

Introduction

Why We Should Wonder about the Rise of Empiricism

1. THE MAIN PUZZLE

“Empiricism” denotes both a historical tradition and a set of substantive philosophical theses. We usually identify the *tradition* by citing the founding work of Locke, Berkeley, and Hume, and perhaps by contrasting these figures with Descartes, Spinoza, and Leibniz. And we usually recognize a family of characteristically empiricist *theses* that concern either knowledge or meaning. In particular, empiricists typically hold that experience is in some sense the source of all genuine knowledge, of all legitimate meaning, or both.

What is the relationship between the tradition and the set of theses, though? Here are two possibilities that come to mind.

First, it may be that the empiricist tradition is composed of a group of 17th and 18th century philosophers—Locke, Berkeley, and Hume—who self-consciously banded together to defend these theses. Or second, perhaps the theses are simply what posterity has deemed this group’s most important legacy.

Neither answer is really satisfactory, for reasons to which I will return. In fact, the concept of an empiricist tradition first played a prominent role in English-language philosophy only in the late 19th century. But what tied Locke, Berkeley, and Hume into one tradition was not then thought to be a shared epistemology, at least not in the first instance. These three were grouped together because they were thought to be philosophical forefathers of empirical psychology.

In the 1870s and ’80s, a lively debate emerged over the idea that the mind is the sort of thing that can be studied scientifically. On one side were neo-Kantian and -Hegelian idealists like Edward Caird (1835-1908), F. H. Bradley (1846-1924), and especially T. H. Green (1836-1882). These figures often criticized the very idea of a science of mind. On the other side were philosopher-psychologists like Alexander Bain

(1818-1903), G. Croom Robertson (1842-1892), and especially William James (1842-1910). This dissertation is a historical and philosophical analysis of their debate.

In Part One, I will show that together these groups helped construct the notion of a British empiricist tradition. The groups developed this historical-philosophical concept as a way to encapsulate the myriad of issues at stake in their debate over psychology. For instance, one of psychology's contested promises was that it might provide a scientific basis for philosophical progress. In this vein, Locke, Berkeley, and Hume were portrayed as having developed a metaphysics in which the empirical study of experience played a starring role. Reality itself was to be associated with what is passively received by the mind, or in other words with sensation. In turn, sensation was to be studied via scientific methods, with a special reliance on introspective observation. Late 19th-century idealists were severely critical of this entire metaphysical picture. Others defended the notion that the fledgling science of mind would provide a route to more rigorous, more scientific philosophy. It was this latter group who first donned the mantle of empiricism.

In Part Two, I will critically investigate the case against psychology. Idealists argued that Lockean metaphysics—the metaphysics with which psychology was enmeshed—had long been discredited. Specifically, Hume had reduced Lockean metaphysics to absurdity by showing that it entails skepticism. But late-19th century psychologists were blithely ignoring the lessons of history, idealists argued. Since mental science was inextricable from a broadly Lockean metaphysics, empirical psychology should be discarded as an absurd enterprise as well. To put the point in Hegelian terms, idealists accused psychologists of working inside a dialectical stage of history that Hume had reduced to absurdity almost a hundred and fifty years earlier.

In Part Three I will explore William James's response. Those like James who wanted to advance psychology towards becoming a legitimate science were forced to pursue two projects simultaneously. On one hand, idealists were very publicly arguing, on a priori grounds, that mental science was an absurdity. So psychologists had to engage these metaphysical attacks. But on the other, no enterprise could pretend to have scientific legitimacy unless it produced empirical successes. So psychologists also

had to generate empirical theories that could actually explain some characteristics of experience, particularly of perception. In other words, they had to practice science and philosophy simultaneously.

James's way of striking this balance was particularly interesting. To evade idealist criticisms of mental science, he abandoned key pieces of Lockean metaphysics that had been prominent in the then-dominant school of associationist psychology. For instance, he abandoned the notion that reality is associated with passively-registered sensations. He also abandoned the notion that all ideas are either simple, or are complex compounds built from simple ideas. Instead, James held that experience was ultimately a continuous stream, not a collection of discrete ideas. He produced experimental results that supported his contention.

This move would have profound implications for both philosophy and psychology. In Chapter Five, I show that James's "stream of thought," as he called it, functioned to delimit a proper sphere for the scientific investigation of mind, thereby helping launch psychology as a legitimate science. In Chapters Two and Four and in Appendix III, I show that the stream of thought also provided a scientific basis for a new philosophical empiricism, an empiricism that emphasized James's empirical psychology rather than the older, Lockean conception of mind. This form of empiricism flourished especially in the United States, though it has been largely forgotten for reasons I will consider in this introduction.



My title might seem purposefully provocative, since it suggests that "the rise of empiricism" happened only in the late 19th century. But consider the two more obvious possibilities I mentioned (*see above*, p.1) for connecting Locke, Berkeley, and Hume with the theses we now think of as comprising empiricist epistemology.

The first possibility was that these three figures self-consciously banded together to pursue a common epistemological project. Now, it is true that in professing empiricism, many 20th-century philosophers meant to espouse as a goal the justification or application of some theses like those I cited in my opening paragraph. But the same cannot be said of the alleged founders of this tradition. Locke, Berkeley, and Hume did

not use the word “empiricism” or any of its variants, as we will see in Chapter One. In fact, these figures did not see themselves as allies in an epistemological or meta-semantic tradition, under any name. And they did not see themselves as united in a philosophical struggle against a rival school on the Continent. So we cannot regard the empiricist tradition, at least in the 17th and 18th centuries, as composed of philosophers who consciously banded together to pursue a common epistemological or meta-semantic agenda.

No, we constructed a tradition of Locke, Berkeley, and Hume in retrospect. So the second possibility seems at least closer to the truth. At some point, philosophers apparently came to see the most important legacy of these three figures as involving the epistemological and semantic theses I have mentioned.

But this is not yet a satisfying answer. Why did we begin looking for a common legacy in just these figures, rather than in any other group of competent philosophers of the era? And why did we begin to see a distinct epistemology, as opposed to a metaphysics, an ethics, an aesthetics, or a political philosophy, as *the* characteristic contribution of these three?

I believe these two questions must be given different answers. In this dissertation, I will pay close attention to the first question, but I will only be able to speculate about the second. In the late 19th century as now, the canonical figures in the empiricist tradition were thought to be Locke, Berkeley, and Hume. However, these figures were grouped together not because of a shared epistemology, but because they held that a “science of man” (as Hume called it)¹ provided the key to progress in philosophy. We will see that in the late 19th-century at least, the most important and controversial part of this science was the part dedicated to studying the mind. That is, the most important part was empirical psychology, or “mental science” as I am also calling it (following late 19th-century usage).

¹ Hume used this expression at, for example, (THN, xv-xvi). This was the aspect of Hume’s work that 19th century philosophers took to be characteristic of the empiricist tradition. Recall that Hume’s *Treatise of Human Nature* bears this subtitle: *Being An Attempt to introduce the experimental Method of Reasoning into Moral Subjects*. As (De Pierris 2002) has argued, the “experimental method” in question is meant to be the method of Newtonian science.

At the end of Chapter Five, I will propose a hypothesis about the second question, though I leave the task of really defending it to future research. James and his allies were remarkably successful at setting psychology on a path to scientific legitimacy. But they were less successful at building an enduring community of empiricist philosophers who would seek to put the latest in mental science to philosophical use. The chief problem was that as psychology became more scientific, it also became more specialized. Before long, professional philosophers would lack the training needed to make sense of the new psychology. Among empiricists at least, I will suggest that the eventual emphasis on epistemology resulted from the ensuing loss of contact with psychology. Philosophers had to find new questions they could pursue in relative isolation from empirical research about the mind. What they came up with was epistemology for its own sake, rather than epistemology in service of a more scientific worldview.

2. THE PUZZLE'S SIGNIFICANCE

So if successful, this dissertation will help solve the puzzle of how and why English-speaking philosophers began using the concept of empiricism. This puzzle is significant for at least two reasons that may not be obvious. First, a good solution stands to lessen a gap in our understanding of the history of analytic philosophy and of logical positivism.² And second, a good solution—my solution, at any rate—calls attention to an important but relatively neglected topic in the philosophy of science: how fledgling fields like psychology gain scientific legitimacy. In this section, I will briefly consider each of these points in turn.



J. S. Mill, on some accounts the last of the classic empiricists, died in 1873. Like the other canonical figures in this tradition, Mill did not himself use the concept of empiricism. About a half century later, logical positivism and (what we now call)

² I will only use the phrase “analytic philosophy” to refer to the British tradition of which Russell and Moore are generally regarded as founders. I will not use the phrase in its wider sense, as an umbrella term that also covers logical positivists like Carnap and Reichenbach.

analytic philosophy began to dominate the English-language scene. These groups united under the flag of empiricism. But how empiricism rose to such prominence during the interim remains a vexed question.

The long-held view had been that logical positivism and analytic philosophy were both self-consciously designed as part of the empiricist tradition, where “empiricist tradition” is understood as an epistemological or meta-semantic movement centering around Locke, Berkeley, and Hume. But a raft of recent scholarship casts this view into serious doubt. A “revisionist”³ literature instead emphasizes the debt founding figures of positivism⁴ and analytic philosophy owe to neo-Kantians. Contrary to received wisdom, early figures of these two movements were often *hostile* towards positions they regarded as forms of empiricism.

For instance, an older reading holds that Carnap’s 1928 *Der logische Aufbau der Welt* was a characteristically “empiricist” attempt to set science on secure epistemic footing. Carnap’s alleged method was to reduce scientific theories to the allegedly incorrigible realm of given experience. More recently, Michael Friedman and Alan Richardson have argued that the *Aufbau* is better read as a Kant-flavored attempt to account for the objectivity of scientific knowledge. Far from doubting the security of science, they argue, Carnap actually began with the assumption that science produces objective knowledge. Carnap’s question was not whether, but *how* this objectivity is possible (Friedman 1999; Richardson 1998).

To be sure, such research has shed new light not just on Carnap, but also on Frege, Moore, Russell, Schlick, and Reichenbach’s respective philosophical development.⁵

³ I follow Gerrard in using this phrase, at (Gerrard 2002, 42).

⁴ Throughout this dissertation, I will use “positivism” as shorthand for “logical positivism.” I will have no occasion to refer to the older, 19th century positivism often associated with August Comte.

⁵ Examples of the revisionist literature I have in mind are, on Carnap, Reichenbach, and Schlick: (Friedman 1999; Gower 2000; Richardson 1998); cf. (Oberdan 1996); on Russell and Moore: (Baldwin 1984; Gerrard 2002; Hylton 1990); on Frege: (Gabriel 2002; Kitcher 1979; Sluga 1980; Weiner 1990). Four examples of edited volumes that have collected this sort of revisionist work are: (Floyd and Shieh 2001; Giere and Richardson 1996; Reck 2002; Tait 1997). Alan Richardson gives a helpful set of references to such work at (Richardson 1998, 2-3). Many of these seek to renew the reputation of positivism by downplaying the role of the

But the research has quietly raised a new question about the rise to dominance of logical positivism and analytic philosophy. We now ought to wonder why empiricism should *ever* have emerged as a unifying commitment of these movements. Thus, when I ask what accounts for the rise of empiricism in English-language philosophy, I am thinking especially of empiricism as it has long been associated with figures like those I mentioned at the start of this paragraph.

Here is one prominent hypothesis about how positivists came to be associated with empiricism. A. J. Ayer's *Language, Truth, and Logic* (Ayer 1936) is sometimes cited as an important source of empiricist interpretations of logical positivism (e.g., Friedman 1999, xiv). Relatively speaking, 1936 is a late date for a new characteristic to emerge as central to logical positivism. Many of the canonical projects associated with positivism had been developed in Germany and Austria during the 1910s and '20s.⁶ So the publication of Ayer's book is sometimes taken roughly to demarcate an earlier period, when positivists were more engaged with the neo-Kantianism of central Europe, from a later period, when their work began to be repackaged as a form of empiricism.

This hypothesis is insightful, but it only provides the start of an answer to my question. If empiricism played just a minimal role in the *early* projects, why should Ayer's peculiar characterization have caught fire in the mid-1930s? Why should this characterization have seemed so attractive it could be used to consolidate an entire philosophical movement, especially given that the movement had been on firm, non-empiricist footing for over a decade?

verification principle in early Vienna Circle work, and by emphasizing a Kantian influence instead. Cheryl Misak takes a different approach, portraying verificationism as a worthy if often misunderstood idea that underpins not just positivism, but pragmatism, some feminism, and even self-consciously anti-positivist epistemologies like that advanced by Rorty (Misak 1995, ix-xvi, 193-200).

⁶ For example, in 1917 Schlick published (Schlick 1917/1920) and was then just finishing his (Schlick 1918/1985); see (Friedman 1999, 24). In the 1920s came (Reichenbach 1920/1965; Reichenbach 1924/1969; Reichenbach 1928/1958). Carnap then published (Carnap 1929/1967). In this same year, the Vienna Circle manifesto appeared (Hahn, Carnap, and Neurath 1929/1996).

During the 1930s, no doubt, some founding figures may have been moving for their own philosophical reasons towards positions we may wish to describe as more overt empiricisms. So part of the answer may well involve theoretical exigencies internal to the development of logical positivism, or perhaps Russell's project.

But I believe a full answer must also take account of the disproportionate popularity of empiricism in the United States. After all, the 1930s was a decade distinguished by more than just a shift towards empiricism, for positivists. It was also a decade when leading members were fleeing the rise of National Socialism on the Continent. Some ended up in Britain, but most ended up in the United States.⁷ A full accounting of logical positivism's shifting identity in the 1930s must pay heed to the impact of its great migration.⁸

Specifically, I submit that we cannot understand the many ways in which positivism changed during this period unless we pay attention to that movement's constructive interaction with empiricist-inflected philosophy in the American 1930s.

⁷ In 1930, Herbert Feigl immigrated to the United States. Then between 1935 and 1939, all of the following found their way to America as well: Rudolf Carnap, Karl Menger, Carl Hempel, Hans Reichenbach, Felix Kaufman, Gustav Bergmann, Philipp Frank, Kurt Gödel, and Edgar Zilsel. Perhaps the most important factor in shifting the geographical center of logical positivism to the United States was Carnap and Charles Morris' work organizing and publishing the *International Encyclopedia of Unified Science* at Chicago. See (Reisch 2005, 8-12).

⁸ Various pieces of a story about how logical positivism changed during the 1930s, particularly in its treatment of empiricism, can be found in (Giere 1996, 341-343; Richardson 1996). There have also been some recent attempts to understand the development of logical positivism in America more generally. See (De Waal 2005, Chapter Nine; Hardcastle and Richardson 2003; Houser 2002; McCumber 2001; Reisch 2002; Reisch 2005; Richardson 2002a; Richardson 2003). Many of these authors are on the right track, but most do not take up the issue of how *older* traditions in American philosophy affected positivism upon its arrival. Those that do (e.g., De Waal and Houser) focus on Charles Morris, a devotee of C. S. Peirce's pragmatism and the chief American contact for the Unity of Science movement. On the history of scientific philosophy in the United States leading up to 1930, see (Wilson 1990; Wilson 1995). The older of these is a book that focuses on turn-of-the-20th-century scientific philosophy in the United States, especially as it grew out of interactions between psychology and philosophy. The more recent Wilson piece is a gem of an article that extends the analysis through the 1930s, although it gives Peirce and Dewey more credit than James for creating a scientific philosophy in the United States (e.g., at p. 123).

Given positivists' well-known struggles to find employment in the United States,⁹ it would be surprising to find that they did *not* try to adapt their philosophical projects to be more intelligible, perhaps even more palatable, to hoped-for audiences in North America.

It is difficult to establish a causal relationship, rather than just a temporal correlation, between positivism's geographic shift to the United States and its philosophic shift towards empiricism. Here and in Appendix III, I will merely offer suggestive evidence of a causal influence.

Empiricism's fate in North America and in Europe diverged sharply after the 1890s. Revisionist historians agree that idealist movements like those I will consider in this dissertation were widely influential across Europe.¹⁰ In the wake of these

⁹ With squinted eyes, some may portray the American 1930s as a place where European Jews were openly welcomed, but this is a serious distortion. Many Jewish academics driven from Europe by the Nazis were viewed suspiciously by American universities, as well. Consider the case of Hans Reichenbach, who taught physics at the University of Berlin until his dismissal in the fall of 1933. Reichenbach had failed to meet Nazi criteria for pure Aryan-ness, as his paternal grandparents were Jewish. Reichenbach fled to Istanbul, where he secured a five-year teaching contract. Eventually dissatisfied with the position, he pursued job opportunities in the United States through his extensive network of correspondents (Traiger 1984).

As he wrote the following letter to Charles Morris, Reichenbach had just learned that he would not be seriously considered for a job at Princeton, despite the support of Einstein who was already installed at the Institute for Advanced Study. Reichenbach's problem, in the United States as in Germany, was again his ethnic heritage. In a letter dated September 7, 1936, Reichenbach wrote these painful words:

... What suppresses [sic] me most is that it is antisemitism which excludes me now from the U.S.A. Carnap wrote me details about Princeton. This is now Hitler's success: instead of producing a general feeling of nauseousness, in civilised countries, against antisemitism, Hitler has succeeded in making antisemitism outside Germany even stronger than before. (CMP; correspondence, box 1; quoted by permission)

The letter is a stirring reminder of the serious obstacles positivists faced in finding jobs in the United States.

¹⁰ There is broad agreement on this point in the literature I cited in fn. 5, *above*. By "idealist movements like those I consider," I refer to neo-Kantian and -Hegelian movements sweeping across not just the United Kingdom, but across France, Germany, and what is now Austria as well. French neo-Kantians like Charles Renouvier and François Pillon (James dedicated the *Principles* to the latter) have not lately received as much attention as they deserve, compared to the German and British movements. On German neo-Kantianism, see *below*, fn. 11.

criticisms, Europeans who founded positivism and analytic philosophy left empiricism all but for dead.

True, Russell and Moore famously revolted against their idealist mentors at the turn of the 20th century. But they did not thereby take refuge in empiricism. Peter Hylton calls it “perhaps the most striking distortion” that Russell was both “influenced by the British empiricist philosophers (especially Hume) and ... himself an Empiricist.” Hylton cites Ayer and D. F. Pears as particularly responsible for this caricature (Hylton 1990, 11). To a greater extent than Moore, Russell *would* eventually move towards a recognizable empiricism, but this was not until much later (Baldwin 1984, 357-358; Hylton 1990, 22).

And Carnap, to take an important example from the German-speaking world, studied with Bruno Bauch and Gottlob Frege. All three of these figures were deeply influenced by neo-Kantianism, particularly in its so-called “Marburg school” incarnation (Friedman 2000, 63, 147).¹¹ Like Russell and Moore, Carnap and his Vienna Circle allies also came to see flaws in orthodox neo-Kantian philosophy. The German speaking group was particularly unhappy with the Kantian notion of synthetic a priori knowledge, for example, and with the attending Kantian conception of pure intuition (Friedman 1999, 6, 33). But again, positivists did not thereby retreat to Humean empiricism, at least not in the 1920s.¹²

¹¹ A helpful introduction to the Marburg and Southwest schools of neo-Kantianism flourishing at the turn of the 20th century is (Friedman 2000, 25-37).

¹² Friedman sees early logical positivism as centrally focused on problems the Kantian philosophy faced in light of the new physics and geometries of the nineteenth- and twentieth-centuries. His view is explicitly presented as countering a “popular picture” of logical positivism:

According to one popular picture, logical positivism began as an empiricist or verificationist movement in the tradition of Hume, Mach, and Russell’s external world program. ... However, if one reads the early (pre 1930) works of the positivists themselves, a very different and, I think, much more interesting picture emerges. The verificationism of the positivists did not develop along a direct line from Hume and Mach via Russell and Wittgenstein. At least equally important is an evolution from German neo-Kantianism and neo-idealism via Hilbert and Einstein. (Friedman 1999, 18-19)

Notice the phrase “at least equally important.” Friedman does not claim that there was *no* empiricist influence on early logical positivists—only that there was less such influence than we

In contrast, James's response to idealism helped spark a long-lived vogue of empiricism in America. His response kick-started a host of empiricist-inspired movements in North America—not just pragmatism and radical empiricism, but new realism and critical realism as well¹³—that flourished during the first few decades of the 20th century. By the 1930s, when members of the Vienna Circle were immigrating to the United States, empiricism had not recovered its good reputation in Europe, at least among most founding figures of logical positivism (as we now know from the scholarship cited in fn. 5, *above*). But these refugees found many such varieties of empiricism still flourishing when they arrived in leading American departments.

I hasten to add that James was not the only important pioneer of American empiricism. Two of James's chief allies in this respect included Charles Peirce and Chauncey Wright. Peirce would have a special influence on Charles Morris, whose significance in the American reception of positivism is discussed in Appendix III (*below*). Peirce and Wright themselves developed empiricist theories of a priori knowledge, of causation, and of space perception, for example.¹⁴

have come to think. Friedman discusses the relation between positivism and empiricism in more detail at (pp. 5-9).

¹³ The leading Pragmatists were, of course, Peirce, James, and Dewey. Radical empiricism was another position James developed, especially in his (James 1912/1976), and followers included Horace Kallen. American New and Critical Realists both published influential, collected volumes. See (Drake et al. 1920/1941; Holt et al. 1912). Key New Realists included E. B. Holt, W. P. Montague, and R. B. Perry. A new collection of primary sources on New Realism, with a helpful introduction, is (De Waal 2001). Leading Critical Realists included Roy Wood Sellars, Arthur Lovejoy, and George Santayana.

¹⁴ On Wright's pragmatic, empiricist conception of the *a priori*, of space perception, and of causation, see (Madden 1963, 98-99, 112-127); and on Wright's empiricism generally, see (Madden 1963, 73-94, 98-103, 107-127; Madden 1972), the earlier of which is largely a reprint of his (Madden 1953); and see (Schneider 1946, 520-521) on related topics. (Bowne 1878) is a harrowing primary source that testifies to Wright's role in the trenches of arguments about empiricism, lengthily excerpted at (Madden 1963, 175-178.n172). On Wright's impact on James, see (Madden 1963, 128-137; RBP I.520-532). On Peirce's conception of the *a priori*, see (Hookway 1992, 181-207; Misak 1991, 140 ff.). On Peirce's relationship to James's psychology, particularly in the latter's theory of space perception, see (Girel 2003). On Peirce's empiricism generally, see (Nagel 1940; Thayer 1968, 101-120). On Peirce's impact on James in this regard, see (Thayer 1968, 136-141), though Thayer sees Peirce's empiricism as growing out of the Kantian rather than the British tradition—a reasonable and common view. Also, James himself describes Wright as “a worker on the path opened by Hume, and a treatise on

But nobody in the United States did more to usher in a new era of empiricist philosophy than William James. Neither Peirce nor Wright held steady academic employment, and thus neither impacted the next generation through teaching.¹⁵ In sharp contrast, James was among the most prominent academics of his generation, in any field—he was undoubtedly the most influential American philosopher, and undoubtedly the most influential American psychologist as well.¹⁶ He was educated and spent his career at Harvard, eventually holding professorships in anatomy, physiology, psychology, and philosophy. James was elected president of both the American Psychological Association and the American Philosophical Association. He received

psychology written by him ... would probably have been the last and most accomplished utterance of what he liked to call the British school,” at (James 1875). Note that the secondary literature I have mentioned in this footnote sometimes uses “empiricism” in an anachronistic manner, denoting an epistemological project rather than a metaphysical view about the mind. In any case, I think Peirce and Wright also contributed in their own ways to the empiricist project, as I understand that project in this dissertation. But it is beyond my scope to make this case. However, one might begin to make it by consulting (Girel 2003), an interesting look at Peirce’s admiring reaction to James’s psychology. (Peirce’s misgivings about James’s later formulation of pragmatism are far better known, and on this topic the reader might consult (Hookway 1997).)

¹⁵ Out of intellectual respect, and even out of a sense of personal empathy, James worked to bring Peirce’s publications to wider attention during much of the latter’s lifetime. But this was largely a failure. Peirce spent periods of his life in dire poverty, and James continually sought to help his friend renew his reputation and start an academic career. For instance, in an 1897 letter to James, Peirce wrote that he had not eaten in three days. James swiftly invited Peirce to give a series of lectures in Cambridge and secured donors for a much-needed stipend. James hoped Peirce would turn his lectures into a book. Delivered in the winter of 1898 in a private house, the lectures impressed a few colleagues, but did not substantially improve Peirce’s fortunes or professional reputation. Interestingly, it was in August of that same year when James unveiled pragmatism in a lecture at Berkeley. In this lecture, James famously credited as the founder of pragmatism a figure his audience had surely never heard of: Charles Peirce (Menand 2001, 348-351).

So the surge in interest in Peirce’s work came only after his death. Royce eventually brought Peirce’s papers to Harvard, and a young C. I. Lewis spent two years in the early 1920s cataloguing them. This work eventually led to the 1931 publication of an 8-volume *Collected Papers* (Peirce 1931), and these volumes finally brought Peirce a wider audience.

¹⁶ Upon James’s death, this was the judgment of colleagues like Bertrand Russell and John Dewey, as well as of newspapers around the world. For example, his obituary in the *Paris Temps* declared James to have been “the most famous American philosopher since Emerson”; and the *Boston Evening Transcript* called his death “the removal of the greatest of contemporary Americans” (quoted at Myers 1971, 1, which also contains quotes from Dewey and Russell).

honors from Princeton and Yale, as well as from universities in Padua, Rome, Oxford, Durham, Geneva, Edinburgh, Copenhagen, Paris, Milan, Berlin, and Moscow. He was also elected an honorary member of the National Academy of Science, the American Association for the Advancement of Science, and the British Academy (Myers 1986, 1-2). And these professional achievements say nothing of James's gift for connecting with audiences of non-academics as well (see Cotkin 1994, 12). In short, James was a towering figure in American intellectual life, and he influenced a generation of students through his publications, through his teaching at Harvard, and through correspondence and informal relationships with far-flung friends and acquaintances.

I suggest that the brand of empiricism he began to develop in his *Principles of Psychology* represents one important aspect of his intellectual legacy, in the United States. In turn, the vogue for empiricism that James sparked may help explain the later evolution of American philosophy.

In particular, it may help explain the particular form of empiricism eventually attributed to logical positivists. The American context helps explain why Ayer, at least on these shores, would have been so effective in advancing the fortunes of logical positivism by pitching it as a new form of empiricism. Whether or not this was his intention, empiricism was a slant sure to play well in the American departments that would provide new homes for crucial members of his movement.

If Ayer's book played a serious role in popularizing the view that positivism is a form of empiricism, one still wonders why this view should have caught fire *in North America*, after all. By the 1930s, this continent had had a robust philosophical life of its own for a half-century—its own journals, its own academic presses, its own graduate programs, its own professional associations, and most of all, its own scholarly debates. But we have come to imagine that American departments were like empty greenhouses, ready to nurture transplanted European philosophies roots and fruits,

without seriously influencing their future development.¹⁷ One implication of my dissertation is that this suspicious assumption should be reconsidered.



The story of empiricism's rise is significant for a second reason that is not immediately obvious. The story calls our attention to the philosophical and historical dimensions of psychology's birth from philosophy.

Empiricists of the late 19th-century held that the mind could be the object of a legitimate science—empirical psychology—as I have mentioned. But they also held that *philosophy* could only make progress by drawing on the results produced by such a science. A workable, philosophical account of the mind had to begin, they held, with the best available empirical data.

I am interested in evaluating this old form of empiricism, not just in recounting the story of its development. So our investigation into the rise of empiricism will therefore bring us into the territory of philosophy of psychology and general philosophy of science. For at heart, the early struggle over empiricism was a struggle over the philosophical dimensions of mental science, a struggle that deserves a fresh evaluation.

One of James's chief strategies for responding to idealists was to establish a division of labor in the study of mind. He sought to erect a disciplinary fence around psychology so that those who studied the mind scientifically could be released of responsibility for answering certain metaphysical questions, particularly metaphysical questions of the sort idealists were asking. In Chapter Five, we will see in detail how this division of labor functioned.

The viability of James's empiricism required that this disciplinary division be defensible. But he claimed that the choice of where to *place* this division could only be made on the basis of a priori assumptions. So to evaluate James's empiricism, we will

¹⁷ The notion that classical American philosophy might have exerted a non-trivial influence on the development of logical positivism or early analytic philosophy is sometimes explicitly brushed aside. For example, Dummett writes that "... pragmatism was merely an interesting tributary that flowed into the mainstream of the analytical tradition," (Dummett 1994, ix). In Dummett's usage, "analytical philosophy" refers to a movement that encompasses logical positivism.

have to develop an account of a priori assumptions in a fledgling, human science like early psychology.

Philosophers like Friedman have recently investigated the role of a priori presuppositions in science. They have typically drawn their examples from revolutions in mature, exact sciences like Newtonian and Einsteinian physics. In Chapter Five, I show that when properly modified, such accounts contain crucial insights about immature, human sciences as well. Fledgling sciences like late 19th-century psychology incorporate what I call “conversational presuppositions,” metaphysical assumptions required to inject an intellectual inquiry with scientific legitimacy.

These assumptions amount to presuppositions in the sense that if they turn out to be false, the entire theory is rendered *unscientific*. The assumptions do not render theories scientific through some semantic or syntactic relation (e.g., a false conversational presupposition does not render a theory *meaningless*). Rather, such an assumption amounts to a social agreement to respect a stipulated boundary between the science in question and an unscientific, neighboring discipline. I argue that such social agreement is necessary if an intellectual inquiry is to become a legitimate science.

James used conversational presuppositions to fortify the hitherto contested boundary between empirical psychology and philosophy. In other words, he helped forge an agreement about which questions about the mind could be treated scientifically, and which should be relegated to philosophy. One of James’s lasting contributions to both psychology and empiricist philosophy was, therefore, to have erected a workable fence inside which mental science could operate without fear of attack from metaphysicians.

It is crucial to note that the boundary James fortified represents a social agreement, but “social” does not mean irrational, in this context. On the contrary, I show that this boundary’s particular placement was the result of extensive deliberation between metaphysicians and aspiring psychologists.

But note, too, that James’s division between metaphysics and psychology required him to give up an older empiricist hope, more recently renewed by (Quine 1969), of

collapsing epistemology into psychology. To be sure, James argued for the relevance of mental science to philosophy. But this is because psychology, properly understood, produces certain unique problems that can only be contemplated from a philosophical perspective, not because philosophy should itself become a science. In contrast to contemporary forms of naturalism, James's defense of psychology actually required that certain philosophical questions be kept *out* of science.

Thus, this dissertation offers an analysis of an early argument over empirical psychology. The analysis serves two distinct purposes, ultimately. First, it helps us understand empiricism's rise in English-language philosophy. Second, the analysis provides a case study in the kind of inherently social, yet *rational* deliberation required for a legitimate science to break free from existing disciplines.

3. SUMMARY OF CHAPTERS

Chapter One begins with a detailed analysis of our contemporary interpretation of empiricism—the concept whose evolution I explore in the rest of the dissertation. I then analyze a meta-historical literature that argues that there is something illegitimate about the very idea of an empiricist tradition. Some in this literature cite T. H. Green as the concept's inventor. Although Green was indeed influential in creating the notion of empiricism, I show that he actually used the concept in quite a different manner from the way it is now used. Green (and idealist allies) did not think Locke, Berkeley, and Hume should be treated as a group because these latter three shared an epistemology. Rather, idealists held that these three formed a group because they were the most important intellectual forefathers of empirical psychology. I then examine (what idealists held to be) the metaphysical presuppositions of empirical psychology, as articulated by Locke, Berkeley, and Hume.

In Chapter Two, I turn to the empiricist tradition as it was understood by psychologist-philosophers like William James and Croom Robertson, the first editor of *Mind*. I offer historical evidence that James was heavily engaged with British idealists like Green and Caird, particularly with their attacks against psychology. Although we think of James as a quintessentially American philosopher, it was the British journal

Mind that published most of the articles eventually incorporated into the *Principles*. Indeed, in the 1880s James participated in a philosophical club in London that included Robertson, as well as the main psychologist-philosophers publishing in *Mind*. I analyze the dimensions of this group's argument with idealists over psychology. I also analyze James's uses of the concept of empiricism throughout his career. I conclude by situating my reading of James with respect to some secondary literature.

In Chapter Three, I critically analyze idealist attacks on Locke, Berkeley, and Hume. Whether or not empiricists could supply a workable account of space perception was a crucial question in the struggle over psychology. I focus on Green's attack on Hume, in this regard. Although recent Hume scholarship has not emphasized the latter's account of space perception, I show that Green's criticisms provide a formidable challenge to would-be defenders of Hume, even today. I compare Green's reading with more recent interpretations of Hume, particularly Don Garrett's. The point is to suggest that the difficulties Green exposed have not been overcome, even on the best recent readings of Hume.

In the final two chapters of the dissertation, I critically examine James's reconfiguration and defense of empiricism. Chapter Four focuses on his response to idealist attacks on psychological accounts of space perception. For James, the crucial issue dividing empiricists and idealists was whether experience has a native, necessary structure. In this connection, spatial perception became a test case for the viability of psychology. Idealists argued that our knowledge of spatial relations must be native and necessary rather than learned. Therefore, a full explanation of spatial perception required transcendental reflection (a kind of a priori inquiry, as we will see) into the necessary preconditions of any experience. Idealists argued that therefore, no merely empirical inquiry like mental science could hope to reveal the ultimate facts about spatial perception.

James actually accepted the idealist contention that our ability to perceive spatial relations is native. However, he did not think it followed that there was one necessary metric (e.g., the metric given by Euclid's axioms) to which all spatial perceptions must conform. Thus he rejected that only a priori analysis could explain the facts of space

perception. To show that the claim of a necessary metric for spatial perception did not follow, he constructed a model of the mind that has the following two properties. First, “extensity” as he called it—the experience of extension—was to be a native property of sensation. But second, any of a multitude of metrics could be used to organize raw sensation into intelligible perceptions of spatial relations. Thus, no one metric could give the necessary form of all spatial perception. This is because our raw, natively-extended sensations are given as a chaotic stream of consciousness, on James’s model. The task of *organizing* this stream into intelligible spatial relations is guided by the organism’s interests. Since these interests may change over time, we cannot be confident that there exists one necessary pattern for organizing experiences. In the specific case of space perception, we cannot be confident that there is one necessary metric any conscious subject must use to organize its sensory fields into intelligible perceptions of spatial relations.

The upshot was that *how* organisms manage to carve spatial relations into the stream of consciousness was not a matter that could be gleaned through a priori analysis, after all. Instead, the facts of spatial perception required an empirical-psychological explanation.

My analysis in Chapter Four will reveal the following tension in James’s psychology, however. On one hand, we will see that James offered empirical evidence to support his contention that experience is fundamentally a chaotic, continuous stream. But on the other hand, James sometimes referred to the stream of consciousness as an “a priori assumption,” or framework on which his entire psychology in some sense rested. How can the stream of thought both rest on empirical evidence, and yet play the role of an a priori framework for his entire psychology?

In Chapter Five, I try to resolve this tension. James had two complimentary strategies for responding to idealist attacks on psychology. As in the case of his work on space perception, he sometimes wove philosophical responses into the basic fabric of his empirical theories. But he had another strategy as well, which was simply to decline responsibility for answering other metaphysical questions idealists were raising. James’s

formulation of the notion of a stream of consciousness helped him accomplish this latter task.

He argued that no science can be held responsible for answering the most general, metaphysical questions about its subject matter. Such questions are best left to metaphysicians, so that scientists can get on with the business of prediction and control of nature. But *which* questions a given science must leave aside is an issue that is not decidable solely on the basis of empirical evidence. Instead, the community of inquirers must reach a stable agreement—on a priori grounds—of how to divide cognitive labor.

To this end, I show that James's stream of consciousness played two distinct roles in his psychology. *Qua* description of experience, the stream of consciousness rested on empirical evidence, as we see in Chapter Four. But the stream of consciousness was explicitly presented not just as a description of experience *simpliciter*, but as a description of experience's "ultimate facts," facts the scientist cannot take responsibility for explaining. Psychologists must decide a priori *which* features of experience are to be treated as ultimate, in this sense. So *qua* description of the ultimate objects of psychology, the stream of consciousness was a special kind of a priori assumption. In particular, the stream was a "conversational presupposition," as I am calling it, in James's science.

Finally, I want to say a word about my use of tense in this dissertation. When I began writing, I decided to use the past tense to discuss dead philosophers, and the present tense to discuss living ones. I came to find this convention awkward, but it was too late to change. So in what follows, I will not write that T. H. Green *claims* that psychology is absurd, for example—Green is dead, and so does not claim anything, anymore. In contrast, living philosophers like David Brink do make all sorts of interesting claims, which I render in the present tense. For better or worse, I have tried to keep to this convention throughout, though economy of expression has sometimes required making exceptions.

4. ACKNOWLEDGEMENTS

The earliest material for this dissertation comes from a term paper I wrote for Michael Friedman in an independent study. I would like to thank him for working with me. I also would like to thank Karen Hanson for conducting an independent study with me several years earlier. It was with her that I first read through William James's *Principles of Psychology*. My earliest exposure to James came as an undergraduate when I worked as an assistant to Jeff Kasser at Wesleyan University.

My first exposure to pragmatism in graduate school came in a class taught by my advisor, Lisa Lloyd. I have fond memories of discussions that semester with Lisa, my classmates, and with Michael Friedman who sat in that semester. Lisa's class showed me that although James was not widely regarded as of much importance inside analytic philosophy, he was a figure worthy of serious study.

During the spring of 2002, I had the opportunity to work in the James archives at the Houghton Library, where I pursued some of the ideas I originally developed with Friedman, Hanson, and Lloyd. This was possible thanks to a job as a Research Assistant to Lisa, who was visiting at Harvard that semester. I thank her for having me along in Cambridge, and I thank Richard Lewontin for providing office space.

Later, I had financial support to spend another month at the archives in May and June of 2006. The support came from the Houghton Library's Rodney G. Dennis Fellowship in the Study of Manuscripts. I would like to thank the library for its backing, as well as the librarians for their patience in helping an archival novice like me.

I presented various portions of this dissertation as talks for audiences from whom I benefited tremendously. I delivered the annual Nelson Fellow Lecture to the Philosophy Department's faculty and graduate students here at Indiana University, in November 2004. The lecture was part of my responsibilities that year as the James B. Nelson Dissertation Year Fellow. This award gave me relief from teaching, and I thank both the Department and James Nelson (1872-1961), whose bequest established and continues to fund the fellowship.

I gave a similar paper as a Symposium at the Eastern meeting of the American Philosophical Association the following month. I would like to thank my commentator, James Mattingly, for his insightful criticism. I would also like to thank the audience, especially Don Garrett and Peter Hare, both of whom asked helpful questions that day. Garrett generously indulged me with further email discussion about Hume and space perception over the next year, and without his help Chapter Three would have been much weaker than it is. Hare also corresponded with me extensively about the role of empiricism in American philosophy, and called my attention to resources of which I had not been aware.

I would like to thank Mary Domski for inviting me to give a talk in April 2005 at California State University, Fresno. The material I presented there went into Chapters One and Three, and again that material is much improved thanks to the audience and my co-participants.

In November of 2005, I delivered portions of Chapters Three and Four at a conference sponsored by the Society for Classical Pragmatism Studies at the University of South Florida, Tampa. I had a chance to present similar material in February 2006 at San Jose State University.

I would also like to acknowledge a serious debt to Alan Richardson. My ideas about the relationship between James and the larger history of scientific philosophy were deeply influenced first by reading his published work, and later by engaging in personal discussion with him. Alan invited me to participate in a session he organized at the History of Philosophy of Science Society (HOPOS) annual meeting in June of 2006. That session gave me the chance to air more of Chapter Four, and the audience and my co-panelists (Richardson, Gary Hatfield, and Rob Sinclair) again provided helpful discussion.

I thank the Institute for American Thought for permission to cite and quote from the Charles W. Morris papers. I also thank the Houghton Library of Harvard University for permission to cite and quote from the William James papers.

There are many of my friends and fellow students who have shaped my thinking in ways I cannot catalogue. I would like to name Darren Abramson, Josh Alexander,

Steve Crowley, Hilmi Demir, Natalia Ermolaev, Steve Hockema, Jon Jacobs, John Jacobson, Jun Luo, Anatole Pinsky, Mike Rings, Melissa Seymour, Chris Tillman, and Beth Tropman.

I owe Brian Cantwell Smith special thanks for support over the years (both material and intellectual), as well as for his deep well of patience. Marcia Baron was selfless with her time when I first went on the job market. She gave invaluable advice especially on how to talk with potential employers about this peculiar dissertation.

I would especially like to thank my committee members, each of whom improved the project in their own unique ways over the years: Karen Hanson, Cheryl Misak, Frederick Schmitt, and Joan Weiner. I have been unusually lucky to have a committee all of whom have generously made time for me despite their own busy schedules.

My advisor, Lisa Lloyd, taught me more about history than she realizes—whatever is worth calling a historical technique in this dissertation is largely adapted (imperfectly, no doubt) from discussions on evolution and *natural* history with Lisa. I would like to thank her for close friendship and unwavering encouragement even when this project was moving laterally. Above all, I owe Lisa the deepest debt for teaching me how to conduct honest, responsible scholarship.

The number of footnotes in this already long dissertation would easily have doubled had I given citations for every passage that was improved by suggestions from Lisa and from the rest of my committee. Of course, I am solely accountable for the myriad ways in which my work likely falls short of the ideas and ideals of all those mentioned above.

Not everyone has the luxury to go to college, much less to spend the better part of a decade in graduate school studying something esoteric. For this kind of opportunity I owe so much to so many people across generations it is hard to single a few out. I owe the most to my family: my sister Nicole, my step-mother Ricci, and my parents Susan and Stephen, who have provided material support, unwavering love, and excellent models of lives well-lived.

I would also like to thank my cousin, Carolyn Mugar, who hosted me for two extended periods while I was working at the Houghton Library. She invited me into her

home during a period of personal sadness for her and the entire family. I also must recognize two other extended family members who have taken special interest in my personal and intellectual development over the years—my uncle Robert Yacubian, and my dear late cousin John O'Connor.

Finally, I want to thank my partner, Joanie Ellen, who reminds me how all this obscure academic work fits into a wider world of art, life, and love.

