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# SCIENCE, RELIGION, AND “THE WILL TO BELIEVE”

Alexander Klein

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Do the same epistemic standards govern scientific and religious belief? Or should science and religion operate in completely independent epistemic spheres? Commentators have recently been divided on William James's answer to this question. One side depicts “The Will to Believe” as offering a separate-spheres defense of religious belief in the manner of Galileo. The other contends that “The Will to Believe” seeks to loosen the usual epistemic standards so that religious and scientific beliefs can both be justified by a unitary set of evidentiary rules. I argue that James did build a unitary epistemology but not by loosening cognitive standards. In his psychological research, he had adopted the Comtian view that hypotheses and regulative assumptions play a crucial role in the context of discovery even though they must be provisionally adopted before they can be supported by evidence. “The Will to Believe” relies on this methodological point to achieve a therapeutic goal—to convince despairing Victorians that religious faith can be reconciled with a scientific epistemology. James argues that the prospective theist is in the same epistemic situation with respect to the “religious hypothesis” as the scientist working in the context of discovery.

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I delivered a version of this article at the Pragmatism in Philosophy of Science conference at the University of San Francisco in March 2012, which I co-organized with David Stump. For very helpful feedback I thank the audience—particularly David Hollinger who also corresponded by e-mail—and my co-organizer. And I would especially like to thank my commentator Cheryl Misak, whose work is a continuous source of stimulation for me. I also delivered portions of this article at St. Andrews University for the Truth, Morality, and Democracy: Themes in the Work of Cheryl Misak conference; at the biannual meeting of HOPOS in Ghent; at the Summer Institute in American Philosophy at the University of Oregon; and at the History of Philosophy Roundtable at the University of California, San Diego. I thank participants at all these events for useful criticism as well. Two anonymous referees at this journal also offered trenchant comments that helped me substantially revise and (I hope) improve the article.

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## 1. Introduction

Do the same epistemic standards govern scientific and religious belief? Or as Galileo supposedly contended, should science and religion operate in completely independent epistemic spheres?<sup>1</sup>

Two recent books give strikingly different accounts of William James's answer to this question. The intellectual historian David Hollinger argues that in "The Will to Believe" James offers a separate-spheres defense of religious belief.<sup>2</sup> In contrast, the philosopher Cheryl Misak contends that "The Will to Believe" in fact seeks to loosen the usual epistemic standards so that religious and scientific belief can both be justified by a unitary set of evidentiary rules (2013, 65–66).

Both of these prominent commentators identify defects in James's supposed answer. Hollinger speculates that almost as soon as he writes "The Will to Believe" James sees his own separate-spheres view as too "metaphysical" for a self-respecting empiricist and that by the time *Pragmatism* appears a decade later, James is fully committed to developing a unitary epistemology (Hollinger 2013, 129–30). And while Misak thinks James advances a unitary epistemology even in "The Will to Believe," she thinks the epistemological permissiveness allegedly embedded in that essay is the sharp end of a wedge that splits the pragmatist tradition in two.

Misak's reading of "The Will to Believe" is particularly interesting because it anchors an ambitious new portrait not just of pragmatism but of pragmatism's relationship to analytic philosophy. Her book offers an overarching history designed to show that unbroken intellectual-historic threads connect older pragmatists like C. S. Peirce, Chauncey Wright, and C. I. Lewis with W. V. Quine, Wilfrid Sellars, Donald Davidson, Crispin Wright, and Michael Williams, among others. Misak portrays post-Davidsonian epistemology of the sort that took hold especially at places like Oxford as not so much a revolution as merely the latest chapter in a long tradition of pragmatist thinking within analytic philosophy. For Misak, early analytic philosophy did not vanquish pragmatism—it co-opted pragmatism and ultimately merged with it (2013, 155–57, 252–54).

Misak thus calls Peirce and his early ally Wright "the pioneers of analytic philosophy in America," partly on the strength of their respect for science and

1. Galileo's actual epistemological account of the relationship between science and religion is more complex than the usual caricature suggests (see McMullin 1999, 2013).

2. Hollinger defends his separate-spheres reading in two key papers collected in his new anthology (2013, chaps. 5 and 6, esp 112–13, 127–29). These essays were first published as Hollinger (1997, 2004). Also see Hollinger (1985), chap. 1. For a similar view, see Suckiel (1982), 71–72.

adherence to rigorous argument (2013, 1). James's absence from this list of analytic forbearers is no mistake. By screening off what she perceives as a subjectivistic, relativistic part of the pragmatist tradition—a part she associates first with James and later with John Dewey and Richard Rorty—Misak is able to isolate clearer thematic links between classical pragmatists like Peirce and more recent analytic epistemologists.

Misak suggests that the split in the pragmatist tradition takes hold as Peirce detects a pernicious form of subjectivism in “The Will to Believe.”<sup>3</sup> She thinks James and Peirce actually agree that if religious faith is justifiable it must meet the same epistemic standards as scientific belief (Misak 2013, 44, 66, 76). Where they disagree is over just what the appropriate epistemic standards should be in the first place. The crux of their dispute is supposed to be that James wants to stretch the concept of *evidence* to include “the satisfaction of the believer”—what it feels good to believe—and this is something Peirce cannot accept (63). For Misak then, “The Will to Believe” crystallizes a nascent disagreement inside the pragmatist tradition between those Jamesians who think “there is no truth and objectivity to be had anywhere and those [Peirceans] who take pragmatism to promise an account of truth that preserves our aspiration to getting things right” (3).

I think Misak's reading does contain a grain of truth, although the contrast with Hollinger is instructive. Misak is right that with Peirce, James does seek a unitary epistemology in “The Will to Believe,” not a rationale for carving out religious belief from the rational constraints we follow in science (*pace* Hollinger). But Hollinger is right that in “The Will to Believe” James does not suggest that religious faith is supported by genuine evidence (*pace* Misak).

What both commentators miss is the very heart of James's argument, I will contend. This is his view that one cannot practice science without being forced to accept various propositions (in particular, hypotheses and regulative assumptions) before one has anything like compelling evidence. “The Will to Believe” identifies the special conditions under which scientists are forced to believe

3. Misak asserts that there is a fundamental chasm in the pragmatist tradition in her book's opening pages. The first three chapters largely emphasize the objective form of pragmatism she thinks Peirce (and his ally Wright) represent. In her fourth chapter on James, Misak begins to defend the thesis that there is a chasm in the pragmatist tradition. The chapter opens with an overview of James's work in psychology and philosophy of mind, largely with a favorable gloss. After a brief and uncontroversial discussion of James's pragmatism, Misak says that she will now discuss James's “radical subjectivism,” which is “at the heart of the dispute between James and Peirce. The dispute manifests itself most strikingly with respect to James's voluntarism, to which we now turn.” The text she immediately begins discussing is “The Will to Believe” (Misak 2013, 60). Elsewhere she refers to the “Will to Believe” controversy as “the great debate between Peirce and James” (Misak 2011, 268).

without evidence. Since we are forced to accept or reject theism under these same conditions, James argues, the epistemic standards of science also permit belief in what he calls the “religious hypothesis” (James 1897/1979, 29; Peirce [1931–58] calls it “the hypothesis of God” at 6.466, 1908).<sup>4</sup>

In section 2 I lay out the main argument of “The Will to Believe,” with a discussion of that essay’s central concepts and terminology. In section 3 I introduce Misak’s key worries about the essay—or rather, Peirce’s worries according to Misak.

Misak and I do agree that “The Will to Believe” aims to give a unitary account of scientific and religious belief, and in section 4 I support our shared contention by sketching some of the essay’s relevant historical background. James had noticed a rash of suicides among educated Victorians who, he thought, had concluded that religious faith was inconsistent with a basically scientific epistemology. He sought to alleviate this cultural anxiety by showing that the same epistemic standards that support belief in scientific hypotheses and regulative assumptions also support belief in the “religious hypothesis.”

Misak and I disagree, however, about whether James thinks belief may permissibly outstrip evidence. In section 5 I show that in his earlier scientific work James takes up the problem of what permits scientists to accept hypotheses and regulative assumptions given that such propositions must typically be accepted before they can have been verified. This was a philosophical problem that loomed large for many scientific methodologists of the era, and it turns out that Peirce and James were at odds over this issue. Thus, when “The Will to Believe” extends James’s accounts of hypotheses and scientific assumptions to cover the case of religious faith, Peirce’s worry is not that this essay peddles a form of outright epistemological nihilism, as Misak contends. Instead, he is carrying forward his ongoing disagreement with James over scientific methodology.

In section 6 I respond directly to some objections as well as to Hollinger’s and Misak’s respective alternative readings of “The Will to Believe.” And in section 7 I consider some historical implications of my project. Although I reject his Galilean reading of “The Will to Believe,” I draw on Hollinger’s historical work to suggest that what the pragmatist tradition shares with early analytic philosophy is not any epistemological doctrine but rather a commitment to the primacy of scientific methodology. Both movements seek to extract philosophical lessons from a direct engagement with science rather than to force epistemological principles onto science from the outside.

4. All Peirce (1931–58, 1992–98) citations follow the protocol used here, where 6 is the volume number, 466 is a paragraph number, and 1908 is the date of the original publication.

## 2. The Basics

Let us begin by setting out some key terms James uses in the central “Will to Believe” argument. James defines a “hypothesis” as “anything that may be proposed to our belief” (1897/1979, 14).<sup>5</sup> He calls a choice of whether to believe either of two competing hypotheses an “option.”

The central argument of “The Will to Believe” seeks to establish that one is sometimes justified in deciding an option in the absence of “objective evidence.” When he glosses “objective evidence,” James puts the account in the mouth of apparent opponents like William Clifford and T. H. Huxley. They supposedly think that “objective evidence” for a proposition is that which makes us “unable to doubt” that proposition—such evidence is that which has an “*aptitudinem ad extorquendum certum assensum* [an aptitude to extort a certain assent]” (James 1897/1979, 21). Clifford supposedly holds that we are obligated to withhold belief until the evidence is totally coercive.<sup>6</sup>

In contrast, James argues that one is justified in accepting a hypothesis without such evidence, but only when we face an option that meets four special criteria. The first is that the choice between beliefs must be *forced* in the sense that accepting one hypothesis or the other must be required in practice—agnosticism cannot be an available position (one of James’s examples: “If I doubt the need of insuring my house, I leave it uninsured as much as if I believed there was no need”; 1897/1979, 50–51). Second, the option must be *living* in the sense that the subject must have voluntary control over whether she is able to accept either hypothesis. Few hypotheses meet this criterion, James suggests.<sup>7</sup> Third, the consequences of this choice must be *momentous* for the subject, not trivial.

James calls any choice that meets the first three criteria a “genuine option.” He says we are licensed to believe without evidence when we face “a genuine

5. This is a considerably more permissive definition of “hypothesis” than James offers elsewhere, as I discuss below.

6. Hollinger rightly points out that this is a caricature of Clifford, who actually thinks we are sometimes permitted to act on “probabilities” in cases where that is the best evidence we can get (2013, 106). Wood makes a similar point (2008, 12). A better and now more typical way to characterize Clifford is to see him as holding that one is obligated to proportion the strength of one’s belief to available evidence (e.g., Jackman 1999, 2).

7. I understand the live/dead distinction to be what we would today call the voluntary/involuntary distinction on the strength of sec. 2 of “The Will to Believe,” which is a discussion of “believing by our volition” (James 1897/1979, 17). What is at issue throughout the section is precisely the live/dead distinction. Here James multiplies examples of hypotheses whose acceptance or rejection we have no voluntary control over—such as the belief that the two dollars in my pocket sum to \$100 or the belief that I am well when I am “roaring with rheumatism in bed.” These are to count as *dead* hypotheses because I cannot voluntarily believe them (15–16).

option *that cannot by its nature be decided on intellectual grounds*” (James 1897/1979, 20, my emphasis). The italicized qualifier shows that he does not think every genuine option is such that we are permitted to choose a belief before we have evidence. Instead, we are permitted to make such a choice only when the genuine option is forced on us before it is *possible* to gather objective evidence. This is his fourth requirement.

In these special cases—in cases where objective evidence is in principle inaccessible at a time when we are practically forced to make a choice between living, momentous hypotheses—James claims we are justified in believing on the basis of what he calls our “willing” or “passional nature” (1897/1979, 18, 20). I use the expression “Will to Believe cases” for options that satisfy these four criteria.<sup>8</sup>

James is especially interested in applying this analysis to what he calls the “religious hypothesis.” Although his articulation of this hypothesis in “The Will to Believe” is notoriously vague, he elsewhere offers formulations that make his intentions clearer.<sup>9</sup> The hypothesis involves the prospect of an eternal afterlife, along with the prospect that the quality of this afterlife depends on whether we choose religious belief here and now (James 1897/1979, 29–30, 48–49). The eternal fate of one’s soul is clearly a momentous matter, and to achieve salvation (at least according to the standard Protestant doctrine of justification by faith),<sup>10</sup> prospective believers are forced to accept or reject the religious hypothesis in this natural life before they can gather objective evidence about whether the soul really is immortal. Thus James sees the religious hypothesis as a clear Will to Believe case for wavering theists, since the option is forced, live, momentous, and necessarily lacking in objective evidence. Given this predicament, prospective theists have a “right to believe” on the basis of their own passional nature, for James (32).

An important clarification is in order before proceeding—what does James mean by “belief”? In *The Principles of Psychology*, he writes that belief is characterized by “the cessation of theoretic agitation, through the advent of an idea which is inwardly stable, and fills the mind solidly to the exclusion of contradictory ideas. When this is the case, motor effects are apt to follow. Hence

8. James construes “willing nature” very broadly, so that it refers to “all such factors of belief as fear and hope, prejudice and passion, imitation and partisanship, the circumpressure of our caste and set” (1897/1979, 18). Thus in Will to Believe cases James thinks we are permitted to rely on not just private emotions but social impulses as well.

9. For a more detailed consideration of this problem than I can offer here, see Schlecht (1997). And for a study of James’s general attitude toward religion in the context of the American ecumenical Protestant tradition, see Hollinger (2014).

10. James alludes to this doctrine himself (at 1897/1979, 13).

the states of consent and belief, characterized by repose on the purely intellectual side, are both intimately connected with subsequent practical activity. . . . *The true opposites of belief, psychologically considered, are doubt and inquiry, not disbelief*" (James 1890/1981, 913–14).

For James, a belief is constituted by a settled habit of action, while a doubt is constituted by the sort of "theoretic agitation" associated with active inquiry.<sup>11</sup> This account owes a clear debt to Alexander Bain, who holds that belief is constituted by a "readiness to act" (Bain 1868, 7).<sup>12</sup> Bain also says that "the real opposite of belief as a state of mind is not disbelief, but *doubt*, uncertainty," a phrase James clearly echoes (Bain 1859/1875, 509). The debt to Bain is important because this is the account of belief of which pragmatism is "scarce more than a corollary," as Peirce famously puts it (1931–58, 5.12, 1906).<sup>13</sup> Indeed, Peirce advocates a clearly Bainian conception of belief as well (Peirce 1992–98, 1.114, 1877). This point will be important later as we try to unravel the disagreement between the two men over "The Will to Believe."

For now, this account of belief helps us unpack the concept of a *forced* option. One might wonder why James thinks the choice between theism and atheism is forced—why he thinks agnosticism is not really an available choice for prospective theists or, for that matter, for prospective buyers of homeowner's insurance. The answer is that his account of belief requires that theistic agnosticism and atheism count as the same belief insofar as they are identified with the same habits of action, and similarly for (so to speak) insurance agnosticism and atheism. In each case, the option to believe is forced because two and only two types of habitual action are available.

Of course here James needs a way to individuate "types of habitual action." After all, one might intuitively expect that the agnostic will have different habit-

11. Note that here James says motor effects are only "*apt* to follow" upon belief. And in "The Will to Believe" he writes, "belief is *measured* by action" (James 1897/1979, 32 n. 4, my emphasis). But I take it his point is that there is a difference between having a settled habit of action and having that habit actually made manifest. Consider my belief that *acetaminophen reduces fever*. Suppose I never get a fever and thus never use the remedy. In this case, the "measure" of belief—my actually using acetaminophen to treat fever—is never actualized. And yet so long as I am ready to act appropriately, James would say I still count as harboring the relevant belief. So the belief *is* the habit, the state of being ready to act—its *measure* is the behavior that the habit produces in the right circumstances. Bain, to whom James is indebted, makes precisely this distinction (1868, 7).

12. A trenchant criticism of Bain's view can be found in Bradley (1883), sec. 15. Bradley offers examples of genuine belief that do not go along with any readiness to act and cases of readiness to act that do not count as belief.

13. James owned the third (1875) edition of Bain's *The Emotions and the Will*. His copy is preserved at the Houghton Library at WJ 506.41, and the chapter on belief is marked and notated throughout (Bain 1859/1875, 505–38). Bain's line about "the real opposite of belief" is underlined, and James adds a kind of pointing line for emphasis there as well. The classic discussion of Peirce's reference to Bain is Fisch (1954).

ual behaviors than the atheist. The former might habitually research various religions while the latter might not, for example. But this is not a difference that makes a difference to the set of goals at which James appears to think religious belief aims, which includes the prospect of achieving eternal salvation. If one is saved through one's faith (as James takes it his largely Protestant audience assumes), then this goal is out of reach whether one behaves like an agnostic or an atheist.<sup>14</sup> Thus, I take it James is implicitly committed to individuating belief states (and thus habits) by appeal to some set of goals those states aim to accomplish. In other words, James understands beliefs (and habits) as inherently goal directed. So to be more precise, the same beliefs (i.e., the same behavioral habits) must be those states that tend to accomplish the same set of specified goals.

Finally, James relies on the Bainian account of belief to give the meaning of "faith." He writes, "Faith means belief in something concerning which doubt is still theoretically possible; and as the test of belief is willingness to act, one may say that faith is the readiness to act in a cause the prosperous issue of which is not certified to us in advance" (James 1897/1979, 76). As we will see, "The Will to Believe" contends that scientific inquiry is impossible unless we are ready to act, in some special cases, on the basis of hypotheses and assumptions whose truth "is not certified to us in advance."

### 3. Epistemological Nihilism?

"The Will to Believe" is standardly taken as an attack on Clifford, who holds that one is obligated to proportion one's belief to the strength of available evidence. Let us call Clifford's view "evidentialism" (see Jackman [1999], 2, for this formulation).<sup>15</sup> And let us call the "antievindentialist reading" that which depicts "The Will to Believe" as an attack on evidentialism.

Misak thinks the antievindentialist reading is wrong.<sup>16</sup> She thinks James's point is not that we are sometimes permitted to believe without evidence. His point is that what counts as evidence should be stretched to include the personal benefits of believing, she holds. Call this the "evidentialist reading."

14. Again, see the pun on "justification by faith" at James (1897/1979), 13.

15. James often depicts Clifford as committed to the far stronger view that one ought to withhold all belief until evidence is totally coercive. This is not a charitable reading of Clifford (see n. 6). By my lights and I assume by Misak's, one counts as an antievindentialist reader whether one envisions James's target as either strong or weak evidentialism, as we might call each of these views.

16. Misak does not discuss Hollinger, but I take it the latter's reading is clearly antievindentialist (see Hollinger 2013, 128–29).

To support her view, Misak points to several passages where James discusses the truth or falsity of our moral and religious beliefs—some of the very beliefs he thinks we are permitted to accept on “passional” grounds.<sup>17</sup> These passages cause textual problems for the antievidentialist reading, Misak thinks, since the very idea that religious and moral beliefs can be true or false suggests that “religious hypotheses, like all hypotheses, need to be verified”—and verification must be based on evidence (Misak 2013, 66). If her reading is correct, then “the very idea of warrant and of truth, for James, is tied up with our interests and our passions” (Misak 2011, 263).

It is this loosening of the rules to count interests or passions as evidence that Misak finds troubling—and that she thinks Peirce finds troubling as well. If we are permitted to believe what is truth-apt for reasons other than evidence-for-truth, then James’s view may seem to have some very subjectivistic implications indeed.<sup>18</sup>

One might think of Misak’s disagreement with antievidentialist readers as turning on a disagreement over how to answer the following question: Why are we supposed to be justified in deciding Will to Believe cases on the basis of our passional nature, according to James? It seems natural to take James simply to be making an ought-implies-can argument. By definition, Will to Believe cases are such that we cannot wait for objective evidence before being forced to make a decision. Therefore we are not obligated to wait for objective evidence in these cases. This much seems right. But James’s conclusion goes one step further. From the fact that in Will to Believe cases one is not obligated to wait for objective evidence, it does not follow that one is permitted to decide these cases specifically on the basis of our passional nature—one could simply flip a coin or resort to some other decision procedure. In fact, one might well prefer coin flipping on grounds that any use of our passional nature to decide questions of truth and falsity is liable to introduce bias.

So as I see it, the key interpretive question here is what the epistemic status of our passions is supposed to be, for James. Both sides want to know what it is about our passional nature that helps secure a right to believe. For the evidentialist reader, James holds that if P appeals to my passional nature, then this is evidence that P is or will turn out to be true. On this view, James actually maintains that we are always required to proportion our belief to the evidence,

17. See, most notably, James’s discussion of the means by which the “truth or falsehood” of “religious hypotheses” can be “wrought out,” at James (1897/1979, 8; Misak 2011, 263–64).

18. The worry that James’s essay is perniciously subjectivistic is as old as “The Will to Believe” itself. James’s student Dickinson Miller has a snappy way of putting this worry. “Desire,” he writes, “strikes me as a quaint fortune-teller for man or the world” (Miller 1899, 172). He suggests that James is really defending the “Will to . . . Make-Believe” (187). William Urban (1909) echoes this memorable phrase.

and our passions simply provide more evidence of which we must take account. For the antievidentialist reader, James only requires us to proportion our belief to the evidence in science. Religion has its own epistemic standards, and in this sphere an appeal to one's own passional nature is entirely appropriate,<sup>19</sup> even though the passions have no evidentiary import in any scientific sense.<sup>20</sup>

Now I think neither side in this debate is quite right, although neither side is wholly wrong either. Hollinger is right that James thinks we are not required to proportion our belief to the evidence in Will to Believe cases. But Misak is right that James does not thereby seek to exempt religious faith from scientific rationality. James's point is rather that we are forced in special cases to decide options by appeal to our passional nature in science, and so those committed to a scientific epistemology need fear no contradiction when they rely on their passional nature to decide structurally similar options in religion.

If I am right, then "The Will to Believe" is actually silent on the evidentialism question as it is usually construed. This point is delicate but important. Evidentialism is a view about our most basic doxastic obligations. But "The Will to Believe" does not make a categorical argument about those obligations—it does not weigh in on whether religious belief is permissible full stop, so to speak.

Both evidentialist readers and their opponents mistakenly assume that this essay develops just such a categorical argument. This is especially clear in Misak's case. She sees James as making an unrestricted argument about the fundamental nature of evidence. Her claim that James sees emotions as having evidentiary import makes sense only on the tacit assumption that the latter is attempting to identify necessary and sufficient conditions for the permissibility of religious belief. This is not his aim.

But the antievidentialist reader shares a similar assumption. If James is claiming that there are fundamentally different epistemic spheres, he is paradoxically

19. Thus, Hollinger says that in "The Will to Believe" James hopes "that a doctrine of separate-spheres would preserve a place in which traditional religious emotions could continue to flourish unintimidated" (2013, 114).

20. Note that the distinctions between evidentialist and antievidentialist readings and that between unitary and separate-spheres readings are related but distinct. I take Misak to give an evidentialist, unitary reading and Hollinger to give an antievidentialist, separate-spheres reading. But in principle one could portray James as an evidentialist who thinks different sorts of things count as evidence in science and religion. This would be an evidentialist reading that is also Galilean (i.e., separate spheres). Or one could portray him as seeking to substitute the requirement that we proportion our beliefs to the evidence with some alternative set of requirements that apply to science and religion alike. This could be an antievidentialist reading that is also unitary. The latter is closest to my own position. I offer a unitary reading, but I will actually deny that the evidentialist/antievidentialist distinction is appropriately applied to the essay.

making a universal pronouncement, a claim about the ultimate structure of our doxastic obligations, different though those obligations may be in different spheres of life. I take it to be precisely the universal nature of this alleged pronouncement that Hollinger thinks James eventually decides is too “meta-physical” (Hollinger 2013, 129). The problem with this sort of reading is not that it commits James to a self-defeating form of relativism (although it might)—the problem is that the reading does not fit the textual evidence, as I will now argue.

“The Will to Believe” does not in fact make a categorical argument about the nature of evidence. It makes a more limited, conditional argument—that if one is committed to a scientific epistemology, then one can accept the religious hypothesis on the basis of one’s “passional nature” without fear of self-contradiction. I call this the “Reconciliationist Reading.” Crucially, James’s point about compatibility does not require any general view about the necessary and sufficient conditions for permissible belief, at least not directly.

#### 4. Reconciliationism in “The Will to Believe”

We can approach the question of what James aimed to establish in “The Will to Believe” by looking at the circumstances under which he wrote the essay. There is a curious account of the original “Will to Believe” lecture in a remembrance of James written by one John Elof Boodin.<sup>21</sup> Boodin was a philosophy student at Brown, where he took a bachelor’s degree in 1895 and a master’s in 1896. During the 1895–96 year, James had published “Is Life Worth Living?” an essay that offered the potential suicide reasons for living. Brown’s philosophical club invited James for a discussion of that piece, and here is Boodin’s colorful account of what happened:

James told us that he would wait until the end before saying anything. I was to lead off the discussion. Strangely enough now that I was in the presence of the man whom I wanted most of all for a friend, whether by a whim of the moment or compelled by logic, I did nothing but make fun of his theory. . . . I brought the laugh on James; and, instead of waiting for the end as he had suggested, he got right up after my speech and said that now was the time for him “to sail in.” He was profoundly stirred by the seeming levity of my attack and made a long and impas-

21. Boodin says the account was written in 1910 upon James’s death, although it was not to appear in print until the *Personalist’s* 1942 centenary issue celebrating James’s birth. Boodin’s piece is anthologized as Boodin (1942/1996).

sioned speech in defense of his position, building it out in a pragmatic way to meet the attack. . . . [Later, James] nicknamed me affectionately “the orator” and stood by me to the end of his days. When he was called upon the same year to give the annual address before the same society, he explained that he had built out his theory to meet the attack at his previous visit and gave us that famous address “The Will to Believe.” (Boodin 1942/1996, 207–8)

Indeed, “The Will to Believe” was first delivered as an address to the Brown and Yale philosophy clubs in 1896, so the general timeline seems plausible enough. But how seriously should we take Boodin’s claim that “The Will to Believe” was designed to address worries the graduate student had raised about “Is Life Worth Living?”

Attention to the two texts shows that Boodin’s claim is not far-fetched. “Is Life Worth Living?” relies on a quick, less refined version of the central Will to Believe argument. What is important for now is that the earlier essay uses the argument to address concerns about the compatibility of science and religion—concerns that are crucial to recognize (I will claim) in the later essay as well. So let us look at the earlier piece first.

“Is Life Worth Living?” has a brooding tone, as James is addressing a troubling social problem. He writes, “that life is *not* worth living the whole army of suicides declare—an army whose roll call, like the famous evening gun of the British army, follows the sun round the world and never terminates. . . . What reasons can we plead that may render such a brother (or sister) willing to take up the burden again?” (James 1897/1979, 38, 39). Citing a rate of about 3,000 American suicides per year, James focuses on one subset of this “army”—educated Victorians who fall into despair because they cannot reconcile the natural world of science with a religious world of values.

It is worth quoting James’s account of (as he calls it) the “metaphysical *tedium vitae* which is peculiar to reflecting men” (James 1897/1979, 39). Such people

are tied to their senses, restricted to their natural experience; and many of them, moreover, feel a sort of intellectual loyalty to what they call “hard facts,” which is positively shocked by the easy excursions into the unseen that other people make at the bare call of sentiment. . . . Now suppose a mind . . . whose imagination is pent in consequently, and who takes its facts “hard”; suppose it, moreover, to feel strongly the craving for communion, and yet to realize how desperately difficult it is to construe the

scientific order of nature either theologically or poetically—and what result *can* there be but inner discord and contradiction? (40–41)

So James has a diagnosis for why some educated Victorians are being driven to suicide. What is tormenting these people is a need for a reconciliation of two apparently incommensurable worldviews. He writes about the need to bring the scientific world into “intelligible unity” with the world of values, about the despair one feels when one is “holding two things together which cannot possibly agree,” and about “the contradiction” apparently involved in the scientific and religious attitudes (41).

Now, James suggests that what needs to be reconciled with scientific principles is some core religious hypothesis concerning an unseen, eternal order. This hidden world is meant to give moral significance to life in the natural world (James 1897/1979, 48).

James proposes to show that the tension between this hypothesis and good scientific methodology is merely apparent—not (*pace* Hollinger) to suggest that we should learn to live with seemingly conflicting worldviews. Thus he writes that those with a scientific attitude *suspect* that we “must always wait for sensible evidence for our beliefs; and where such evidence is inaccessible we must frame no hypotheses whatever” (James 1897/1979, 50). But scenarios sometimes arise, James claims, when agnosticism is not an occupiable space on the board—such as when deciding on the need for homeowner’s insurance, when we are forced to make an important decision before conclusive evidence can be had.

Crucially, James claims that such scenarios arise not just in day-to-day life but also in science, and in such cases withholding belief until one has sufficient evidence is not something we *can* do. “Hardly a law has been established in science,” he writes, “hardly a fact ascertained, which was not first sought after, often with sweat and blood, to gratify an inner need” (James 1897/1979, 51). Let us use the word “research” to designate the process of searching for evidence to support or undermine a hypothesis. James claims that as a psychological matter, research in this sense needs to be motivated by some actual, personal desire—a desire for logical harmony or the truth of a theory, perhaps, but a subjective desire nonetheless. James suggests that if this sort of desire-motivated faith in a hypothesis is licit in scientific research, it must be licit in religion too. That is his core argument.

This much looks like a rehearsal for “The Will to Believe,” but note that the argument hinges not on whether cases where belief outruns evidence are permissible full stop but on whether such cases routinely arise in *science*. Remember, the

reflective suicide is supposed to worry that theistic doxastic strategies are at odds with scientific doxastic strategies.

When it comes time to collect this and other essays in *The Will to Believe*, James emphasizes precisely this reconciliationist aim up front, in the volume's preface. Addressing the worry that defending faith is practically dangerous because "what mankind at large most lacks is criticism and caution, not faith," he responds that his project is tailored to a narrower group—"academic audiences, fed already on science, [who] have a very different need." These people suffer from "timorous *abulia* in the religious field" because they think "there is something called scientific evidence by waiting upon which they shall escape all danger of shipwreck in regard to truth" (James 1897/1979, 7). His defense of religious faith is a defense of the right of those "fed already on science" to believe the religious hypothesis—it is not a defense of religious faith simpliciter, as evidentialist and antievidentialist readers alike assume.<sup>22</sup>

Moreover, James's strategy for curing this audience's religious abulia is to show that religious hypotheses are to be accepted or rejected according to the same standards we use to test scientific hypotheses (James 1897/1979, 8–9). In other words, the *Will to Believe* preface proposes that the book will give a unitary account of the epistemic standards appropriate to religious and scientific belief.

And the same reconciliationist aim is not far to seek in "The Will to Believe" essay itself. That piece is framed in terms of a disagreement between "empiricism" and "absolutism"—a crucial point commentators often ignore. Empiricism is an epistemological view central to the sciences, James claims (1897/1979, 21). It holds that although we can attain true beliefs, we cannot infallibly know which of our beliefs really are true. In contrast, absolutists say that we can attain truths, and we can know with certainty that we know. This is an important distinction because as the essay unfolds, we find that James does not ask whether it is categorically permissible to believe without evidence. He asks what the *empiricist* should say about this question.

Thus in the penultimate paragraph of the essay, we do not find James concluding that belief may permissibly outrun evidence always, everywhere, and for any one. He concludes that the *empiricist* may permissibly allow belief to

22. The notion that "The Will to Believe" is designed for a rather narrow audience is corroborated in a letter of August 30, 1896, to Dickinson Sergeant Miller. "But my paper wasn't addressed to mankind at large but to a limited set of studious persons, badly under the ban just now of certain authorities whose simple-minded faith in 'naturalism' also is sorely in need of an airing—and an airing, as it seems to me, of the sort I tried to give" (James 1992–2004, 2:49–50; also quoted at James 1897/1979, 249).

outrun evidence in special cases. Further, James says that the requirement of withholding all belief until we have objective evidence

seems to me the queerest idol ever manufactured in the philosophic cave. *Were we scholastic absolutists, there might be more excuse.* If we had an infallible intellect with its objective certitudes, we might feel ourselves disloyal to such a perfect organ of knowledge in not trusting to it exclusively, in not waiting for its releasing word. *But if we are empiricists,* if we believe that no bell in us tolls to let us know for certain when truth is in our grasp, then it seems a piece of idle fantasticality to preach so solemnly our duty of waiting for the bell. (James 1897/1979, 32–33, my emphasis)

“If we are empiricists”—if we accept the dominant epistemological outlook of the sciences—then we are free to accept that there are special cases where belief may permissibly outstrip evidence, James concludes. Evidentialism might be appropriate, he suggests, but only for “absolutists.”

In keeping with this theme, note that James repeatedly and sarcastically characterizes the likes of Clifford and Huxley as “scientific absolutists”—people who “are only empiricists on reflection: when left to their instincts, they dogmatize like infallible popes” (James 1897/1979, 21). His point is that it is Clifford’s position that is incompatible with scientific principles. In particular, Clifford’s (supposed) claim that we should withhold belief until we are presented with totally coercive evidence is obviously incompatible with the more appropriately scientific view James calls “empiricism,” according to which no evidence is totally coercive.<sup>23</sup>

So “The Will to Believe” seeks to show that if one is committed to a scientific (i.e., “empiricist”) epistemology, then one may believe in the religious hypothesis on the basis of one’s passions without fear of contradiction. In other words, this essay seeks not so much an ultimate foundation for religious belief as a demonstration of religious belief’s compatibility with scientific methodology. James’s concerns are ultimately therapeutic, on my reading, and the success or failure of his reconciliationist argument depends on whether it has the capacity to talk the educated Victorian jumper back from the ledge. I now take

23. What about the reading of Clifford to which I already alluded (see n. 6 and *passim*) according to which the latter only holds that one is required to *proportion* one’s belief to available evidence? This more charitable version of Clifford could accept empiricism as James here construes it, it seems to me. But this is not to say that Clifford thereby evades James’s attack in “The Will to Believe,” for James argues that when we adopt hypotheses and regulative assumptions in science we are forced to accept beliefs that are not even proportionately supported by available evidence. See sec. 5, below.

a closer look at why James thinks good scientific methodology permits us (in special cases) to allow belief to run ahead of the evidence.

## 5. Hypotheses and Regulative Assumptions in “The Will to Believe”

*The Will to Believe and Other Essays in Popular Philosophy* was James’s first philosophical book. When that volume appeared in 1897, he had built an international reputation on his prior 2 decades of research in psychology. Interestingly, the essays collected in *The Will to Believe* were written during roughly that same period—that is, between 1879 and 1896.<sup>24</sup> To place those dates into perspective, consider that James began work on the *Principles of Psychology* in 1878 and published it a dozen years later, with the *Briefer Course* appearing in 1892.

Those were early years for the young science of experimental psychology. As one might expect with a young science, methodological disagreements were rampant, and as it happens Peirce and James were at loggerheads over at least two issues—the role of hypotheses and of regulative assumptions in inquiry. These issues have a direct bearing on “The Will to Believe” because they figure prominently in James’s argument for the compatibility of religious belief with scientific methodology. He claims that we rely on our passionate nature in the course of hypothesis confirmation in science (e.g., James 1897/1979, 27; also see 51). We should therefore be allowed to do the same in religion. James also discusses scientific “*Grenzbegriff[e]*,” or regulative assumptions (23; also see 6). These are principles like the uniformity of nature, principles that James thinks scientists are also forced to accept without evidence in order to get inquiry off the ground (19). His point is that when we accept hypotheses and regulative assumptions in science, we effectively adopt beliefs on the basis of our passions. Hence the scientifically inclined theist is permitted to accept or reject religious faith on similar grounds without fear of contradiction. Peirce objects to James’s treatment of hypotheses and of regulative assumptions, so I will explore each theme in turn.

### 5.1. Hypotheses

Scholars have long recognized that scientific methodology underwent a shift in orthodoxy around the turn of the nineteenth century. Since about the 1730s, philosophers and methodologists had taken Newton’s “hypotheses non fingo” very literally. They held that theories should emerge inductively or ana-

24. I owe this observation to Madden (1897/1979), xi.

logically from data. The so-called hypothetical method, according to which one experimentally tests the deductive consequences of conjectures (i.e., hypotheses), was almost universally rejected. One key worry was that hypotheses introduce a needless risk of bias into scientific practice. Hypotheses are human inventions that the scientist ought not try to force onto nature, the thinking went (Laudan 1981, 10, 90–91).

But in the nineteenth century Auguste Comte and others broke with orthodoxy by advocating hypothetical reasoning. James's thinking about hypotheses owes a clear debt to Comte (as well as to another early proponent of hypotheses, Charles Renouvier).<sup>25</sup>

For Comte, what counts is not where hypotheses come from but whether they fit with the observational evidence (for a discussion, see Laudan [1981], 145–46). Comte writes: “Whatever the mode, rational or experimental, from which proceeds [various facts'] discovery, it is always their conformity, direct or indirect, with the observed phenomena that results in their scientific effectiveness. Pure imagination finally loses its ancient mental supremacy, and is necessarily subordinated to observation, . . . without ceasing to exercise, in positive philosophy, a principal and ineliminable office for creating or refining hypotheses [les moyens de liaison],<sup>26</sup> be they final or provisional” (1844, 13, my translation). Hypotheses are scientifically effective, just in case they square with observable phenomena. But notice that Comte insists on a robust role for imagination when it comes to framing and researching those hypotheses.

It is this last point that James amplifies in “The Will to Believe.” There James echoes Comte: “It matters not to an empiricist from what quarter an hypothesis may come to him: he may have acquired it by fair means or by foul; passion may have whispered or accident suggested it; but if the total drift of thinking continues to confirm it, that is what he means by its being true” (James 1897/1979, 24). Following Comte, James claims that framing a scientific hy-

25. Renouvier, whose impact on James is well known, relies on a defense of hypotheses to help support a fallibilist epistemology (Schmaus 2007, 134). This epistemology foreshadows pragmatism. In fact, in the original published version of “The Will to Believe” James writes that “I owe my confidence in my position to the writings of Charles Renouvier” (James 1896, 327 n. 1). Two other figures of the era with a welcoming attitude toward hypotheses are Pierre Duhem and Henri Poincaré, both of whom James mentions as exemplifying a new pragmatic attitude in science (James 1907/1975, 34). The role of hypothetical reasoning in James's *Pragmatism* is a fascinating topic—variants of “hypothesis” appear 39 times in that work—but I cannot explore this issue here.

26. I follow Beesly in using “hypothesis” at this point in my translation (see Comte 1903, 21). For Comte, scientists are to eschew causal explanations and instead are to frame and test hypotheses about law-like connections between observed phenomena.

pothesis can be a creative, even passionate affair.<sup>27</sup> The factors that produce a hypothesis are independent of considerations that go into justifying it.

Thus, although “passion may have whispered” a hypothesis, James repeatedly claims that we must consider evidence for that hypothesis dispassionately. He writes that when it comes to verification the “abstract intellect” must act as an “indifferent . . . umpire.”<sup>28</sup> This is in contrast with what goes on in the context of discovery, as we now call it. There, “the concrete players who furnish . . . [the umpire] the materials to judge of are usually, each one of them, in love with some pet ‘live hypothesis’ of his own,” and James thinks this is entirely appropriate (1897/1979, 27).

“The Will to Believe” repeats the point in several places. For instance, James also says that in the context of justification we must “keep weighing reasons *pro et contra* with an indifferent hand” (1897/1979, 26). In contrast, “for purposes of discovery such indifference is to be less highly recommended, and science would be far less advanced than she is if the passionate desires of individuals to get their own faiths confirmed had been kept out of the game” (26). Readers may be surprised at my suggestion that James distinguishes between the contexts of discovery and justification.<sup>29</sup> But the distinction is a long-standing one for him.

To give an older example, in the *Principles* he writes that the “genesis” of scientific hypotheses is “strictly akin to that of the flashes of poetry and sallies of wit to which the instable brain paths equally give rise. But whereas the poetry

27. We do not typically think of James as a positivist. And yet he opens the *Principles* by trumpeting his own “strictly positivistic point of view” as the only aspect of the work “for which I feel tempted to claim originality” (James 1890/1981, 6). While he sometimes considers philosophical theses that do not meet this standard, throughout the *Principles* James reminds readers of his Comtian commitment to frame only psychological hypotheses that are in principle verifiable (e.g., 141, 182, 185, 319, 328, 331–32, 341, 379, 467). Peirce directly attacks the *Principles*’ professed positivism (Peirce 1931–58, 8.60, 1891).

28. James also emphasizes the dispassionate stance appropriate to justification, in contrast to the passionate “faith” we have when we entertain a hypothesis, at (1897/1979, 79). And he claims that we can verify the hypothesis of “absolute morality” in the same way that the “physical philosopher” verifies a hypothesis—i.e., by deducing consequences from the conjecture and dispassionately testing whether they fit with experience (86).

29. The origin of this distinction is usually attributed to Reichenbach (1938). The Comte passage quoted in the text illustrates that it likely has a foundation in nineteenth-century positivism. For a recent study of this distinction’s rocky history especially in the twentieth century, see Schickore and Steinle (2006). One key reason this distinction has fallen into ill repute of late has been the concern that it was long used (especially in logical positivism) to justify philosophers of science in ignoring issues related to discovery, and instead to focus exclusively on confirmation (vii–viii). Notice that neither James nor (as we will see) Peirce can be accused of ignoring the context of discovery. James sees the context of discovery as the key link between science and religion. And Peirce’s constant emphasis on abduction, which I discuss below, shows how crucial he thought it was to get a grip on the logic of discovery.

and wit (like the science of the ancients) are their ‘own excuse for being,’ and have to run the gauntlet of no farther test, the ‘scientific’ conceptions must prove their worth by being ‘verified.’ This test, however, is the cause of their *preservation*, not that of their production” (James 1890/1981, 1232–33). We begin to get a grip here on James’s account of the epistemic significance of our passionate, creative nature. James thinks our passionate nature appropriately “give[s] rise” to scientific hypotheses and poetic ruminations alike. But unlike poetry, scientific hypotheses must then get taken up in a different, justificatory context—they must be verified, and verification must be dispassionate.

Two questions crop up as we turn back to “The Will to Believe.” First, why should James think that the passions are appropriate in the context of discovery, and second, why should he think they are not appropriate in the context of justification? James answers the second question directly—he points out that in the context of justification our options are rarely “momentous,” “hardly living,” and “seldom forced” (1897/1979, 25–26). In other words, in the context of justification we rarely face Will to Believe cases. The clear implication is that Will to Believe cases do arise with some frequency in the context of discovery, and it is here that scientists must rely on their passionate nature.

I will return to the first question, but James’s bigger point about religion now comes into focus. James thinks the prospective theist is in the same epistemic situation with respect to the religious hypothesis as the scientist working in the context of discovery (the “discovering scientist,” for short). Both face Will to Believe cases. Positivist methodology permits the discovering scientist to rely on her passionate nature in deciding scientific Will to Believe cases (e.g., in choosing a hypothesis to adopt during research). So that methodology should also permit the prospective theist to rely on her passionate nature in deciding religious Will to Believe cases (e.g., in choosing to adopt the religious hypothesis in this natural life).

James thus advocates a radical Comtism according to which imagination and emotion are essential tools for framing and researching hypotheses, whether those hypotheses are scientific or religious.<sup>30</sup> His criticism of Clifford and

30. James seeks rigorously to adopt Comtian standards of hypothesis formation and testing. But I do not mean to imply that he is a devotee of Comte’s philosophy in all respects. James (1884, 1) rejects Comte’s notoriously pessimistic account of introspection. The general argument of “A Plea for Psychology as a ‘Natural Science’” certainly is incompatible with Comte’s view that psychology was not an independent natural science (James 1892/1983). And James rejects Comte’s treatment of the three stages of human inquiry (theological, metaphysical, and positive) as “too sharp and definite” (1911/1979, 15). But James was clearly impressed by Comte’s scientific methodology; see n. 27, above.

Huxley is not that their epistemological standards are too strict—his criticism is that they fail to apply their own standards strictly enough.

Now, the question of what justifies the scientist in relying on her passional nature in the context of discovery brings us back to an issue I raised in section 3, above. Ought-implies-can reasoning establishes that if we are forced to adopt a belief in a Will to Believe case, we are not obligated (because we are not able) to adopt that belief on the basis of objective evidence. But I argued above that James wants to establish a stronger point—that in such cases we are permitted to adopt a belief on the basis of our passional nature. What is his rationale for this stronger claim?

As we have just seen, he thinks Will to Believe cases typically arise in the context of discovery (when they arise in science), and framing hypotheses is a kind of creative skill for the scientist working in that context. In “The Sentiment of Rationality,” James clarifies the sort of skill he thinks hypothesis framing involves. The scientist with a knack for dreaming up promising hypotheses has a passional nature that produces a kind of poetic insight into how the world works. Such a scientist is more likely than others to “guess right” about the natural environment (James 1897/1979, 78). If a passional nature “helps those who, as Cicero says, ‘*vim naturæ magis sentiunt*’ [feel the force of nature more], it is good and not evil. Pretend what we may, the whole man within us is at work when we *form* our philosophical opinions. Intellect, will, taste, and passion cooperate just as they do in practical affairs” (77, my emphasis).<sup>31</sup> Those who often “guess right” literally “feel” (*sentiunt*) in harmony with the natural world, James suggests. A hunch, a gut instinct, or a good feeling can guide us in framing the most promising hypotheses, for James, and this is why we are wise to consult our passional nature in the context of discovery.

Notice that in this passage, too, James is careful to emphasize the role of our subjective nature in forming conjectures, rather than in verifying them. So contra the evidentialist reading, that some hypothesis appeals to our passional nature does not constitute evidence relevant to justification, on James’s view. However, our passional nature does have epistemic significance—but in the context of discovery. It can guide us to frame and test conjectures that are not random guesses but promising hypotheses.

It is worth acknowledging a potential shortcoming of James’s account at this point. The definition of “hypothesis” as “anything that may be proposed to our belief” is unusually permissive (James 1897/1979, 14). We might worry

31. For a useful discussion, see O’Connell (1997), 94.

that James's argument works only if we ignore some essential restrictions we typically place on scientific hypotheses. In fact, James himself advocates such restrictions in other writings. For instance, Perry quotes some class lecture notes in which James writes that for an "ideal 'science' . . . any hypothesis, however self-contradictory or unimaginable, is good, *provided it offer conveniences for calculation*" (my emphasis).<sup>32</sup> It is hard to see how the religious hypothesis might be construed as aiding calculation, although perhaps we can read "provided" as having the logical force of "if" rather than "if and only if."

James records more detailed reflections on hypotheses in a notebook entry critical of Chauncey Wright: "An hypothesis is vain, metaphysical, mythological which simply repeats the phenomenon under a different name—virtus dormitiva, vital force &c—legitimate if it refer it [the phenomenon] to a class already known in other ways; or declare a property analytically contained from which consequences flow other than those already known; or ascribe it to an entity defined by properties *additional* to the phenomenon in question. All these hypotheses bring the phenomenon into *continuity with something* else. . . . Hypothesis a is b. b must be already known in some other determination *than as a*" (James 1988, 154–55). Readers of "The Will to Believe" should wonder whether this list of conditions under which a hypothesis is "legitimate" is meant to be exhaustive, for the religious hypothesis does not seek to explain any observable phenomena (if so, which?) by relating them to something "already known in some other determination." Perhaps James would deny that all hypotheses must either explain or aid in the calculation and prediction of phenomena. Still, one might well be hard-pressed to think of cases where a good scientific hypothesis does not seek to explain or help predict what is observable.

Now Peirce is unsympathetic with "The Will to Believe," as Misak rightly notes.<sup>33</sup> But interestingly Peirce does not take issue with James's underlying assumption that religion advances "hypotheses" in more or less the same sense as science. Instead, he argues that James has misunderstood the proper sense in which *science* advances hypotheses. This is the heart of Peirce's dissatisfaction with "The Will to Believe." His concerns are twofold.

First, he rejects James's seemingly cavalier attitude about considerations that enter into the context of discovery. James likens the scientist who has a flair for dreaming up good hypotheses to the insightful poet (1897/1979, 185;

32. Perry provides this quotation without giving a citation (1935, 1.492).

33. Misak quotes a 1909 letter where Peirce says, "I thought your *Will to Believe* was a very exaggerated utterance, such as injures a serious man very much" (James 1992–2004, 12:171, 1909; see Misak 2013, 64). All subsequent James (1992–2004) citations follow the protocol used here, where 1909 is the year of the letter.

James 1890/1981, 1232–33). But Peirce holds that framing a hypothesis amounts to a variety of *inference*, and as such it is governed by basic logical rules. Peirce calls this form of inference “abduction,”<sup>34</sup> and studying its logic “animated most of Peirce’s intellectual life,” as Psillos puts it (2009, 117).

It is precisely the logic of abduction that Peirce thinks James disregards in “The Will to Believe.” To see his worry it helps to consider the logical form of abduction:

The surprising fact, *C*, is observed;  
 But if *A* were true, *C* would be a matter of course.  
 Hence, there is reason to suspect that *A* is true. (Peirce 1992–98,  
 2.231, 1903)

Peirce says that we are permitted to conjecture that *A* just in case “if *A* were true, *C* would be a matter of course.” Thus Peirce thinks only hypotheses that “would account for the facts or some of them” should be admitted in scientific inquiry (2.231, 1903).

So far it is not clear that the two men disagree. But upon receiving his personal copy of *The Will to Believe*, Peirce writes a letter to James pushing hard on the latter’s account of hypothesis (James 1992–2004, 8:243–46, 1897). Peirce suggests that James is wrong to construe the scientist’s “faith” in a hypothesis as a matter of passionately formulating and then clinging to a conjecture. Instead, the scientist tests whether the deductive consequences of the hypothesis actually obtain, and if they do not then she follows a rational method for replacing that hypothesis with something more promising.

This last step is crucial, and Peirce thinks James ignores it. Suppose *A* deductively entails not just *C* but also *D*, *E*, and *F*. And suppose we find that *F* does not obtain. The only hope we have that science will progress is that we have some rational method for replacing hypothesis *A* with something better in such circumstances. “You must have a considered plan of procedure [*sic*], and the hypothesis you try is the one which comes next in turn to be tried according to that plan,” as Peirce puts it (James 1992–2004, 8:244, 1897).

In a series of 1898 lectures in Cambridge, Peirce expands this criticism of James in a public forum.<sup>35</sup> It is precisely this deliberate plan of replacing re-

34. Peirce thinks abduction is one of three forms of inference on which science relies, the other two being induction and deduction.

35. Ironically, the lectures are arranged by James as a way to raise money for his impoverished friend. Peirce writes to thank James for dedicating *The Will to Believe* to him and mentions having gone without food for almost 3 days (James 1992–2004, 8:243–46; for a discussion of this episode, see Menand [2001], 349–50). Peirce originally plans a series of talks about formal logic (James 1992–

futed hypotheses with more promising conjectures that gives abduction the property of “self-correction” (Peirce 1992–98, 2.47, 1898). Peirce calls this “one of the most wonderful features of reasoning” (2.43, 1898).<sup>36</sup>

So Peirce’s concern is that “The Will to Believe” portrays hypothesis formation (abduction) as a process that may proceed according to mere whim—“passion may have whispered” a hypothesis, as James says, so long as the conjecture ultimately squares with observable phenomena. Peirce thinks this view strips abduction of the very feature that produces its authority, namely, its tendency to self-correct as we replace vitiated hypotheses with more promising alternatives.<sup>37</sup> Thus, Peirce worries that by “faith” James means “you are not going to be alert for indications that the moment has come to change your tactics,” and Peirce thinks faith of that sort is “ruinous in practice” (James 1992–2004, 8:244, 1897).

What we need then is not a “Will to Believe,” Peirce says in his 1898 lectures, but a “Will to Learn”—a sincere “dissatisfaction with one’s present state of opinion” (Peirce 1992–98, 2.47, 1898). We need to summon the will to test hypotheses and, as they are found wanting, to replace them according to a rational plan. Peirce insinuates that the justification for employing the hypothetical method in science essentially involves the promise of self-correction. But faith (as James construes it) in the religious hypothesis has no such self-correcting mechanism.

I can see two responses James has available. In one place he suggests that what differentiates hypothetical reasoning in science and religion is simply the length of time the inquirer must have faith before she can hope for conclusive

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2004, 8:325, 1897). But James immediately replies that this is not suitable. He chides Peirce: “Now be a good boy and think a more popular plan out” (8:326, 1897). Peirce is clearly offended, insisting that all his philosophical ideas rest on logic (8:330, 1897). Peirce dryly accepts James’s request for lectures on “separate topics of vital importance” and uses his talks to hit back for this perceived slight. The lectures argue that we are better off acting on instinct, and not on logic or reason, in vital matters (e.g., Peirce 1992–98, 2.40, 1898). Since real philosophy rests on logic, the implication is that such vital matters as James treats in his *Will to Believe* volume—subtitled *And Other Lectures in Popular Philosophy*—are not genuinely philosophical at all. Thus James is a thinly veiled target of Peirce’s insistence that the philosopher “who does not stand aloof from all intent to make practical applications, will not only obstruct the advance of the pure science, but what is infinitely worse, he will endanger his own moral integrity and that of his readers” (2.29, 1898).

36. Peirce devotes considerable energy to developing a set of heuristics that are to guide this procedure of framing and replacing hypotheses. An extensive discussion of this procedure can be found in his 1901 “The Logic of Drawing History from Ancient Documents,” especially at Peirce (1931–58), 7.220, 1901. For an illuminating treatment, see Psillos (2009), 132ff.

37. The notion that the hypothetical method is self-correcting is not unique to Peirce in this era. Renouvier apparently holds a similar view, likening the use of hypotheses to the so-called method of false position in mathematics (see Schmaus 2007, 141).

evidence on which to judge dispassionately (James 1897/1979, 79). Perhaps James can accept that there is a rational procedure for replacing hypotheses and then simply say that these procedures do apply to religious hypotheses, albeit on an elongated timescale as compared to scientific hypotheses.

One might worry that the response gives up too much by conceding that we are not permitted, after all, to rely on our passionate nature in *replacing* hypotheses. But this is not a devastating problem, as James can still maintain that our *first* conjecture at an explanation flows from our passionate nature,<sup>38</sup> and he can maintain that we need a passionate commitment if we are to carry through an extensive research program concerning some hypothesis.

But there is a bigger problem with this response. Suppose the religious hypothesis' ultimate verification only comes on "the day of judgment" (i.e., after one's natural death; James 1897/1979, 79). Then one loses the chance to replace it with a superior conjecture in this natural life, which is the timescale that matters at least to Protestant religious belief (again, individuating beliefs in the Bainian fashion I have suggested). So if Peirce is right that what justifies our abductive inferences is our method for continually correcting them, then it is hard indeed to accept James's argument that faith in the religious hypothesis can be justified on the same grounds.

Still, James has a better response—to reject this justification of abduction entirely. For so far as I can tell, Peirce fails to give an argument for what is, after all, a controversial claim—that abductive inference really is self-correcting. He often seeks to demonstrate the self-correcting nature of science, but he typically gives examples of the self-correcting nature of induction and occasionally deduction (as at Peirce 1992–98, 2.42–44, 1898). But I find in Peirce no clear proof that *abduction* is really self-correcting, and I note that Laudan makes the same point (1973, 236).

In fact, in several places Peirce tellingly concedes that abduction's justification is not that it is self-correcting. He writes, "Its only justification is that its method is the only way in which there can be any hope of attaining a rational

38. A frustratingly incomplete fragment from one of James's notebooks (dated ca. 1907–10) actually suggests that he gives exactly this response, albeit in connection with a criticism from Dewey. James writes: "*Truth*.—On the assumption that the S. is the hitherto satisfactory hypothesis, and the P. its *correction* (à la Dewey) it follows that *that kind* of a correction (that P) requires *that kind* of an hypothesis (that S). The compulsiveness and objectivity of our judgments would thus be compatible with [*leaf missing*]" (1988, 843). One can speculate that James goes on to suggest that the origin in our passionate nature of that first conjecture (that S) is compatible with the notion that rational considerations subsequently guide us in making objective improvements on our hypothesis, as when we replace S with P. It is impossible to confirm my speculation without the missing leaf, however. Tantalizingly, the next surviving page in this notebook discusses "hypotheses" involved in "a Science of religions."

explanation” (Peirce 1931–58, 2.777, 1901).<sup>39</sup> We employ abduction simply because we have no other choice, not because we have any a priori guarantee that this or that procedure for replacing hypotheses really is self-correcting. But Peirce’s first objection to “The Will to Believe” tacitly presumes that we do have some such guaranteed procedure. So I do not see that this objection really forces James to abandon his Comtism about the role our passional nature plays in framing and researching hypotheses.

In any case, Peirce has a second worry. He does not accept James’s claim that testing a hypothesis requires believing it. This criticism comes out in the 1898 lectures as well. He begins by evoking a modified form of the Bainian account of belief we have already discussed: “We *believe* the proposition we are ready to act upon. *Full belief* is willingness to act upon the proposition in vital crises, *opinion* is willingness to act upon it in relatively insignificant affairs. But pure science has nothing at all to do with *action*” (Peirce 1992–98, 2.33, 1898). Peirce grants that we are permitted to form beliefs on the basis of our passional nature, but only in matters of “vital importance” (2.33). He claims that “the scientific man” must treat every scientific proposition as thoroughly provisional—that is, not as the sort of thing he should be prepared to act on come what may and thus not the sort of thing he should count as believing. Peirce concludes, “there is thus no proposition at all in science which answers to the conception of belief” (2.33). The suggestion is that there is no Will to Believe in science because there is no belief in science at all. That is a radical claim.<sup>40</sup>

Misak puts Peirce’s point perspicuously: Peirce holds that when it comes to hypotheses and regulative assumptions (more on the latter, below), “we are obliged to suppose,” but “we need not assert” (Peirce 1931–58, 2.66, 1902; quoted at Misak 2013, 51; 2011, 266). Misak explains:

Peirce seems to be suggesting that there is a propositional attitude, alternative to belief, which is appropriate in certain circumstances. It is of course an open question whether adopting this kind of attitude towards the proposition “this chasm is jumpable” or “we can capture this position” would be sufficient to instill the confidence required to successfully jump the chasm or capture the position. But that is a side-issue. The main matter is that Peirce very clearly pulls apart the desirability of *p*’s being

39. He makes the same point at Peirce (1931–58), 5.145, 1903. I owe these two references to Psillos (2009), 117, 132.

40. Peirce draws the same contrast between the genuine beliefs we employ in “practical matters” like “religion” and the sort of “hypothesis” that the scientist adopts merely “provisionally” at (1931–58, 6.216, 1898).

true from the rationality of believing  $p$  or from the likelihood of its truth.  
(2011, 273 n. 15)

In my view, just what this propositional attitude “alternative to belief” could be is not a side issue but actually one of the central disagreements between Peirce and James concerning “The Will to Believe.” The issue stems from the broadly Bainian account of belief that both men accept. James insists that on this account habitually acting as though  $P$  were true, as we do when  $P$  is a hypothesis that we are researching, amounts to believing  $P$ . In contrast, Peirce claims that science does not aim to establish belief. Scientific propositions are not the sorts of things that involve action at all (Peirce 1992–98, 2.33, 1898).

Even if this modified Bainian conception of belief is workable in its own right, the modification creates tensions with other aspects of Peirce’s project. In particular, it threatens the integrity of his own account of inquiry: “the irritation of doubt causes a struggle to attain a state of belief. I shall term this struggle *inquiry*” (Peirce 1992–98, 1.114, 1877). Here he defines inquiry as an attempt to establish belief, and the most effective way to conduct inquiry is supposed to be through the scientific method. So the cost of his later claim that “what is properly and usually called belief . . . has no place in science at all” is enormous (2.33, 1898). It apparently requires giving up his belief-doubt model of inquiry—a model that by all accounts is a cornerstone of his pragmatism. That seems far too high a price to pay. Absent evidence that Peirce was actually willing to pay it, we should conclude that this line of attack is more polemical than substantive.

## 5.2. Regulative Assumptions

Peirce has another worry about “The Will to Believe” that stems from a disagreement with James over scientific methodology. The worry surfaces in a hitherto unpublished portion of “Questions on William James’s *Principles of Psychology*.” There are 45 questions, and “The Will to Believe” makes a surprise appearance in question 28.<sup>41</sup>

41. I am grateful to Mathias Girel for supplying me with a copy of his own transcription of this document, which is conventionally identified as R1099 in the Peirce Collection at Houghton Library. Girel (2003, 196 n. 65) discusses Peirce’s “Questions.” Several of these questions can be found at Peirce (1931–58), 8.72–90; however, question 28 has not to my knowledge been published anywhere. Girel notes that the manuscript is generally dated circa 1891 but that given Peirce’s remarks in question 28 the document was presumably revised and expanded through at least 1896 when James first gave the Will to Believe lecture.

This question targets a *Principles* passage in which James claims that to explain cognition, “the psychologist as such must assume” a “*thoroughgoing dualism . . . [of] two elements, mind knowing and thing known, and [treat] them as irreducible*” (James 1890/1981, 216, 214). He then adds an important proviso—that the psychologist must be a dualist “whatever ulterior *monistic* philosophy he may, as an individual who has the right also to be a metaphysician, have in reserve” (216, my italics). In other words, James insists that qua psychologist an inquirer must be a mind-matter dualist but that this does not preclude this same inquirer qua metaphysician from being a mind-matter monist. Peirce’s response is succinct but cryptic: “there is too much ‘will to believe’, here.”<sup>42</sup>

It is not immediately obvious how “The Will to Believe” relates to the *Principles* passage, but context makes the thrust of Peirce’s worry clear. He does not deny that there is an independent world that minds come to know. What he denies is “the ‘irreducibility’ which is here said to be something the psychologist must not give up.”<sup>43</sup> Peirce rejects the notion that an inquirer could be absolutely forced to adopt assumption A qua psychologist, particularly if qua metaphysician the same inquirer could be free to reject A.

I will return to the question of why Peirce should have associated such a view with “The Will to Believe.” But we can unpack the substance of the question 28 worry by reviewing a long-standing dispute between these two men over regulative assumptions.

In an 1892 review of the *Principles*, Peirce attacks one of James’s provocative methodological claims: that any science must begin by making metaphysical assumptions. James announces this idea in the preface:<sup>44</sup>

I have kept close to the point of view of natural science throughout this book. Every natural science assumes certain data uncritically, and declines to challenge the elements between which its own ‘laws’ obtain, and from which its own deductions are carried on. Psychology, the science of finite individual minds, assumes as its data (1) *thoughts and feelings*, and (2) *a physical world* in time and space with which they coexist and which (3) *they know*. Of course these data themselves are discussable; but the discussion of them (as of other elements) is called metaphysics and falls outside the province of this book. (James 1890/1981, 6–7, my underline)

42. R1099 in the Peirce Collection at Houghton Library.

43. Ibid.

44. This section offers a synopsis of an account I develop more fully in Klein (2008).

Peirce emphatically denies that science begins by accepting any data “uncritically.” In a sour review of the *Principles in Nation*, Peirce writes: “The notion that the natural sciences accept their data *uncritically* we hold to be a serious mistake. . . . The principle of the uncritical acceptance of data, to which Prof. James clings, practically amounts to a claim to a new kind of liberty of thought, which would make a complete rupture with accepted methods of psychology and of science in general” (Peirce 1931–58, 8.61, 1891).

James’s “assumptions” specify the stopping point for psychological inquiry—he thinks experience has some basic features that cannot be subject to any deeper psychological explanation. These features can be discussed, but only in neighboring fields such as metaphysics. But Peirce rejects this sort of view on grounds that scientists “are not banded together to repress any species of inquiry” (1931–58, 8.60, 1891). His worry is that “by the simple expedient of declaring certain inquiries extra-psychological,” James undertakes “to decide upon the character of its data” by fiat (8.60).<sup>45</sup>

But James’s position is subtler than Peirce seems to appreciate. At the time he begins work on the *Principles* in 1878, James is bothered by a series of attacks on the very idea that there can be a natural science of mind. He develops his views on regulative assumptions in this context (see Klein 2009, esp. sec. 2.1).

Those attacks are coming largely from idealists, especially metaphysicians like T. H. Green, whose swan song is a three-part essay in *Mind* entitled “Can There Be a Natural Science of Man?” One can get a sense of this idealist challenge from James’s “On Some Hegelisms,” which is anthologized in *The Will to Believe*. That piece opens with a complaint: “if perchance we essay to do some small bit of psychological detail-work for ourselves, it is lucky if someone does not trip us up at every step by reminding us that we forget to do homage to the Transcendental Ego which is presupposed in all the words we use. . . . The transcendental-ego-business is a good deal like interrupting a geographer at his work by telling him every five minutes that he forgets to talk about Space, which is nevertheless presupposed in all the distances and latitudes and longitudes he is discussing” (James 1882, 186).<sup>46</sup> Idealists like

45. Neither James’s tolerance for conflicting explanations of mental phenomena in different disciplines (particularly in psychology and philosophy) nor Peirce’s criticism of such tolerance is unique in the late nineteenth century (in fact, cf. Peirce [1931–58], 6.216, 1898, where Peirce himself seems to acknowledge the inevitability of such conflict). For instance, Ward claims that Locke, Berkeley, and Hume had a “standpoint [that] was the proper one for the science of psychology,” even though their “philosophy was foredoomed to a collapse” (Ward 1886/1899, 38). In a hotly discussed response, Prichard expresses astonishment at this position: “How can the proper standpoint of one subject possibly lead to false conclusions in another?” (1907, 31).

46. This passage appears in the opening paragraph of the original essay, but the passage is omitted in the version anthologized in *The Will to Believe*.

Green claim that psychology cannot ultimately be an empirical undertaking because all experience presupposes the existence of a Transcendental Ego. Since (for familiar Kantian reasons) this Transcendental Ego cannot itself be in time and space, it is not empirically observable. Thus, a fully empirical account of experience is supposed to be in principle impossible.

In response James actually embraces the idea that sciences rely on metaphysical presuppositions but denies that this undermines empirical credibility. This is what he is getting at in the preface to the *Principles*. The move is to block interdisciplinary squabbling by gerrymandering the questions practitioners of different fields are responsible for answering.

What rationally constrains the scientist's choice of assumptions, though? Can she simply introduce any old principle, so long as she calls it a "metaphysical presupposition"? This is Peirce's chief question, and James answers in the negative.

In an 1892 defense of the *Principles* entitled "A Plea for Psychology as a 'Natural Science,'" James claims that these assumptions are rational only to the extent they actively help divide labor between neighboring disciplines:

The actual existence of two utterly distinct types of mind, with their distinct needs, both of them having legitimate business to transact with psychology, must then be recognized; and the only question there can be is the practical one of *how to distribute the labor so as to waste it least and get the most efficient results*. . . . Almost all the fresh life that has come into psychology of recent years has come from the biologists, doctors, and psychical researchers, . . . [and] wisdom lies, not in forcing the consideration of the more metaphysical aspects of human consciousness upon them, but, on the contrary, in carefully rescuing these aspects from their hands, and handing them over to those of the specialists in philosophy, where the metaphysical aspects of physics are already allowed to belong. . . . [We need] a generally expressed consent as to the kind of problems in psychology that were metaphysical and the kind that were analogous to those of the natural sciences. (James 1892/1983, 272–73)

Remember James's remark from "On Some Hegelisms." The controversy over psychology's scientific status is hampering inquiry. As a way to move forward, James seeks to establish a cognitive *division of labor* (note the italicized passage above) so that the scientists can produce results of practical benefit and the philosophers can have free reign over properly metaphysical questions. He sees that the success or failure of the young science of mind hinges in part on whether psychologists can successfully quell the resource-wasting boundary

disputes that had cropped up, particularly on the border of psychology and philosophy.<sup>47</sup>

So James thinks empirical science cannot be practiced without cooperation between specialized researchers, even cooperation across different research groups concerning the workable placement of disciplinary boundaries.<sup>48</sup> Jamesian scientific assumptions are theoretical manifestations of such coordination in science. They are rational to adopt to the extent that they help researchers coordinate their efforts.

Just how is a regulative assumption supposed to foster intellectual cooperation? These assumptions effectively delineate disciplinary boundaries by identifying a field's proper object of inquiry. For instance, we have seen that one key assumption from the *Principles*' preface is that thoughts exist. But crucially, James later picks out five particular features of thoughts the psychologist must regard as "ultimate." One is that all thoughts appear banded together into one (or another) mental life (James 1890/1981, 220ff.). The bandedness of thought cannot, at least circa 1890, be empirically explained. But it is a feature of experience that a neighboring field (i.e., metaphysics) is eager to elucidate. So the psychologist's postulate amounts to an agreement to leave the explanation of this feature of experience to a neighboring field, in this case metaphysics.

Interestingly, "The Will to Believe" also discusses several regulative assumptions of science.<sup>49</sup> For instance, James says that in order for scientific inquiry to proceed, we must assume that the questions we pursue are actually answerable. But regulative assumptions like this cannot be directly justified by any purely rational considerations:

Our belief in truth itself, for instance, that there is a truth, and that our minds and it are made for each other—what is it but a passionate affirmation of desire, in which our social system backs us up? We want to

47. On the history of boundary disputes between psychology and philosophy during this era, see Wilson (1990), esp. chaps. 5 and 6; Bordogna (2008), esp. chap. 2. The notion of boundary disputes is originally due to Gieryn (1983).

48. I therefore cannot agree with Bordogna that James thinks the science of mind is a fundamentally interdisciplinary undertaking (see Bordogna 2008; Klein 2012). I do think Bordogna is right that James is deeply concerned with the overall architecture of the sciences, though, and her book performs a great service in highlighting this crucial aspect of James's thought.

49. Admittedly, James's full-blown account of regulative assumptions is at best gestured at in both "The Will to Believe" and "Is Life Worth Living?" Why only a gesture? At the time James published these essays, his views on scientific assumptions were widely known and widely disputed. In fact, he was forced to address worries about these criticisms in his presidential address to the American Psychological Association in 1894, just 2 years before he delivered the Will to Believe lecture (in "The Knowing of Things Together"; James 1895, 122–23). So he may have felt it unnecessary to rehearse the issue here.

have a truth; we want to believe that our experiments and studies and discussions must put us in a continually better and better position towards it; and on this line we agree to fight out our thinking lives. But if a pyrrhonic sceptic asks us *how we know* all this, can our logic find a reply? No! (James 1897/1979, 19; for similar arguments, see 28, 51, 96, 96 n. 3)

Science relies on the regulative assumption that there is a fact of the matter about whatever we are studying, a fact of the matter the human mind is capable of grasping. James also mentions “the uniformity of Nature,” saying that without this assumption “scientists cannot possibly go on” (19). Neither assumption can be antecedently verified.

The issue of regulative assumptions also comes up in connection with James’s account of empiricism’s two basic claims: (1) that we can know the truth but (2) that we cannot know that we know. On behalf of empiricism, James offers a brief argument for 2 from the history of widespread disagreement over first principles. What is interesting for our purposes is that James uses the Kantian watchword for regulative assumptions to characterize 1, calling it the central “Grenzbegriff” of empiricism, and thus of science itself (James 1897/1979, 23–24).<sup>50</sup>

What point is James making with his discussions of regulative assumptions in “The Will to Believe”? Is he simply amassing examples of propositions scientists must accept on faith? That could be right. But does that mean James thinks that when scientists adopt regulative assumptions this is the result of their facing some Will to Believe case? That seems more dubious, because he does not discuss regulative assumptions in connection with what I have called the essay’s central argument. So how does his discussion of regulative assumptions figure into his larger defense of religious faith, exactly?

We must keep in mind that “The Will to Believe” contains at least two distinct arguments that support religious belief. We have discussed the first—this is the argument that in Will to Believe cases we are permitted to allow belief to outstrip available evidence. But as Gail Kennedy once pointed out, James also advances the logically independent claim that sometimes one’s faith

50. He writes, “The much lauded objective evidence is never triumphantly there; it is a mere aspiration or *Grenzbegriff*, marking the infinitely remote ideal of our thinking life” (James 1897/1979, 23). He continues: “when as empiricists we give up the doctrine of objective certitude, we do not thereby give up the quest or hope of truth itself. We still pin our faith on its existence” (23). So empiricists reject the view that we can attain objective evidence in the here and now, but they retain as a *Grenzbegriff* the notion that we can find such evidence in the “infinitely remote” limit of inquiry, when we will finally gain “truth itself.” James also uses “Grenzbegriff” to describe another regulative assumption (6). Kant’s use of the word can be found at Kant (1781–87/1965, A255/B311).

that a fact will come to exist helps bring about that very fact (Kennedy 1958, 579–80). James's example of the mountain explorer whose only escape from a difficult situation is to jump a chasm memorably illustrates the latter claim (1897/1979, 33, 53). Whether the explorer clears the chasm safely is not causally independent of whether she has faith in her own leaping ability.

The doctrine that there are faith-dependent facts, as we might call them, actually provides a separate argument for the permissibility of religious belief. For James (peculiarly) suggests that the religious hypothesis might turn out to be faith dependent—in other words, whether the religious hypothesis turns out to be true might in some sense depend on whether that hypothesis is believed.<sup>51</sup>

This claim is perhaps theologically unusual, but what interests me is how it fits with James's overall reconciliationism. He sees the religious hypothesis as essentially involving a social relationship between God and a believer. And he argues that social coordination of any kind depends on regulative assumptions that are themselves faith-dependent facts (James 1897/1979, 29). For example, the fact of a marriage's long-term success is more likely to materialize if each spouse has faith in the other's loving feelings (28). Similarly, God's very existence is more likely to flourish if I have faith in him. And I take it this is why Peirce is reminded of "The Will to Believe" by James's discussion of psychology's regulative assumptions. Again, these assumptions are meant to help foster social coordination of intellectual labor (James 1890/1981, 214, 216).

Here is what the latter essay has to say about social coordination: "A social organism of any sort whatever, large or small, is what it is because each member proceeds to his own duty with a trust that the other members will simultaneously do theirs. Wherever a desired result is achieved by the cooperation of many independent persons, its existence as a fact is a pure consequence of the precursive faith in one another of those immediately concerned. A government, an army, a commercial system, a ship, a college, an athletic team, all exist on this condition, without which not only is nothing achieved, but nothing is even attempted" (James 1897/1979, 29). James offers the example of a trainload of strangers who can be robbed by a few organized bandits simply because only the latter will have a "precurative faith" that each can count on support from the others. A favorable outcome for the passengers would be more likely if each

51. This unusual idea comes out clearly in "Is Life Worth Living?" where James writes: "I confess that I do not see why the very existence of an invisible world may not in part depend on the personal response which any one of us may make to the religious appeal. God himself, in short, may draw vital strength and increase of very being from our fidelity" (1897/1979, 55; also see 98, 106–7). In other words, James apparently contends that faith in the religious hypothesis might also be permissible on the grounds that this hypothesis could turn out to be a faith-dependent fact.

acted on faith that others would support a resistance. He says this is an example where “a fact”—success at resisting the robbers—“cannot come at all unless a preliminary faith exists in its coming” (29).

Now there is a clear affinity between the discussions of social coordination in “The Will to Believe” and of the scientific division of labor in “A Plea for Psychology as a ‘Natural Science.’” In science, we must accept regulative assumptions about where one discipline ends and the next begins. And these assumptions can plausibly be regarded as faith-dependent facts. Whether a particular way of drawing a disciplinary boundary proves stable depends in part on whether the scientist on each side of the divide “proceeds to his own duty with a trust that the other members will simultaneously do theirs” (James 1897/1979, 29).

So I take James’s point in “The Will to Believe” not only to be that it is absurd to prohibit antecedent belief in a faith-dependent fact. His discussion of faith-dependent facts also bolsters (albeit implicitly) his therapeutic project of showing that one can accept religious faith without contradicting the standards of good scientific practice. As James sees it, good science requires accepting faith-dependent facts, in the form of regulative assumptions, ahead of the evidence. So the epistemic standards of science cannot contravene accepting the religious hypothesis—which he sees as a faith-dependent fact—ahead of the evidence except by a “singularly arbitrary caprice” (James 1897/1979, 76; see sec. 6 for more on this quotation).

Let us finally return to Peirce. His question 28 worry is in keeping with his old concern about James’s account of regulative assumptions. Peirce portrays science as an inherently social enterprise. But as we have seen, he is wary of James’s suggestion that such social coordination requires “uncritical” assumptions—Peirce does not think scientists are “banded together to repress any species of inquiry” (Peirce 1931–58, 8.60, 1891). Thus Peirce uses the phrase “too much ‘will to believe’” in connection with the *Principles*’ passage about regulative assumptions, it seems, because he sees the latter essay as expanding the account of the role of regulative assumptions in social coordination in roughly the manner I have suggested.

In fact, in the Cambridge lectures that attack “The Will to Believe” he repeats his old criticism of Jamesian regulative assumptions. Peirce rejects the “philosophical stratagem for cutting off inquiry [that] consists in maintaining that this, that, or the other element of science is basic, ultimate, independent of aught else, and utterly inexplicable” (1992–98, 2.49, 1898). Although here he does not name James as somebody who blocks inquiry in this fashion, the resonance with the *Nation* review is apparent. Peirce’s concern about such assumptions is that they risk blocking inquiry—an assumption held true come

what may cannot be improved in light of new evidence. This is why Peirce contends (dryly) that what we need is a “Will to Learn” not a “Will to Believe” (2.47, 1898).

## 6. Some Objections Considered

I now want to consider some potential objections to my reading. In order to establish what I take to be the reconciliationist aims of “The Will to Believe,” I have relied fairly heavily on reading that essay through the lens of “Is Life Worth Living?” A critic might point out that James offered even earlier versions of more or less the central Will to Believe argument and, thus, that we have no good reason to read that piece through the specific lens of “Is Life Worth Living?” The earlier versions come in several short reviews, plus two other essays that appear in the book *The Will to Believe*—“The Sentiment of Rationality” and “Reflex Action and Theism.”

But these pieces all show the same fundamental aim of searching for a way to reconcile science and religion. The earliest of these anticipations of “The Will to Believe” is James’s 1875 review of Balfour Stewart and Peter Tait’s *The Unseen Universe*. The review complains that the book “professes to have mediated between science and religion” but fails (James 1987, 293). The real reconciliation between the two is to come from granting (a very early version of) the Will to Believe argument.

And in the following year’s brief “Bain and Renouvier,” James considers science and religion’s seemingly incompatible views on determinism: “The ‘assumption’ of a fixed law in natural science is thus, according to this authority, an intellectual *postulate*, just as the assumption of an ultimate law of indetermination might be a moral postulate in treating of certain human deliberations. Is each assumption true in its sphere, or is determinism universal? Since no man can decide empirically, must one remain for ever uncertain, or shall one anticipate evidence and boldly choose one’s side?” (James 1987, 325). The scenario here is that science and morality appear to be incompatible—in this case, in their respective “assumptions” about free will. In subsequent passages, James then deploys Will to Believe–style reasoning not so much to argue that these two assumptions can be made logically consistent but rather to claim that scientific evidence at least does not require one to be a determinist—whatever one’s position in the free will debate, one can have only “extralogical considerations” as the basis for choosing sides, according to James.

And the two relevant essays in the *Will to Believe* volume show a similar concern with reconciling science and religion. “The Sentiment of Rationality” primarily aims to give a psychological account of what sorts of theories humans

tend to find rational. The Will to Believe–style argument comes in a section where James contends that only theoretical systems that provide a role for faith will (as a psychological matter of fact) seem rational to people. He claims that even “the scientific philosophers of the present day” contend that it is necessary that one have faith in the principle that the course of nature is uniform, suggesting that it is a “singularly arbitrary caprice” for such people to seek to restrict faith to this one principle (James 1897/1979, 76). On the strength of this example James contends that even when we do science “we cannot live or think at all without some degree of faith” (79). The discussion also brings up the potential suicide who despairs over the question of whether this is a moral universe (83).

“Reflex Action and Theism” was originally given as an address to an assembly of Unitarian ministers in 1881. James urges the ministers to insist “that no fact of sense or result of science must be left out in the religious synthesis” (1897/1979, 105). Indeed, to help them make such a synthesis he argues that the reflex arc theory in psychology entails the existence of God.

And I note that James’s pamphlet *Human Immortality*, long published in one volume with *The Will to Believe*, also addresses the problem of people trained in science who feel a conflict with religious principles (1897/1956). My purpose here is not to evaluate these other discussions but rather to underline how central reconciliationist concerns are to James and to show that these concerns are especially likely to appear when he is deploying arguments that prefigure “The Will to Believe.”

Another potential objection comes from Hollinger’s reading, which I cited at the outset. Hollinger argues that James’s essay offers a “separate spheres” defense of religious faith in the manner of Galileo. This separate-spheres view is supposed to contrast with Clifford’s unitary epistemology according to which one set of doxastic standards is appropriate for both science and religion (and so much the worse for religion). I obviously cannot accept this position since on my reading James’s debate with Clifford is not over whether religion should be excused from scientific rationality. Both men advocate a unitary epistemology, in my view. The debate is about whether the epistemic standards of science are compatible with religious faith.

Hollinger offers two main pieces of evidence to support his Galilean (i.e., separate-spheres) reading of “The Will to Believe.” The first has to do with that essay’s distinction between beliefs that can be decided “on intellectual grounds” and those that cannot. Hollinger thinks this is supposed to mark off a distinction between two epistemologically distinct spheres, those of science and religion (2013, 112–13, 128–29). But I take myself to have shown that “The Will to Believe” claims that science itself makes extensive use of beliefs—hypotheses

and regulative assumptions in particular—that are not and cannot be supported by evidence at the time the inquirer is forced to adopt them (James 1897/1979, 19, 25–26). If my discussion has been convincing, then James cannot be cashing out the divide between science and religion by claiming that only one side employs nonintellectual beliefs.

Hollinger’s second bit of evidence for his reading is James’s claim in “The Sentiment of Rationality” to be trying “to mark out distinctively the questions which fall within faith’s sphere” (James 1897/1979, 89; quoted at Hollinger 2013, 128). But this is the same sort of language James uses in discussing the need for a division of labor across scientific disciplines such as psychology and biology, as I have just discussed. For James, different disciplines ask different questions; it does not follow that different epistemologies govern each discipline.<sup>52</sup>

To drive this point home, consider one more passage from “A Plea for Psychology as a ‘Natural Science’”: “What is a natural science, to begin with? It is a mere fragment of truth broken out from the whole mass of it for the sake of practical effectiveness exclusively. *Divide et impera*. Every special science, in order to get at its own particulars at all, must make a number of convenient assumptions and decline to be responsible for questions which the human mind will continue to ask about them” (James 1983, 271). If the special sciences employ incompatible epistemologies it does not make sense to talk about “the” single mass of truths out of which they all break a chunk. Notice also that James explicitly discusses epistemological standards that apply to “every special science” here. I grant that this passage does not discuss religion. But my point is that James had long used a “different questions” rhetoric in discussing the different special sciences, even while expressly advocating common epistemic standards. So the mere fact that in “The Sentiment of Rationality” he suggests that religion has a unique set of “questions” does not establish that he thinks religion has its own epistemic standards.

Now, Hollinger argues that James actually abandons the separate-spheres strategy almost immediately after writing “The Will to Believe,” citing the preface to *The Will to Believe* collection, and I accept his reading of the preface (Hollinger 2013, 119, 129). Anticipating the worry that there is no need to

52. Hollinger also cites James’s claim in “The Sentiment from Rationality” that “belief (as measured by action) . . . does and must continually outstrip scientific evidence” (James 1897/1979, 80; partially quoted at Hollinger [2013], 127). But this remark does not commit James to separate epistemological spheres, either. He does not say that in science people are only licensed to believe on the basis of scientific evidence. His point is that we cannot avoid sometimes allowing belief to outrun evidence—scientific evidence, if you like—even in science itself. This passage does create apparent difficulties for the evidentialist reader, however. For another problem with the Galilean reading of “Sentiment,” see n. 55, below.

give a philosophic defense of religion in an age of science, James writes that a critic might say that in “this age of toleration, no scientist will ever try actively to interfere with our religious faith, provided we enjoy it quietly” (1897/1979, 8). But he goes on to reject this “live and let live” strategy,<sup>53</sup> precisely because the same epistemic considerations must govern both science and religion: “The truest scientific hypothesis is that which, as we say, ‘works’ best; and it can be no otherwise with religious hypotheses” (James 1897/1979, 8). As Hollinger puts it, the preface “celebrates the . . . ‘survival of the fittest’ competition of religious as well as scientific ideas” (2013, 129). In other words, by the time he writes the preface of *The Will to Believe*, James has come to see science and religion as both subject to the same epistemic standards, in Hollinger’s view.

I agree that the preface clearly repudiates the Galilean approach. But I do not think this marks any change in attitude. The problem is that even if one sets aside “The Will to Believe” (originally published in 1896), there are a host of earlier passages that (a) directly contend that science and religion are governed by the same epistemic standards or (b) suggest that it is important to show that science and religion are governed by the same epistemic standards or (c) contend that in special cases one is sometimes forced to accept propositions in science without good evidence.<sup>54</sup> To take a few examples, these reconciliationist themes appear in James’s 1878 “Remarks on Spencer’s Definition of Mind as Correspondence,” his 1881 “Reflex Action and Theism,” his 1882 “Rational Activity and Faith” (in passages incorporated into “The Sentiment of Rationality” in *The Will to Believe*),<sup>55</sup> his 1890 *Principles of Psychology*, and his 1895 “Is Life Worth Living?” (James 1890/1981, 1232–33 [c]; 1897/1979, 41–42 [b], 51 [c], 76 [c], 79 [a], 105–6 [b]; 1978, 21 [c]).

So even if one were inclined to resist the details of my “Will to Believe” reading, it seems very doubtful that James would have advanced a Galilean defense of religion during the period when he would have been writing that essay. One would have to assume that from at least 1878 through 1895 James was hostile to the Galilean defense, then had a brief conversion sometime be-

53. This is Hollinger’s phrase (2013, 128).

54. Recall that Hollinger cites the distinction between options that can and cannot be decided on intellectual grounds in “The Will to Believe” as a key basis for his separate-spheres reading. If James thinks both scientific and religious options must sometimes be decided on nonintellectual grounds, he cannot be using this distinction to tease apart two epistemologically different spheres.

55. This address was delivered to the Harvard Philosophical Club in 1880. In that year the *Harvard Echo* printed a report that describes the lecture this way: Clifford’s repudiation of faith “was criticized and shown to be inconsistent with his own habitual practice, as well as with that of all scientific theorists” (quoted at James 1897/1979, 326–27).

tween 1895 and 1896 when he was composing “The Will to Believe,” and then repudiated Galileanism again in 1896 and thereafter.<sup>56</sup> The more plausible conclusion is that in “The Will to Believe,” as in so many works both before and after that essay, James advocates a unitary account of scientific and religious belief.

Let me make a distinction to head off a potential confusion, here. Above I claimed that “The Will to Believe” is written for a rather narrow audience—for those “academic audiences, already fed on science” who suffer from “timorous *abulia* in the religious field” (James 1897/1979, 7). Perhaps James thinks that sort of audience employs a scientific epistemology, while some other audience employs a separate, more purely religious epistemology. And then maybe James is, after all, acknowledging the existence of separate epistemic spheres.

But one must distinguish between a *universal defense of religious faith* (an argument to show that religious faith is permissible for anybody, anywhere, and at any time) and a *unitary account of religious and scientific belief* (an argument to show that religious faith is compatible with doxastic standards appropriate to natural science). I deny that James offers a universal defense of religious faith; he is only concerned to defend the permissibility of religious belief for scientifically minded Victorians. But for this audience his strategy is to bring science and religion under the same epistemic standards. In other words, James offers a unitary account of religious and scientific belief without pretending to give a universal defense of religion, in my view.

Another possible objection might come from commentators like Andrew Jewett. He claims that James has a “pluralistic worldview” that embraces “a multitude of interpretive methods” (Jewett 2012, 93). To support his interpretation Jewett quotes James’s claim that “common sense is better for one sphere of life, science for another, philosophic criticism for a third; but whether either be truer absolutely, Heaven only knows” (James 1907/1975, 93). Jewett does not discuss “The Will to Believe,” but still readers may wonder how this sort of line squares with my unitary James.<sup>57</sup>

First, compare the *Pragmatism* passage with a similar line from Peirce:

It is a damnable absurdity indeed to say that one thing is true in theology and another in science. But it is perfectly true that the belief which I shall

56. I have not been able to find a record of when James wrote the preface to *The Will to Believe*, but he registered the book’s copyright on December 23, 1896 (see James 1897/1979, 307).

57. Note that Hollinger and I both agree that in *Pragmatism* James offers a unitary account of scientific and religious belief—we are not divided on this issue. So the objection I am developing on Jewett’s behalf is not one that Hollinger would raise.

do well to embrace in my practical affairs, such as my religion, may not accord with the proposition which a sound scientific method requires me provisionally to adopt at this stage of my investigation. Later, both the one proposition and the other may very likely be modified; but how, or which comes nearer to the ultimate conclusion, not being a prophet or a magician, I cannot yet say. (1931–58, 6.216, 1898)

Peirce argues that religious and scientific beliefs may conflict in the short term, but it is a “damnable absurdity” to say that each sphere will have conflicting truths in the final reckoning. Modulo his insistence on characterizing the propositional attitude appropriate to science as “adopting” rather than “believing,” I read the quoted passage from *Pragmatism* as making fundamentally the same point.

The two sentences before the passage Jewett quotes show that like Peirce, James is claiming that right now we have no way of considering these various “types of thinking” and “telling which is the more absolutely true” (James 1907/1975, 93). Thus, I take “*heaven only knows*” which *type of thought is preferable* to be a colorful shorthand for “we will only come to know in the ideal limit of inquiry.” Moreover, on the prior page James characterizes common sense, science, and philosophy as three main “levels, stages or types of thought about the world we live in”—he does not say that different epistemic standards are appropriate to each. Again, James has a long history of suggesting that different disciplines ask different questions. But it does not follow that each has different epistemic standards, as I have already argued. Similarly, the existence of different “types of thought” does not entail the existence of different epistemic standards.

Finally, what about Misak’s charge that James is committed to some form of epistemological nihilism? Recall that she thinks James is stretching the concept of *evidence* to cover the subjective satisfaction of the believer. She supports that view by appealing to the fact that James commonly talks about the truth or falsity of the religious hypothesis, since truth claims may only be advanced on the basis of evidence (Misak 2013, 66).

We are now in a position to see the evidentialist reader’s mistake. I have shown that “The Will to Believe” draws a distinction between the context of discovery—where passions can play a helpful role in framing and researching a hypothesis—and the context of justification, where we must “keep weighing reasons *pro et contra* with an indifferent hand” (James 1897/1979, 26). The worry about epistemological nihilism is that “The Will to Believe” advocates a strong role for the passions in the context of justifying a hypothesis.

In fact, “The Will to Believe” clearly rejects this view, instead advocating a role for the passions only in the context of framing and researching a hypothesis.<sup>58</sup>

Misak actually addresses the discovery/justification distinction in connection with the pragmatists’ relationship to Reichenbach, and her remarks are instructive. For Reichenbach, “the politics, sociology, and psychology of how scientists come to their decisions are part of the project of discovery, not justification. Notice that this is a move away from one of the very fundamentals of pragmatism: all pragmatists take as a fundamental insight the idea that the justification of beliefs and theories cannot be fenced off from human elements” (Misak 2013, 160). I think James is closer to Reichenbach than Misak thinks, at least in one crucial respect. “The Will to Believe” is quite explicit in maintaining that justification must be “fenced off from human elements.” I am not sure how else to read his insistence that justification requires “weighing reasons *pro et contra* with an indifferent hand” or his oft-repeated distinction between an idea’s *verification*, which “is the cause of [its] . . . *preservation*,” and an idea’s “genesis,” which “is strictly akin to . . . flashes of poetry and sallies of wit” (James 1897/1979, 26; 1890/1981, 1232–33). I have argued that this is a distinction James owes to Comte, which helps explain the connection with Reichenbach. If Peirce rejects the distinction, then maybe it is he and not James who is vulnerable to charges of pernicious subjectivism.

James does indeed think something cannot be “fenced off from human elements,” but that something is belief, not justification. Here James is also clear: “belief (as measured by action) . . . does and must continually outstrip scientific evidence” (1897/1979, 80).<sup>59</sup> Again, James’s point is that the set of permissible beliefs, even in science, is larger than the set of beliefs justified by evidence (justified by “scientific evidence,” as he puts it here). This does not

58. This distinction between the contexts of discovery and justification bears on another rival reading, according to which “The Will to Believe” advocates a kind of metaepistemological expressivism. James is supposed to alternate between two distinct perspectives in that essay—the perspective of the theorist attempting to explain judgments of cognitive obligation and the perspective of the participant playing the game of making judgments of obligation (Kasser and Shah 2006). When James writes about the quest for truth as the quest to gratify “an inner need,” he is speaking from the first point of view, advocating a kind of expressivism about cognitive obligation, on this reading. When he advocates the doxastic strategy of maximizing true beliefs rather than minimizing errors, he is speaking from the second perspective (James 1897/1979, 24). This is a tempting reading but one that I must ultimately reject because it does not take account of James’s distinction between discovery and justification. Again, in the context of justification he says that we must “keep weighing reasons *pro et contra* with an indifferent hand”—and I take “indifferent” to have the force of “dispassionate” (26). So I do not see how James could be advocating a thoroughgoing metaepistemological expressivism that would cover not just the context of discovery but the context of justification as well.

59. For more on this passage, see n. 52.

require him to reject the justification/discovery distinction, although I think it does encourage us to reject the evidentialist reading of “The Will to Believe.”

## 7. Final Thoughts

Although I have taken issue with Hollinger’s account of “The Will to Believe,” I am sympathetic with his larger portrait of the history of pragmatism. In a seminal essay, he writes that pragmatists “were preoccupied with the place of science in modern life. . . . The writings on meaning, truth, goodness, and other basic philosophical issues on account of which Peirce, James, and Dewey became known as pragmatists were the apex of a larger intellectual edifice constructed by these three men and their followers in response not only to the great epistemological and metaphysical questions of post-Kantian thought, but also to the desire for a way of life consistent with what they and their contemporaries variously perceived as the implications of modern science” (Hollinger 1980, 92–93). In the century that has passed since its heyday, philosophers have focused tightly on pragmatism’s marquee theories of meaning and of truth. But Hollinger is exactly right that these more purely epistemological views sit atop an articulated substrata of deliberation about science and its role in modern life. There are epistemological divisions among the classic pragmatists, to be sure. But the divisions are typically created by fault lines in the substrata, and when we ignore the fault lines the contours of the epistemological surface become inexplicable. In what precedes I have tried to make this case, at any rate, vis à vis “The Will to Believe.”

The fight between Peirce and James over that essay is not (at least in the first instance) between defenders and opponents of truth and objectivity. It is a fight over James’s radical Comtian methodology, for one thing—truly rigorous positivism, he contends, permits and even encourages a robust role for the passions in the context of framing and researching hypotheses. Peirce is eager to draw a sharp contrast between his own account of abduction and orthodox positivist treatments of hypotheses.<sup>60</sup> Some of his opposition to “The Will to Believe” is best understood as a chapter in this larger struggle over scientific hypotheses.

Peirce also opposes the account of regulative assumptions he finds in “The Will to Believe,” and this disagreement has roots in an older conversation be-

60. For discussions of Peirce’s general opposition to positivism, see Fairbanks (1964, 1970). Peirce does see Comte’s requirement that hypotheses be “verifiable” to be an important precursor to pragmatism, but he rejects Comte’s gloss on “verifiable” as that which is directly observable; on this point, see Buchler (1939, 121–23, 128–29).

tween these men about scientific methodology, too. The disagreement first comes to a head in Peirce's critical review of the *Principles* (see Klein 2008). These concerns are mirrored in his later attacks on "The Will to Believe." So I find it misleading to suggest, as Misak does, that "The Will to Believe" was the site of a direct clash between competing pragmatic epistemologies.

However, recall that Misak advances this two-pragmatic-epistemologies narrative to serve a larger historical point—that analytic philosophy merged with pragmatism and did not eclipse it. I think this larger point can be salvaged even if we abandon the notion that what analytic philosophy took up was one and not the other of these allegedly competing epistemologies.<sup>61</sup>

In fact, attending to the pragmatists' extensive deliberation about scientific methodology suggests a deeper resonance between the two traditions. The affinity between these groups has less to do with any shared epistemological doctrine, I submit, and everything to do with a shared commitment to letting philosophical principles emerge from a direct engagement with science.

Alan Richardson and Michael Friedman have lately canvassed nineteenth- and early twentieth-century attempts to create a revolutionary "scientific philosophy" (Richardson 1997; Friedman 2001). They portray the analytic tradition as developing in this milieu. One upshot of Hollinger's historical work (and of the current essay) is that pragmatism shares this lineage. True, figures like James, Peirce, Dewey, Carnap, and Russell disagree in myriad ways about what it means to make philosophy more "scientific." But I suggest that they all see philosophy's job as reckoning with the significance of the latest scientific developments for modern life. Thus Peirce's (and Carnap's and Russell's) heavy emphasis on then-recent developments in formal logic can fruitfully be seen as central to one form of scientific philosophy—but we cannot eliminate from this history philosophers like James and Dewey (and for that matter Mach and Helmholtz) who took psychology and biology as major scientific touchstones.

Misak is right to see a division between Peirce and more recent neopragmatists like Rorty. But the division that matters is methodological, not epistemological—unlike Rorty, Peirce's philosophical deliberation typically grows out of his extensive reflection on scientific methodology. But if this is the divide, then James and Peirce are on the same side.

61. Misak discusses (and rightly rejects) the old vision of analytic philosophy as having eclipsed pragmatism—a vision shared by Rorty as well as many antipragmatists (see Misak 2013, 155–57 and throughout). Other challenges to this received view can be found in Richardson (2002, 2003), Reisch (2005), and Talisse (2007), 131; cf. Giere (1996).

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