough to make us legitimately doubt the correctness of our own epistemic system."<sup>23</sup> After all, if there is nothing impressive about the alternative, why take it seriously? Why see it as a potential threat to our own S? Second, using S to justify S is allowed as long as S has not become independently doubtful.<sup>24</sup>

As far as Bellarmine is concerned, Boghossian denies that Bellarmine's S is a genuine alternative to ours. If *Revelation* was fundamental for Bellarmine, his use of it should be dismissed as "arbitrary": Bellarmine used *Revelation* to dismiss heliocentrism but ignored *Revelation* when inquiring about other celestial matters, like whether the sun was shining.<sup>25</sup> Boghossian's "charitable" alternative is to say that *Revelation* was *not fundamental* for Bellarmine and that he had reasons for the selective application of *Revelation*. But then we no longer have a genuine alternative to our S.

#### *Self-Refutation*

Boghossian formulates this classic attack on relativism as follows:

The claim "Nothing is objectively justified, but only justified relative to this or that epistemic system" must be nonsense, for it would itself have to be either objectively justified, or only justified relative to this or that particular epistemic system. But it can't be objectively justified, since in that case it would be false if true. And it can't be justified only relative to the relativist's epistemic system, since in that case it is just a report of what he finds it agreeable to say. If he also invites us to join him, we need not offer any reason for declining since he has offered us no reason to accept.<sup>26</sup>

Boghossian finds the argument unconvincing. It rests on the questionable assumption that the relativist stands *outside our* community. If the relativist is a member of our culture, the relativist and the rest of us share the same S. And then the relativist might insist that his position is "justified by principles that are endorsed by relativists and non-relativists alike."<sup>27</sup>

<sup>23</sup> Ibid., p. 101.    <sup>24</sup> Ibid., p. 100.    <sup>25</sup> Ibid., p. 104.    <sup>26</sup> Ibid., p. 83.

<sup>27</sup> Ibid.; cf. Boghossian, "Epistemic Reasons," 27.



Still, Boghossian believes that the self-refutation charge can be reformulated. He takes it to be central to relativism that one's choice of standards is ultimately unconstrained by higher or absolute standards. We therefore are "epistemically blameless" if we so choose our epistemic standards that whatever we want to believe ends up being justified. If that is correct, however, the absolutist opponent of relativism is entitled to so pick her epistemic standards that relativism turns out to be unjustified. Relativism refutes itself.<sup>28</sup>

*Relativist Double-Think*

Boghossian also highlights a difficulty with respect to how relativists think about their anti-relativist opponents. Assume I am a relativist and encounter Otto, who, based on his reading of fairy tales, believes in ghosts. I reject Otto's belief based on scientific knowledge. As a relativist, I believe that our respective judgements are both epistemically justified relative to our respective S and that thus both of our judgements are "faultless."

And yet, if I judge validly that . . .

- (a) *Belief in ghosts is not justified*  
 . . . then it is also right for me to think that . . .
- (b) *It's true that belief in ghosts is not justified.*  
 Moreover, if I accept (b) then I also have to commit to . . .
- (c) *It's false that belief in ghosts is justified.*  
 And in light of (c) I have to conclude that . . .
- (d) *Anyone who judges that belief in ghosts is justified is making a mistake.*

But (d) contradicts the relativist view that the disagreement is faultless.<sup>29</sup>

One possible reply involves two perspectives: the perspective of the committed knower and the perspective of the relativist theoretician.<sup>30</sup> When I take my disagreement with Otto to be faultless, I adopt the latter perspective. When I believe that Otto has made a mistake, I speak from the perspective of the committed knower. Since the perspectives are separate, there is no direct conflict between the two judgements. Boghossian is not convinced. If I occupy both perspectives, he says, then I suffer from "serious cognitive dissonance": I take Otto's judgement to be both faultless and faulty at the same time.<sup>31</sup>

<sup>28</sup> Boghossian, "Epistemic Reasons," 30–1.    <sup>29</sup> Boghossian, "Three Kinds," 62.  
<sup>30</sup> Boghossian, "Relativismus," 386–7.    <sup>31</sup> Ibid.

*Against Absolute Relativism*

Some forms of relativism work with a mixture of absolute and relative principles. Think of a relativism of manners based on the one absolute principle: “When in Rome do as the Romans do” or of subjective Bayesians for whom the Bayesian formula is the one and only absolute principle.<sup>32</sup> Boghossian rejects such “absolute relativism” for two reasons. First, one of the best arguments against absolutism asks how absolute principles could possibly fit into a contingent empirical world. In allowing at least one such principle, absolute relativism has foregone the right to use this argument. Boghossian’s second reason for dismissing absolute relativism is that it has no good answer to this question: if there can be at least one absolute principle, why can’t there be many?<sup>33</sup>

*Variation*

Boghossian readily acknowledges that our epistemic practices vary, but he denies that such variation supports relativism. What variation there is can be explained by the fact that our absolute rules are sometimes vague and unspecific. They leave room for choice.<sup>34</sup>

**3 Kuhn, Feyerabend, Perspectivism, Pluralism**

## Introduction

In this section I continue preparing the ground with brief reminders concerning recent Kuhn-debates, Feyerabend, pluralism, and perspectivism.

## Kuhn’s Structure

*The Structure of Scientific Revolutions* proposes a cyclical model of the development of “mature” natural sciences. From time to time, “normal science” falls into “crises”; these crises lead to “revolutions,” which in turn result in new forms of normal science. Normal science is based on “paradigms.” On the one hand, paradigms are “exemplars,” that is, outstanding scientific achievements that scientists seek to emulate and that are central in training and textbooks. On the other hand, “paradigms” are “disciplinary matrices” consisting of shared equations, metaphysical commitments, cognitive values, and exemplars. Exemplars are primary with respect to rules and standards. Normal science is comparable to “puzzle-solving.”

<sup>32</sup> Boghossian, “Three Kinds,” 67. <sup>33</sup> *Ibid.*, p. 68.

<sup>34</sup> Boghossian, pers. comm.; cf. Boghossian, *Fear*, p. 110.